

David J. Clark, ScD

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EDUCATION

Doctor of Science (ScD)

Movement and Rehabilitation Sciences

Boston University

Sargent College of Health and Rehabilitation Sciences

September 2002 – May 2007

Bachelor of Science (BS), Summa Cum Laude

Exercise Physiology

University of Massachusetts – Lowell

September 1997 – June 2001

PROFESSIONAL EXPERIENCE

Primary Appointments

2011 – 2018	<i>Assistant Professor</i> , Department of Aging and Geriatric Research, College of Medicine, University of Florida
2018 – 2023	<i>Associate Professor</i> , Department of Physiology and Aging, College of Medicine, University of Florida
2007 – 2023	Research Health Scientist, Brain Rehabilitation Research Center, Malcom Randall VA Medical Center
2022 – 2023	Acting Deputy Chief of Staff for Research, North Florida / South Georgia Veterans Health System
2023 – Present	<u>Professor</u> , Department of Neurology, College of Medicine, University of Florida
2023 – present	<u>Associate Chief of Staff for Research Service</u> , North Florida / South Georgia Veterans Health System

Service and Mentoring Appointments

2013 – present	<i>Co-Coordinator</i> , Motor Function Research Initiative, Brain Rehabilitation Research Center, Malcom Randall VA Medical Center
2014 – present	<i>Graduate Faculty</i> , PhD Program in Movement and Rehabilitation Sciences, College of Public Health and Health Professions, University of Florida
2017 – 2022	<i>Board Member</i> , Institutional Review Board, University of Florida
2019 – present	<i>Graduate Faculty</i> , PhD Program in Applied Physiology and Kinesiology, College of Health and Human Performance, University of Florida
2019 – present	<i>Affiliate Faculty</i> , J. Crayton Pruitt Family Department of Biomedical Engineering, College of Engineering, University of Florida
2020 – 2021	<i>Vice Chair</i> , Research and Development Committee, Malcom Randall VA Medical Center
2022 – present	<i>Member</i> , Board of Directors, North Florida Foundation for Research and Education

FUNDING

Active Funded Awards:

NIH/NIA 1R01AG081477-01

5/2023 – 4/2027

Cognitively engaging walking exercise and neuromodulation to enhance brain function in older adults

\$3,828,628 (direct costs)

Role: Principal Investigator

VA 1I21RX004641 (E4641-P)

7/2023 – 6/2025

Small Projects in Rehabilitation Research

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Aging with a Traumatic Brain Injury: Implications for Balance Deficits and Fall Risk

\$230,000

Role: Principal Investigator

NIH/NINDS 1R01NS131227

7/2023 – 6/2028

The function of descending and ascending pathways in spastic hypertonia and hyperreflexia

\$1,257,513 (direct costs)

Role: Co-Investigator (PI: S. Vahdat)

NIH/NIA U01AG061389

9/2018 - 5/2023 (NCE until 5/2024)

Multimodal imaging of brain activity to investigate walking and mobility decline in older adults

\$3,557,000 (direct costs)

Role: Principal Investigator (Multi-PI: DJ Clark, RD Seidler, TM Manini)

VA I01RX003115 (E3115R)

5/2019 – 4/2023

Merit Review

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Cerebral networks of locomotor learning and retention in older adults

\$1,100,000

Role: Principal Investigator

E9287-O

10/2019 – 9/2024

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Presidential Early Career Award for Scientists and Engineers: The PECASE is the highest honor bestowed by the United States Government to outstanding independent early-career scientists.

\$125,000

Role: Principal Investigator

VA Merit Review (B3542R)

2021 – 2025

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Brain and behavioral responses to backward walking training post-stroke

\$1,200,000

Role: Co-Investigator (PI: DK Rose)

VA RR&D Center Award (B3000-C)

10/2019 – 9/2024

Brain Rehabilitation Research Center

US Department of Veterans Affairs, Rehabilitation Research and Development Service

\$4,500,000

Role: Co-Investigator and Motor Function Initiative Co-Leader (PI: R Bauer)

Craig H. Neilsen Foundation

1/2021 – 9/2023

Pilot Grant: Spinal Cord Injury Research on the Translational Spectrum (SCIRTS)
Locomotor Training with Testosterone to Promote Bone and Muscle Health
\$300,000

Role: Co-Investigator (PI: JF Yarrow and EJ Fox)

NIH/NIA T32 AG062728

5/2020 - 4/2025

Translational research on aging and mobility (TRAM) program

Role: Co-Investigator (PI: TM Manini)

(I am on the mentoring committee of T32-funded post-docs Dr. Brianne Borgia and Dr. Valay Shah)

Craig H. Neilsen Foundation

9/2022 – 9/2024

Pilot Grant: Spinal Cord Injury Research on the Translational Spectrum (SCIRTS)

Transcutaneous spinal direct current stimulation to enhance locomotor rehabilitation after SCI

\$299,876

Role: Co-Investigator (PI: EJ Fox)

Career Development Award – Level 1

11/2022 – 10/2024

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Brain Networks of Turning Performance with Aging and Stroke

\$242,388

Role: Primary Mentor (PI: CW Swanson)

Pilot Award

8/2022 – 3/2024

NIH/NIA via UF Claude Pepper Older Americans Independence Center

Development of a Home-based Self-delivered Prehabilitation Intervention to Proactively Reduce Fall Risk in Older Adults

\$49,994

Role: Co-Investigator (PI: CW Swanson)

Completed Funded Awards:

NIH 1F32AG072808-01

05/2021 – 04/2023

Efficacy of balance training with intermittent sensory perturbations

\$152,487

Role: Co-Mentor (PI: E Pliner)

NIH/NIA Pilot P30-AG028740

11/2020 – 10/2022

via University of Florida Claude D. Pepper Older American's Independence Center

Investigating COMT genotype association with mobility decline and falls in older adults

\$71,510

Role: Primary Mentor (PI: SA Chatterjee)

VA SPiRE (B3336-P)

11/2019 – 10/2021

Small Projects in Rehabilitation Research

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Quantifying Post-Stroke Community Participation: Filling in the Gap Between Ability and Reality

\$200,000

Role: Co-Investigator (PI: DK Rose)

VA I21RX002874 (E2874P)

11/2018 – 10/2020 (NCE: 9/2021)

Small Projects in Rehabilitation Research
US Department of Veterans Affairs, Rehabilitation Research and Development Service
Spinal excitation to enhance mobility in elderly adults

\$200,000

Role: Principal Investigator

VA I01RX001449

5/2015 – 4/2019 (NCE: 4/2021)

Merit Review

Department of Veterans Affairs, Rehabilitation Research and Development Service

Higher-than-replacement testosterone plus finasteride treatment after SCI

\$1,100,000

Role: Co-Investigator (PI: JF Yarrow)

VA Merit Review I01RX002004 (N2004R)

7/2016 – 6/2020 (NCE: 6/2021)

US Department of Veterans Affairs, Rehabilitation Research and Development Service

A novel strategy to decrease fall incidence post-stroke

\$1,100,000

Role: Co-Investigator (PI: DK Rose)

NIH National Rehabilitation Research Resource to Enhance Clinical Trials (REACT)

REACT Pilot Studies Program

10/2018 – 6/2019 (NCE 6/2021)

Transcutaneous spinal direct current stimulation to enhance locomotion after spinal cord injury

\$39,688

Role: Principal Investigator (Co-PI: EJ Fox)

VA Equipment Award

2/2020

Malcom Randall VA Medical Center

Soterix Medical 1x1 Mini-CT Stimulators and required accessories

\$18,400

Role: Principal Investigator

Pilot Award 0220BRRC-05

1/2020 – 9/2020

VA Brain Rehabilitation Research Center Innovation Pilot Award

Backward Walking Training Post-Stroke: How Much and For Whom – A Pilot Feasibility Study

\$20,000

Role: Co-Investigator (PI: DK Rose)

NHLBI 5T35HL007489-37

UF Medical Student Research Program

6/2020 – 8/2020

Short-term training for medical students in cardiovascular and pulmonary research

\$2,000

Role: Faculty Mentor (Medical Student: Rodeania Peart; Principal Investigator: GS Schultz)

University of Florida

University Scholars Program

5/2019 – 4/2020

Transcranial direct current stimulation and complex walking tasks as therapeutic interventions for age-related decline in balance and cognition

\$1,750

Role: Faculty Mentor (Student: Chanoan Sumonthee)

NIH R21AG053736

6/2017 – 5/2019 (NCE 5/2020)

Combining tDCS and neurorehabilitation to treat age-related deficits of mobility and cognition

\$275,000

Role: Principal Investigator

NIH National Center on Neuromodulation for Rehabilitation (NM4R)

NM4R Pilot Studies Program

7/2018 – 6/2019 (NCE 6/2020)

Neuromodulation of spinal circuits to enhance practice-related performance on a complex walking task

\$34,722

Role: Principal Investigator (Co-PI: EJ Fox)

VA I01RX001149 (B1149R)

6/2014 – 5/2018 (NCE 5/2019)

Merit Review

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Rehabilitation of corticospinal control of walking following stroke

\$1,079,593

Role: Principal Investigator

VA RR&D Center Award (B9252-C)

7/2014 – 9/2019

Brain Rehabilitation Research Center

US Department of Veterans Affairs, Rehabilitation Research and Development Service

\$4,500,000

Role: Co-Investigator and Locomotor Initiative Co-Leader (PI: JJ Daly)

NHLBI 2T35HL007489-36

UF Medical Student Research Program

6/2019 – 8/2019

Short-term training for medical students in cardiovascular and pulmonary research

\$2,000

Role: Faculty Mentor (Medical Student: Brittany Raymond; Principal Investigator: GS Schultz)

Brain Rehabilitation Research Center Innovation Project (0419BRRC-04) 4/2019 – 9/2019

Accurate Quantification of Real-World Post-Stroke Ambulation: Validation and Feasibility

\$17,214

Role: Co-Investigator (PI: DK Rose)

VA I21RX002051 (N2051P)

4/2016 – 3/2018 (NCE: 3/2019)

Small Projects in Rehabilitation Research

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Biofeedback to increase propulsion during walking after stroke

\$200,000

Role: Co-Investigator (PI: DK Rose)

VA IK1RX002327

4/2017 – 3/2019

Career Development Award – Level 1

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Testosterone Plus Finasteride Therapy to Improve Walking Function After SCI

\$164,283

Role: Co-Mentor (PI: DM Otzel)

NIH/NIA Pilot 2P30-AG028740

7/2015 – 3/2017

via University of Florida Claude D. Pepper Older American's Independence Center

Pain and mobility function in older adults

\$99,312

Role: Co-Investigator (PI: Y Cruz-Almeida)

NHLBI 5T35HL007489-33

UF Medical Student Research Program

6/2016 – 8/2016

Short-term training for medical students in cardiovascular and pulmonary research

\$4,870

Role: Faculty Mentor (Medical Student: Christina Albert; Principal Investigator: GS Schultz)

VA Merit Review I01RX000457 (D7675-R)

7/2012 – 6/2016

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Combined cognitive and gait training

\$1,099,408

Role: Co-Principal Investigator, effective 7/7/14 (PI: JJ Daly)

VA Small Equipment Grant

5/2016

Malcom Randall VA Medical Center

VA small equipment grant proposal for OctaMon NIRS

\$21,654

Role: Principal Investigator

NIH/NIA Research Development Project (5P30AG028740-07) 11/2013 – 3/2016

via University of Florida Claude D. Pepper Older American's Independence Center

Development of clinical methods to evaluate neural function in aging

\$109,779

Role: Co-Investigator (PI: TW Buford)

VA IS1BX003096

6/2015

Shared Equipment Evaluation Program

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Optima Human Performance System (HPS) for measurement of innovative gait recovery methods

\$189,701

Role: Co-Investigator (PI: JJ Daly)

Brooks Pilot Grant

8/2014 – 12/2015

Brooks Rehabilitation Collaborative Research Fund

Development of a clinical assessment tool for the measurement of walking adaptability post-stroke

\$28,169

Role: Co-Investigator (PI: CK Balasubramanian)

Brain Rehabilitation Research Center Innovation Project (0115BRRC-02) 01/2015 – 09/2015

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Age related deficits of locomotor programming: development of assessment and screening methodology

\$19,535

Role: Principal Investigator

NHLBI 5T35HL007489-32

UF Medical Student Research Program

6/2015 – 8/2015

Short-term training for medical students in cardiovascular and pulmonary research

\$4,775

Role: Faculty Mentor (Medical Student: Brittany Michael; Principal Investigator: GS Schultz)

Brain Rehabilitation Research Center Innovation Project (0214BRRC-13) 2/2014 – 9/2014

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Developing the use of skin conductance as an objective physiological indicator of locomotor recovery after stroke

\$8,400

Role: Principal Investigator (Co-PI: DK Rose)

NIH/NIA Pilot 2P30-AG028740-06

7/2012 – 3/2014

via University of Florida Claude D. Pepper Older American's Independence Center

Cortical control of walking: assessment, mechanisms and functional implications

\$59,473

Role: Principal Investigator

Career Development Award – Level 2 (B7176-W)

10/2009 – 9/2013

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Neural determinants of impaired locomotor adaptability post-stroke

\$646,343

Role: Principal Investigator

Brain Rehabilitation Research Center Innovation Project (0512BRRC-3)

5/2012 – 9/2012

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Neural control of challenging walking tasks post-stroke

\$19,500

Role: Principal Investigator

NIH/NIA Pilot P30-AG028740-04

1/2011 – 3/2012

via University of Florida Claude D. Pepper Older American's Independence Center

Locomotor reserve: a novel approach for detecting mobility deficits with aging

\$84,270

Role: Principal Investigator

Career Development Award – Level 1 (B4888M)

9/2007 – 8/2009

US Department of Veterans Affairs, Rehabilitation Research and Development Service

Adaptability of walking in persons with neurological disorders

\$146,739

Role: Principal Investigator

Dudley Allen Sargent Fund

1/2003 – 12/2003

Doctoral Student Research Grant, Sargent College, Boston University

Assessing the Reliability of Lower Extremity Force Production in Persons with Post-Stroke Hemiparesis

\$1,770

Role: Principal Investigator

PUBLICATIONS

Peer Reviewed Journal Publications

- 65) Liu C, Downey RJ, Mu Y, Richer N, Hwang J, Shah VA, Sato SD, **Clark DJ**, Hass CJ, Manini TM, Seidler RD, and Ferris DP. Comparison of EEG source localization using simplified and anatomically accurate head models in younger and older adults. *IEEE Trans Rehabil Eng*, in press, 2023.
- 64) Boyer KA, Hayes KL, Umberger BR, Adamczyk PG, Bean JF, Brach JS, Clark BC, **Clark DJ**, Ferrucci L, Finley J, Franz JR, Golightly YM, Hortobágyi T, Hunter S, Narici M, Nicklas B, Roberts T, Sawicki G, Simonsick E, and Kent JA. Age-Related Changes in Gait Biomechanics: Impact on the Metabolic Cost of Walking. *Exp Gerontol*, in press, 2023
- 63) Downey RJ, Richer N, Gupta R, Liu C, Pliner EM, Roy A, Hwang J, **Clark DJ**, Hass CJ, Manini TM, Seidler RD, and Ferris DP. Uneven terrain treadmill walking in younger and older adults. *PLOS ONE*, accepted, 2022.
- 62) Sood P, Chatterjee SA, Skinner JW, Lysne PE, Sumonthee C, Wu SS, Cohen RA, Rose DK, Woods AJ, and **Clark DJ**. Somatosensory Impairment of the Feet is Associated with Higher Activation of Prefrontal Cortex During Walking in Older Adults. *Exp Gerontol*, 165, 111845, 2022.
- 61) Wade FE, Kellaher GK, Pesquera S, Baudendistel ST, Roy A, **Clark DJ**, Seidler RD, Ferris DP, Manini TM, and Hass CJ. Kinematic analysis of speed transitions within walking in younger and older adults. *J Biomech*, 138, 111130, 2022.
- 60) Lipat AL, **Clark DJ**, Hass CJ, and Cruz-Almeida Y. Gait Subgroups Among Older Adults with Chronic Pain Differ in Cerebellum and Basal Ganglia. *Exp Gerontol*, 163, 111773, 2022.
- 59) Lipat AL, Peterson JA, **Clark DJ**, and Cruz-Almeida Y. Decreased cognitive function is associated with impaired spatiotemporal gait performance in community dwelling older adults with chronic musculoskeletal pain. *Brain Cogn*, 159, 105862, 2022.
- 58) Hawkins KA, DeMark LA, Vistamehr A, Snyder HJ, Conroy C, Wauneka C, Tonuzi G, Fuller DD, **Clark DJ**, and Fox EJ. Feasibility of transcutaneous spinal direct current stimulation combined with locomotor training after spinal cord injury. *Spinal Cord*, in press, 2022.
- 57) Chatterjee SA, Seidler RD, Skinner JW, Lysne PE, Sumonthee C, Wu SS, Cohen RA, Rose DK, Woods AJ, and **Clark DJ**. Effects of prefrontal tDCS on retention of performance gains on an obstacle negotiation task in older adults. *Neuromodulation*, in press, 2022.
- 56) **Clark DJ**, Hawkins KA, Winesett SP, Cox BA, Pesquera S, Miles JW, Fuller DD, and Fox EJ. Enhancing locomotor learning with transcutaneous spinal electrical stimulation and somatosensory augmentation: a pilot randomized controlled trial in older adults. *Front Aging Neurosci*, 14, 837467, 2022. PMC8924500
- 55) Bansal K, **Clark DJ**, Fox EJ, Conroy C, Freeborn P, and Rose DK. Spatiotemporal strategies adopted to walk at fast speed in high- and low-functioning individuals post-stroke: a cross-sectional study. *Top Stroke Rehabil*, 10.1080/10749357.2021.2008593, 2022.
- 54) Yeater TD, **Clark DJ**, Hoyos L, Valdes-Hernandez PA, Peraza JA, Allen KD, and Cruz-Almeida Y. Chronic pain is associated with reduced sympathetic nervous system reactivity during simple and complex walking tasks: potential cerebral mechanisms. *Chronic Stress*, 5: 1-8, 2021. PMC8267022

- 53) Fettrow T, Hupfeld KE, Tays G, **Clark DJ**, Reuter-Lorenz PA, and Seidler RD. Brain activity during walking in older adults: Implications for compensatory versus dysfunctional accounts. *Neurobiol Aging*, 105: 349-364, 2021. PMC8338893.
- 52) **Clark DJ**, Rose DK, Butera KA, Hoisington B, DeMark L, Chatterjee SA, Hawkins KA, Otzel DM, Skinner JW, Christou EA, Wu SS, and Fox EJ. Rehabilitation with accurate adaptability walking tasks or steady state walking: a randomized clinical trial in adults post-stroke. *Clin Rehabil*, 35(8): 1196-1206, 2021.
- 51) Bansal KA, **Clark DJ**, Fox EJ, and Rose DK. Does falls efficacy influence the relationship between forward and backward walking speed after stroke? *Physical Therapy (PTJ)*, 101(5): 1-8, 2021. PMC8152901
- 50) **Clark DJ**, Chatterjee SA, Skinner JW, Lysne PE, Sumonthee C, Wu SS, Cohen RA, Rose DK, and Woods AJ. Combining frontal tDCS with walking rehabilitation to enhance mobility and executive function: a pilot clinical trial. *Neuromodulation*, 24(5): 950-959, 2021. PMC7889743.
- 49) Anton SD, Cruz-Almeida Y, Singh A, Alpert J, Bensadon B, Cabrera M, **Clark DJ**, Ebner N, Esser KA, Fillingim RB, Goicolea SM, Han SM, Kallas H, Johnson A, Leewenburgh C, Liu AC, Manini TM, Marsiske M, Moore F, Qiu P, Mankowski RT, Mardini M, McLaren C, Ranka S, Rashidi P, Saini S, Sibille KT, Someya S, Wohlgemuth S, Tucker C, Xiao R, and Pahor M. Innovations in Geroscience to Enhance Mobility in Older Adults. *Exp Gerontol*, 142: 1-18, 2020. PMC7581361
- 48) Menant JC, Maidan I, Alcock L, Al-Yahya E, Cerasa A, **Clark DJ**, de Bruin E, Fraser S, Gramigna V, Hamacher D, Herold F, Holtzer R, Izzetoglu M, Lim S, Pantall A, Pelicioni P, Peters S, Rosso AL, St George R, Stuart S, Vasta R, Vitorio R, and Mirelman A. A consensus guide to using functional near-infrared spectroscopy in posture and gait research. *Gait and Posture*, 82: 254-265, 2020.
- 47) Hernandez AR, Winesett SP, Federico QP, Williams SA, Burke SN, and **Clark DJ**. A cross-species model of dual-task walking in young and older humans and rats. *Front Aging Neurosci*, 12(276): 1-12, 2020. PMC7492995
- 46) Chatterjee SA, Seidler RD, Skinner JW, Lysne PE, Sumonthee C, Wu SS, Cohen RA, Rose DK, Woods AJ, and **Clark DJ**. Obstacle negotiation in older adults: prefrontal activation interpreted through conceptual models of brain aging. *Innovation in Aging*, 4(4): 1-12, 2020. PMC7508296
- 45) **Clark DJ**, Manini TM, Ferris DP, Hass CJ, Brumback BA, Cruz-Almeida C, Pahor M, Reuter_Lorenz PA, and Seidler RD. Multimodal imaging of brain activity to investigate walking and mobility decline in older adults (Mind in Motion Study): Hypothesis, Theory, and Methods. *Front Aging Neurosci*, 11:358, 2020. PMC6960208
- 44) Chatterjee SA, Fox EJ, Daly JJ, Rose DK, Wu SS, Christou EA, Hawkins KA, Otzel DM, Butera KA, Skinner JW, and **Clark DJ**. Interpreting prefrontal recruitment during walking after stroke: influence of individual differences in mobility and cognitive function. *Front Hum Neurosci*, 13:194, 2019. PMC6611435
- 43) Chatterjee SA, Rose DK, Porges EC, Otzel DM, and **Clark DJ**. A perspective on objective measurement of the perceived challenge of walking. *Front Hum Neurosci*, 13(161): 1-7, 2019. PMC6527756

- 42) Hawkins KA, Balasubramanian CK, Vistamehr A, Conroy C, Rose DK, **Clark DJ**, and Fox EJ. Assessment of backward walking unmasks mobility impairments in post-stroke community ambulators. *Topics in Stroke Rehabilitation*, 26(5):382-388, 2019.
- 41) Gouelle A, Rennie L, **Clark DJ**, Megrot F, Balasubramanian CK. Addressing limitations of the Gait Variability Index to enhance its applicability: The Enhanced GVI (EGVI). *PLoS ONE* 13(6): e0198267, 2018. PMC5983480
- 40) Vistamehr A, Balasubramanian CK, **Clark DJ**, Neptune RR, and Fox EJ. Dynamic balance during walking adaptability tasks in individuals post-stroke. *J Biomech*, 74: 106-115, 2018. PMC6114086
- 39) Chatterjee SA, Daly JJ, Porges EC, Fox EJ, Rose DK, McGuirk TE, Otzel DM, Butera KA, and **Clark DJ**. Mobility function and recovery after stroke: preliminary insights from sympathetic nervous system activity. *J Neurol Phys Ther*, 42: 224-232, 2018. PMC6156783
- 38) Hawkins KA, Fox EJ, Daly JJ, Rose DK, Christou EA, McGuirk TE, Otzel DM, Butera KA, Chatterjee SA, **Clark DJ**. Prefrontal over-activation during walking in people with mobility deficits: interpretation and functional implications. *Hum Mov Sci*, 59:46-55, 2018. PMC5988641
- 37) **Clark DJ**, Chatterjee SA, McGuirk TE, Porges EC, Fox EJ, and Balasubramanian CK. Sympathetic nervous system activity measured by skin conductance quantifies the challenge of walking adaptability tasks after stroke. *Gait and Posture*, 60:148-153, 2018. PMC5911926
- 36) Rose DK, DeMark L, Fox EJ, **Clark DJ**, and Wdyluka P. A Backward Walking Training Program to Improve Balance and Mobility in Acute Stroke: A Pilot Randomized Controlled Trial. *Journal of Neurologic Physical Therapy*, 42(1):12-21, 2018.
- 35) Lodha N, Chen YT, McGuirk T, Fox EJ, Kautz SA, Christou EA, and **Clark DJ**. EMG synchrony to assess impaired corticomotor control of locomotion after stroke. *J Electromyogr Kinesiol*, 37:35-40, 2017. PMC5698140
- 34) Hawkins KA, **Clark DJ**, Balasubramanian CK, and Fox EJ. Walking on uneven terrain in healthy adults and the implications for people after stroke. *NeuroRehabilitation*, 41(4):765-774, 2017.
- 33) **Clark DJ**, Neptune RR, Behrman AL and Kautz SA. Locomotor adaptability task promotes intense and task-appropriate output from the paretic leg during walking. *APMR*, 97(3):493-6, 2016. PMC4769939
- 32) Anton SA, Woods AJ, Ashizawa T, Barb D, Buford TW, Carter CS, **Clark DJ** et al. Successful Aging: Advancing the Science of Physical Independence in Older Adults. *Ageing Res Rev*, 24 (Pt B): 304-27, 2015. PMC4661112
- 31) Sorond FA, Cruz-Almeida Y, **Clark DJ**, Viswanathan A, Scherzer CR, Csiszar A, Laurienti PJ, Hausdorff J, Chen WG, Ferrucci L, Rosano C; Studenski SA, Black SE, Lipsitz LA. Aging, the Central Nervous System, and Mobility in Older Adults: Neural Mechanisms of Mobility Impairments. *J Gerontol A Biol Sci Med Sci*, 70(12):1526-32, 2015. PMC4643615
- 30) **Clark DJ**. Automaticity of walking: functional significance, mechanisms, measurement and rehabilitation strategies. *Front Hum Neurosci*, 246(9): 1-13, 2015. PMC4419715

- 29) Balasubramanian CK, **Clark DJ** and Gouelle A. Validity of the gait variability index in older adults: effect of aging and mobility impairments. *Gait and Posture*, 41: 941-946, 2015. PMC4431573
- 28) Reid KF, Martin KI, Doros G, **Clark DJ**, Hau C, Patten C, Phillips EM, Frontera WR and Fielding RA. Comparative effects of light or heavy resistance power training for improving lower extremity power and physical performance in mobility-limited older adults. *J Gerontol A Biol Sci Med Sci*, 70(3):374-80, 2015. PMC4351393
- 27) **Clark DJ**, Rose DK, Ring SA and Porges EC. Utilization of central nervous system resources for preparation and performance of complex walking tasks in older adults. *Front Aging Neurosci*, 6:217, 2014. PMC4142860.
- 26) **Clark DJ**, Christou EA, Ring SA, Williamson JB and Doty L. Enhanced somatosensory feedback reduces prefrontal cortical activity during walking in older adults. *J Gerontol A Biol Sci Med Sci*, 69(11): 1422-8, 2014. PMC4229993.
- 25) Balasubramanian CK, **Clark DJ**, Fox EJ. Walking adaptability after a stroke and its assessment in clinical settings. *Stroke Res Treat*, 2014: 591013. PMC4164852.
- 24) Cruz-Almeida Y, Black ML, Christou EA and **Clark DJ**. Site-specific differences in the association between plantar tactile perception and mobility function in older adults. *Front Aging Neurosci*, 6:68, 2014. PMC3990110.
- 23) **Clark DJ**, Reid KF, Patten C, Phillips EM, Ring SA, Wu SS and Fielding RA. Does quadriceps neuromuscular activation capability explain walking speed among older men and women? *Exp Gerontol*, 55: 49-53, 2014. PMC4039086.
- 22) Buford TW, Anton SD, **Clark DJ**, Higgins TJ and Cooke MB. Optimizing the benefits of exercise on physical function in older adults. *PM&R*, 6(6):528-43, 2014. PMC4064002.
- 21) Reid KF, Pasha EP, Doros G, **Clark DJ**, Patten C, Phillips EM, Frontera WR and Fielding RA. Longitudinal decline of lower extremity muscle power in healthy and mobility-limited older adults: influence of muscle mass, strength, composition, neuromuscular activation and single fiber contractile properties. *Eur J Appl Physiol*, 114(1): 29-39, 2014. PMC3945182.
- 20) Fox EJ, Tester NJ, Kautz SA, Howland DR, **Clark DJ**, Garvan C, and Behrman AL. Modular control of varied locomotor tasks in children with incomplete spinal cord injuries. *J Neurophys*, 110(6): 1415-25, 2013. PMC3763159.
- 19) **Clark DJ**, Kautz SA, Bauer AR, Chen YT and Christou EA. Synchronous EMG activity in the Piper frequency band reveals the corticospinal demand of walking tasks. *Ann Biomed Eng*, 41(8): 1778-1786, 2013. PMC3725573.
- 18) **Clark DJ**, Pojednic RM, Reid KF, Patten C, Pasha EP, Phillips EM and Fielding RA. Longitudinal decline of neuromuscular activation and power in healthy older adults. *J Gerontol A Biol Sci Med Sci*, 68(11): 1419-1425, 2013. PMC3805299.
- 17) Routson RL, **Clark DJ**, Bowden MG, Kautz SA and Neptune RR. The influence of locomotor rehabilitation on module quality and post-stroke hemiparetic walking performance. *Gait and Posture*, 38, 511-517, 2013. PMC3687005.

- 16) **Clark DJ**, Manini TM, Fielding RA and Patten C. Neuromuscular determinants of maximum walking speed in well-functioning older adults. *Exp Gerontol*, 48(3):358-363, 2013. PMC3594593.
- 15) **Clark DJ** and Patten C. Eccentric versus concentric resistance training to enhance neuromuscular activation and walking speed following stroke. *Neurorehabil Neural Repair*, 27(4):335-44, 2013.
- 14) Pojednic RM, **Clark DJ**, Patten C, Reid KF, Phillips EM and Fielding RA. The specific contributions of force and velocity to muscle power in older adults. *Exp Gerontol*, 47(8):608-13, 2012. PMC3778449.
- 13) Reid KF, Doros G, **Clark DJ**, Patten C, Carabello RJ, Cloutier GJ, Phillips EM, Krivickas L, Frontera W and Fielding RA. Muscle power failure in mobility-limited older adults: preserved single fiber function despite lower whole muscle size, quality and rate of neuromuscular activation. *Eur J Appl Physiol*, 112(6): 2289-301, 2012. PMC3394542.
- 12) **Clark DJ**, Fielding RA. Neuromuscular contributions to age-related weakness. *J Gerontol A Biol Sci Med Sci*, 67(1): 41-7, 2012. PMC3260482.
- 11) Kautz SA, Bowden MG, **Clark DJ** and Neptune RR. Comparison of motor control deficits during treadmill and overground walking post-stroke. *Neurorehabil Neural Repair*, 25(8): 756-65, 2011. PMC4434587
- 10) **Clark DJ**, Patten C, Reid KF, Carabello RJ, Phillips EM and Fielding RA. Muscle performance and physical function are associated with voluntary rate of neuromuscular activation in older adults. *J Gerontol A Biol Sci Med Sci*, 66(1): 115-21, 2011. PMC3011959.
- 9) **Clark DJ**, Patten C, Reid KF, Carabello RJ, Phillips EM and Fielding RA. Impaired voluntary neuromuscular activation limits muscle power in mobility-limited older adults. *J Gerontol A Biol Sci Med Sci*, 65(5): 495-502, 2010. PMC2854883.
- 8) **Clark DJ**, Ting LH, Zajac FE, Neptune RR and Kautz SA. Merging of healthy motor modules predicts reduced locomotor performance and muscle coordination complexity post-stroke. *J Neurophys*, 103(2): 844-57, 2010. PMC2822696.
- 7) McGowan CP, Neptune RR, **Clark DJ** and Kautz SA. Modular control of human walking: Adaptations to altered mechanical demand. *J Biomech*, 43(3): 412-419, 2010. PMC2813323.
- 6) Carabello RJ, Reid KF, **Clark DJ**, Phillips EM and Fielding RA. Lower extremity strength and power asymmetry assessment in healthy and mobility-limited populations: reliability and association with physical functioning. *Aging Clin Exp Res*, 22(4): 324-9, 2010. PMC4423605
- 5) Bowden MG, **Clark DJ** and Kautz SA. Evaluation of abnormal synergy patterns post-stroke: relationship of the Fugl-Meyer Assessment to hemiparetic locomotion. *Neurorehabil Neural Repair*, 24(4): 328-37, 2010. PMC4434590
- 4) Neptune RR, **Clark DJ** and Kautz, SA. Modular control of human walking: a simulation study. *J Biomech*, 42(9): 1282-7, 2009. PMC2696580.
- 3) **Clark DJ**, Condliffe EG, Patten C. Activation impairment alters muscle-torque velocity in the knee extensors of persons with post-stroke hemiparesis. *Clin Neurophysiol*, 117(10): 2328-37, 2006.

2) **Clark DJ**, Condliffe EG, Patten C. Reliability of concentric and eccentric torque during isokinetic knee extension in post-stroke hemiparesis. *Clin Biomech*, 21: 395-404, 2006.

1) Condliffe EG, **Clark DJ**, Patten C. Reliability of elbow stretch reflex assessment in chronic post-stroke hemiparesis. *Clin Neurophysiol*, 116: 1870-8, 2005.

Book Chapters

Woods AJ, Antonenko D, Flöel A, Hampstead BM, **Clark D**, and Knotkova H. Practical Guide to Transcranial Direct Current Stimulation; Chapter 19: Transcranial Direct Current Stimulation in Aging Research, Springer International Publishing: 569 – 596, 2019.

SELECTED NATIONAL/INTERNATIONAL PRESENTATIONS (since 2015)

Wade FE, Choi Y, Seidler R, Ferris D, Manini T, **Clark D**, Hass CJ, and Christou E. Altered Muscular Coherence is evident prior to changes in gait biomechanics. North American Congress on Biomechanics, Ottawa ON, August 22, 2022. [poster]

Wade FE, Daniels B, **Clark D**, Seidler R, Manini T, Ferris D, and Hass CJ. Distal-to-proximal redistribution of propulsion does not correlate with margin of stability during fast or typical walking. North American Congress on Biomechanics, Ottawa ON, August 22, 2022. [poster]

Swanson CW, Winesett SP, Miles JW, Callaway JA, Chatterjee SA, Cox BA, Woods AJ, Rose DK, Seidler RD, and **Clark DJ**. Turning on the Brain; Associations between Turning Performance and Cognitive Function. International Society of Posture and Gait Research, Montreal, Canada, July 5, 2022. [poster]

Richer N, Downey RJ, Hwang J, **Clark DJ**, Seidler R, Hass CJ, Manini TM, and Ferris DP. Age and uneven surfaces decrease smoothness of walking. International Society of Posture and Gait Research, Montreal, Canada, July 5, 2022. [poster]

Hawkins KA, Demark L, Snyder HJ, Vistamehr A, Conroy C, Wauneka C, Tonuzi G, Fuller DD, **Clark DJ**, and Fox EJ. Feasibility of transcutaneous spinal direct current stimulation combined with locomotor training after spinal cord injury. APTA Combined Sections Meeting, San Antonio TX, February 3, 2022. [poster]

Bansal K, **Clark D**, Monaldi M, Fox EJ, and Rose DK. Objective Measurement of Perceived Walking Challenge Differentiates between Home and Community Ambulation Levels Post-Stroke. APTA Combined Sections Meeting, San Antonio TX, February 3, 2022. [poster]

Conroy C, Wauneka CN, Vistamehr A, **Clark D**, and Fox EJ. The influence of AFO use on prefrontal activation during complex walking tasks in adults post-stroke. APTA Combined Sections Meeting, San Antonio TX, February 3, 2022. [poster]

Chapin BA, Williamson JB, Chatterjee SA, Cox B, Harciarek M, Mankowska A, Heilman KM, and **Clark DJ**. (2022). Measures of Vertical Attention Predict Gait Performance. International Neuropsychological Society Annual Meeting (virtual conference), February 2, 2022. [poster]

Clark DJ. Investigating cognitive-motor control of walking using fNIRS. Boston University Neurophotonics Symposium (virtual conference), January 12, 2022. [invited presentation]

Hawkins KA, Fuller DD, **Clark DJ**, and Fox EJ. Effects of transcutaneous spinal direct current stimulation applied during walking rehabilitation on spinal reflex modulation, reflex behavior and walking function. Society for Neuroscience (virtual conference), November 10, 2021. [poster]

Shah VA, Fettrow T, Ferris DP, **Clark DJ**, Hass CJ, Reuter-Lorenz P, Manini TM, and Seidler RD. Associations between neural correlates of imagined walking and community mobility: preliminary results from the Mind in Motion study. Society for Neuroscience (virtual conference), November 10, 2021. [poster]

Clark DJ. Walking with an aging nervous system. National Institute on Aging Workshop Causes & Consequences of Age-Related Changes in Gait Biomechanics. Virtual workshop, September 20-21, 2021. [oral presentation]

Clark DJ, Chatterjee SA, Skinner JW, Lysne PE, Sumonthee C, Wu S, Cohen RA, Rose DK, and Woods AJ. Presentation Title: fNIRS outcomes for a pilot clinical trial combining frontal tDCS with walking rehabilitation in older adults. *Symposium Title: Prefrontal Cortex Control of Walking: Functional Near-Infrared Spectroscopy and Beyond*. Annual Meeting of the Gerontological Society of America (virtual conference), November 6 2020. [oral presentation]

Clark DJ, Chatterjee SA, Seidler RD, Skinner JW, Lysne PE, Sumonthee C, Wu S, Cohen RA, Rose DK, and Woods AJ. Obstacle negotiation in older adults: prefrontal activation interpreted through conceptual models of brain aging. Annual Meeting of the Gerontological Society of America (virtual conference), November 6 2020. [poster]

Clark DJ, Chatterjee SA, Skinner JW, Lysne PE, Sumonthee C, Wu S, Cohen RA, Rose DK, and Woods AJ. Combining frontal tDCS with walking rehabilitation to enhance mobility and cognition: a pilot clinical trial. Annual Meeting of the Gerontological Society of America (virtual conference), November 5 2020. [poster]

Clark, DJ. Planning a multi-site clinical trial that combines walking rehabilitation with tDCS. REACT-NM4R Joint Workshop, Virtual Workshop via web conference, April 27, 2020. [oral presentation]

Rose DK, DeMark L, Conroy C, Fox EJ, **Clark DJ**. A New Rehabilitation Strategy to Improve Gait Speed and Balance Self-Efficacy Following Stroke. American Heart Association/International Stroke Conference, Los Angeles, CA, February 19, 2020. [poster]

Chatterjee SA, Skinner J, Lysne P, Sumonthee C, Wu S, Cohen R, Rose DK, Woods AJ, **Clark DJ**. Prefrontal recruitment during obstacle walking is predicted by older age and executive function. APTA Combined Sections Meeting, Denver CO, February 13, 2020. [poster]

Clark DJ, Hernandez A, Winesett S, and Burke S. A Cross-Species Paradigm for Testing Dual-Task Costs of Walking and Cognition with Aging. APTA Combined Sections Meeting, Denver CO, February 13, 2020. [poster]

Bansal K, Patel J, Vistamehr A, Conroy C, Fox E, **Clark DJ**, and Rose D. The Effect of Forward Versus Backward Locomotor Training on Forward Propulsion during Forward Walking Post-Stroke. APTA Combined Sections Meeting, Denver CO, February 13, 2020. [poster]

Clark DJ, Seidler RD, Woods AJ, Rose DK, Fox EJ. Precision Rehabilitation to Enhance Neural Control of Complex Walking. APTA Combined Sections Meeting, Denver CO, February 15, 2020. [poster]

Sood P, Chatterjee S, Skinner J, Lysne P, Sumonthee C, Wu S, Cohen R, Rose D, Woods A, and **Clark DJ**. Prefrontal over-Recruitment during Walking Is Associated with Impaired Tactile Somatosensation in Older Adults. APTA Combined Sections Meeting, Denver CO, February 15, 2020. [poster]

Hawkins KA, DeMark L, Vistamehr A, Tonuzi G, Fuller DD, **Clark DJ**, Fox EJ. Transcutaneous spinal direct current stimulation with locomotor training to alter spinal excitability post-spinal cord injury. APTA Combined Sections Meeting, Denver CO, February 15, 2020. [poster]

Hawkins KA, DeMark L, Vistamehr A, Tonuzi G, Fuller DD, **Clark DJ**, and Fox EJ. The effect of combined transcutaneous direct current stimulation and locomotor training on spinal excitability in an individual with chronic spinal cord injury. World Congress of the International Society of Posture and Gait Research. Edinburgh, Scotland. July 1, 2019. [poster]

Chatterjee S, Fox EJ, Rose DK, Daly JJ, Christou E, Hawkins KA, McGuirk T, Butera KA, Otzel DM, Skinner J, and **Clark DJ**. Prefrontal activity during walking post-stroke: insights from the CRUNCH framework. APTA 2019 Combined Sections Meeting, Washington DC, January 25, 2019. [platform presentation]

Rose DK, DeMark L, Vistamehr A, Conroy C, Freeborn P, Fox E, and **Clark DJ**. Backward Walking Training Improves Forward Gait Speed and Balance Confidence Post-Stroke. APTA 2019 Combined Sections Meeting, Washington DC, January 25, 2019. [platform presentation]

Bansal K, Freeborn P, Conroy C, Fox E, **Clark DJ**, and Rose D. Is Faster Really Better? Implications of Fastest Comfortable Speed on Gait Asymmetry Post-Stroke. APTA 2019 Combined Sections Meeting, Washington DC, January 24, 2019. [poster]

Brunetti G, DeMark L, Bayliss J, Blunt K, Fulcher C, Fox EJ, **Clark DJ**, Rose DK. Backward Walking Training for Individuals with Chronic Stroke. APTA 2019 Combined Sections Meeting, Washington DC, January 24, 2019. [poster]

Vistamehr A, Balasubramanian C, **Clark D**, Conroy C, Neptune R, and Fox E. Dynamic balance control during obstacle negotiation in individuals with post stroke hemiparesis. Annual Conference of Neural Control of Movement Society. Santa Fe NM, May 2 2018. [poster]

Hoyos L, Lysne P, Porges E, Woods A, Cohen R, Riley J, Fillingim R, **Clark D**, Cruz-Almeida Y. Deficits in functional ambulatory performance during simple and complex walking tasks in older adults with musculoskeletal pain. American Pain Society Annual Meeting, March 6 2018, Anaheim CA. [poster]

Chatterjee SA, Albert CM, Fox EJ, Daly JJ, Rose DK, Christou EA, Hawkins KA, Otzel DM, Butera KA, **Clark DJ**. Increased prefrontal cortical activation during typical walking is associated with greater dual-task costs after stroke: an fNIRS study. APTA Combined Sections Meeting, February 24 2018, New Orleans LA. [poster]

Hawkins KA, Vistamehr A, Balasubramanian CK, Conroy C, Rose DK, **Clark DJ**, and Fox EJ. Post-stroke community ambulators demonstrate deficits in backward walking. APTA Combined Sections Meeting, February 24 2018, New Orleans LA. [platform presentation]

Rose DK, Vistamehr A, Conroy C, Howarth J, Fox E, Demark L, and **Clark DJ**. Backward Walking Training to Target Forward Walking Speed, Dynamic Balance and Balance Confidence Post-Stroke: A Case Series Report. APTA Combined Sections Meeting, February 24 2018, New Orleans LA. [poster]

Balasubramanian CK, **Clark DJ**, and Fox EJ. Comprehensive and targeted assessment of walking adaptability is warranted for the stroke population. APTA Combined Sections Meeting, February 24 2018, New Orleans LA. [platform presentation]

Balasubramanian CK, **Clark DJ**, Hawkins KA, Alqahtani F, and Fox EJ. Backward walking speed shows potential to serve as an indicator of mobility impairments in community dwelling stroke survivors. APTA Combined Sections Meeting, February 24 2018, New Orleans LA. [poster]

Clark DJ, Balasubramanian CK, and Fox EJ. Walking Adaptability After Neurological Injury: Mechanisms, Assessment & Intervention. 2017 Annual Conference of the American Congress of Rehabilitation Medicine, Atlanta, GA, October 27, 2017. [symposium]

Clark DJ, Chatterjee S, Porges E, Fox EJ and Balasubramanian CK. Sympathetic nervous system activity as an assessment of perceived challenge of walking after stroke. 2017 Annual Conference of the American Congress of Rehabilitation Medicine, Atlanta, GA, October 26, 2017. [poster]

Rose DK, Vistamehr A, Conroy C, Howarth J, Fox EJ, DeMark L, **Clark DJ**. Backward walking training to improve balance confidence and forward gait speed post-stroke: case series. 94th Annual Conference of the American Congress for Rehabilitation Medicine, Atlanta, GA, October 26, 2017.

Vistamehr A, Balasubramanian CK, **Clark DJ**, Conroy C, Neptune RR, and Fox EJ. Regulation of whole-body angular momentum and muscle activation during walking adaptability tasks post-stroke. American Society of Biomechanics. Boulder CO, August 10 2017.

Clark DJ, Chatterjee S, Porges E, Fox EJ, and Balasubramanian CK. Sympathetic nervous system activity as an assessment of perceived challenge of walking after stroke. World Congress of the International Society of Posture and Gait Research, Fort Lauderdale FL, June 27, 2017. [platform presentation]

Balasubramanian CK, **Clark DJ**, Romero S, and Fox EJ. Development of a clinical assessment tool for walking adaptability post-stroke: Preliminary results. World Congress of the International Society of Posture and Gait Research, Fort Lauderdale FL, June 26, 2017.

Hawkins KA, Fox EJ, Daly JJ, Rose DK, Christou EA, Otzel DM, Butera KA, Chatterjee SA, and **Clark DJ**. Quantifying the executive demand of walking with fNIRS neuroimaging. World Congress of the International Society of Posture and Gait Research, Fort Lauderdale FL, June 26, 2017.

Chatterjee S, Rose D, Porges E, Fox E, Daly J, Christou E, Otzel D, Butera K, and **Clark DJ**. Quantifying the perceived challenge of walking after stroke by measuring sympathetic activation: a pilot study. APTA Combined Sections Meeting, February 17 2017, San Antonio, TX.

Hawkins K, Fox E, Daly J, Rose D, Christou E, Otzel D, Butera K, Chatterjee S, and **Clark DJ**. Thinking about walking: functional neuroimaging demonstrates increased demand for executive control of walking in adults with mobility deficits (Platform presentation). APTA Combined Sections Meeting, February 17 2017, San Antonio, TX.

Clark DJ. *Symposium Chair for:* Executive Control of Walking in Aging and Neurological Disease: Insights from fNIRS Neuroimaging. Annual Meeting of the Gerontological Society of America. New Orleans LA, November 18 2016.

Hawkins KA, Fox EJ, Daly JJ, Rose DK, Christou EA, Otzel DM, Butera KA, Chatterjee SA, and **Clark DJ.** Executive control of walking in adults with mobility deficits quantified by fNIRS neuroimaging. Society for Neuroscience. San Diego CA, November 16 2016.

Vistamehr A, Balasubramanian CK, **Clark DJ**, Conroy C, Neptune RR, and Fox EJ. Regulation of whole-body angular momentum during a variety of walking adaptability tasks in individuals with post-stroke hemiparesis. 40th Annual Meeting of the American Society of Biomechanics. Raleigh NC, August 2-5 2016.

Burke SN, Rosen-Hernandez A, Campos K, Truckenbrod L, Sakarya Y, **Clark DJ**, Carter CS, and Maurer AP. The Ketogenic Diet as Metabolic Strategy for Improving Motor and Cognitive Functioning in a Rodent Model of Senescence. Pepper Older American Independence Centers Annual Meeting. Bethesda MD, April 15 2016.

Fox EJ, **Clark DJ** and Balasubramanian CK. Walking adaptability after neurologic injury: Assessment & intervention. Combined Sections Meeting of the APTA (Neurology Section). Anaheim CA, February 20 2016.

Clark DJ. Automaticity of Walking: A Motor Control Perspective for Enhancing Mobility in Older Adults. Annual Meeting of the Gerontological Society of America. Orlando FL, November 21 2015.

Otzel DM, Fielding RA, Patten C, Reid KF, Phillips EM and **Clark DJ.** Quantifying Neuromuscular Activation in Older Adults: A Comparison of Methodological Techniques. Annual Meeting of the Gerontological Society of America. Orlando FL, November 19 2015.

Clark DJ. Automaticity of walking: an alternative perspective for locomotor rehabilitation. Satellite Meeting of the Neural Control of Movement Society. Charleston SC, April 20 2015.

PROFESSIONAL SERVICE

Regulatory Committee Memberships

- Institutional Review Board, University of Florida (May 2017 – 2022)
- Member, VA Research and Development Committee, Malcom Randall VA Medical Center (February 2019 – December 2021)
- Vice Chair, VA Research and Development Committee, Malcom Randall VA Medical Center (January 2020 – December 2021)
- VA Scientific Projects Committee, Malcom Randall VA Medical Center (2015 – present)

Editorial Board Member

- Editorial Board Member, Journal of Gerontology: Medical Sciences (January 2017 - present)
- Review Editor, Frontiers in Neurology – Movement Disorders (December 2020 – present)
- Academic Editor, PLOS ONE (2016 - 2022)

Grant Reviewer (National and International)

- 2014 (October) VA RR&D; SPiRE Review Panel

- 2015 (April) VA RR&D; SPiRE Review Panel
- 2016 (April) VA RR&D; Shared Equipment Program Review Panel
- 2019 (April) NIH/NIA Program Project Review Panel
- 2019 (June) NIA Clinical Aging Review Committee (NIA-C)
- 2019 (October) NIH SBIR/STTR ZRG1 RPHB-Y(12) Review Panel
- 2020 (March) NIH SBIR/STTR ZRG1 RPHB-Y(12) Review Panel
- 2020 (March) French Stroke Research Foundation Grant Reviewer
- 2020 (June) French National Research Agency Grant Reviewer
- 2020 (August) VA RR&D; Career Development Review Panel (RRD9)
- 2021 (March) NIH SBIR/STTR ZRG1 RPHB-Y(12) Review Panel
- 2021 (June) European Science Foundation; Research Project Grant Reviewer
- 2021 (July) United Kingdom Multiple Sclerosis Society Grant Reviewer
- 2022 (June), VA Post-COVID Conditions Collaborative Merit Award Review

Grant/Award Reviewer (Local)

- 2012 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2013 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2013 Brain Rehabilitation Research Center Innovation Awards, Malcom Randall VA Medical Center
- 2014 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2015 Reviewer, UF Graduate Student Mentoring Awards
- 2015 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2015 Graduate Student Mentoring Awards, University of Florida
- 2016 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2016 Judge; UF Aging Research Day; Poster Awards
- 2017 Reviewer, UF Graduate Student Mentoring Awards
- 2018 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2018 Judge; Institute for Learning in Retirement; Aging Research Awards
- 2019 Reviewer; Institute for Learning in Retirement; Cluff Award
- 2019 Judge; UF Aging Research Day; Poster Awards
- 2019 Judge; Institute for Learning in Retirement; Aging Research Awards
- 2020 Judge; Institute for Learning in Retirement; Aging Research Awards
- 2021 Judge; Institute for Learning in Retirement; Aging Research Awards
- 2022 Judge; Institute for Learning in Retirement; Aging Research Awards

Manuscript Reviewer

Age, Aging Clinical and Experimental Research, American Journal of Physical Medicine and Rehabilitation, Brain Imaging and Behavior, Clinical Biomechanics, Clinical Neurophysiology, Experimental Gerontology, Frontiers in Human Neuroscience, Frontiers in Aging Neuroscience, Gait and Posture, Journal of Aging Research, Journal of the American Geriatrics Society, Journal of Applied Physiology, Journal of Athletic Training, Journals of Gerontology: Medical Sciences, Journal of the Neurological Sciences, Journal of Neurophysiology, Journal of Rehabilitation Research and Development, Neurorehabilitation and Neural Repair, PLOS ONE

AWARDS/HONORS AND TRAINING

Recipient of the 2019 Presidential Early Career Award for Scientists and Engineers (PECASE)

The PECASE is the highest honor bestowed by the United States Government to outstanding scientists and engineers who are beginning their independent research careers and who show exceptional promise for leadership in science and technology. (includes \$125,000 of research discretionary funding)

“Top 10” 2021 Editors Pick, Motor Neuroscience section of *Frontiers in Human Neuroscience*

Chatterjee SA, Fox EJ, Daly JJ, Rose DK, Wu SS, Christou EA, Hawkins KA, Otzel DM, Butera KA, Skinner JW, and **Clark DJ**. Interpreting prefrontal recruitment during walking after stroke: influence of individual differences in mobility and cognitive function. *Front Hum Neurosci*, 13:194, 2019.

Faculty Mentoring Award

2019 University Scholars Program (student: Chanoan Sumonthee)

Transcranial direct current stimulation and complex walking tasks as therapeutic interventions for age-related decline in balance and cognition

\$500

Finalist (Top 4) for the Golden Synapse Award from the APTA Academy of Neurologic Physical Therapy, for the article “*Mobility function and recovery after stroke: preliminary insights from sympathetic nervous system activity. J Neurol Phys Ther*, 42: 224-232, 2018.”

Pepper Scholar, UF Claude Pepper Older Americans Independence Center (2011-2014)

Certificate of Excellence in Reviewing from Experimental Gerontology for 2013

In recognition of an outstanding contribution to the quality of the journal.

Workshop Registration Award (received complimentary meeting registration)

Workshop on “Aging, the Central Nervous System, and Mobility in Older Adults”

Annual Meeting of the Gerontological Society of America (2012)

Intensive Course in Transcranial Magnetic Stimulation

Harvard University and Beth Israel Deaconess Medical Center, Boston MA, July 2010

Outstanding Post-doctoral Poster

Effects of concentric vs. eccentric resistance training on muscle strength and walking function in adults post-stroke.

Neuromuscular Plasticity Symposium, University of Florida (2008)

Sargent College Dean’s Award: Outstanding Poster

Velocity-dependent modulation of agonist EMG distinguishes healthy adults from motor-compromised adults.

Science and Engineering Research Symposium, Boston University (2007)

Health/Fitness Instructor Certified, American College of Sports Medicine (2001 – 2007)

Class President, Exercise Physiology, University of Massachusetts – Lowell (2000-2001)

Member, Honors Program, University of Massachusetts – Lowell (1997-2001)

Member, Alpha Lambda Delta National Honor Society (1998)