21st of March is the beginning of spring, a new year for the planet earth, and perhaps a new beginning for the evolution of the 2nd generation of Multi-Disciplinary Teams. Today the needs of physical rehabilitation of disability relies a lot more on new technology and advances in medicine than ever before. This call for more shared responsibility, deeper knowledge and recognising the inter dependency on each other’s skill which consequently results in more mutual respect and more equal value in formation and building a much stronger team. The revolution of additive manufacture (3D printing), customisation of interfaces for prosthetics, orthotics and seating has the potential to change the shape of our profession within the coming decade. Advances in Ossointegration, TMR, neuro-implant coincides with the need to manage the healthcare economic against society’s expectations. These are parallel challenges for today’s MDT and greater team work seems to be a natural way to solve.

Following success of 2015 Oxford meeting where we were able to gain a deeper understanding of Outcome Measures, Clinical evidence based practice, Long term Health economics needs and Quality of service in O&P, simultaneously we obtained greater understanding of the latest in Neuroscience and how the O&P field being re shaped by the emerging science. The horizon till 2020 is now clearer at least in as much as helping us to vision the theme of next 5 years meetings. The changes in foundation of Industry, Social Services and NHS care, Education and Training needs to meet future advances in technologies (for example future rehabilitation processes which are aimed at personalisation and bespoke manufacture of customised devices, made from pre-fabricated modular system, fitted and made based on 3D sensing of the full interfaces, simulating, compensating soft tissue effect and the fabrication at the point of fitting by MDT professionals, with in built capabilities of measuring success of rehabilitation) may be quicker that we think. Hence ISPO needs to be more vigilant and focused on providing the forum for learning and discussion as our field is being re shaped.

To this end, we plan to hold the next meeting at Glasgow encouraging NCTPO students. The 2016 program will combine both TIPS and the UK National Members Society Annual Scientific meeting for 4 days. (TIPS will run for 3 days the NMS meeting for 2 with an overlap on Friday). The program aims to present future of upper limb prosthetics and share some of current research as well as consider the holistic nature of future services to maintain quality, efficiency and establish ways of increasing access to modern devices and advances in P&O products and services. A large number of key note speakers promises making of an enthusiastic meeting for all. The 2017 ISPO UK NMS meeting will be held at Cambridge where the emerging theme of improving quality of service and access with increasing understanding of neuromuscular control through dissemination of research publications continues. 2018 will be the year of the joint meeting with BAPO, addressing some of grand challenges in Orthotics and support of aging population for longer independent living. The theme of sensors and interfaces at Southampton and how to bring these sciences into clinical practice promises to be a turning point event. The proposed venue for 2019 is Stanmore to enable the continuation of the evolutionary journey of MDT profession in P&O in bringing together greater advances in medical sciences with latest technological breakthrough in manufacturing which has the capability of closer integration into services. The journey of learning and teaching brings us back to educational centre in UK for 2020 at Salford to facilitate more student participation, where the new shape of future integrated P&O will be the subject of discussion, demonstration, validation and verification.

Joint meeting with other MDT professional to complement, share each other experiences, and provide a richer offering is very likely to increase with the greater need to simplify the underlying complexity of new advances. BAPO’s expertise in dissemination of clinical experiences and education, compliments ISPO UK MS role which is to provide the best scientific education for Multi-Disciplinary Teams of Orthotist, Prosthetist, Physiotherapist, Occupational Therapist, Technicians, Bio Medical Engineers, Rehabilitation Engineers, Nurses, Rehabilitation Medicine, Psychologist, Administrators, Managers and many other professionals. The P&O challenge remains using the best use of our collective limited resources and I believe we are already on the road to meet these challenges by encouraging more people to join our unique profession.

ISPO UK members society, executive committee and all stakeholder organisations will not survive without your support, contributions, and sponsorship. The ISPO UK executive committee will continue to engage in increasing awareness of all stake holders and establish a balanced MDT professional representation in healthcare, commercial, academic organisations, trusts, governments, charities, associations and other linked professional. For ISPO to have continuous success we rely on the generous giving of your resources and your support. We look forward to hearing from you on areas that you can help to enhance ISPO UK activities as well as your suggestion in refining and improving our offerings.

Professor Saeed Zahedi OBE FReE BSc. PhD. FIMechE CEng RDI
Vice Chairman ISPO UK MS
Outline Programme

The program will combine both TIPS and the UK National Members Society Annual Scientific meeting. TIPS will run for three days the NMS meeting for two with an overlap on Friday.

**TIPS - Wednesday 28th September**
- Keynote - Rickard Branemark - *Latest developments in the use of Osseointegrated upper limb prosthesis*
- Free papers
- Exhibitors showcase
- Poster exhibition
- TIPS Welcome Reception

**TIPS - Thursday 29th September**
- Keynote - Tamar Makin - *Phantom pain revisited*
- Free papers
- Exhibitors showcase
- Poster exhibition
- Case studies
- Manufacturers’ Training session
- TIPS Dinner

**ISPO National Members Society Annual Scientific meeting /TIPS - Friday 30th September**
- Keynotes - Carol Garcia/Raoul Bongers - *Patient’s perceptions of upper limb prosthetics and how virtual reality may be used in clinical practice*
- Free papers
- Exhibitors showcase
- Manufacturers’ presentations
- ISPO Conference Dinner

**ISPO National Members Society Annual Scientific Meeting - Saturday 1st October**
- Keynote - Todd Kuiken - *Targeted Muscle Re-ennervation* - Brian Blatchford Prize
- Keynote - TBD - Orthotics - OETT
- Imad Sedki - The future funding of Upper and Lower Limb Advanced Prostheses
Second Announcement

28th – 30th September 2016
Glasgow, UK

Call for abstracts

Abstracts on all topics connected with Upper Limb prosthetics are sought. Topics include, novel prosthetic fitting/practice, Occupational Therapy, Prosthetic design and control. Abstracts should be a maximum of 500 words, see attached template for guidelines.

The deadline for abstracts is 25th March.

Those abstracts that are accepted will be invited to write a four page paper for completion before 15th July.

The Trent International Prosthetics Symposium is the only conference in Europe dedicated exclusively to Upper Limb Prosthetics, it is a balance of research and clinical papers. It runs across three days and enjoys a reputation for a lively social program.
This year’s theme:  

Advances in Our Understanding

Prosthetics has a long history. For all of this time, practitioners have tried to match the needs of the users with the functions of the prostheses. The difficulties arise when there is a mismatch between what the user needs and what the prosthesis can provide. It has been difficult to identify what it is the user requires in order to control and use their prostheses effectively. With advances in compact computers and medical imaging technology, it is becoming possible to unlock how we control our prostheses, how we adapt to limb loss and absence and how we can use this knowledge to improve the control of the prosthetic limbs.

The FIMRIB team from Oxford have showed that there is a lot to understand about how neuroplasticity changes the way we see the world and one might control prostheses. Tamar Makin suggests that the conventional models for neuro redistribution of amputated limb control lack some of the fine detail that is now possible using a powerful MRI scanner as they have in Oxford. Their work promises to increase our understanding of what compensations are made as the user gets accustomed to their amputation.

Similarly, many fields have promoted the idea of the use of Virtual Reality to train or retrain new users of prosthetic arms. The choice of task and if there is transfer from one side to the other are important factors for the training of new users. The team in Groningen, The Netherlands, under Professor Corrie van de Slius and Raoul Bongers have looked at the theoretical constraints in the use of VR in the training of prosthetic users, while the team in Sheffield Hallam have an extensive set up that allows them to create a virtual environment and see how virtual training improves performance.

The team in Goteborg have continued to innovate Osseointegration. In the last year they have won FDA approval for the normal technique, which opens it up to a US audience. At the same time they now can perform direct connections to the nerves, and use the abutment as the conduit, making this technique more advanced than any other team working in the field.

Keynote Speakers

Tamar Makin
Associate Professor at Oxford University's neuroimaging centre (FMRIB Centre), Nuffield Department of Clinical Neuroscience.

Phantom pain revisited

Tamar's research group integrates recent advancements from the fields of neuroimaging and experimental psychology to study plasticity in body representation with clinical significance. Her main interest is the consequences of arm amputation on human brain plasticity. Tamar completed an MSc and a PhD in Neuroscience at the Hebrew University of Jerusalem (Israel). She joined the FMRIB Centre in 2009, first as a Newton International Royal Society Fellow and subsequently as a Marie Curie Intra-European Early Career Development Fellow. She currently holds a Wellcome Trust/Royal Society Sir Henry Dale Fellowship.

Raoul Bongers
Assistant Professor at University of Groningen, University Medical Centre Groningen, Centre for Human Movement Sciences
Serious Gaming in learning to use a prosthetic device

Raoul Bongers’ field of expertise is action-perception learning and development. He studies behavioural patterns of action-perception and how changes in these patterns emerge from interactions between the agent and the environment. He has a particular focus on different types of structure in variability of action-perception behaviour during learning and development. He has applied this knowledge to upper-limb prosthetic rehabilitation. To develop training protocols for upper limb prosthesis he has founded GRIP (Groningen Research in Prosthetics) together with Prof. Corry van der Sluis. In this group they develop serious games to develop upper limb prosthetics rehabilitation protocols.

Carol Garcia
Senior Physiotherapy Lecturer and Team Leader Physiotherapist
Faculty of Health and Wellbeing, Sheffield Hallam University

Patient’s perceptions of upper limb prosthetics and how virtual reality may be used in clinical practise

Carol Garcia has been qualified as a physiotherapist since 1987 and worked clinically for nineteen years primarily in acute respiratory care and cardiac rehabilitation. She joined Sheffield Hallam University in 2005 and went on to complete her MA in Teaching and Learning (Post Compulsory Education and Training) in 2013. Carol teaches cardiorespiratory physiotherapy across the undergraduate and post graduate programs and since joining SHU she has developed her interest and understanding of the pedagogy that underpins teaching in higher education.

Since 2013, Carol has been developing her research skills through working in a multidisciplinary, cross faculty team looking at the use of virtual reality in upper limb prosthetics. Presently this research is being used as a pilot project looking at the wider uses of virtual reality in health care.

Rickard Branemark
Director of Centre of Orthopaedic Osseointegration, Salengrenask Hospital, Goteborg, Sweden

Latest developments in the use of Osseointegrated upper limb prosthesis

Rickard has pioneered the studies on titanium implants to anchor limb prostheses for more than 20 years. He has himself carried out more than 200 such operations. As the most experienced surgeon in this field, Dr. Brånemark has been internationally acknowledged, and was rewarded with the Hanger Prize in 2007 for his contribution in amputation research. The Osseointegration technique can now include a bi-directional interface between the muscles and nerves to control prosthetic arms. He is presently visiting associate professor at the Department of Orthopaedic Surgery, and co-director for the international Centre for Osseointegration Research, Education and Surgery (iCORES) at University of California, San Francisco.
Template and Guidelines for Submission of FREE PAPER ABSTRACTS

Title: How to lay out a free paper abstract submission
Presenter: Name E Pearson, Research Prosthetist, Mr
Contact Address: Anytown DSC, Tel: Telephone Number
Any Street, Fax: Fax Number
Anytown, E-mail: E-mail address
Post Code
Other Authors: AN Other, Design Engineer, Anytown General Hospital NHS Trust

The abstract should consist of not more than 500 words, 12pt, justified with single spacing, double spacing for paragraphs and on A4 paper. A 25mm margin should be left on all sides. Discipline and affiliations should be stated for each of the authors and the presenting author should be in bold type.

The abstract is the only means by which a proposed paper can be assessed and, therefore, it should be complete in itself. It should be structured along the following guidelines:

- Aims and objectives of the study, case study or survey or a brief outline of why the work was undertaken.
- The techniques or methods used and the subjects studied.
- An indication or a summary of the actual results. It will not be sufficient to include phrases such as "the results will be discussed".
- Conclusions or recommendations or implications arising out of this work.

A maximum of two references may be included and they should be presented in the format used in the journal of ISPO entitled "Prosthetics and Orthotics International."

Acceptance of abstracts will depend upon these instructions being complied with. In order to be eligible to present your paper you must be registered for the meeting on the day of presentation. The abstracts may be edited for inclusion in the Compendium, which will be included in the delegates' pack. Authors are reminded, in their own interests, to pay particular attention to the layout and quality of typing.

Template and Guidelines for SHORT CLINICAL PAPER ABSTRACTS and POSTER submissions

Title: How to lay out an abstract for a short clinical presentation or poster submission
Presenter: Name E Pearson, Research Prosthetist, Mr
Contact Address: Anytown DSC, Tel: Telephone Number
Any Street, Fax: Fax Number
Anytown, E-mail: E-mail address
Post Code
Other Authors: AN Other, Design Engineer, Anytown General Hospital NHS Trust

The submission should consist of not more than 250 words, 12pt, justified with single spacing, double spacing for paragraphs and on A4 paper. A 25mm margin should be left on all sides. A brief outline of the work undertaken should be summarized together with key conclusions and recommendations.
For the first time, TIPS will combine with the ISPO UK MS annual meeting, allowing delegates the opportunity to enjoy the International Upper Limb Prosthetics gathering with the broader interests of ISPO in one venue. Those attending both events can further benefit from discounted registration rates.

DELEGATE REGISTRATION FORM

PLEASE PRINT YOUR DETAILS USING BLOCK CAPITALS

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Your name, company details and e-mail address will be published in the conference compendium. If you have any objection, tick the box and your name and city only will be included. ☐

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Reduced registration rates are available to ISPO members.

Are you a member of ISPO?  Yes  ☐  No ☐  Membership No: __________________

Applications for ISPO UK MS membership (£95) will be accepted together with delegate registration forms. Membership application forms can be downloaded at www.ispo.org.uk or are available from the Secretariat Office, PO Box 7225, Pitlochry, PH16 9AH  E-mail: info@ispo.org.uk

### REGISTRATION (please tick √)

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### Student Registration Rate - £55 per day

Please indicate below attendance dates √

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### Method of Payment (please choose one option)

By cheque:
made payable to ISPO UK NMS and forwarded to ISPO UK NMS, Secretariat, PO Box 7225, Pitlochry, PH16 9AH

By BACS transfer to:
The Royal Bank of Scotland plc, Dundee Perth Road (A) Branch, 260 Perth Road, Dundee, DD2 1AE, UK
Sort Code: 83-28-39  Account No: 00146801
BACS remittance advices to info@ispo.org.uk

By international bank transfer to:
The Royal Bank of Scotland plc, Dundee Perth Road (A) Branch, 260 Perth Road, Dundee, DD2 1AE, UK
Beneficiary: ISPO UK NMS  IBAN No: GB29RBOS83283900146801  Swift: RBOSGB2L

By invoice:
Purchase Order Number:
Invoice address (if different from above):

Please note that ISPO UK MS is not able to accept credit card payments

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### Social Programme

Full details of the social programmes for TIPS and ISPO 2016, including registration details, will follow shortly.

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### Accommodation

Delegates are responsible for making their own accommodation arrangements.

A limited number of single, en-suite rooms are available on-site at the Golden Jubilee Conference Hotel at the specially negotiated rate of £85 per room per night.

**To reserve accommodation at the Golden Jubilee Conference Hotel telephone ++44 (0) 141 951 6006 quoting TIPS/ISPO 2016 Event 6006 or e-mail kirsten.burke@goldenjubilee.scot.nhs.uk**

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### Travel

Delegates are responsible for making their own travel arrangements.
For further information on travel to the Golden Jubilee Conference Hotel visit [http://www.goldenjubileehotel.com/hotel/location/](http://www.goldenjubileehotel.com/hotel/location/)

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*Please forward your completed form, together with registration payment, to:*

Irene Cameron, ISPO UK MS Secretariat,
PO Box 7225, Pitlochry, PH16 9AH   Tel: 01796 473556   E-mail: info@ispo.org.uk
ISPO Membership Bursaries

ISPO UK MS is keen to support interested individuals working in the field and students studying prosthetics and orthotics or carrying out research and development in this area, by awarding membership bursaries. A total of TEN membership bursaries are available for 2016/17.

Successful applicants will receive a contribution of £50 from ISPO UK MS towards the cost of the annual membership fee for two consecutive years. Successful applicants must contribute the balance payment of £45 each year for two consecutive years, and will receive all benefits of ISPO membership including Prosthetic and Orthotic International scientific journals; full access to the ISPO International members’ only website; regular e-bulletins; and reduced delegate registration fees for both ISPO International and UK conferences.

Criteria for Application

- Individuals working in the relevant fields of prosthetics/orthotics/ rehabilitation/ wheelchairs
- Individuals who have not been a member of ISPO in the last 5 years
- Students studying, carrying our research and development in prosthetics and orthotics who have not previously been an ISPO member

Application Process

- Applicants should provide a written statement of not more than 150 words outlining the benefits membership would offer them personally, their organisation and team including areas of interest.
- Statements and contact details should be e mailed to: info@ispo.org.uk
- The closing date for applications for 2016/17 membership is 20th April 2016
## APPLICATION FORM

**INTERNATIONAL SOCIETY FOR PROSTHETICS AND ORTHOTICS**

### Personal Information

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### Professional Information

**Present Position**

**Qualification1**

**Qualification2**

**Professional Category**

if other, please specify:

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### Other Information

**Type of Membership requested**

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**Willingness to work for ISPO**

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**Current Activities**

*please provide a brief summary here*

### ISPO Contact Information

Please return the completed application form together with payment to:

**ISPO UK MS Secretariat, PO Box 7225, Pitlochry, PH16 9AH. E-mail: info@ispo.org.uk**

Membership Subs: £95 (full) £27 (student) payable by cheque to ISPO UK MS or on-line transfer (e-mail info@ispo.org.uk for online bank transfer details)
The George Murdoch Prize Lecture 2016

Applications are invited for the George Murdoch Prize Lecture, an award (Silver Medal) given by the ISPO UK Member Society every alternate year in honour of Professor George Murdoch, a founder of ISPO International, a past Professor of Orthopaedic Surgery, Dundee and a pioneer in modern rehabilitation of amputees.

Professor George Murdoch’s wishes were

1. That the Lecture, normally be given as an award by application, is a Prestige Lecture in the field of amputation surgery, prosthetics, orthotics and related rehabilitation and bio-engineering given every alternate year at the ISPO UK MS Annual Scientific Meeting
2. That it is awarded to an individual who demonstrates ‘commitment and real understanding of the patient’s personal problem, assessment, the program of rehabilitation and a measurement of the ultimate outcome’.
3. That the applicant shows evidence of commitment to the disabled.
4. He also hoped that the applicant ‘tackled’ the influence of government (in the broadest sense) with respect to attitude, regulations applied and their influence on major events in the patient’s history.

To this effect and to support the above wishes and hopes of Professor George Murdoch, prospective candidates should submit an application with the following:

1. A Personal up-to-date CV with achievements highlighting work done generally, possibly ‘over and above’ the routine job to show commitment to the specialty, patients and service, and
2. An essay with a maximum of 5000 words to include research and/or professional work with outcomes (proposed content of Lecture)

The Award winner is expected to present his Lecture at the next Annual Scientific Meeting of ISPO UK which will take place on 30th September and 1st October 2016 in Glasgow.

Applications to be sent to
Dr T L Landham, Chair, ISPO UK MS
Lal.landham@kmpt.nhs.uk

Closing Date for applications: 30 June 2016