

**ROYAL COLLEGE OF PHYSICIANS
AND
BRITISH SOCIETY OF REHABILITATION MEDICINE**

**RESTORING MOBILITY:
THEORIES, TECHNOLOGIES AND EFFECTIVE TREATMENTS**

Monday 10 December 2007

*at Royal College of Physicians,
11 St Andrews Place, Regent's Park, London NW1*

Mobility problems arising from neurological and musculoskeletal disease or injury interfere with independence and lifestyle for many people throughout the world. The aims of this conference are to:

- consider how movement is learnt and how disruption to this process *occurs* in disease and injury
- explore the use of technologies (ranging from deep brain stimulation to orthoses, prosthetic limbs and robotics) to restore function
- explore the interface between therapies and technologies
- learn about how individuals have managed their own mobility problems in often very inhospitable environments

The conference is directed at doctors working in rehabilitation medicine, neurology, orthopaedics, rheumatology and paediatrics, physiotherapists and occupational therapists, prosthetists and orthotists. It will also be relevant for bioengineers working in clinical services and industry.

The conference is intended to enable all to respond to mobility problems more rationally & effectively. However, given the wealth of novel technologies to be described, it should also be lively and entertaining!

09.00 *Registration and coffee*

09.45 **Opening remarks and welcome**

Professor Ian Gilmore, President, Royal College of Physicians

Chair: Dr Diane Playford, National Hospital for Neurology and Neurosurgery, London

THE RANGE OF EXPERIENCE

09.50 **Mobility problems: their epidemiology and impact on participation**

Dr Vera Neumann, Leeds Teaching Hospitals NHS Trust & University of Leeds

Discussion

HOW MOVEMENT IS LEARNT, LOST AND REGAINED

10.20 **Can abnormal movement control be made normal? The science behind movement control**

Professor Richard Carson, Queen's University Belfast

Discussion

- 10.50 **Physiotherapy interventions and orthoses following stroke.
What is the evidence?**
Dr Elizabeth Condie, University of Strathclyde
and
11.15 Professor Ann Ashburn, University of Southampton
Discussion
- 11.40 *Coffee*
- 12.00 **Falls in those with limb loss or deficiency**
Dr Jai Kulkarni, Withington Hospital, Manchester
Discussion
- NOVEL TECHNOLOGIES**
- 12.30 **Deep brain stimulation for movement disorders**
Professor Tipu Aziz, John Radcliffe Hospital, Oxford
Discussion
- 13.00 *Lunch*
- Chair:** Professor Ian Gilmore
- 14.00 **COLLEGE NAMED LECTURE**
Targeted reinnervation for enhanced prosthetic function
Professor Todd Kuiken, Rehabilitation Institute of Chicago, USA
- Chair:** Professor Bipin Bhakta, University of Leeds
- NOVEL & RESTORATIVE TECHNOLOGIES**
- 14.50 **Cybernetics & robots in rehabilitation**
Professor Kevin Warwick, University of Reading
Discussion
- 15.20 *Tea*
- 15.50 **Moving forward with technology**
Dr Ruth Mayagoitia-Hill, King's College London
Discussion
- 16.20 **Crossing the Nicaraguan jungle with mobility problems**
2 service users
(who were on the Beyond boundaries TV programmes)
Karl Sacks & **speaker - TBC**
Discussion
- 17.10 *Close of conference and drinks reception*