

VISTA 2013 equipment and technology in Paralympic sports

Keynote speaker biographies

22 February 2013





Ivo van Hilvoorde (i.m.van.hilvoorde@vu.nl) is assistant professor at the Faculty of Human Movement Sciences (Vrije Universiteit Amsterdam) and lecturer at the School of Human Movement & Sport (Windesheim, Zwolle). He lectures in Philosophy of Human Movement Sciences, Philosophy of Sport and Sport & Society. In his research he combines philosophical, sociological and historical perspectives on sport, with special interest in the relations between sport and (bio)technology, (the ethics of) doping and human enhancement, (the history of) fitness, technology and (dis)ability and the use of digital technology in the context of physical education. For more information see: http://www.ivovanhilvoorde.nl/





Professor Brendan Burkett (OAM) is a professional engineer, professor in biomechanics, and a Paralympic swimming champion having competed at 4 Paralympic Games winning several medals and lead the Australian team into the opening ceremony at the Sydney 2000 Games. The combination of engineering and human movement qualifications, along with sporting experience, has provided Brendan with a solid understanding of biomechanics. In 2007 Brendan was an invited scholar for the Erasmus Mundus Masters in Adapted Physical Activity. The impact of Brendan's research in sport and exercise is demonstrated with research grants and publications in this discipline.

Brendan has an active role in industry through his appointment as national sport science coordinator for the Australian Paralympic Swim team for the 2002, & 2006 World Championships, the 2004, 2008 & 2012 Paralympic Games. His focus on sports technology for people with a disability is recognised as the Professional Engineer of the Year, by the Australian Institution of Engineers, and part of the Prime Minister's 2020 Summit. His sporting achievements include an inductee in the Swimming Queensland Hall of Fame and listed as one of Queensland Q150 Sporting legends.





Chris Rushman graduated from Brunel University in 1995 in Industrial Design, and after a short spell in the UK manufacturing sector, joined the Motivation Charitable Trust as a design engineer, working overseas designing and initiating production of a range of low-cost wheelchairs and supportive seating products for low-income countries.

Chris worked in Indonesia, Pakistan, Afghanistan, Sri Lanka and Bangladesh amongst others, before moving to Tanzania to work with the Tanzanian Training Centre for Orthopaedic Technologists (TATCOT) in developing and delivering a one year certificate level

training course in Wheelchair Technology.

In 2003 Chris moved to the Motivation UK office as the Design Manager for Motivation, and was involved in the design and production of Motivation's more global range of flat-pack wheelchair products produced in China, and the development of comprehensive training material to support this type of wheelchair provision.

Chris then became the Training Coordinator and Senior Technical Trainer delivering technical and wheelchair service training to Motivation partners all over the world, including international partners such as the International Committee for the Red Cross (ICRC) and Handicap International (HI) in places as diverse as Haiti, Burundi, Papua New Guinea and Ethiopia.

Chris is currently the Senior Technical Specialist for Motivation, supporting Motivation programme partners and designing new products including our growing range of sports wheelchairs.





Simone Oehler joined Ottobock in 2010 as Head of Testing Department at the company's headquarters in Duderstadt, Germany. She is responsible for leading a team of eight engineers and technicians to test the components used to make Ottobock prosthetic, orthotic and wheelchair products to ensure they meet the international quality and safety standards set by the industry. The lab is equipped to test the complete range of materials used in the manufacture of Ottobock products including metals, plastics, textiles and carbon-fibre, and the team complete 1500 test reports every

year. In addition, Simone works with engineers and product developers to design and implement testing for products and materials in development, as well as new products before they are launched to the market.

Simone's responsibility also includes testing of sports products and is currently working with Paralympic Sprinter and Ottobock Ambassador Heinrich Popow. New tests have been developed to effectively measure the loads applied to his sports prosthesis during a race, providing Ottobock with the data required to improve the design and performance of its carbon-fibre running blades.

Prior to joining Ottobock Simone was a Research Associate in the Faculty of Medical Engineering at the Berlin Institute of Technology. Due for completion in 2013, Simone's PhD is on mobility measurements on above knee amputees.

Simone has also studied in the USA and New Zealand, completing courses in Mechanical Engineering, Psychology and Sport Science at the Monroe Community College Rochester, New York and Biomedical Science at the University of Auckland.

In association with her role at Ottobock, Simone is a Research Associate at the Rehabtech Research Lab, Berlin, a partnership between Ottobock and the Berlin Institute of Technology, researching prosthetic alignment. In 2010 the project was awarded the prize for innovation in medical technology by the German Ministry of Education and Research.

Papers and research by Simone's have been widely published in medical physics, biomedical engineering, orthopedic and rehabilitation publications across Germany.