Introduction to the special issue on the first Global Research, Innovation, and Education on Assistive Technology (GREAT) Summit and invitation to contribute to and continue the discussions

This Special Section of the journal is dedicated to reporting on the proceedings of the Global Research, Innovation, and Education on Assistive Technology (GREAT) Summit, held at the World Health Organization (WHO) headquarters in Geneva, in the Summer of 2017. This summit was an important step in the steady progress towards making quality affordable assistive technology more available globally and to promoting its importance as a means for achieving the Sustainable Development Goals (SDGs), in an equitable and inclusive manner [1], “leaving no one behind”.

The United Nations Convention on the Rights of Persons with Disabilities [2] provided the world with a legal framework for claiming rights, including those related to access to assistive technology. The World Report on Disability [3] followed this up by identifying the significant lack of access to technology globally, but especially so among the most marginalized in the poorest countries. The Global Disability Action Plan 2014–2021 [4] outlines the central importance of assistive technology in the development of services and opportunities for people with disabilities.

Alongside these important developments in the realm of disability, the World Report on Ageing and Health [5] also identified a central role for assistive technology in enabling people to address the reduced functional capacity that may be associated with ageing. This confluence of concerns with impairment associated with disability and ageing has also coincided with more people living longer with chronic illnesses, surviving serious accidents and receiving support for temporary functional challenges [6]. Recognizing that the needs for assistive technology are diverse, that they are across the age range, and often across-sectoral, WHO established GATE (Global Cooperation on Assistive Technology) in 2014: to address assistive technology from a population health perspective. Partnering-stakeholders represent international organizations, donor agencies, professional organizations, academia, industry and perhaps most importantly, user-groups. The vision of GATE is to have a world where everyone who requires them has access to high-quality affordable assistive products, allowing them to lead a healthy, productive and dignified life.

GATE understands assistive products to be "any product (including devices, equipment, instruments and software), either specially designed and produced or generally available, whose primary purpose is to maintain or improve an individual's functioning and independence and thereby promote their wellbeing" [6]. The generic term “assistive technology” is often used to refer to the range of technologies available. GATE has also sought to stress the importance of assistive technology systems, where this refers to "the development and application of organized knowledge, skills, procedures and policies relevant to the provision, use and assessment of assistive products" [6]. The “system” may also include the use of other infrastructures and technologies; such as information and communication technologies (ICT) and the Internet of Things (IoT), that promote the effectiveness of assistive technology.

Included in its achievements to date, GATE has established a Priority Assistive Products List [7] though the use of an extensive Delphi consultation, a Global Survey of Assistive Technology and a Consensus Conference, also in Geneva. This list of 50 priority assistive products is recommended as a minimum for each country to provide, along with the necessary infrastructure to support the users of these products.

Also though a process of participation and consultation with a range of stakeholders, GATE has produced a Global Priority Research Agenda [8] that identifies five priority themes:

1. Effects, costs and economic impact
2. Policies, systems, service provision models and best practices
3. Quality and affordability
4. Appropriate human resources
5. Standards and methodologies for the assessment of need and unmet need.

Running across these themes are also two underlying principles. First is the need for user involvement in all aspects of research, policy development, system design and service provision. Second is the need to work from an environmental approach to functioning, in contrast to the medical model that has historically been dominant.

The GREAT Summit – to which this Special Section is dedicated – sought to stimulate a transformational change in assistive technology research, innovation and education. One aspect of this was to bring together a range of different stakeholders to develop “Position Papers”; outlining current thinking and possibilities, regarding a number of strategic drivers previously identified by GATE [7]: people (or users), personnel, policy, provision and products. Prior to the Summit, lead authors were identified to coordinate the development of Preliminary Position Papers on each of these 5 topics. The papers were circulated ahead of the meeting so as to serve as a platform for stimulating debate and discussion during the Summit itself. Thematic break-out sessions allowed for presentations and large-group discussions. Out of the discussions, ideas for revisions of the Preliminary Position Papers were gathered, and the papers went through iterations with inputs from the then expanded number of named authors. It is important to state that these papers were not intended to be reviews of the literature per se, but rather a synthesis of views from research, users, civil society, government, industry, donors, indeed all relevant stakeholders. It will be apparent that the range of contributors to papers varies somewhat across the 5P papers in this Special Section. These papers outline situations as they currently exist, together with recommended actions needed to guide and galvanize on-going collective and collaborative efforts of all assistive technology stakeholders.

The GREAT Summit was a learning event and emergent from the event were a number of other background factors that were also felt to be important for assistive technology systems. For consistency these have also been described in terms of Ps – procurement, pace, place, promotion, and partnership [9]. The Commentary in this Special Section outlines how these 10 Ps can be understood to contribute to, or to hinder, effective systems-thinking and practice in assistive technology. Also included in
This section of Disability & Rehabilitation: Assistive Technology is an article summarizing content presented during an innovative electronic poster session of “Snapshots” of exciting and diverse ideas and practices regarding assistive technology globally.

This Special Section of Disability & Rehabilitation: Assistive Technology, is therefore a contribution to the aims of GATE, some steps along the path to hopeful progress. We hope that the GREAT Summit will become a regular event and we seek to further broaden participation in the Summit form those in resource-poor contexts and those more marginalized in their own society.

Additional and updated materials from the Gate initiative can be accessed at the GATE website [10]. Here one can access the following GATE publications:

- GREAT Summit Report
- Wheelchair packages – overview
- UN Report on the impact of AT on the rights of older persons
- Assistive technology fact sheet
- Assistive products and the Sustainable Development Goals
- Global priority research agenda
- Intellectual Disability and Assistive Technology: Opening the Gate Wider
- Priority Assistive Products List in 6 languages
- Secretariat Report

Also from this site one can download an exciting new development since the Summit; the Draft Resolution voted on during the Seventy-First World Health Assembly, January 18, 2018, that urges member states to improve access globally to assistive technology.

The papers comprising this issue are meant to stimulate many international – but also local – discussions around assistive technology needs and opportunities and the steps necessary to address those needs and opportunities. This will necessarily vary according to locale, available resources, and the policies of governments, regions and municipalities. The different papers in this special section while intended to be independent are also highly inter-related and we recommend that they be read, where possible, as a collection of interlocking ideas, rather than stand-alone contributions to the debate. The issues identified herein are inter-related and we recommend that they be read, where possible, as a collection of interlocking ideas, rather than stand-alone contributions to the debate.

Join us in the continuing process, challenge and opportunity of transforming the lives of users of – and those who would benefit from using but don’t have access to – assistive technology.

Disclosure statement
No potential conflict of interest was reported by the authors.

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Marcia J. Scherer
Editor, Disability & Rehabilitation: Assistive Technology, Institute for Matching Person & Technology, USA
impt97@aol.com

Malcolm MacLachlan
Research & Innovation Coordinator, Global Cooperation on Assistive Technology (GATE), World Health Organization, Switzerland; Assisting Living & Learning (ALL) Institute, Maynooth University, Ireland; Centre for Rehabilitation Studies, Stellenbosch University, South Africa; Olomouc University Social Health Institute, Palacky University Olomouc, Czech Republic
mac.maclachlan@mu.ie

Chapal Khasnabis
Programme Manager, Global Cooperation on Assistive Technology (GATE), World Health Organization, Geneva, Switzerland
khasnabisc@who.int

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