



Innovations in Prosthetics and Orthotics

ISPO Canada Symposium 2011, Atlantic Region
Friday September 30 – Halifax, NS

Program

8:30 - 9:30	Registration, coffee and welcome	
Televised from the symposium in Ottawa:		
9:30 – 10:10	Welcome	Edward Lemaire, PhD President, ISPO Canada
	ISPO Greetings	Prof. Jan Geertzen, MD, PhD (Netherlands) President, ISPO (via video conference)
	ISPO Canada /War Amps 2011 R&D Award	Karen Valley, The War Amps
10:10 -11:15	Robotics and Exoskeletons for Orthotics and Prosthetics	Prof. Yoshiyuki Sankai, PhD (Japan) Tsukuba University, Cyberdyne Inc.
11:15 -11:45	Break	
11:45 -12:15	Appropriate Prosthetic and Orthotic Technologies in Low Income Countries (2000-2010)	Dan Blocka, BSc, CO(c), FCBC
12:15–12:45	Mind, Body, and Pain	Hillel Finestone, MD, FRCPC Medical Director, Stroke Rehabilitation, Elisabeth Bruyere Hospital, University of Ottawa
12:45-1:05	Clifford Chadderton Award Presentation Evidence Based Practice in the P&O Profession: Barriers, Beliefs and Demographic Associations	James Christensen
1:05 – 1:30	Lunch (Catered on site)	
Presentations (on site):		
1:30 – 2:00	Outcome Measures: Prosthetics and Orthotics	Kim Parker, MASc, PEng
2:00 – 2:30	Diabetic Foot Management	Andrew Hoar, C.Ped (c)
2:30 – 2:45	Break	
2:45 – 3:15	Trans Tibial Exoskeletal Swim Prosthesis with Limb Logic - Fabrication	Elizabeth Sepic, RTP (c)
3:15 – 3:45	Patient and Family Centered Care through Collaboration	Terry Laurence, C.Ped (c)
3:45 – 4:00	Inter-professional Student Experience	Heather Miklovich, CO (c)
4:00 – 4:30	Atlantic Association meeting	
	Closing Remarks	

Speaker Bios

Professor Yoshiyuki Sankai

Professor, University of Tsukuba; President, Cyberdyne Inc.

Professor Yoshiyuki Sankai is professor of the Graduate School of Systems & Information Engineering at the University of Tsukuba, and President and CEO of CYBERDYNE Inc. He is also president of Japan Society of Embolus Detection & Treatment, chairman of International Journal of the Robotics Society of Japan (RSJ) and an executive board member of RSJ.

Previously in his career he was assistant professor, associate professor, and professor at the Institute of Systems & Engineering at the University of Tsukuba, and a visiting professor of Baylor College of Medicine in Houston, Texas in the United States. He received a PhD in engineering from University of Tsukuba in Japan in 1987.

He is the inventor, creator and driving force behind the advanced robotics Robot Suit HAL® (Hybrid Assistive Limb ®) and various cybernics, medical, care and welfare technologies. In 2006 and 2009, he was invited to provide direction to Japan's future science and technology policies by the Council for Science and Technology Policy advising the prime minister, other Japanese ministers and senior government officials.

He has won numerous awards including the World Technology Award (2005), Good Design Gold Award (2006), Japan Innovator Award (2006), Best Paper Award (International Journal of Advanced Robotics) (2006), Award from American Society for Artificial Organs, Award from International Society for Artificial Organs, Award from the Minister of Economy, Trade and Industry of Japan (2007), Award from National Institute of Science and Technology Policy (2007), NIKKEI Top – Quality / Service Award (2008) , Award from IEEE / IR, Invention & Entrepreneurship Award (2009), the 21st century Invention Award from Japan Institute of Invention and Innovation (2009) among others.

In 2007, he was appointed as leader of Global COE (Centre of Excellence) program for cybernics by the Japanese Ministry of Education, Culture, Sports, Science and Technology of Japan. He obtained significant grants from NEDO (New Energy and Industrial Technology Development Organization), health science grants from the Japanese Ministry of Health, Labor and Welfare, and a grant-in-aid for scientific research from the Japanese Ministry of Education, Culture, Sports, Science and Technology. In September, 2009, he was selected as the core researcher of the Funding Program for World-Leading Innovative R and D on Science and Technology, set up by Cabinet Office of Japan. He continues to promote the application of the HAL™ technology for the benefit of senior citizens, physically challenged people and patient groups with specific diseases.

Dan Blocka, BSc, CO(c), FCBC

Past President, ISPO

Dan Blocka is currently the Immediate Past President of the International Society for Prosthetics & Orthotics (ISPO) after a term as President from 2007 to 2010. He is also currently the Chair of the USAID-ISPO Steering Committee and Assistant Chair of the ISPO Education Committee. Since 1988, Dan has been the President and owner of Clinical Orthotic Consultants in Mississauga. Dan was also on faculty as a lecturer in the School of Human Biology at the University of Guelph from 1985 to 2004. Dan was recently appointed to the Board of Directors of Cambodia Trust, a UK based charity established in 1989 that works for equality for people with disabilities in the developing world. Other notable achievements include: Canadian Association for Prosthetics and Orthotics Life Membership for his leadership and dedication to the field of Prosthetics and Orthotics; Canadian Board for Certification of Prosthetists and Orthotists Life Fellowship; Nominee for the Premier's Award in 2004 and 2006, awarded to outstanding graduates of the College Educational system in the province of Ontario.

**Hillel M. Finestone, MDCM, FRCPC (Physiatry),
Medical Director Stroke Rehabilitation Program, Elisabeth Bruyere
Hospital
Electromyographer, The Ottawa Hospital Rehabilitation Center
Associate Professor, Division of Physical Medicine and Rehabilitation,
University of Ottawa**

Dr. Hillel Finestone is a specialist in PM&R, or physiatrist. He graduated from McGill Medical School and received PM&R specialty training at the University of Ottawa and the University of Michigan. He is an Associate Professor in the division of PM&R at the University of Ottawa. Dr. Finestone is the Medical Director of the Stroke Rehabilitation Program at the Elisabeth Bruyere Hospital. He also has a musculoskeletal pain practice and is a Fellow of the American Association of Neuromuscular and Electrodiagnostic Medicine.

Dr. Finestone has research interests in stroke rehabilitation related topics including: 1) nutrition in the stroke patient, 2) driving issues post stroke, and 3) use of virtual reality exercise training post stroke. He was recently awarded the Dr. Tony Hakim Innovative Stroke Research Award from the Centre for Stroke Recovery of the Heart and Stroke Foundation of Ontario, in June 2010, concerning a project on Virtual Reality exercise training in rehabilitating stroke inpatients.

Dr. Finestone has published many research articles and, recently wrote a book for health care professionals and laypersons titled "The Pain Detective, Every Ache Tells a Story" (www.thepaindetective.com). The book describes, in a clinical case format, the roles that psychological and social factors may play in healing and recovery from a painful musculoskeletal injury.

Kim Parker, MASC, PEng

Kim Parker is a rehabilitation engineer at the Nova Scotia Rehabilitation Centre (NSRC). She has a Masters of Applied Science Degree from the University of Toronto and an Honours Bachelor of Science in Mechanical Engineering from Queens University. She provides technical support to the Assistive Technology Program at NSRC and collaborates with clinicians and faculty at Dalhousie University on rehabilitation research. Research interests include the impact of assistive devices and therapeutic interventions on function, mobility and participation.

Andrew Hoar, C Ped(C)

I am a fifth generation custom shoe maker and graduate of George Brown College in Toronto. In 1985, I completed my internship as a Registered Prosthetic Technician, and in 1988, I completed my internship in Pedorthics and have been a Certified Pedorthist since that time. I have studied Pedorthics in both Canada and the U.S. I am a current member of the College of Pedorthics of Canada and am recognized by the Provincial Judicial System as an expert in Gait Analysis and Footwear.

I have been employed by the N.S. Rehabilitation Centre since 1983, holding the position of Production Supervisor in the Orthotic and Prosthetic Department for 6 years. I have held the position of Staff Pedorthist since 2000 in the QEII Leg Ulcer clinic and have developed a strong interest in Wound Care, specifically for Diabetic Neuropathic Feet.

Faculty member of the Canadian Association of Wound Care (CAWC)- Institute of Wound Management and Prevention since 2009. The past 15 years I have been involved in the residency training for Dalhousie University School of Medicine and have provided in-service teaching for other allied health providers.

Elizabeth Sepic, RTP (c)

- Born and raised in Kingston, Ontario.
- Attended George Brown in 2005-7 for the P and O Technical Program.
- Has worked at Pro Prosthetics Inc, in Toronto and currently employed at Eagle Orthopaedics in Shannonville, Ontario.
- Obtained registration in Prosthetics in 2009.

Terry Laurence, B.PE. , MSc. HKIN, C.Ped. Tech (C), C. Ped. (C)

Terry Laurence is a certified pedorthist of Canada at the Nova Scotia Rehabilitation Centre (NSRC). He has his physical education degree from Acadia and Masters of Human Kinetics from the University of British Columbia. He provides pedorthic care as part of an interdisciplinary team to in-patients and also treats out-patients at NSRC. He has written articles for the *Pedorthics Quarterly*, a periodical of the Pedorthic Association of Canada (PAC), is a committee member for PAC's professional development, and has authored a section for an upcoming Pedorthic best practice guidelines for clinicians.

Heather Miklovich, CO (c)

- 2002 completed BSc Kin (honours) at Laurentian University
- 2006 one year of GBC technical program
- Worked as a summer orthotic technician at Glenrose Rehabilitation Hospital (Edmonton, AB) and the NS Rehab Hospital
- In 2009, completed Clinical Methods in Orthotics and Prosthetics at GBC
- May 2009 began orthotics residency at OrthoDynamics, Vancouver BC and completed it in May 2011 at NS Rehab
- currently working as an orthotist at the NS Rehab