



**FSEM ASC 2021 – Exercise is Medicine – Friday 17th September, 2021
8.30 – 18.00**

Exercise, Brain Health, and Pain Management - 13.00 – 14.30

Dr Matt Herring, Dept of Physical Education & Sport Sciences, University of Limerick



Matthew P. Herring, PhD, FACSM is a Senior Lecturer at University of Limerick (UL) affiliated with the Department of Physical Education and Sport Sciences and the Physical Activity *for* Health Research Cluster of the UL Health Research Institute, a Visiting Research Fellow in Medical Gerontology with The Irish Longitudinal Study on Ageing (TILDA) at Trinity College Dublin, and Director of the Exercise is Medicine® Ireland National Centre. He received BSc in Psychology, MEd in Counselling, MSc in Exercise Science, and PhD in Exercise Psychology degrees from The University of Georgia in the United States before completing a Post-Doctoral Fellowship in Exercise Psychology at the University of South Carolina. Following post-doctoral work, he joined the School of Public Health at the University of Alabama at Birmingham before joining UL in August 2014.

His research focuses on relations of physical activity and exercise with mental health, particularly anxiety, and their plausible psychobiological underpinnings across the age and health continuums. Dr. Herring's research has critically enhanced our understanding of the role of meeting recommended levels of physical activity in protecting and improving anxiety, the role of exercise training, especially resistance exercise training, in the treatment of subclinical and clinical anxiety (i.e., Generalized Anxiety Disorder), and the modifiable factors which may contribute to variability in anxiety response to exercise training.

Prof Suzanne McDonough, Head of RCSI School of Physiotherapy



Professor Suzanne McDonough is a Professor and Head of RCSI School of Physiotherapy, and holds professorial appointments at Ulster University UK, and University of Otago, NZ; and is a visiting Professor with the University of Southampton. Suzanne obtained her undergraduate degree in physiotherapy at University College Dublin (UCD) in 1989; was awarded her PhD in neurophysiology from Newcastle University, UK, in 1995; and a higher diploma in healthcare (acupuncture) in 2002 from UCD. Suzanne has supervised 30 PhD students to date, has published widely in her area of expertise (over 100 papers; H-index=43) related to physical activity, exercise and rehabilitation of various movement conditions.

Suzanne is expert in the development and evaluation of rehabilitation interventions in clinical populations with movement challenges (e.g. due to pain, neurological injury, ageing etc.). Suzanne has experience of conducting trials in Ireland, UK and Canada to understand how people with painful conditions can be supported to safely walk more in order to meet the physical activity guidelines. She is also interested in the role exercise and physical activity can play in reducing pain levels and improving day to day function over time.

Prof Carson Smith, School of Public Health, University of Maryland



Prof Smith graduated summa cum laude with a double major in Psychology and Exercise Science from Arizona State University. He went on to complete his doctoral degree in Kinesiology at the University of Georgia, and then a post-doctoral fellowship in Affective Neuroscience at the University of Florida. Prof Smith is focused on understanding how exercise and physical activity, from single sessions of exercise to long-term exercise training, affect human brain function and cognition, particularly in older adults. Prof Smith's investigations use magnetic resonance imaging (MRI), neuropsychological testing, and analyses of blood biomarkers to document how exercise protects the brain from age-related cognitive decline, as well as mental health problems such as depression and anxiety. Prof Smith and his team of collaborators are currently interested in the potential efficacy for exercise to affect brain function and protect memory in healthy older adults at increased genetic risk for Alzheimer's disease, as well as in patients diagnosed with Mild Cognitive Impairment (MCI).

Prof Dane Cook, Director of the Exercise Psychology laboratories at the William S. Middleton Memorial Veterans Hospital and the University of Wisconsin-Madison



Prof Dane B. Cook is the Director of the Exercise Psychology laboratories at the William S. Middleton Memorial Veterans Hospital and the University of Wisconsin-Madison. He is also the Director of the *Marsh Center for Research in Exercise and Movement* within the Department of Kinesiology at UW-Madison. He received his Master's and Doctoral degrees in Exercise Science at the University of Georgia in Athens, GA and he received post-doctoral training in neuroscience at the University of Medicine and Dentistry (Rutgers) in Newark, NJ.

Prof Cook's research focuses on the relationships between biology and behaviour as they relate to acute and chronic exercise, with a specific focus on how exercise influences the central nervous system in both health and disease. Much of Prof Cook's research uses functional magnetic resonance imaging (fMRI), in conjunction with biological and behavioural outcomes, to understand central nervous system mechanisms of pain and fatigue in people with fibromyalgia (FM), myalgic encephalomyelitis / chronic fatigue syndrome (ME/CFS) and Veterans with Gulf War illness (GWI). These studies combine exercise science and brain imaging methods to better understand these diseases. Prof Cook's research also incorporates additional biological systems, such as the immune, autonomic, and gut microbiome to better understand how distinct yet related physiological responses interact within disease.

Prof Cook's research has been funded by the National Institutes of Health, the Department of Defense, and Department of Veterans Affairs. His laboratory is currently testing how acute exercise influences autonomic, immune and brain responses during pain and cognitive challenges – a mechanistic study of post exertion malaise in Gulf War Illness (Merit Review Grant Award: I01CX0011329-01). In separate projects (Merit Review Award: Grant # 1I01CX000383-04; Grand Challenges Award), Prof Cook's lab is examining symptom, physical activity and brain responses to resistance exercise training in Gulf War veterans with chronic musculoskeletal pain, as well as, brain inflammation in GWI and ME/CFS.

To Register – Click [HERE](#).

Recording of the webinar will be available to view for 6 months after the event, via Medcafe.

For further details, please contact: Ms Annemarie Creighton, Faculty of Sports and Exercise Medicine, RCSI House, 121 St Stephen's Green, Dublin 2. Tel: 01- 402 2382 –
e-mail: sportsfac@rcsi.ie