

NCM SATELLITE MEETING DETAILED DAILY PROGRAM

NCM Satellite Meeting, Dublin, Ireland April 30, May 1, 2017 All sessions will be held at the Clayton Hotel Burlington Road

This satellite symposium is designed to develop an interactive environment among leaders in the field addressing sensory control of movement in order to identify critical scientific and clinical directions for the future. The symposium will start off with a Keynote presentation by Jonathan Cole, author of "Pride and a Daily Marathon", who will discuss his work with Ian Waterman, a patient who has learned to live without proprioception. Four sessions, will address the following topics:

- 1) The role of proprioception in perception or action
- 2) The role of vision in perception or action
- 3) The integration of vision and proprioception for perception and action
- 4) Clinical applications to stroke, cancer, Parkinson's disease, and amputations.

Each session will be followed by a panel discussion. Posters will be presented during lunch and following the symposium, during a cocktail session.

The satellite symposium is organized by T. Richard Nichols and Robert Sainburg.

Sunday April 30

- 17:00 19:00 Satellite Registration
- 18:00 19:00 Satellite Drinks Reception, Bbar, Clayton Hotel Burlington Road

Monday May 1

- 07:30 08:00 Registration
- 08:00 08:15 Welcome/Introduction, Robert Sainburg, T. Richard Nichols

08:15 – 9:15 Keynote Address:

Jonathan Cole, University of Bournemouth



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9:15 - 10:30 Session 1: The role of proprioception in perception and action Moderator: Robert Sainburg, Penn State University Sensory physiology and central pathways for proprioceptors Richard Nichols, Georgia Institute of Technology The roles of proprioception in action Simon Gandevia, Prince of Wales Medical Research Institute Somatosensory control of movement and visual compensatory mechanisms: Insights from deafferented individuals Fabrice Sarlegna, Aix-Marseille University 10:30 – 10:45 Coffee Break 10:45 – 12:30 Session 2: The role of vision in perception and Action Moderator: Melvyn Goodale, The University of Western Ontario Introduction Melvyn Goodale, The University of Western Ontario The role of the early visual cortex in action: contribution of Vision, Imagery and Touch Simona Monaco, Center for Mind/Brain Sciences Neural representations for action in human occipitotemporal cortex Jason Gallivan, Queen's University Sensory contributions to the control of reach-to-grasp Scott Frey, University of Missouri 12:30 – 13:30 Lunch and Satellite Meeting Poster Session, 13:30 – 15:30 Session 3: Integration of vision and proprioception for perception or action Moderator: T.Richard Nichols, Georgia Institute of Technology **Toward Artificial Proprioception** Philip Sabes, University of California, San Francisco

> **Task dependent use of visual feedback during reaching** Stephen Scott, Queen's University

What limb drift reveals about the independence of Vision and proprioception in motor control

Robert Sainburg, Penn State University

Action stability with and without vision

Mark Latash, Penn State University



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15:30 – 15:45 **Coffee Break**

15:45 - 17:30Session 4: The effects of vision and proprioceptive deficits on clinical
conditions
Moderator: Lee Miller, Northwestern University

Proprioceptive loss and recovery in the upper limb following stroke Seann Dukelow, University of Calgary

The effect of amputations on proprioception and proprioceptive-visual integration

Lewis Wheaton, Georgia Institute of Technology

Chemotherapy for Colorectal cancer produces proprioceptive deficits by changing muscle spindle properties: A clinical model of spindle-dysfunction Tim Cope, Georgia Institute of Technology

The relationship between proprioceptive and motor deficits in Parkinson's disease and focal dystonia Juergen Konczak, University of Minnesota

- 17:30 19:00 Closing Comments, Poster Session and Cocktails
- 19:30 21:30 Opening Reception for Annual Meeting,
 Please Note: If you registered to attend the Satellite Meeting ONLY and want to attend the dinner, tickets can be purchased at the registration desk.