

# RESEARCH & INNOVATION DAY 2025

**PROGRAM** 

# AGENDA

**8:00 - 8:45 am** Registration and Coffee

First Poster Session Set-Up

8:45 - 9:00 am WELCOME AND OPENING REMARKS:

Bill Farquhar, PhD

Dean,

UD College of Health Sciences

9:00 - 9:45 am KEYNOTE:

Julie M. Fritz, PT, PhD, FAPTA

Distinguished Professor, Department of Physical

Therapy & Athletic Training, Associate Dean for Research,

College of Health, University of Utah

**9:45 - 10:15 am** 1-minute Podium Poster Pitches

**10:15 - 10:30 am** Break

10:30 - 11:45 am First Poster Session

11:45 am - 12:45 pm Lunch

Second Poster Session Set Up

12:45 - 1:30 pm KEYNOTE:

Linda M. Collins, PhD

Professor of Social and Behavioral Sciences.

New York University

1:30 - 2:45 pm Second Poster Session

2:45 - 3:45 pm CHS Faculty Lightning Research Talks

CSCD: Evan Usler, PhD

Epi: Daniel Harris, PhD, MPH

HBNS: Melissa Melough, PhD

KAAP: Jocelyn Hafer PhD

MMS: Mona Batish, PhD PT: Sheri Silfies, PhD, PT

SON: Christine Hoch, PhD, RN

3:45 - 4:00pm Award Winners Announced and Closing Remarks

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

#### **1A**

Stressors and Coping Methods in Caregivers of Toddlers Experiencing Socioeconomic Disadvantage Nick Bendel; Hannah Feng; Freda

Nick Bendel; Hannah Feng; Freda Patterson, PhD; Lauren Covington PhD, RN

#### 3A\*

Addressing Disordered Eating and Body Image: Perceptions, Programming Needs, and Comparisons Between Student-Athletes and Athletics Staff Delaney Moore, Elizabeth Orsega-Smith, PhD, Carly Pacanowski, PhD, RD, Serena Schade, Bridget O'Donnell

#### 5A

"She's Not a Couch Potato Anymore." Feasibility/Acceptability Reports from a Novel Nintendo Switch Exergaming Intervention

Jacob Corey, Jung-Mei Tsai, Swetha Kathiravan, Hanna Starner, Anjana Bhat

## 7A\*

Associations between Child Language, Problem Behavior, and Caregiver Communicative Repairs

Maura O'Fallon, Ph.D., CCC-SLP, Emma Grindle, B.A., Rebecca Alper, Ph.D., CCC-SLP

#### 9A

Veterans and Collegiate Athletes
Together (VCAT): Dual-Task Balance
Performance and Functional Health
Assessments Pre-Exercise Intervention
Scott W. Passalugo, Caitlin A. Gallo, Abigail
M. Fisher, Lauren J. Cardone, Thomas A.
Buckley

#### 11A\*

Health Literacy and its Relationship to the Vital Conditions for Health and Well-being

Grace Hrustich, Elena Lynn, Katlyn Culhane-Suluai, MPS, Alexandra Wynn, PhD, Yendelela Cuffee, PhD, MPH, and Jennifer Horney, PhD, MPH, CPH

#### 13A

Impact of Time-Restricted Eating on Emerging Adult Women's Diets Mary A. Adewoye, Diane Vizthum, Carly R Pacanowski

#### 15A

Title: Perception of Sleep Health and Chatbot-based Sleep Intervention Among Adolescents with Autism Spectrum Disorder

Fatou Marong, BS, Abigail Strang, MD, Seema Rani, MD, Lauren Covington, PhD, RN, Sarah Mallory, PhD 3, Heidi Hildick, RN, Stuart Mary, RN, Farzana Mohseni, Xiaopeng Ji, PhD, RN

#### 17A

A Gamified mHealth Intervention to Promote Physical Activity and Reduce Sedentary Behavior in Autistic Adults: Protocol for a Remotely Delivered Pilot Intervention Study

McNulty LK, Kathiravan S, and Lee D

#### 19A

Examining the relationship between Food Insecurity and Cardiovascular Health using Life's Essential 8 Metrics: National Health and Nutrition Examination Survey (NHANES) 2011-2018 Fadzai Nicola Dube\*, Annaliese Peña\*, Jee Won Park

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

#### 21A

HEALTH for All: Reaching underserved communities in Delaware to promote health equity

Christine G. Sowinski, Heather M. Milea, Deepika Chowdary Kanagala, Emma Mathias, Laurie Ruggiero

#### 22A\*

Quantity of Toddler Bedtime Activities and Routine Effectiveness in Socioeconomically Disadvantaged Families

Hannah Feng, Nicholas Bendel, Lauren B. Covington, PhD, RN

#### 23A

Mood Instability and Microvascular Function in Perimenopausal Women Jumaris D. Hernandez 1, Allyson I. Schwab 1, Jody L. Greaney 2, Megan M. Wenner 1

## 25A

The Effects of 'Fluent' Environment on Neural Correlates of Auditory Prediction Error

Joseph Koski, Gabrielle Brumond, and Evan Usler

#### 27A\*

Supporting complex conversations about vaccinations: innovative communication skill training for community health educators

Sydney Bouder, Sarah Goldring, Alyssa Whittaker, Jacquelyn Medley, Sana Patil, and Laurie Ruggiero

#### 29A

The impact of psychosocial stress in diet in young adults

Clarisse M Hunt, Jillian C Trabulsi, Aaron S Autler, Jody L Greaney

#### 31A

Impact of Sodium Intake on Blood Pressure in Collegiate Athletes and Non-Athletes

Dae Sik Song, Kristina Krieger, Lindsey M. Mirkes, Jacob J. Capin, Shannon L. Lennon

#### 33A

Eating Window Length, Night Eating, and Metabolic Syndrome Risk in Emerging Adults

Diane Vizthum MS RD, Melissa Melough PhD RD, Freda Patterson PhD, Carrie Earthman PhD RD, Carly Pacanowski PhD RD

#### 35A

Maternal newborn skills demonstration: A tool for improving confidence and preparedness of senior nursing students entering the inpatient obstetric setting Amanda Watson & Nicole Donahue

#### 37A

Comprehensive Review on the Role of Folic Acid in Preventing Neural Tube Defects and Other Pregnancy Outcomes

Kolluri Prathyusha

#### 39A

Elevated Glucose Impairs Endothelial Kir2.1 Channel Function and Degrades the Glycocalyx in vitro

Emma Hudgins, M. Sadeghinejad, A. Bonar, EJ Johnson, EJ, IS Fancher

#### 414

Exploring a Potential Relation Between Vitamin D and Blood Pressure Variability in Young Black Women

Evan C. Ciecko, Michele N. D'Agata, Alexs A. Matias, Krista M. Szymanski, Melissa A. Witman FACSM

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

#### 43A

Altered Peripheral Artery Function and Wave Reflection in Boys with Duchenne and Becker Muscular Dystrophy

Alexs Matias, Krista Szymanski, Michele D'Agata, Mena Scavina, Michael McCulloch, Julio Chirinos, David Edwards, Melissa Witman

#### 45A

Association between Age and Functional Connectivity of Sodium Sensing Brain Regions during Acute Hypernatremia

Ryan Hoefer, Nathan T. Romberger, Joseph M. Stock, Virginia R. Nuckols, Ronald K. McMillan, Megan M. Wenner, William B. Farquhar, Roxana G. Burciu

#### 47A\*

Microvascular Endothelial Dysfunction in Adults with Major Depressive Disorder: The Role of Mitochondrial-Derived Reactive Oxygen Species Aaron S Autler, Madison G Evering, Erika FH Saunders, and Jody L Greaney

#### 49A

Neuroticism is not associated with microvascular endothelial dysfunction in young adults

Navyasree Vadlamudi, Joy Mochache, Madison G. Evering, Aaron S. Autler, Kelsey S. Schwartz, Claire E. Goebel, Anna E. Stanhewicz, and Jody L. Greaney

#### 53A

Endothelial Cell CD36 ablation attenuates obesity-induced endothelial dysfunction

Erica J. Johnson, Thanh Nguyen, Sabita Rokka, Emma Hudgins, Ibra S Fancher

## 55A\*

The Effects of High-Intensity Interval Training and Moderate-Intensity Continuous Training in Sedentary Individuals on Blood Pressure Reactivity Samuel A.W. Zercher, Bryce J. Muth, Joseph M. Stock, David G. Edwards

#### 59A

Impact of Passive-Dynamic Ankle-Foot Orthoses on Post-stroke muscle activity Jacob T. Skigen, Shay Pinhey, Elisa S. Arch

#### 614

Association of Cardiovascular Health and Endothelial Function in Female Adults

Susmita Basnet; Shannon Robson, PhD, MPH, RD; Melissa M. Melough, PhD, RD; Jody L. Greaney, PhD; David G. Edwards, PhD

#### 63A

Impact of Senior Center Healthy Aging Programming on Psychosocial Health Outcomes

Serena A. Schade, Elizabeth Orsega-Smith, Julia O'Hanlon, Mihret Walelgne, Valerie Simmet, Brynna Torpey, Jillian Orellano

#### 66A

Exploring Changes in Daily Behavior with Changes in Physical Function over 24 Weeks in Adults with Knee Osteographitis

Thomas Videtich Bye, Isabella Granetzke, Sydney Liles, Jennifer Copson, Laura Schmitt, Jason Jakiela, and Daniel White

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

#### 69A

Neurological Health in Former Amateur Ice Hockey Players: Considerations for Lifestyle Factors and Career Duration Caitlin A. Gallo, Abigail M. Fisher, Lauren J. Cardone, Scott W. Passalugo, Melissa N. Anderson, Thomas A. Buckley

## 71A

Activity-Induced Changes In Pain And Gait In Adults With And Without Knee Oa

Julien A. Mihy, Mayumi Wagatsuma, Katie A. Butera, Elisa S. Arch, Stephen M. Cain, Jocelyn F. Hafer

#### 73A

Pain impairs retention of motor learning regardless of a change in context

Samuel R Jackson, Ryan T Pohlig, Susanne M Morton

#### 75A

Chronic Stroke Compromises the Temporal Precision of Proprioceptive Processing

Devin S. Austin, Arianna G. Eimont, Jennifer A. Semrau. PhD

#### 77A\*

Older Adults Activate Muscles Earlier in Response to Activity

Millissia A. Murro, Fany Alvarado, Grace K. Kellaher, Nancy T. Nguyen, Mayumi Wagatsuma, Jeremy R. Crenshaw, Jocelyn F. Hafer

#### 79A

Exploring Carotid Structure and Function in Boys with Duchenne and Becker Muscular Dystrophy

Grant E. Maxa, Alexs A. Matias, Krista M. Szymanski, Evan C. Ciecko, Michele N.D'Agata, Michael A. McCulloch, David G. Edwards, Mena Scavina, Melissa A. Witman

## 83A\*

Auditory Cueing Reduces Motor Segmentation in the Surface Electromyogram of People with Parkinson's disease

Rebecca J. Daniels, Christopher A. Knight

#### 85A

Parental Self-Efficacy in Promoting Physical Activity in Their Adult Children with Moderate-to-Profound Intellectual Disability: A Mixed-Methods Study Guided by the COM-B Model

Lauren Palmer, McKenzie Tubbs, Sophia Kayatta, Lia McNulty, Daehyoung Lee

#### 87Δ

Dual-Task Reaction Time in Former Athletes With and Without Concussion History

Abigail M. Fisher, Isabella M. Rothwell, Caitlin A. Gallo, Thomas A. Buckley

#### 89A

Associations among Clinical Ratings and Laboratory Measures of Tremor in People with Parkinson's Disease Daniel R. Vaizman, Rebecca J. Daniels

and Christopher A. Knight

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

#### 93A

Defining the parameters for sorting of RNA cargo into Extracellular vesicles.

Ahmed Abdelgawad, Yiyao Huang, Olesia Gololobova, Yanbao Yu, Kenneth W. Witwer, Vijay Parashar, Mona Batish

#### 95A

Unraveling the Role of Mitochondrial-Encoded Circular RNAs in Tumor Cells: Localization, Expression, and Functional Implications

Maggie Sumerau, Romero Brigette, Mona Batish

## 97A\*

Computational analysis of Human papillomavirus E2 proteins and biological consequences

Sean Fletcher, Esther Biswas-Fiss, Subhasis Biswas

#### 99A

Optimizing the isolation and characterization of cytosolic DNA from human cell lines

Maryia Hrynashka, Brigette Romero, and Mona Batish

#### 101A

Understanding Genetic Variants in the Regulatory Domains of ABCA4 Associated with Inherited Blinding Disorders

Zachary Davis and Esther Biswas-Fiss

#### 103A

Investigating the Impact of Complex ABCA4 Alleles in Inherited Retinal Degeneration

Masi Sadeghi, Jazzlyn Jones, Subhasis Biswas and Esther Biswas-Fiss

#### 105A

Systematic Identification And Characterization Of Protein Receptors For Cyclic Nucleotide Signals In Bacterial Antiphage Defense

Alejandra Arango, Julia Perkowski, Mona Batish, Vijay Parashar

#### 107A

Metabolic Regulation of Cyclic-di-AMP in Mycobacterium tuberculosis
Sattar, K. Parashar

#### 109A

ABCA4 Membrane Transporter: A Molecular Approach to Develop a Soluble Model System

Bhoomika Sudharshan, Albtool Alturkestani, Jazzlyn Jones, Esther E. Biswas-Fiss, and Subhasis Biswas

#### 111A\*

E2-Mediated Regulation of E1 Helicase Activity in Human Papillomavirus DNA Replication

Anshul Rana, Esther Biswas-Fiss, and Subhasis Biswas

#### 113A

Validating Anti-EDC1 And Anti-NBD2 Antibodies for ABCA-4 Protein Analysis

Tayyaba Sajjad, Theresa Edery, Jazzlyn Jones, Esther Biswas-Fiss

#### 115A

Navigating the Shadow Pandemic: Empowering Practitioners and Advocates to Combat Domestic Violence.

Zakariah Robinson, Jennifer Horney, Lauren Camphausen, Ruth Steiner, Susan Miller

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

#### 117A\*

# Disaster Preparedness for Delawareans with Diabetes

Palma Bauman, Jennifer Horney, Lilly Moreau

#### 119A

The Rise of Al-Facilitated Sexual Violence: Public Awareness, Legal Responses, and the Role of Deepfake Technology

Taylor Burton

#### 121A

Method Development for the Characterization of Microplastics in Drinking Water from Across Delaware

Mary D. Webb, Sanaz Pourreza, Melissa M. Melough

## 123A

The impact of phytochemical supplementation on depression and anxiety in women: A systematic review Anita Dini, Carly Pacanowski, PhD RD, Sheau Ching Chai, PhD RD

#### 125A

Probiotic and synbiotic interventions and women's mental health: A systematic review

Cash, H., Katz, S., Pacanowski, C.

#### 127A

When Pain Isn't Gain: Relationship
Between Low Back Pain Chronicity and
Psychosocial Health Outcomes Among
Adults with Lower-Limb Loss

Roseberry, RL; Stauffer, SJ; Horne, JH; Sions JM

#### 129A\*

Achilles Tendon Cross-Sectional Geometry and Pain in Patients with Achilles Tendinopathy

Nate Mange, Morgan N Potter, Andy K Smith, Stephanie G Cone, Karin Grävare Silbernagel

#### 131A

Lower Self-Efficacy Is Associated With Higher Movement-Evoked Pain Among Adults With Low Back Pain

Isabelle Botto, Steven George, Emily Fox, and Katie Butera

#### 133A

Motor learning strategies during walking, are diversly affected by receiving error and reinforcement feedback in healthy older adults Sara Penuela, John J Jeka

#### 1354

The Platform to Recognize and Evaluate Children for Age-appropriate Response and Early detection of Delays (PRECARE)

Bashayer M. Alharbi, Waad A. Al Mutlaqah, Eman K. Alhindi, Sydney Wissman, Alondra Alverio, Michele A. Lobo and the PRECARE Consortium

#### 137A

The Effect of Neovascularization on Achilles Tendon Circularity and Stiffness Sensation

Jess Orzelowskil, Andy K. Smithl,2, Stephanie G Cone2,3, Karin Grävare Silbernagel1,2

First Poster Session - 10:30 - 11:45 am \*Podium Pitch Presentation (Randomly Selected)

## 139A

The Role of Visuospatial Working Memory in Visual Feedback-Based Motor Corrections During Walking After Stroke

Manzoor S, Thompson ED, Wright H, Wright TR, Barela AM, Cohen ML, Reisman DS

#### 141A\*

Factors Impacting the Use of Wearables and Logs by Adults with Intellectual Disability: A Randomized Crossover Study

Cora J. Firkin, Iva Obrusnikova, and Albert R. Cavalier

#### 143A

Impaired proprioception after stroke affects the ability to perform sensory action sequences

Amelia Decarie and Jennifer A. Semrau

Second Poster Session - 1:30 - 2:45 pm \*Podium Pitch Presentation (Randomly Selected)

#### 2B

Event apprehension and argument roles during sentence production: An individual differences approach to the role of linguistic knowledge.

Mackensie Blair, Kathleen Oppenheimer, Roshean Ashmah, Yi Ting Huang, Amanda Owen Van Horne

#### **4B**

## Does Sex Influence Achilles Tendinopathy Recovery?

Morgan N. Potter, PT, DPT, Ryan Pohlig, PhD, Karin Grävare Silbernagel, PhD, PT, ATC, FAPTA

#### 6B

Parent Reported Container Use Relates to Infants' Fine Motor Development Joseph Corrado, Zainab Alghamdi, and Michele A. Lobo

#### **8B**

The Scholar Model: Enhancing Clinical Proficiency, Knowledge Retention, and Resilience in Nursing Students Isabella Leonardo, Jennifer Saylor, Jennifer Graber, Rosemary Wurster, Michelle Thompson, Elizabeth Speakman

#### 10B

Enhancing Suicide Prevention: Evaluating the Impact of Universal Suicidal Ideation Screening in Primary Care

Alyssa Selimov, BSN, RN 1; Jennifer Graber, EdD, APRN, PMHCNS-BC 1; Sharon Dudley-Brown, PhD, FNP-BC 1

#### 12B

Association between Time-of-Day for Eating, Exercise, and Sleep with Blood Pressure in Adults with Elevated Blood Pressure or Hypertension: A Systematic Review

Thomas Keiser, Sarah Katz, Shannon M. Robson, Jody L. Greaney, Sean Healy, Susan K. Malone, Vahid Farrahi, and \* Freda Patterson

#### 14B\*

Examining State-level Program Goals in the Supplemental Nutrition Assistance Program Education (SNAP-Ed) System: Preliminary Insights from State Plans Kristin Kelly, MA

#### 18B\*

Addressing LGBTQIA+ Biases in Healthcare Professionals: Impact on Care and Health Outcomes Siddhi Sanjay Ghadi, Yendelela Cuffee

#### 20B

Sleep Health in Children and Adolescents with Sickle Cell Disease S., Rani, A. Strange, K., Canter, A. Hildenbrand, R. Miller, N. Divirgilio, A. Lewis, K. Dver, A. Chidekel, F. Patterson

#### 24B

Variability between stress management and sleep health in socioeconomically disadvantaged families

Kiara Shay, Benjamin Brewer, PhD, Destiny Mahmood, MS, Nicholas Bendel, Emma Archer, BS, Shannon Mayberry, MS, Xiaopeng Ji, PhD, MS, RN, Freda Patterson, PhD, Lauren B. Covington, PhD, RN

Second Poster Session - 1:30 - 2:45 pm \*Podium Pitch Presentation (Randomly Selected)

#### 26B

How Delaware's SHIP Coalition Improves the Health of Delaware Senquiz, Esme Harshbarger, Bree Jawaharlal Nehru, Katlyn Culhane–Suluai, Dr. Wynn, Dr. Cuffee, Dr. Horney

#### 28**B**

Prevalence of Insomnia and Its Associations with Gaming Behavior and Perceived Health in Autistic Adults Sydney Bouder, Lia McNulty, Daehyoung Lee

#### 30B

iManage-SCI Sexual Wellness: A Symptom-Monitoring/Self-Management Program to Improve Sexual Wellness after SCI

Chloe DeHart, MLIS, Pamela A. Kisala, MA, Jerry Slotkin, PhD, Aaron Boulton, PhD, and David S. Tulsky, PhD

#### 36B

Effect of Tart Cherry Juice Consumption on Emotional and Menopausal Symptoms in Postmenopausal Women: An Ongoing Study

Oyefemiwa Fadaini, Bingqing Luo, Ayham Ghith, Alexa Harrison, Anita Dini, Freda Patterson, Zugui Zhang, David Edwards, Sheau Ching Chai

#### 38**B**

Gaming Behavior as a Predictor of 24-Hour Movement Behaviors in Autistic Adults with and without Mild Intellectual Disabilities

Kathiravan S, McNulty LK, and Lee D

#### 40B

Contrasting Associations of Fat and Lean Mass with Bone Mineral Density Among Postmenopausal Women Bingqing Luo, Adam Davey, Sheau Ching

#### 42B\*

extract on endothelial dysfunction in acrolein-exposed human aortic endothelial cells Brandy L. Le, NDTR; Sabrina P. Trudo, RD, PhD; Sheau Ching Chai, RD, PhD; Jillian Trabulsi, RD, PhD; Jae

The effect of apiaceous vegetable

#### 44B

Kveom Kim. PhD

Training Speed, not Training Heart Rate, Predicts Changes in Walking Capacity in People with Chronic Stroke Kiersten M. McCartney, PT, DPT, Pierce Boyne, PT, DPT, PhD, Ryan Pohlig, PhD,

Susanne M. Morton, PT, PhD, Darcy Reisman, PT, PhD, FAPTA

#### 46B

Comparing Physiological Approaches to Assess Cutaneous Nitric Oxide-Dependent Vasodilation in Young Men and Women

Madison G. Evering, Aaron S. Autler, Kelsey S. Schwartz, Claire E. Goebel, Navyasree Vadlamudi, Joy R. Mochache, Anna E. Stanhewicz, and Jody L. Greaney

#### 48B

Examining the Association Between
Diet Quality, Physical Activity, and
Vascular Function in Children
Zenas Okero, Adriana Verdezoto

Alvarado, PhD, MS, Shannon Robson, PhD, MPH, RD

Second Poster Session - 1:30 - 2:45 pm \*Podium Pitch Presentation (Randomly Selected)

#### 50B\*

Effects of vasomotor symptoms on endothelial function in midlife women Emily K. Shaw, Allyson I. Schwab, Virginia R. Nuckols, Megan M. Wenner

#### 52B

# ASCVD: Screening in New Castle County, Delaware

Juneessa Pressley, Christine Sowinski, Heather Milea, Jennifer Horney

#### 54B

Effects of chronic kidney disease and exercise training on the blood pressure response to exercise

Jessica M. Irwin, Danielle L. Kirkman, David G. Edwards

#### 56B

Assistive device and orthosis use impact on daily step activity improvements in individuals with chronic stroke

Jemma Kim DPT 1,2 Elizabeth D. Thompson PT, PhD, NCS 2 ,Kiersten McCartney DPT 1,2 , Henry Wright DPT 2 , Tamara Wright DPT 2 , Darcy S. Reisman PT, PhD, FAPTA 1,2

#### 58B

Guardian-Reported and Self-Reported Quality of Life in High School Students with Congenital Heart Defects

Samantha Muza, Jennifer Saylor PhD, APRN, ACNS-BC, Jennifer Graber EdD, APRN

#### 60B

The Effect of Repetitive Head Impact Exposure on Resting Blood Pressure in Former Amateur Athletes

Lauren J. Cardone, Caitlin A. Gallo, Scott W. Passalugo, Thomas A. Buckley

#### 62B

Pain and Function Differences for Adults with Rheumatic Conditions: Preliminary Findings from an Online Cohort Sydney, Jennifer, Tom, Jason, Evie, Julie, Julio. Dan

#### 64B

The Effect of Stochastic Resonance Stimulation in Neural Control of Balance During Walking in Parkinson Disease

Eman Alsaqabi, Stephen DiBianca, Ashwini Sansare, Khushboo Verma, Hendrik Reimann, John Jeka

#### 65B

Prescription and non-prescription medication use before and after a herpes zoster diagnosis among nursing home residents in the United States Peyton Free, Preeti Chachlani, Kaleen N. Hayes, Kevin W. McConeghy, H. Edward Davidson, Lisa Han, Stefan Gravenstein, Daniel A. Harris

#### 68B\*

fNIRS-based markers of cognitive improvements following a Nintendo Exergaming Intervention in Autistic Children – a Pilot Randomized Control Trial

J.-M. Tsai, J. Corey, S. Kathiravan, L. Alexander, A. Bhat

#### **70B**

From Muscle Mass to Movement: Exploring the Connection Between Appendicular Lean Soft Tissue Index and Walking Stability Control Ahmed Alkaye, Nancy Nguyen, Carrie Earthman, and Jeremy Crenshaw

Second Poster Session - 1:30 - 2:45 pm \*Podium Pitch Presentation (Randomly Selected)

#### 72B\*

## A Domain-Specific Approach to Characterizing Falls Efficacy Post-Stroke

Grace K. Kellaher, Ryan T. Pohlig, Darcy S. Reisman, and Jeremy R. Crenshaw

#### 74B

## Assessing Balance Control in Early-Stage Parkinson's Disease with Wearable IMU Technology

Taylor Boileau, Jae Woo Chung, PhD, Abigail E. Bower, MA; Roxana G. Burciu, PhD

#### 76B

Diuretic Use is Associated with Fall Risk after Lower-Limb Loss: A Retrospective Analysis of Data from an Interdisciplinary Outpatient Clinic Shahi AK; Stauffer SJ; Sarlo, FB; Horne JR; Sions JM

#### **78B**

## Examining the Relationship Between Specific Strength and Fatigability in Older Adults

Kathleen Downs, Millissa A. Murro, Jocelyn F Hafer

#### 80B

Nursing Students' Perceptions in Caring for Older Adults: A Literature Review Sophia Theodoridis, Paige Beam, Pia Inguito, Ju Young Shin

#### 84B

## The Effects of Repetitive Head Impact and Physical Activity on Dual-Task Cognitive Performance

Isabella M. Rothwell, Abigail M. Fisher, Caitlin A. Gallo, Thomas A. Buckley

#### 86B

Diuretic Use is Associated with Fall Risk after Lower-Limb Loss: A Retrospective Analysis of Data from an Interdisciplinary Outpatient Clinic Shahi AK; Stauffer SJ; Sarlo, FB; Horne JR; Sions JM

#### 88B

Physical Activity Characteristics and Pain Severity in Older Adults with Arthritis: Examining Sleep Disturbances as a Moderator

Sanaz Taherzadeh, MS, RN . Ju Young Shin, PhD, APRN, ANP-C . Regina Wright, PhD . Shanshan Ding, PhD . Li-Qun Zhang, PhD . Xiaopeng Ji, PhD, RN

#### 90B

Healthcare Providers' Roles in Preventing A Trajectory of Violence Andrea Araya, Alexa Brown & Kathleen Brewer-Smyth, PhD, RN, MSN, CRRN, FAAN

#### 92B\*

Mitochondrial CD36 Regulates Lipid Metabolism and Superoxide Production in Endothelial Cells Under Hyperglycemic and obesogenic Conditions

Bhaswati Kashyap, Thanh Nguyen, Emma Hudgins, Erica J Johnson, Ibra S Fancher\*

#### 94B

**Quantifying the Uptake of RNA Cargo from Nanocage-based RNA Exporters** P. Turner, A. Koppula, M. Batish, G. Davis

#### 96B

Regulation of transcription factor MEF2C expression by circNFIX in spastic cerebral palsy

Brigette Romero, Parsa Hoque, Karyn G Robinson, Stephanie K Lee, Tanvi Sinha, Amaresh Panda, Vijay Parashar, Robert E Akins, M. Wade Shrader, and Mona Batish

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Second Poster Session - 1:30 - 2:45 pm \*Podium Pitch Presentation (Randomly Selected)

#### 98B

Effects of Circulating Endothelial Microvesicles on Cerebrovascular Inflammation in Chronic Kidney Disease Vinicius P. Garcia, Danielle L. Kirkman, Auburn R. Berry, Samuel D. Ruzzene, Jared J Greiner, Christopher A. DeSouza, David G. Edwards

#### 100B

Atypical transcriptional regulation by a histidine kinase in S. aureus

Theresa Edery, Ahmed Abdelgawad, Sadik Shataer, Mona Batish, Vijay Parashar

#### 104B

Necrotizing Fasciitis in Diabetic Patients: Current Global Status and Challenges in Diagnosis and Treatments Anna Hernandez and Mona Batish

#### 106B

Swarming Motility is Controlled by DegU Oligomerization and DNA Bending

Richard Knappenberger, Vijay Parashar, Mona Batish

#### 108B

Exploring Retinoid Interactions with ABCA4's Extracytoplasmic Domain ECD2: A Computational Perspective Jazzlyn S. Jones, Subhasis B. Biswas, and Esther E. Biswas-Fiss

#### 110B

Exploring ABCA4 Genetic Variants: Present Insights and Emerging Opportunities

Nadee N. J. Matarage Don, Subhasis B. Biswas and Esther E. Biswas

#### 112B\*

Epidemiological Analysis Of High Risk And Low Risk Human Papilloma Viruses (Hpvs) In Africa, Asia And Other Parts Of The World.

Yaw Kobia Dwomor

#### 114B

DNA Polymerase Family B Reveals Novel Viral Diversity and Reflects Infection Strategy

Zaina T.A. Punter, Barbra D. Ferrell, Zachary D. Shreiber, K. Eric Wommack, Shawn W. Polson

#### 116B\*

Characterizing Perceptions of Opioid Treatment Program Access Barriers During Disasters

Lilly Moreau, Palma Bauman, Joshua Hall, Shangjia Dong, Jennifer Horney

#### 118B

Nursing Climate Resources for Health Education (N-CRHE): Bridging the Gap Between Assessment and Action

M. DePhillips, G. Friel, K. Boyd, K. Duderstadt, M. Myers, R. McDermott-Levy, N. Sood. C. Sorenson

#### 120B

Long working hours and cardiovascular health using Life's Essential 8 Metrics: Findings from the 2011–2018 National Health and Nutrition Examination Survey (NHANES)

Annaliese Peña, Fadzai Nicola Dube, James Wallace, Kareem Khairy, Jee Won Park

Second Poster Session - 1:30 - 2:45 pm \*Podium Pitch Presentation (Randomly Selected)

#### 122B

Development of a Protocol for Extracting and Characterizing Microplastics in Infant Formula Sanaz Pourreza, Mary Webb, Melissa M. Melouah

#### 124B

Sociodemographic and Health Vulnerabilities Associated with Disaster Exposure: Insights from ECHO Cohort Shazia Shaukat, Tarang Parekh, Jee Won Park, Melissa Melough, Jennifer Horney

#### 126B

Evaluating Accessibility, Safety, and Usability of Delaware's Parks and Playgrounds for Individuals with Disabilities

Riley Pennington; Cole Bilbrough; India Dixon; Cora J. Firkin, BS; Iva Obrusnikova, PhD

#### 128B

Investigating how proprioceptive deficits affect bilateral arm capacity after stroke

Joanna E. Hoh, Darcy S. Reisman, Jennifer A. Semrau

#### 130B

Patellar Tendon Graft-Site Healing after ACLR using BPTB Autograft

Claudia Kacmarcik, PT, DPT , Karin Gravare Silbernagel, PT, ATC, PhD, FAPTA

#### 132B

Sex-Specific Differences in Recurrent Fall Risk among Adults with Lower-Limb Amputation

Claire E. Vallery, CPO, MPO; Samantha J. Stauffer, CPO, MSPO; Frank B. Sarlo, MD; John R. Horne,

CPO; J. Megan Sions, PT, DPT, PhD

#### 134B

Motion Capture And Shear Wave Tensiometry Assessments Of Achilles Tendon Loading Are Significantly Correlated

\*Zahra McKee, Stephanie G. Cone, Karin Grävere Silbernagel, Elisa S. Arch

#### 136B

Does Walking Efficiency Increase After Self-Exploration Of Walking With A Passive

**Dynamic Ankle-Foot Orthosis For Individuals Post-Stroke? A Pilot Study** Shay R. Pinhey, Darcy S. Reisman, Elisa S. Arch

#### 138B\*

Body size parameters in allometric normalization of handgrip strength in adults with Parkinson's disease: Which parameter is the most appropriate? Isabella P. Marques, Rebecca J. Daniels and Christopher A. Knight

#### 140B

Relationships between the rate of torque development and tendonaponeurosis complex stiffness in plantar flexors and knee extensors

Tomonobu Ishigaki, PT, PhD, Tomoya Ishida, PT, PhD, Takumi Ino, PT, PhD, Mutsuaki Edama, PT, PhD, Karin Gravare Silbernagel, PT, ATC, PhD

#### 142B

The Influence of Metabolic Risk Factors on Physical Activity during Midportion Achilles Tendinopathy Recovery

Hayley P Smitheman, Kayla D Seymore, Ryan T Pohlig, Christian Couppé, Andy K Smith, Karin Grävare Silbernagel

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