

Virtual Symposium at [International Society for Prosthetics and Orthotics \(ISPO\)](#) World congress

Date: 1-4 November 2021

Congress topics: Prosthetics: Lower Limb Transfemoral

Title: Prosthetics For Low-Middle-and-Income Countries (LMICs): Challenges and Opportunities

Statement of the learning objectives (max 35 word)

- The unmet need of the LMICs amputees
- Capacity building case studies to build skills across career stages with LMICs partners
- Development of Upcycled Plastic Prosthetic
- User-engagement experiences of hand-off casting in LMICs setting

Abstract (max 250 word)

The World Health Organisation estimates that 650 million people worldwide are disabled. Of those people, 80% currently live in Low- and Middle-Income countries (LMICs) that are often at various stages of economic development depending on active conflict or post conflict state. Fewer than 3% of persons with disabilities in LMIC's have access to required rehabilitation services. Without access to the rehabilitation they require, those with disability may become entrenched in a cycle of poverty. There is a need for functional prosthetics which are affordable, robust, reliable and fit-for- purpose in resource constrained settings of LMICs. To address some of those LMICs developmental challenges, an integrated multidisciplinary partnership was convened between Indian and UK Engineers, Prosthetists, Healthcare professionals and experts from prosthesis manufactures, and public health NGOs. This consortium held exclusive networking meetings both in India and UK, supported by the UK Academy of Medical Sciences under Global Challenges Research Fund Networking Grants. The team also engaging with interdisciplinary research for developing Upcycled Plastic Prosthetic supported by the UK's Royal Academy of Engineering Frontiers follow-on grant.

This symposium will be delivering the findings from those research projects involved with LMICs as well as the UK stakeholders to inform the current thinking on the LMICs prosthetics requirements. These includes the unmet need of the LMICs amputees, capacity building to build skills across career stages with partners in LMICs during the preliminary trials of Upcycled Plastic Prosthetic, as well as integrating hands-off casting for prosthetic socket fabrication in LMICs protocol.

Presenters

Presenter	Proposed topic (Prosthetics: Lower Limb Transfemoral)	Duration
Dr Pooja Mukul	The unmet need of LMICs amputees	10mins
Dr Amit Singh	Capacity building to tackle developmental LMICs challenges	10mins
Dr Arjan Buis	Hands-off casting	10mins
Dr Sarah Dey	Perspiration discomfort (liner)	10mins
Dr Farukh	Upcycled Plastic Prosthetics	10mins

Delivery format

Given the virtual online format of the congress, creativity in presenting the material is strongly encouraged. Delivery of the material may involve live presentation and/or pre-recorded content. For example, for Symposia, the use of multiple presenters in a panel or debate format, and encouraging attendee participation through virtual polls or moderated questions may be considered.