

# **International Movement Screening and Interventions Group (IMSIG)**

## **Update December 2022**

As research activities are resuming after the suspension of projects during the Covid-19 pandemic, the IMSIG Core Group met in October 2022 to revisit priorities for the Task Groups, as summarised below. It was decided to open up Task Group meeting to all IMSIG members, where there were no restrictions due to confidentiality of sensitive material/populations. Advance notice will be sent to all members, as meetings are scheduled.

### **1. Membership**

We have 80 members representing 12 countries: Australia, Canada, Ghana Ireland, Italy, Japan, New Zealand, Poland, South Africa, Sweden, UK and USA. New members are always welcome, so please tell your colleagues, who can join by contacting Charlotte McKnight-Burton (see below).

### **2. How the IMSIG operates**

A Core Group of members meets periodically via teleconference to review the IMSIG goals and achievements. Task Groups also meet to work on specific topics and their outcomes are summarised in these updates, which are circulated to members and posted on the IMSIG website. Workshops are held on relevant themes and have specific goals. Details of Core Group and Task Group members, and workshop summaries can be found on the IMSIG website. Maria Stokes co-ordinates activities, assisted by Paul Muckelt (Southampton, UK). Charlotte McKnight-Burton (Bath, UK) provides administrative support (see contact details at end of document).

### **3. Task Groups**

There are five active task groups, two of which are new.

#### **3.1. Military Group – UK & USA**

This group is led by Jo Fallowfield (UK) and Sarah de la Motte (USA) and projects include:

**a) UK - Movement Quality using movement screening and neuromuscular exercise interventions to reduce injury**

Studies are at various stages in different military cohorts.

**b) USA - Scoping Survey of Movement Screening in the Military**

A survey (led by Sarah de la Motte) is scoping the use of movement screening tools across the military to determine types and purpose of screening used (delayed due to Covid-19 pandemic).

**c) Consensus** - the US and UK (military) are involved in a Consensus Group, with the aim of establishing shared definitions and standardised data gathering approaches to injury prevention / mitigation programmes.

#### **3.2. Biomechanics Group**

The group, led by Martin Warner (Southampton) is now focusing on wearable sensors to screen movement control and/or actual activity. This group is open to those members who are interested joining their meetings.

#### **3.3 Football Group**

This group, led by Richard Jones (Manchester, UK), has yet to resume activities. Paul Muckelt was due to conduct a women's football study in Manchester but this was prevented by Covid-19, so his PhD shifted to mechanistic studies on student cohorts in Southampton, as well as warm-up exercise intervention studies in military cohorts.

### **3.4 Aerospace & High Performance**

This new group is led by Ellen Slungaard (ES) & Paul Muckelt (PM)

- Work with military pilots is led by ES and is evaluating a neck muscle exercise programme. Could be expanded to F1 drivers and skeletal bob sleigh crew.
- Work with Astronauts is led by PM. Pre- and post-flight movement screening of astronauts forms part of a collaborative project led by Nick Caplan at Northumbria University, with Martin Warner leading the movement quality aspect. This sub-group is planning lab-based projects to study movement screening in partial gravity.

### **3.5. Interventions to Improve Movement Quality**

The new group, led by Maria Stokes, will scope projects developing exercise interventions to improve movement quality to prevent injury (primary), progression of traumatic injury to osteoarthritis (secondary) and progression of severity of established osteoarthritis (tertiary), as well as improve performance. This will help identify where collaborations can be made to harmonise research approaches and enable comparison between studies and cohorts.

If you are interested in joining a Task Group, please contact Charlotte McKnight-Burton.

## **4. Communication - Centre for SEOAVA website**

The main means of communication for the group is through the public area on the Centre for Sport, Exercise and Osteoarthritis Research Versus Arthritis website (see link below). Alerts about any activities, such as workshops, are emailed to all members on the database.

## **5. Publications by IMSIG members relevant to the group**

Publications produced from collaborations formed within the Task Groups are posted on the IMSIG website. You will have received a message from Charlotte recently, asking for details of any publications from your research that are relevant to the group. This is to provide a resource for members to see the work of other members. This will also help gain consistency across member research groups, in terms of research approaches (methodologies, outcome measures etc) to enable comparisons between studies.

### **Contact details:**

Administrator – Charlotte McKnight-Burton – email: [centre-seoa@nottingham.ac.uk](mailto:centre-seoa@nottingham.ac.uk)

### **Link to IMSIG Website:**

<http://www.sportsarthritisresearchuk.org/international-movement-screening-and-interventions-group-imsig/imsig.aspx>

### **Acknowledgment**

We thank the Centre for Sport, Exercise and Osteoarthritis Versus Arthritis for providing administrative support to enable IMSIG meetings and activities to take place, and for maintaining the website.