# **Contact Info**

135 Arizona Biomedical Collaborative

425 N. 5th Street

Phoenix, AZ 85003

Work: 602-827-2773

Fax: 602-827-2253

Email:Edward.ofori.phd@gmail.com

# **EDUCATION & TRAINING**

2013-2015	Postdoctoral Training in Neuroimaging & Parkinsonism							
2009-2013	University of Fiorida Doctor of Philosophy in Kinesiology Area of Study: Biomechanics & Motor Control							
	University of Illinois at Urbana Champaign							
2009-2011	Master of Science in Statistics							
2006-2008	University of Illinois at Urbana-Champaign <b>Master of Science in Kinesiology</b> Area of Study: Motor Control							
	University of Illinois at Urbana-Champaign							
2000-2004 Bachelor of Science in Biomedical Engineering								
	Minor: Business Administration							
	University of Tennessee at Knoxville							
PROFESSION	AL EXPERIENCE							
2020-present	Lead Research Analyst 56 FW HPT, Cobalt Health Litchfield Park, AZ							
2018-present	Assistant Professor (tenure-track), College of Health Solutions							
	Faculty Mentor of Banner Honors College							
	Faculty, Center for Innovation in Healthy and Resilient Aging							
	Faculty, School of Biological and Health System Engineering Member of Auditory and Language Neuroscience Program							
	Member of Additory and Language rectroscience Program							
	Member of ASU-Banner Neurodegenerative Disease Research Center							
	Arizona State University, Phoenix, AZ							
2015-2018	<b>Research Assistant Professor (non-tenure track),</b> Department of Applied Physiology & Kinesiology Member of Laboratory of Rehabilitation Neuroscience Investigator 1Florida Alzheimer's Disease Research Center University of Florida, Gainesville, FL							
2011-2012	<b>Visiting Instructor,</b> Department of Kinesiology and Community Health University of Illinois at Urbana-Champaign,							
2011-2012	<b>Program Assistant for Ronald E. McNair Programs</b> , Office of Minority Student Affairs University of Illinois at Urbana-Champaign							
2006-2011	<b>Graduate Assistant</b> , Office of Minority Student Affairs, University of Illinois at Urbana-Champaign							
2005-2011	<b>Teaching Assistant</b> , Department of Kinesiology & Community Health University of Illinois at Urbana-Champaign							
2007-2010	<b>Research Assistant,</b> Department of Speech and Hearing Science Center for Health, Aging, and Disability Grant Fellow							

University of Illinois at Urbana-Champaign

2005-2008 **STEM Academic Tutor**, Division of Intercollegiate Athletics University of Illinois at Urbana-Champaign

2004-2005 Statistical Assistant, As You Wish Consulting

#### **FUNDING**

Since ASU Appointment (Funding Pursued as PI: \$5,104,347; Funding Award/Pending as PI: \$2,321,377) \*\*denotes internal funding

- \*\*Edson College of Nursing (ASU), Edson Discovery Pilot Award, Principal Investigator: "Distinct visuomotor markers for preclinical Alzheimer's disease," \$25,000 (funded, Fall 2021).
   [X] Formulated Concept [X] Aims [X] Research Plan [X] Resources [X] Supporting Documents
- \*\*Institute for Social Science Research (ASU), Seed Grant Initiative, Principal Investigator: "Examining Cognitive Capacity and Oxygen Cost in adults with Charcot-Marie Tooth."\$7,814 (funded, May 2021)
   [X] Formulated Concept [X] Aims [X] Research Plan [X] Resources [X] Supporting Documents
- \*\*Institute for Social Science Research (ASU), Seed Grant Initiative, Co-Investigator (Principal Investigator: D. James): "Weight reduction and cognitive health: A pilot study testing a remotely delivered, mindful eating intervention among obese mid-life."\$7,996 (funded, May 2021)
   [] Formulated Concept [X] Aims [X] Research Plan [] Resources [] Supporting Documents
- 4. National Institute of Mental Health (NIH), NIMH Biobehavioral Research Awards for Innovative New Scientists, Co-Investigator (B. Braden, Principal Investigator): "Combining novel MRI biomarkers to predict accelerated cognitive decline in older adults with autism spectrum disorder" \$3,786,339 (under review, June 2021) [] Formulated Concept [] Aims [X] Research Plan [X] Resources [] Supporting Documents
- National Institute of Aging (NIH), Early Stage Clinical Trials for the Spectrum of Alzheimer's Disease and Age-related Cognitive Decline (R01 Clinical Trial), **Co-Investigator** (Principal Investigator, F. Yu): "Precision Medicine in Alzheimer's Disease: A SMART Trial of Adaptive Exercises and their Mechanisms of Action Using AT(N) Biomarkers to Optimize Aerobic-Fitness Responses" \$4,736,021 (under review, June 2021)
   [] Formulated Concept [] Aims [X] Research Plan [] Resources [] Supporting Documents
- National Institute on Drug Abuse (NIH), Avenir Award Program for Genetics or Epigenetics of Substance Use Disorders (DP1), Principal Investigator: "Genetic and Neuroimaging Markers of adolescent and adult cannabis users" \$2,288,563 (under review, October, 2020)
   [X] Formulated Concept [X] Aims [X] Research Plan [X] Resources [X] Supporting Documents
- \*\*Institute for Social Science Research (ASU), Seed Grant Initiative, Co-Investigator (Principal Investigator: D. James):"Prolonged nightly fasting in older adults with mild cognitive impairment (MCI): A pilot study exploring changes in neurocognitive function."\$7,995 (funded, May 2020)
   [] Formulated Concept [] Aims [X] Research Plan [] Resources [] Supporting Documents
- \*\*College of Health Solutions (ASU), Jumpstart Grant, Co-Investigator (Principal, D. Peterson): "The Impact of Dopamine on Attention in Parkinson's Disease" \$18,000 (funded, April, 2020)
   [] Formulated Concept [] Aims [X] Research Plan [X] Resources [] Supporting Documents
- 9. \*\*College of Health Solutions (ASU), Jumpstart Grant, Co-Investigator (H. Gu): "Targeting fatty acid metabolism in Alzheimer's disease: A special interest in Lauric acid" \$17,999 (funded, April, 2020)
   [] Formulated Concept [] Aims [X] Research Plan [] Resources [] Supporting Documents
- National Institute of Aging (NIH), Sensory and motor system changes as predictors of preclinical Alzheimer's disease (R01), Principal Investigator: "Longitudinal free-water and functional markers of preclinical Alzheimer's disease" \$2,782,970 (not funded, submitted February 2020)
   [X] Formulated Concept [X] Aims [X] Research Plan [X] Resources [X] Supporting Documents
- Office of Behavioral and Social Sciences Research (NIH), Predoctoral Training in Advanced Data Analytics for Behavior al and Social Sciences Research (T32), **Co-Investigator** (Principal Investigator: D. Helitzer): "Training Program in Clinical-Behavioral Data Sciences" \$ 1,415,153 (not funded, submitted May 2019)
   [] Formulated Concept [] Aims [X] Research Plan [] Resources [] Supporting Documents

#### Prior to ASU Appointment

12. \*\*Clinical and Translational Science Institute (Univ. of Florida), Career-Development Grant, Principal investigator: "Free-water imaging of the temporal lobe along the Alzheimer's disease continuum" \$60.000 (funded, declined August 2018)

[X] Formulated Concept [X] Aims [X] Research Plan [X] Resources [X] Supporting Documents

- 13. 1Florida Alzheimer's Disease Research Center (State of Florida). Pilot Award. Co-Principal Investigator "Diabetes as a risk factor for dementia in Hispanic Floridians." \$40,000 (not funded, submitted May 2017) [X] Formulated Concept [X] Aims [X] Research Plan [] Resources [] Supporting Documents
- 14. National Institute of Aging (NIH). Career Development Award (K01). Principal Investigator. "Free-water Imaging of Subtypes along the Alzheimer's Disease Continuum", \$473,840 (not funded, submitted June 2017: Scored 39) [X] Formulated Concept [X] Aims [X] Research Plan [] Resources [X] Supporting Documents
- 15. 1Florida Alzheimer's Disease Research Center (State of Florida). Developmental Grant. Co-Investigator (Principal Investigator: D. Vaillancourt) "Consortium for Diagnostic Algorithm with Novel Markers in Early Alzheimer's Disease", \$57,119 (funded, August 2016-September 2017 completed) [] Formulated Concept [X] Aims [X] Research Plan [] Resources [] Supporting Documents
- 16. National Institute of Biomedical Imaging and Bioengineering (NIH), Research Project Grant 01, Consultant (Principal Investigator: M. Cohen) "Complexity Toolbox with new modules for EEGLAB." \$750,000 (not funded, submitted July 2016). [] Formulated Concept [] Aims [X] Research Plan [] Resources [] Supporting Documents
- 17. National Institute of Neurological Disorders and Stroke (NIH). Research Project Grant 01. Co-Investigator, (Principal Investigator: D. Vaillancourt) "Role of the Cortex and Cerebellum in Visually-Guided Motor Behavior" \$1.875.000 (funded renewal, 2015-2020 completed)
- 18. National Institute of Aging (NIH). Research Program Projects and Centers. Key Personnel, (Principal Investigator: T. Golde): University of Florida-Mt. Sinai Medical Center AD Research Center. NIH \$7,362,000, (funded, 2015-2020 completed).
- 19. National Institute of Neurological Disorders and Stroke (NIH). Postdoctoral Fellowship (F32). Principal Investigator, "Entropy of resting brain activity in Parkinson's disease and atypical Parkinsonism." \$696,580. (not funded, submitted 2014)

#### **Developmental Submissions**

- 20. Mayo Clinic and ASU. Seed Grant. Principal Investigator, 3-D Cortical electrophysiology for finger tapping subtypes of PD. (Targeted Submission date Spring 2022)
- 21. National Institute of Neurological Disorders and Stroke (NIH). Notice of Special Interest (R21). Principal Investigator. Patient reported outcomes and multimodal markers of motoric decline in adults with Charcot-Marie-Tooth (Targeted Submission date Spring 2022)
- 22. National Institute of Aging (NIH), Sensory and motor system changes as predictors of preclinical Alzheimer's disease (R01), Principal Investigator. Distinct visuomotor markers for subtypes of Alzheimer's disease. (Targeted Submission date Spring 2022)
- 23. National Institute of Biomedical Imaging and Bioengineering (NIH). R21. Co-Investigator, "Molecular Tools to Resolve and Manipulate the Mammalian Neuroimmune System" \$400,000 (planned submission date: October 2021) (Targeted Submission date October 2021)

### **S**CHOLARSHIP

Peer-Reviewed Journal Articles (in print or accepted):

Since ASU Appointment (7)

In-Press (1)

1. Roman G, Peterson DS, Ofori E., Vidt ME. (In Press). Upper extremity biomechanics in native and non-native signers. WORK

[] Research Design [X] Statistical Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection Journal Metrics: Citations: Impact Factor:

#### 2021 (1)

2. Peterson DS, Moore, A, Ofori, E<sup>c</sup>. (2021). Performance fatigability during gait in adults with Charcot-Marie-Tooth disease. Gait & Posture, 85,232-237. doi: 10.1016/j.gaitpost.2021.02.002. PMID: 33618167 [X] Research Design [] Statistical Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection 93<sup>rd</sup> Prominence Percentile

Journal Metrics: 51 of 125, 2nd Quartile (Sports Science), 19 of 130, 1st Quartile (Rehabilitation),

#### 2020 (2)

3. Roman G, Peterson DS, Ofori E., Vidt ME. (2020). The Modified Strain Index: A Composite Measure of Injury Risk for Signers, Journal of Motor Behavior, 17, 1-10, PMID: 32799767

[] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection

Journal Metrics: 119 of 262, 3rd Quartile (Orthopedics & Sports Medicine), 109 of 156, 3rd Quartile (Experimental & Cognitive Psychology

Impact Factor: 1.279

Impact Factor: 2.686

4. Febo M., Perez PD., Ceballos-Diaz C., Colon-Perez LM., Zeng H., Ofori E., Golde TE., Vaillancourt DE., Chakrabarty P. (2020). Diffusion magnetic resonance imaging-derived free water detects neurodegenerative pattern induced by interferonv. Brain Structure and Function, 225(1): 427-439

[X] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 33 of 146, 1st Quartile (Neuroscience), 5 of 37, 1st Quartile (Anatomy),

98<sup>th</sup>Prominence Percentile Impact Factor: 3.733

### 2019 (3)

5. Colon-Perez LM., Ibanez KR., Suarez M., Torroella K., Acuna K., Ofori E., Levites Y., Vaillancourt DE., Golde TE., Cakrabarty P., Febo M. (2019). Neurite orientation dispersion and density imaging reveals white matter and hippocampal microstructure changes produced by Interleukin-6 in TgCRND8 mouse model of amyloidosis. NeuroImage, 202: 116138 [X] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection Journal Metrics: 5 of 66, 1st Quartile (Cognitive Neuroscience), 5 of 165, 1st Quartile (Neurology), 95<sup>th</sup> Prominence Percentile Impact Factor: 7.353

6. Ofori E., DeKosky ST., Febo M., Colon-Perez LM., Charkabarty P., Duara R., Adjouadi M., Golde T.E., Vaillancourt DE; Alzheimer's Disease Neuroimaging Initiative. (2019). Free-water imaging of the hippocampus is a sensitive marker of Alzheimer's disease. Neuroimage Clinical, 24:101985

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection

Journal Metrics: 29 of 288, 1st Quartile (Radiology, Nuclear Medicine and Imaging), 46 of 373, 1st Quartile (Neurology-clinical) Impact Factor: 5.104

7. Yang J, Archer DB, Burciu RG, Müller MLTM, Roy A, Ofori E., Bohnen NI, Albin RL, Vaillancourt DE. (2019). Multimodal dopaminergic and free-water imaging in Parkinson's disease. Parkinsonism & Related Disorders, 62,10-15 [PMID: 306391681

[X] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 5 of 66, 1<sup>st</sup> Quartile (Cognitive Neuroscience), 5 of 165, 1<sup>st</sup> Quartile (Neurology), Impact Factor: 3.926

### **Prior to ASU Appointment (28)**

#### 2018 (2)

8. Chung JW, Burciu RG, Ofori E., Coombes SA, Christou EA, Okun MS, Hess CW, Vaillancourt DE. (2018). Beta-band oscillations in the supplementary motor cortex are modulated by levodopa and associated with functional activity in the basal ganglia. Neuroimage Clinical, 19:559-571 [PMID: 29984164].

[X] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection Journal Metrics: 32 of 288, 1<sup>st</sup> Quartile (Radiology, Nuclear Medicine and Imaging), 50 of 373, 1<sup>st</sup> Quartile (Neurology-clinical) Impact Factor: 5.104

9. <u>Ofori, E.,</u> Shim J., Sosnoff JJ (2018). The influence of lower leg configurations on muscle force variability. *Journal of Biomechanics*, 71:111-118 [PMID: 29475750].

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [] Data Collection

Journal Metrics: 36 of 125,2<sup>nd</sup> Quartile (Sports Science), 41 of 502, 1<sup>st</sup> Quartile (Biomedical Engineering), 72<sup>nd</sup> Prominence Percentile Impact Factor: 3.000

#### 2017 (6)

10. Burciu, RG., <u>Ofori, E.,</u> Archer D.B., Wu S.S., Pasternak, O., McFarland, N.R., Okun, M.S., Vaillancourt, D.E. (2017). Progression marker of Parkinson's disease: a 4-year multi-site imaging study. *Brain*, 140(8): 2183-2192 [PMID: 28899020].

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection Journal Metrics: 34 of 2898, 1<sup>st</sup> Quartile (Medicine), 3 of 383, 1<sup>st</sup> Quartile (Neurology-clinical)

11. **Ofori E**, Krismer F, Burciu RG, Pasternak O, McCracken JL, Lewis MM, Du G, McFarland NR, Okun MS, Poewe W, Mueller C, Gizewski ER, Schocke M, Kremser C, Li H, Huang X, Seppi K, Vaillancourt DE. (2017). Free water improves detection of changes in the substantia nigra in parkinsonism: A multisite study. *Movement Disorders*, 32(10): 1457-1464 [PMID: 28714593].

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 14 of 383, 1<sup>st</sup> Quartile (Neurology-clinical), 4 of 146, 1<sup>st</sup> Quartile (Neurology) 97

97<sup>th</sup> Prominence Percentile Impact Factor: 7.856

96<sup>th</sup> Prominence Percentile

Impact Factor: 11.340

12. Burciu RG, Hess CW, Coombes SA, <u>Ofori E.</u>, Shukla P, Chung JW, McFarland NR, Wagle Shukla A, Okun MS, Vaillancourt DE. (2017). Functional activity of the sensorimotor cortex and cerebellum relates to cervical dystonia symptoms. *Human Brain Mapping*, *38*(9): *4563-4573*. [PMID: 28594097]

[] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 9 of 278, 1<sup>st</sup> Quartile (Radiology, Nuclear Medicine and Imaging, 16 of 165, 1<sup>st</sup> Quartile (Neurology) 95<sup>th</sup> Prominence Percentile Impact Factor: 5.144

13. Chung, J.W., Burciu, R.G., <u>Ofori, E.</u>, Shukla, P., Okun, M.S., Hess, C.W., Vaillancourt, D.E., (2017) Parkinson's disease diffusion MRI is not affected by acute antiparkinsonian medication. *NeuroImage Clinical, 15:417-421 [PMID: 28275542]* [X] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 32 of 383, 1<sup>st</sup> Quartile (Neurology-clinical), 23 of 165, 1<sup>st</sup> Quartile (Neurology) 97<sup>th</sup> Prominence Percentile Impact Factor: 4.930

14. Misra, G., <u>Ofori, E.</u>, Chung, J.W., Coombes, S.A. (2017). Pain-related suppression of beta oscillations facilitate voluntary movement. *Cerebral Cortex, 4,* 2592-2606 doi: 10.1093/cercor/bhw061 [*PMID: 26965905*] []Research Design [X] Statistical/Data Analysis []Drafted Manuscript [X] Revised Manuscript []Data Collection Journal Metrics: 3 of 126, 1<sup>st</sup> Quartile (Cognitive Neuroscience), 5 of 93, 1<sup>st</sup> Quartile (Cellular & Molecular Neuroscience) 94<sup>th</sup> Prominence Percentile Impact Factor: 5.930

15. Chung, J., <u>Ofori, E.\*</u>\*, Misra, G., Hess, C.W., Vaillancourt, D.E (2017). Beta-band activity and connectivity in sensorimotor and parietal cortex are important for accurate motor performance. *NeuroImage, 44, 164-173 [PMID: 27746389]* \*\*Co-first author

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [] Data Collection Journal Metrics: 9 of 278, 1<sup>st</sup> Quartile (Cognitive Neuroscience), 5 of 138 (Neurology) 81<sup>st</sup> Prominence Percentile Impact Factor: 6.44

2016 (6)

16. DeSimone J.C., Febo M., Shukla, P., <u>Ofori E.</u>, Colon-Perez L., Li Y., Vaillancourt, D.E. (2016) In vivo imaging reveals impaired connectivity across cortical and subcortical networks in a mouse model of DYT1 dystonia. *Neurobiology of Disease [PMID: 27404940]* 

[] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 14 of 165, 1<sup>st</sup> Quartile (Neurology) 96<sup>t</sup>

96<sup>th</sup> Prominence Percentile Impact Factor: 5.7664

17. Burciu RG, Chung JW, Shukla P, <u>Ofori E.</u>, McFarland NR, Okun MS, Vaillancourt DE (2016). Functional MRI of disease progression in Parkinson's disease and atypical parkinsonian syndromes. *Neurology [PMID: 27421545]* [] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 17 of 373, 1<sup>st</sup> Quartile (Neurology) 87<sup>th</sup> Prominence Percentile

37<sup>th</sup> Prominence Percentile Impact Factor: 7.514

18. Kang, N., Christou, E.A., Burciu, R.G., Chung, J.W., DeSimone, J.C., Ofori, E., Ashizawa, T., Subramony, S.H., Vaillancourt, D.E. (2016). Sensory and motor cortex function contribute to symptom severity in spinocerebellar ataxia type 6. Brain Structure and Function [PMID: 27352359] [] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection

Journal Metrics: 33 of 136, 1st Quartile (Neuroscience), 16 of 165, 1st Quartile (Anatomy)

19. Burciu, R.G., Ofori, E., Shukla, P., Pasternak, O., Chung, J.W., McFarland, N.R., Okun, M.S., Vaillancourt, D.E. (2016). Free-water and BOLD imaging changes in Parkinson's disease patients chronically treated with MAO-B inhibitor. Human Brain Mapping [PMID: 27089850]

[] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 6 of 266, 1<sup>st</sup> Quartile (Radiology, Nuclear Medicine and Imaging, 70 of 609, 1<sup>st</sup> Quartile (Neuroscience) 97<sup>th</sup> Prominence Percentile Impact Factor: 5.082

20. Planetta, P.J., Ofori, E., Shukla, P., Burciu, R.G., Pasternak, O., Okun, M.S., Vaillancourt, D.E. (2016). Free-water diffusion MRI in Parkinson's disease and atypical Parkinson's disease. Brain, 139(2), 495-508 [PMID: 26706348] [X] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 35 of 2448, 1<sup>st</sup> Quartile (Medicine), 3 of 383, 1<sup>st</sup> Quartile (Neurology-clinical) 97<sup>th</sup> Prominence Percentile Impact Factor: 11.075

21. Ofori, E., Du, G., Babcok, D., Huang, X., Vaillancourt, D.E. (2016). Parkinson's Disease Biomarkers Program Brain Imaging Repository. NeuroImage, 124:1120-1124 [PMID 25976927].

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 5 of 165, 1st Quartile (Neurology), 4 of 99, 1st Quartile (Cognitive Neuroscience)

#### 2015 (5)

22. Banerjee, M., Chakraborty, R., Ofori, E., Vaillancourt, D.E., Vemuri, B.C. (2015). Nonlinear regression on Riemannian manifolds and its applications to neuro-image analysis. Medical image computing and computer assisted intervention. 9349. 719-727[PMID: 27110601]

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 8 of 6,462, 1st Quartile (Computer Science), 84<sup>th</sup> Prominence Percentile Impact Factor: 4.657

23. Ofori, E., Pasternak, O., Planetta, P.J., Burciu, R.G., Snyder, A.F., Febo, M., Golde, T.E., Okun, M.S., & Vaillancourt, D.E. (2015). Increased free-water in the substantia nigra of Parkinson's disease: a single-site and multi-site study. Neurobiology of Aging, 36(2):1097-1104 [PMID: 25467638]

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 17 of 161, 1st Quartile (Neuroscience); 4 of 37, 1st Quartile (Aging) 97<sup>th</sup> Prominence Percentile Impact Factor: 5.592

24. Ofori, E., Coombes, S.A., Vaillancourt, D.E. (2015) 3D cortical electrophysiology of ballistic upper limb movement in humans. NeuroImage, 115:30-41 [PMID: 25929620

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection 82<sup>nd</sup> Prominence Percentile Journal Metrics: 5 of 165, 1<sup>st</sup> Quartile (Neurology), 4 of 99, 1<sup>st</sup> Quartile (Cognitive Neuroscience)

25. Ofori, E., Pasternak, O., Planetta, PJ., Li, H., Burciu, R.G., Snyder, A.F., Lai, S., Okun, M.S., Vaillancourt, D.E. (2015). Longitudinal changes in free-water within the substantia nigra of Parkinson's Disease. Brain. 138(Pt 8):2322-31 [PMID: 25981960] \*\*Editors Choice Award

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 31 of 2927, 1st Quartile (Medicine), 3 od 376, 1st Quartile (Neurology) 97<sup>th</sup> Prominence Percentile Impact Factor: 12.589

26. Burciu, R.G., Ofori, E., Shukla, P., Snyder, A.F., Planetta, P.J., Li, H., Hass, C., Okun, M., McFarland, N., Vaillancourt, D.E. (2015). Distinct patterns of brain activity in Progressive Supranuclear Palsy and Parkinson's Disease. Movement Disorders, 30(9): 1248-1258 [PMID: 26148135]

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 46 of 607, 1<sup>st</sup> Quartile (Neuroscience), 252 of 7741, 1<sup>st</sup> Quartile (Medicine)

88<sup>th</sup> Prominence Percentile Impact Factor: 6.405

Impact Factor: 7.550

97<sup>th</sup> Prominence Percentile Impact Factor: 7.550

Impact Factor: 4.068

### 2013 (3)

27. Hess, C.W., Ofori, E., Akbar, U., Okun, M.S., Vaillancourt, D.E. (2013). The evolving role of diffusion magnetic resonance imaging in movement disorders. Current Neurology and Neuroscience Reports, 13(11):400. [] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 46 of 161, 2<sup>nd</sup> Quartile (Neuroscience); 16 of 165, 1<sup>st</sup> Quartile (Neurology-clinical) 94<sup>th</sup> Prominence Percentile Impact Factor: 3.686

Ward, A.M., Loucks, T.M., Ofori, E., & Sosnoff, J.J. (2013). A direct comparison of short-term audiomotor and 28. visuomotor memory. Motor Control, 18(2):127-45.

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 59 of 104, 3<sup>rd</sup> Quartile (Physiology), 85 of 125, 3<sup>rd</sup> Quartile (Sports Science) 73<sup>rd</sup> Prominence Percentile

Impact Factor: 1.719 29. Bronson-Lowe, C.R., Loucks, T.M., Ofori, E., & Sosnoff, J.J. (2013). Aging effects on sensorimotor integration: a comparison of effector systems and feedback modalities. Journal of Motor Behavior, 45(3), 217-240. [] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 55 of 90, 3<sup>rd</sup> Quartile (Cognitive Neuroscience), 59 of 127, 2<sup>nd</sup> Quartile (Sports Science) 73<sup>rd</sup> Prominence Percentile Impact Factor: 1.653

#### 2012 (2)

30. Loucks, T. M., Ofori, E., & Sosnoff, J. J. (2012) Force control under auditory feedback: effector differences and auditory memory. Journal of Perceptual and Motor Skills. 114(3), 915-935. [] Research Design [] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection 73<sup>rd</sup> Prominence Percentile

Impact Factor: 0.703

# 31. Ofori E., Loucks, T.M.J., Sosnoff, J.J. (2012). Visuomotor and audiomotor processing in continuous force production of oral and manual Effectors. Journal of Motor Behavior. 44(2), 87-96.

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 54 of 85, 3rd Quartile (Cognitive Neuroscience), 60 of 125 2rd Quartile (Sports Science)

73<sup>rd</sup> Prominence Percentile Impact Factor: 1.337

## 2010 (2)

32. Ofori E., Samson, J.M., & Sosnoff, J.J. (2010). Age-related differences in force variability and visual display. Experimental Brain Research, 203(2), 299-306.

[X] Research Design [X] Statistical/Data Analysis [X] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 47 of 150, 2<sup>nd</sup> Quartile (Neuroscience)

73rd Prominence Percentile Impact Factor: 2.844

33. Loucks T.M.J., Ofori E., Grindrod C.M., De Nil L.F., Sosnoff JJ. (2010). Auditory motor integration in oral and manual effectors. Journal of Motor Behavior, 42(4), 233-239.

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection

J Journal Metrics: 54 of 85, 3rd Quartile (Cognitive Neuroscience), 60 of 125 2rd Quartile (Sports Science) 73<sup>rd</sup> Prominence Percentile

Impact Factor: 1.750

### 2009(1)

34. Heffernan KS., Sosnoff JJ., Ofori E., Jae SY., Baynard T., Collier, S.R., Goulopoulou S., Figueroa, A., Woods, J.A., Pitetti, J.H., & Fernhall, B. (2009). Complexity of force output during static exercise with Down Syndrome. Journal of Applied Physiology, 106, 1227-33.

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [] Data Collection Journal Metrics: 9 of 114, 1st Quartile (Sports Science), 30 of 103, 1st Quartile (Physiology)

Impact Factor: 3.876

35. Bemis DA., Jones RD., Hiatt LE., <u>Ofori E.</u>, Rohrbach BW., Frank LA., Kania SA. (2006). Comparison of tests to detect oxacillin resistance in Staphylococcus intermedius, Staphylococcus schleiferi, and Staphylococcus aureus isolates from canine hosts. *Journal of Clinical Microbiology*, *44* (9), 3374-3376.

[] Research Design [X] Statistical/Data Analysis [] Drafted Manuscript [X] Revised Manuscript [X] Data Collection Journal Metrics: 7 of 101, 1<sup>st</sup> Quartile (Microbiology)

Impact Factor: 4.101

Manuscripts In-Preparation/Submitted for Review (6):

36. Delgado, F., Kaczmarek, O., Trebing, S., Myassar, Z., Gudesblatt, M., <u>Ofori, E.<sup>c</sup></u> Visuospatial skills and dual task effects in individuals with memory loss

37. <u>Ofori, E.,</u> James, D., Stecher, C., Vaillancourt, D.E., Greig-Custo, M.T., Barker, W., Hanson, K., et. al. Free-water Imaging Reveals Unique Microstructure in Hispanic Individuals with Dementia

38. Van Liew, C., Gudesblatt, M.<sup>c</sup>, Covey, T., Wilken, J., Golan, D., Zarif, M., Bumstead, B., Buhse, MJB., Ofori, E.<sup>c</sup>, Peterson, D.S., The Moderating Roles of Self-Efficacy and Depression in Dual-Task Walking in Multiple Sclerosis: A Test of Self-Awareness Theory (UNDER REVIEW)

39. Peterson DS<sup>c</sup>, <u>Ofori E<sup>c</sup></u>. Entropy and Characterization of gait and posture in people with CMT type 1 and CMT type 2. ASU.

40. <u>Ofori, E.</u><sup>c</sup>, Mahendran, J., Moore, A., Hollett, C., Aldrich. Ladha, S, Gudesblatt, M., Peterson, DSC. Patient-reported outcomes and mobility function in adults with Charcot-Marie Tooth disease (UNDER REVIEW).

41. <u>Ofori, E.,</u> Carlton, L.G. Sensory function and motor control in older adults. *Submitting to Journal of Gerontology-Series B Psychological Sciences and Social Sciences* 

### Peer-Reviewed Abstracts (in print or accepted):

### Since ASU Appointment (12)

- 1. <u>Ofori E.</u>, James, D., Kaczmarek, O., Gudesblatt, M. *Moderators of Dual Task Gait Effects in Mild Cognitive Impairment and Dementia,* Gerontological Society of America 2021 Annual Scientific Meeting, Phoenix, AZ, 2021
- Pagni, B., Walsh, M., <u>Ofori, E.</u>, Chen, K., Sullivan, G., Alvar, J., Monahan, L., Guerithaul, N., Delaney, S., Braden, B.B., Middle-age and older adults with autism experience accelerated declines in verbal short-term memory and hippocampal volume. Arizona Alzheimer's Consortium Conference, Tucson, AZ 2021
- 3. <u>Ofori E.,</u> Foster J., Gassaway J. *Specific Psychological Skills Used During Training in Student Pilots,* Aerospace Medical Associations 91<sup>st</sup> Annual Scientific Meeting, Reno, NV 2021
- 4. <u>Ofori E.,</u> Foster J., Gassaway J. *Perceptual Cognitive Training Improves Motor Coordination in Student Pilots,* Aerospace Medical Associations 91<sup>st</sup> Annual Scientific Meeting, Reno, NV 2021
- Chayrez, S. E., Sarellis, S. D., Hook, J.P., Scott, R.M., <u>Ofori, E.</u> Prevention and Treatment of Musculoskeletal Injury: An Emphasis on [near-term] Readiness and [long-term] Resilience, Military Health System Research Symposium, Orlando, FL 2021 (canceled due to COVID-19).
- 6. Rosenfeld, Y., Kaczmaarek, O., Chee, J., Bumstead, B., Zarif, M., Anand, B., <u>Ofori, E.</u>, Gudesblatt, M. Dementia, Fall Risk and Routine Clinical Care: Opportunities to Enhance Care by Incorporation of Examiner Independent Analytics-Computerized Cognitive Evaluation and Quantified Digital Gait Analysis Including Dual Tasking, Alzheimer's Association International Conference, Denver, CO 2021
- 7. Kaczmaerk, O., Rosenfeld, Y., Chee, J., Bumstead, B., Zarif, M., Anand, B., <u>Ofori, E.,</u> Gudesblatt, M. Dementia, Fall Risk, and Routine Clinical Care: An Opportunity to Enhance Care by Incorporation of Examiner Independent Computerized Cognitive Testing, Alzheimer's Association International Conference, Denver, CO 2021
- 8. Delgado, F., Kaczmarek, O., Trebing, S., Myassar, Z., Gudesblatt, M., **Ofori, E.** *Exploratory cross-sectional mediation analysis of the dual-task effect of cognition on gait in individuals with memory loss,* Alzheimer's Association International Conference, Denver, CO 2021
- 9. Ofori M., Gudesblatt M, Srinivasn J, Kaczmarek O, Ofori, E. Specific cognitive domains and temporal parameters may indicate severity in individuals with memory loss. American Academy of Neurology, Virtual Annual meeting

- 10. Van Liew C, Gudesblatt M, Srinivasan J, Kaczmarek O, Golan D, Doniger G, Wilken J, Ofori E, Peterson DS. Cognitive Domains and Dual Task-Walking in Persons with Multiple Sclerosis. 10<sup>th</sup> International Symposium On Gait & Balance in Multiple Sclerosis. October, 2020
- 11. Alvar, J., Ofori., E., Elms, N.E., Walsh, M., Pagni, B., Braden, B.B. *Free-water analysis of the hippocampal complex in aging adults with autism spectrum disorder* Arizona Alzheimer's Consortium Conference, Tucson, AZ 2020
- 12. Ofori, E., Elms, NE. Braden, BB. *Free-water in the hippocampal striatal axis is altered in older individuals with ASD.* Autism Spectral Disorder Mini-Conference, ASD Translational Team, Phoenix, AZ 2019

### Prior to ASU Appointment (33)

- 13. Chung JW, Burciu RG, **Ofori E**, Shukla P, Okun MS, Hess CW, Vaillancourt DE. *Movement-related beta-band desynchronization in supplementary motor area is reduced by anti-parkinsonian medication and relates to the velocity of upper limb movement in Parkinson's disease*. Annual Meeting of the Society for Neuroscience, Washington DC, 2017
- 14. Vaillancourt DE, Burciu RG, **Ofori E**, Archer DB, Wu SS, Pasternak O, McFarland NR, Okun MS. *Applications of free-water diffusion MR imaging to parkinsonism*. Annual Meeting of the National Institute of Neurological Diseases and Stroke Parkinson's Disease Biomarker Program, Bethesda, MD, 2017.
- 15. Chung JW, Burciu RG, **Ofori E,** Okun MS, Hess CW, Vaillancourt DE. *Desynchronization in the supplementary motor area is reduced by dopaminergic medication and relates to the velocity of upper limb movement in Parkinson's disease.* Progress in Motor Control XI, Miami, FL, 2017.
- 16. Burciu RG, **Ofori E**, Archer DB, Wu SS, Pasternak O, Okun MS, Vaillancourt DE. *An imaging progression marker for Parkinson's disease: a 4-year multicentre longitudinal study of substantia nigra free-water.* Annual Meeting of the International Society for Magnetic Resonance in Medicine, Honolulu, HI, 2017.
- 17. Chung JW, Burciu RG, Ofori E, Shukla P, Okun MS, Hess CH, Vaillancourt DE. Parkinson's disease diffusion MRI is not affected by acute antiparkinsonian medication. D. K. Stanley Research Symposium, Gainesville, FL, 2017.
- 18. Burciu RG, Shukla P, **Ofori E**, Chung JW, Hess CW, McFarland NR, Wagle Shukla A, Okun MS, Vaillancourt DE. *Functional and free-water diffusion MR imaging following a single low dose of trihexyphenidyl in patients with cervical dystonia.* Annual Meeting of the Society for Neuroscience, San Diego, CA, 2016.
- Burciu RG, Ofori E, Shukla P, Pasternak O, Chung JW, DeSimone J, Hess CW, McFarland NR, Wagle Shukla A, Okun MS, Vaillancourt DE. Motor-related brain changes associated with acute administration of trihexyphenidyl in patients with cervical dystonia. 20th International Congress of Parkinson's Disease and Movement Disorders (MDS), Berlin, Germany 2016.
- 20. Burciu RG, Ofori E, Shukla P, Pasternak O, Chung JW, McFarland NR, Okun MS, Vaillancourt DE. *In vivo nigrostriatal changes associated with MAO-B inhibitor therapy in Parkinson's disease.* Annual Meeting of the Society for Neuroscience, Chicago, IL, 2015.
- 21. Burciu RG, Chung JW, Shukla P, Ofori E, McFarland NR, Okun MS, Vaillancourt DE. Longitudinal changes in basal ganglia and cortex using task-based fMRI in early Parkinson's disease. Annual Meeting of the Society for Neuroscience, Chicago, IL, 2015.
- 22. Chung, JW., Ofori, E., Vaillancourt, D.E., (April 2015). Visual Gain Reduces Movement Error by Enhancing Beta-band Desynchronization in the Sensorimotor Cortex. Neural Control of Movement, Charleston, SC
- 23. Ofori, E., Pasternak, O., Planetta, P.J., Birciu, R.G., Snyder, A.F., Febo, M., Golde, T.E., Okun, M.S., Vaillancourt, D.E. (2014). Increased extracellular free-water in the substantia nigra of Parkinson's disease
- 24. Burciu, R.G., Shukla, P., **Ofori, E.**, Snyder, A.F., Planetta, P.J., Hass, C., Okun, M., McFarland, N., Vaillancourt, D.E. (2014). Bimanual dexterity and gait related to functional and structural brain differences between progressive supranuclear palsy and Parkinson's disease.
- 25. Misra, G., **Ofori, É.**, Chung, J., Coombes, S.A. (2014). High Density Eectroencephalograpy (EEG) correlates of painrelated changes in upper limb movements. Society for Neuroscience, Washington, D.C
- 26. Bronson-Lowe, CR., Loucks, T.M., **Ofori, E.**, Sosnoff, J.J. (2013). Aging effects on variability of force output in the lip. Dysphagia Research Society's Annual Meeting, Seattle, WA
- 27. **Ofori, E.,** Bronson-Lowe, CR., Sosnoff, JJ & Loucks, T.M.J (June 2012). Age-related differences in force control under visual and auditory feedback. North American Society for the Psychology of Sport and Physical Activity National Conference, Honolulu, HI
- Ofori, E., Holtrop, J., Bailey, A., Sutton, B., & Loucks, T.M.J (June 2012). Neural correlates of manual and oral movements in young and older adults. North American Society for the Psychology of Sport and Physical Activity National Conference, Honolulu, HI
- 29. **Ofori, E.,** Loucks, T.M., Carlton, L.G., Sosnoff, J.J., (June 2011). Auditory and Visual Feedback in Oral and Manual Effectors. Speech Production Workshop, University of Illinois at the Beckman Institute for Advanced Science and Technology, Urbana, IL
- 30. **Ofori, E.**, Shim, J., Sosnoff, J. (July 2011). Angle Differences in Modeling Force Variability across Multiple Muscular Contractions of the Lower Limb. Progress in Motor Control VIII, Cincinatti, OH

- 31. **Ofori, E.**, Sosnoff, J.J, Morrison, S., Boes, M.K., Pula, J.H., & Motl, R.W., (June 2011) Tremor and Multiple Sclerosis. North American Society for the Psychology of Sport and Physical Activity National Conference, Burlington, VT
- Kickertz, A., Lim, J., Carlton, M.J., Ofori, E., & Carlton, L.G. (October 2010). Coordination of head and eye movements in free-throw shooting. Canadian Society for Psychomotor Learning and Sport Psychology, National Conference, Ottawa, ON
- Ofori, E., Davis, J., Lim, J., Kickertz, A., & Carlton, L.G. (October 2010). Coordination of head and eye movements in free-throw shooting. Canadian Society for Psychomotor Learning and Sport Psychology, National Conference, Ottawa, ON
- 34. Loucks, T. M., **Ofori, E.** & Sosnoff, J. J., (June 2010) Sensory Mechanisms for Fine Force Control. Integrative Neural Systems Underlying Vital Aerodigestive Tract Functions Conference, Madison, WI
- 35. Loucks, T.M., **Ofori, E.,** C.M., De Nil L.F., Sosnoff JJ (June 2010). Auditory motor integration for manual and oral effectors. North American Society for the Psychology of Sport and Physical Activity National Conference, Tucson, AZ
- 36. **Ofori, E.,** Loucks, TMJ, Carlton, LG, Sosnoff, JJ (June 2010). Auditory and Visual Feedback in Oral and Manual Force Control. North American Society for the Psychology of Sport and Physical Activity National Conference, Tucson, AZ
- 37. **Ofori, E.,** Butler, JM, Serio, SD, Wessels, KK, & Sosnoff, JJ (November 2009). Pain and Muscular Strength in Manual Wheelchair Users. Canadian Society for Psychomotor Learning and Sport Psychology, National Conference, Toronto, ON
- 38. Sosnoff JJ., **Ofori E.**, Knapik D., Grinrod CM., De Nil LF., Ambrose NG, Carlton LG, & Loucks T.(October 2009). Auditory Motor Memory. Society of Neuroscience, Chicago, IL
- 39. **Ofori, E.,** Samson, JM, Sosnoff JJ. (June 2009). Visual Display and Age-Related Differences in Force Production. North American Society for the Psychology of Sport and Physical Activity National Conference, Austin, TX
- 40. **Ofori, E**., Sosnoff JJ, & Carlton, LG, (May 2009). Force Variability due to Strength Differences in Discrete and Continuous Force Control Tasks. American College of Sports Medicine, National Conference, Seattle, WA.
- 41. **Ofori, E.**, & Heffernaan, KS, Fernhall, B., & Sosnoff, JJ, (June 2008). Force Variability and Down Syndrome. North American Society for the Psychology of Sport and Physical Activity, National Conference, Niagara Falls, ON.
- 42. **Ofori, E.,** Sosnoff, JJ., & Carlton, LG. (June 2008). *The Relationship between Discrete and Continuous Force Variability.* North American Society for the Psychology of Sport and Physical Activity, National Conference, Niagara Falls, ON
- 43. **Ofori, E**., Heffernan, KS, Fernhall, B, & Sosnoff JJ, (May 2008). *Muscular Weakness and Force Variability in Individuals with Down Syndrome*. American College of Sports Medicine, National Conference, Indianapolis, IN
- 44. **Ofori, E.,** & Sosnoff JJ, (June 2007). *Does Discrete Error Impact Continuous Force Production?* North American Society for the Psychology of Sport and Physical Activity, National Conference, San Diego, CA.
- 45. Sosnoff JJ, Jang, J & **Ofori, E.** (October 2006). *The neuromuscular correlates of the structure of force variability.* Society of Neuroscience, Atlanta, GA.

## Invited Presentations/Talks:

### **Prior to ASU Appointment (2)**

- 1. 3D Electrocortical Activity of Upper Limb Movements: Velocity and Distance Effects. 1<sup>st</sup> Annual Motor Neuroscience Summit, University of Florida, Gainesville, USA. Nov 22, 2013.
- 2. *Free-water imaging in Aging, Parkinson's Disease, and Alzheimer's Disease.* Kinesiology and Community Health Colloquium series, University of Illinois at Urbana-Champaign, Urbana, IL, April 28, 2017.

### Since ASU Appointment (10) \*denotes outside of the State of Arizona

- 3. \**Reflections from Pre-College Programs at Tennessee.* Engineering Diversity Programs 45<sup>th</sup> Anniversary, UTK Tickle College, University of Tennessee at Knoxville, Knoxville, TN November 3, 2019
- 4. \*Diffusion Imaging Applications in Alzheimer's Disease. Alumni Speaker Series, University of Tennessee at Knoxville, Knoxville, TN November 3, 2019
- 5. Multimodal Imaging in Neurodegenerative Disease, CHS Research Day 2019, Arizona State University, Phoenix, AZ February 14, 2019
- 6. Multimodal Imaging for early detection of decline in Alzheimer's Disease, Coffee and Cognition Seminar, Tempe, AZ April 3, 2019
- 7. Multimodal imaging for neurodegenerative disorders, BME Seminar, SBSHE, Tempe, AZ, February 7, 2020

- 8. \*Diffusion MRI in Neurodegenerative diseases, Rocky Mountain MRI Mash-UP, Virtual , June 24, 2020
- 9. \*NASPSPA Symposium "Neuroimaging in Motor ControL"
- 10. Improving Cognitive Capacity and. Movement & Preventing Neurodegeneration, Community Education Presentation, Sun Health, Surprise, AZ September 25, 2020
- 11. \*Multicultural Engineering Program Talk Session, Office of Diversity Programs, University of Tennessee, Knoxville, March 29, 2021 (Virtual Talk)
- 12. "Parkinson's, Motor Disorders & the Community", ASU TRiP Talk, April, 2021

### SERVICE

### Journal Editorial Boards:

- 1. Frontiers in Neurology-Guest Associate Editor for Neuroimaging in Parkinson's Disease and Parkinsonism,2019present (Currently Edited & Published 25 articles)
- 2. Frontiers in Neurology-Guest Associate Editor for Neuroimaging in of Non-Motor Deficits in Movement Disorders, 2021present (Currently Edited & Published 1 articles)
- 3. Associate Editor in Brain Imaging and Stimulation, Frontiers in Human Neuroscience, 2020-present
- 4. Associate Editor in Movement Disorders, Frontiers in Neurology, 2018-present

Ad-Hoc Journal Reviewer (\*\*indicates more than 5x) (2010-present) (Total articles: 150+):

- 1. Brain\*\*
- 2. Annals of Neurology
- 3. Movement Disorders\*\*
- 4. Neurology
- 5. NeuroImage\*\*
- 6. Journal of Neuroscience
- 7. NeuroImage Clinical\*\*
- 8. Frontiers in Neurology\*\*
- 9. Frontiers in Aging Neuroscience\*\*
- 10. Alzheimer's Research & Therapy\*\*
- 11. Parkinsonism & Related Disorders
- 12. Cerebral Cortex\*\*
- 13. Brain Structure and Function\*\*
- 14. Scientific Reports
- 15. Neuroscience
- 16. Journal of Biomechanics
- 17. Clinical Neurophysiology
- 18. Brain Imaging & Behavior
- 19. Journal of Applied Physiology
- 20. PlusOne
- 21. Gait & Posture

# Ad-Hoc Grant Reviewer:

- 22. Clinical Biomechanics
- 23. Journal of Neurodegenerative Disorders
- 24. Neuroscience Letters\*\*
- 25. Experimental Brain Research\*\*
- 26. Physiological Measurement\*\*
- 27. Biomedical Research International
- 28. Experimental Physiology
- 29. Motor Control\*\*
- 30. Journal of Motor Behavior\*\*
- 31. Human Movement Science\*\*
- 32. Journal of Applied Biomechanics
- 33. Journal of Neurophysiology
- 34. Institute of Electrical and Electronics Engineers: Transactions of Haptics
- 35. Adaptive Behavior
- 36. European Journal of Sport Science
- 37. OBM Neurobiology
- 1. 2020 NIA Clinical Neuroscience and Neurodegeneration Study Section
  - 2. Bright Focus Foundation
  - 3. HIDA/CHS Collaborative Seed Grant Program

### Professional Service External To ASU

1. NIH LRP Ambassador (2018-present). LRP Ambassadors serve as a personalized link/connection between the Division of Loan Repayment (DLR) and potential applicants at their home institutions by Identifying potential eligible applicants to the LRPs within their institutions and sharing information about the LRPs with them.

### University Service Since ASU Appointment

- 2. 2020-21 Achievement Reward for College Scientists Faculty Review Committee (Phoenix Chapter/ASU Graduate College). This committee reviews eligible applications that select finalists for the ARCS Foundation. This involves the review of 6-8 applications.
- 3. 2020-2021 Banner-ASU Neuroscience Scholars Reviewer- Track 1 Basic and Translational Neuroscience. The selected faculty review candidates within the pool for opportunities to work in the lab. This was halted due to COVID-19.
- 4. Summer 2021 ASU Enterprise marketing Hub, Lead Role of Professor This involved taking photos in various classroom on the Tempe campus for recruitment and awareness of COVID-19 protocols.
- 5. ASU PT Club Research Panel- This involved speaking about various research opportunities and helping pre-PT students navigate classes and professional develop.
- 6. African and African American Faculty and Staff Association The AAAFSA is committed to promoting and enhancing a sense of community and equality at Arizona State University. Membership allows for working on sub-committees to contribute to goals of equality and community engagement.
- 7. ASU Mentor Network- The ASU Mentor Network can provide an opportunity for faculty and staff to make a positive difference in students' lives and careers by sharing career advice, networks, and their own success stories. I use my role in this network to Serve as a mentor to students or alumni who may be interested in working at a university.
- 8. Black African Coalition Faculty Contact- The Black African Coalition leads the celebration of Black History Month each February. I served on a video recording to highlight the recent killings of black individuals.

### College of Health Solutions (ASU) Service

- 9. 2019-2020 College Search Committee: Associate Professor (T/TT): Biomedical Informatics and Health Economics).
- 10. 2019-2020 College Search Committee: Human Neuroscience Search Committee
- 11. 2020-present. Mentee in Faculty Mentoring Program (Mentors: Glenn & Shannon Ringenbach)
- 12. ENS PHD Executive Committee (Spring 2019 present): The ENS Executive Committee reviews the entire packet for incoming graduate students and helps conduct admission interviews. The committee meets monthly to discuss program issues. The Executive committee ensures the program is Graduate College compliant, offers recommendations over curriculum, and approves outside program faculty mentors. The Executive committee is also tasked to review annual contracts of students within the program and serve on their supervisory committee. The ENS executive committee also sets threshold scores for the program comprehensive exam that helps ensure PhD students meet milestones within the program. The ENS executive committee also handles petitions for continuation of funding or extension of time. More regarding the program can be found here: https://chs.asu.edu/sites/default/files/handbook\_exercise\_and\_nutritional\_sciences\_phd\_ay2122\_rev202106\_u pl20210824.pdf
- 13. Annual Review Committee Member: Shannon Wilson (2020)/Ferdinand Delgado (2019-present)/Andrew Monaghan (2020 present)
- 14. 2019 present, EXW Progressive Exam Grader Ph.D. students must take a progression exam on research design and statistics proficiency in May after they have completed the core ENS research methods and statistical

courses. The progressive exams will focus on skills learned in research methods (EXW 700) and statistics (EXW 640 and EXW 645); students need to have earned a B or higher in each of these classes before being able to sit for the exam. The aim of the progressive exam is to assess a students' proficiency in applying their knowledge to real research design problems and statistical analysis. All material from the courses may be included in the progressive exam.

- 15. Fall 2018-present, MS EXW Comps Grader & EXW 501 Question Creator.
- 16. Current Member Athletic Affinity Network (2019-present) & Previous Member GIS Affinity Network (2019-2020). Affinity Networks are groups of faculty and staff, practitioners, policy experts, advocates and others who have an interest in the topic and represent a pool of talent from which Translational Teams can draw.
- 17. Current Member of Autism Spectrum Disorder Translational Team. Translational research aims to improve health by shortening the time between discoveries and the development of community and clinical practices, and ultimately improvements in population health. Our most pressing health challenges have multiple layers: medical, geographic, environmental, psychosocial and cultural. Addressing just one factor means we may miss identifying the most effective solutions. Translational Teams connect university researchers and staff with clinical and community partners, industry innovators and students to do research that addresses community and individual health needs from the very beginning.
- 18. Member of Justice, Equity, Diversity & Inclusion (JEDI) Council. The JEDI Council aims to diversify recruiting of faculty, staff, students and community partners. This method is through using various techniques and tactics to help promote awareness and inclusivity within all members of the college. The council meets twice a month and then has subcommittee that are tasked with specific deliverables.

### Selected Service Prior to ASU

- 1. Running Backs Coach, PK Yonge Developmental School, 2018
- 2. Alachua County School Volunteer Program. Topic of Interest: Magnets; (2015-2018)
- 3. National High Magnetic Field Laboratory. Magnet Exploration Elementary School Outreach Speaker (2015-2018)
- 4. Machen Scholar Life Coach at the University of Florida (2015-2016)
- 5. Chapter Advisor for African-American's in Pre-Health at the University of Illinois (2011-2012); Note: Won Organization of the Year 2012 Under Supervision
- 6. Graduate Record Examination Course Instructor (Quantitative Section) for Ronald McNair Program at University of Illinois at Urbana-Champaign (2010)
- 7. Human & Health Performance College Marshall for Summer 2017 Graduation
- 8. Research Program Coordinator Kinesiology and Community Health position, Fall 2011
- 9. Retention & Success for the Office of Minority Student Affairs, Spring 2011
- 10. 2011 Illinois Summer Research Symposium University of Illinois Graduate Collage
- 11. Teaching Equipment Fee Committee 2010 in the Department of Kinesiology and Community Health

### **INSTRUCTIONAL ACTIVITIES**

#### Courses:

\* Denotes the development of a new course or significant revision of existing course

Eall 2019	Instructor, KIN 412/512: Biomechanics of the Skeletal System (Undergraduate/Graduate) Arizona State University, Phoenix AZ
Fall 2018 Spring 2019 Fall 2019 Spring 2020 Fall 2020 Spring 2021	Significantly revised and updated previous content and instructed a upper level kinesiology course which is one of the required courses in BS in kinesiology. The revisions involved transferring content to Canvas and involving more student engagement opportunities during COVID-19 pandemic using slido.com The purpose of this course is to introduce students to the mechanical principles that determine how the musculoskeletal system functions. The course covers the mechanical properties of different biological materials (e.g., bone, ligaments, tendons, cartilage, and muscle) and quantitative and qualitative analyses of the mechanics at major joints of the body. Topics include: Anthropometrics, Training Mechanics, Articular Cartilage Biomechanics, Muscle and Gait Biomechanics. The graduate component attracts students from SBHSE where they complete a specialized topic or complex analyses. A few topics have been ACL
	Reconstruction Impact on joint reaction force or Smooth Muscle Biomechanics

Semester	Total	%	Student	Course	Instructor	Course	Overall
	Students(Grad	Received	Engagement	Organization	Enthusiasm/A	Demands	Instructor
	Students)				vailability		Effectiveness
Fall 2018	36 (1)	83%	4.6 ± 0.62	4.3 ± 0.66	4.7 ± 0.75	4.3 ± 0.84	3.6 ± 0.96
Spring 2019	35 (3)	77%	4.3 ± 1.01	4.0 ± 1.02	4.3 ± 0.94	4.1 ± 1.05	4.1 ± 1.02
Fall 2019	39 (6)	54%	4.4 ± 0.73	3.8 ± 1.06	4.4 ± 0.84	4.1 ± 0.97	3.5 ± 1.10
Spring 2020**	35 (0)	71%	4.5 ± 0.76	3.6 ± 1.28	4.3 ± 0.83	3.8 ± 1.27	3.4 ± 1.32
Fall 2020**	48 (3)	60%	3.9 ± 1.10	3.1 ± 1.38	3.7 ± 1.10	3.9 ± 1.06	3.3 ± 1.31
Spring 2021	30 (0)	59%	4.8 ± 0.42	4.5 ± 0.78	4.5 ± 0.78	4.4 ± 0.77	4.3 ± 0.89
Mean	37 (4)	67%	4.4 ± 0.74	3.9 ± 1.03	4.3 ± 0.87	4.1 ±	3.7 ± 1.11
wean	37 (4)	67%	4.4 ± 0.74	3.9 ± 1.03	4.3 ± 0.87	4.1 ±	3.1 ± 1.11

Scores range from Low (1) to Very High (5)

Fall 2021

Instructor, KIN 540: Sports Biomechanics (Graduate) Arizona State University, Phoenix AZ

This is a newly developed course a part of the Masters in Strength & Conditioning Program. The Course uses Qualitative and quantitative analyses of selected sports performance and human movements to help reduce injury risk and maximize performance. Some of the learning outcomes involve: Describe fundamental concepts related to motion, center of gravity, and levers, Understand the mechanical principles involved in sport specific activities, such as running, throwing, lifting, and catching. Critically analyze research articles related to sports biomechanics, Identify measurement and technology use for specific sports movements & developing hierarchical models for sports movements and the parameters that may needed to test for optimal performance. The course also is approved for Masters students in SBHSE

Semester	Total Students	% Received	Student Engagement	Course Organization	Instructor Enthusiasm/A vailability	Course Demands	Overall Instructor Effectiveness
Fall 2021	15						

### Fall 2021

#### Instructor, HCD 300: Biostatistics (Undergraduate) Arizona State University, Phoenix AZ

Biostatistics and its use in health and health services research. Familiarizes students with statistical concepts and methods to analyze and interpret data and conceptually addresses statistical theory. Introduces Excel software to manage data and perform statistical tests.

Semester	Total Students	% Received	Student Engagement	Course Organization	Instructor Enthusiasm/A vailability	Course Demands	Overall Instructor Effectiveness
Fall 2021	34						

### Guest Lectures/Learning Modules

### **Prior to ASU**

- 1. "Angular Kinematics: Clinical and Practical Applications" (2016): University of Florida
- 2. "EEG: Capture and Share the Brain's Moments" (2015): University of Florida

### Since ASU

- 3. "Pathomechanics & NeuroImaging Lab Mission" (2018): Arizona State University (2 x)
- 4. "Biomechanics: Insights & Applications" (2018): Arizona State University
- 5. "Diffusion MRI and clinical applications" (2019-present): Arizona State University, BME 565: Magnetic Resonance Imaging
- 6. "Multimodal Imaging Methods for Dementia" (2019-2020): Arizona State University, SHS 542 Applied Methods in Auditory Language Neuroscience
- 7. "The biomechanics behind bone health" (2020-present): University of Arizona, College of Medicine, Musculoskeletal and Neuroscience
- 8. "The biomechanics behind muscles, tendons, and ligaments (2020-present): University of Arizona College of Medicine, Musculoskeletal and Neuroscience

#### Doctoral Dissertation Committee Member:

#### Since ASU Appointment

- 1. Gretchen Roman (2018). Exercise & Nutrition Sciences, "Upper Extremity Biomechanics is Native and Non-Native Singers", College of Health Solutions (Chair: P. Swan)
- 2. Charles Van Liew (2021). Exercise & Nutrition Sciences, "Dual-Task Walking in Multiple Sclerosis: Correlates, Moderators, and Consequences", College of Health Solutions (Chair: D. Peterson)
- 3. Ferdinand Delgado (In Progress). Exercise & Nutrition Sciences, "TBD". College of Health Solutions/Edson College of Nursing (Co-Chairs: F. Yu & C. Der Ananian)
- 4. Andrew Monaghan (In Progress). Exercise & Nutrition Sciences, "TBD". College of Health Solutions (Chair: D. Peterson)
- 5. Elizabeth Keeling (In Progress). Neuroscience Program, "TBD". College of Liberal Arts Sciences (Chair: A. Stokes)

#### Master Committee Chair:

#### Since ASU Appointment

- Sofoklis D. Sarellis (2020). Exercise & Wellness, "The Effects of High-Load Versus Low-Load Resistance Training on Isokinetic Knee Extensor and Flexor Peak Power, Vastus Intermedius, and Vastus Lateralis Muscle Thickness in Untrained Overweight and Obese Adults" College of Health Solutions
- 2. Madeline Hooten (In Progress). Auditory & Language Neuroscience, "TBD". College of Health Solutions
- 3. Eric Andrade (In Progress). Auditory & Language Neuroscience, "TBD". College of Health Solutions
- 4. Dakota Hohenwalter (In Progress). Exercise & Wellness, "TBD". College of Health Solutions
- 5. Sean Southland (In Progress). Exercise & Wellness, "TBD". College of Health Solutions
- 6. McKenzie Walsh (In Progress). Exercise & Wellness, "TBD". College of Health Solutions

#### Masters Applied Research Project Chair:

1. Clayton Banister (2020). Exercise & Wellness, "The Association between Occupation and Alzheimer's disease" College of Health Solutions, ASU

#### Masters Committee Member:

 Alexander J Stark (2019). Exercise & Wellness, "Feasibility of Using a Non-Counter Movement Squat to Assess Lower Body Strength in Adults Ages 20-70 years." College of Health Solutions, ASU (Chair: B. Ainsworth)

2. Ahmad Basiri (2020). Biomedical Engineering, "Analyze Fractional Anisotropy along various track." School of Biological and Health Systems Engineering, ASU (Chair: S. Schaefer)

3. Jose Rivera (2020). Biomedical Engineering, "Comparison of Older Adults' Gait in Laboratory Setting and Home Setting using Smart Shoes," School of Biological and Health Systems Engineering, ASU (Chair: W. Zhang)

4. Jordan S. Barajas (2020). Exercise & Wellness, "Characterizing the Impact of Baseline Cognitive Status on Dual Task Performance: An Analysis of Postural and Cognitive Outcomes While Backward Protective Stepping". College of Health Solutions, ASU (Chair: D. Peterson)

5. Joel Horn (2021). Exercise & Wellness, "ACL Injury Prevention in Youth Soccer Athletes". College of Health Solutions, ASU (Chair: R. Larson)

6. Jade Terry (2021). Auditory & Language Neuroscience, "TBD". (Chair: G. Brewer)

#### Undergraduate/Honors Thesis Committee Chair:

- 1. Sydney Stephens (in progress). Medical Studies, "TBD". Arizona State University
- 2. Santana Solomon (in progress). Medical Studies, "TBD". Arizona State University
- 3. Joshua Malone (in progress). Kinesiology, "TBD". Arizona State University

### **Prior to ASU**

- 4. Johanna McCracken (2016). Applied Physiology and Kinesiology, "Longitudinal diffusion changes in subcortical and cortical brain areas of Parkinsonism", University of Florida
- 5. Leah Mulholland (2017). Applied Physiology and Kinesiology, "Cortical changes in bilingual and monolingual individuals across the Alzheimer's clinical continuum", University of Florida

#### Undergraduate/Honors Thesis Committee:

#### Since ASU Appointment

- 1. Randall Arroyo (2019). Kinesiology, "The effects of variable training on generalization during loss of balance", College of Health Solutions, ASU (Chair: D. Peterson)
- 2. Jocelyn Alvar (2020). Speech & Hearing Science., "Freewater Brain Analysis of Aging Adults with Autism", College of Health Solutions, ASU (Chair: B. Blair Braden)
- 3. Nicole Oberbillig (2020). Kinesiology. "Acute Exercise Improves Self-Efficacy in Adults with Down Syndrome", College of Health Solutions, ASU (Chair: S. Ringenbach)
- 4. Ezekiel Mendoza (2020). Kinesiology. "Cycle Therapy on Fine Motor Control in Older Adults with Down Syndrome", College of Health Solutions, ASU (Chair: S. Ringenbach)
- 5. Georgia Sullivan (2021). Biomedical Engineering. "Aging in Autism: An Analysis of Age-Related Changes in The Hippocampus", SBHSE, ASU (Chair: B. Blair Braden)

#### Mentoring of Past High School, Undergraduate, Graduate Students, Post-Docs & Research Assistants:

Min Gao	Larz Storwell	Jayasurya	Derek Archer,PhD
Narendiran Raghu	John Bravo, MD	Mahendran, MS	Sarah Hovey
Julia Philips	Dara James, PhD	Max Ofori, MD	Brianna
Akua Fordjour	Franklin Kwanoh	Michaela Mitchell	Paiewonsky, BS
Nicole Elms, BS	Marvam Musse	Jessica Lynn	Abigail Hatcher
Heeren Parekh	Kevla Baeza	Christopher	
Brianna Kubic	Anthony Insalaco	Gonzales	

### HONORS/AWARDS/RECOGNITION/CERTIFICATES

#### **Prior to ASU Appointment**

- 1. Departmental Engineering Scholarship, The University of Tennessee at Knoxville (2000-2002)
- 2. African-American Achiever's Scholarship, The University of Tennessee at Knoxville (2000-2004)
- 3. Ronald E McNair Summer Fellowship, The University of Tennessee at Knoxville (2004)
- 4. Named 10 times to the incomplete list of teachers ranked excellent by students 2006-2012. Student course evaluations from students normally range from 4.4 to 4.9 out of 5.0 (University of Illinois).
- 5. National Instruments Certified LabView Associated Developer (2010-2012)
- 6. Progress in Motor Control, International Society of Motor Control (2011)
- 7. McKnight Brain Institute Fellow, The University of Florida (2014-2015)
- 8. BJ & Eve Wilder Fellowship in Alzheimer's Disease, The University of Florida (2015-2016)

- 9. UCLA Advanced Neuroimaging Training Program Fellowship, The University of California at Los Angeles (2016)
- 10. 1Florida Alzheimer's Disease Research Center Fellow (2016-2017)

#### Since ASU Appointment

- 11. NIH Loan Repayment Program Award (2018-2020)
- 12. NIA Butler-Williams Scholar Recipient (2019)
- 13. NIH Early Career Reviewer program, Center for Scientific Review (2020)

### **PROFESSIONAL MEMBERSHIPS**

- 1. National Society for Black Engineers (2000-2005)
- 2. Biomedical Engineering Society-UTK Chapter (2003-2005)
- 3. North American Society for the Psychology of Sport and Physical Activity (2006-2011)
- 4. LabVIEW Advanced Virtual Architects
- 5. American College of Sports Medicine (2007-2010)
- 6. International Society of Motor Control (2011-2013)
- 7. Canadian Society for Psychomotor Learning and Sports Psychology (2007, 2009, 2010)
- 8. Society for Neuroscience (2014-2016)
- 9. Neural Control for Movement (2015-2017)
- 10. American Academy of Neurology(2019-present)
- 11. Gerontological Society Association (2021-present)
- 12. Aerospace Medical Association (2020-present)

# SELECTED ASU PROFESSIONAL DEVELOPMENT ACTIVITIES

NIH Blueprint for Neuroscience Research: Addressing Neuroimaging Challenges Across Populations and Settings Workshop

Billion Dollar Graphics with Mike Parkinson Inaugural Simons-Emory Symposium on Motor Control -ASU Community of Care Training for Employees Type: Diversity & Recruitment for Search Committees SciLine networking reception Dementia Consensus Conference 2018 NIH Regional Seminar Script Writing for Informative Videos R Intro for ASU's High Performance Computing Cluster