

CURRICULUM VITAE — MARGRIT-REGULA MEIER, PH.D., C.P.O.

SUMMARY

Dr. Meier is a certified prosthetist/orthotist (C.P.O.) from Zurich, Switzerland with extensive clinical experiences. She received two postgraduate diplomas—one in Lower Limb Prosthetic Biomechanics and one in Lower Limb Orthotic Biomechanics—as well as a Master of Science degree in Prosthetics and Orthotics from the University of Strathclyde, Glasgow, Scotland, and a Ph.D. degree in Clinical Sciences with emphasis on biomechanics from the University of Sherbrooke, Quebec, Canada. She started her post-doctoral education at Northwestern University Prosthetic Research Laboratory and the Rehabilitation Research Engineering Program in Chicago, USA, in February 2000. Since September 2002, Dr. Meier is on Faculty as a Research Assistant Professor in the Department of Physical Medicine and Rehabilitation at Northwestern University's Feinberg School of Medicine, Chicago, USA.

RESEARCH INTERESTS

Dr. Meier's main interests are

- Prosthetic feet and prosthetic construction concepts for landmine survivors in low-income countries;
- Development of a prosthetic foot for low-income countries (Shape& Roll Prosthetic Foot)
- Development of education material in prosthetics for persons in low-income countries;
- Alignment principles of below-knee prosthesis;
- Clinical evaluation of prosthetic components (prosthetic knee joints, gel-liner, prosthetic socket suspension systems);
- Gait analysis.

ACADEMIC ACTIVITIES

Dr. Meier has contributed substantially towards grants that have been successful in receiving funding. She has also published in various scientific journals and presented at numerous conferences and congresses. She is an active member of several professional societies.

INFORMATION

For detailed information, please contact Dr. Meier directly either by
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phone (312) 238-6539.

Thank you.

PUBLICATIONS AND PRESENTATIONS (selected)

- Meier M-R**, Gard SA, Hansen AH. *Performance on an obstacle course: Otto Bock C-leg vs. Otto Bock 3R60 vs. SNS Mauch*. Annual Meeting of the American Academy of Orthotists and Prosthetists (AOPA) and the Association of Children's Prosthetic-Orthotic Clinics (ACPOC), Orlando, FL, USA, March 16-19, 2005.
- Miff S, Hansen A, Childress D, Gard S and **Meier M**. *The anatomical ankle behavior during gait initiation, steady-state walking, and gait termination*. 10th Annual Gait and Clinical Movement Analysis Meeting, (GCMAS) Portland, OR, USA, April 6-9, 2005.
- Sessoms Hungspreugs P. Hansen AH, **Meier M-R**, Gard SA and Childress DS. *The dynamic effective foot length ratio of prosthetic feet varies with ankle-foot roll-over shape arc length and speed*. 10th Annual Gait and Clinical Movement Analysis Meeting, (GCMAS) Portland, OR, USA, April 6-9, 2005.
- Koehler SR, Gard SA and **Meier M-R**. *The effect of shock-absorbing prosthetic components on ground reaction force profiles in persons with transfemoral amputations*. 10th Annual Gait and Clinical Movement Analysis Meeting, (GCMAS) Portland, OR, USA, April 6-9, 2005.
- Meier M-R**, Gard SA, Hansen AH. *Performance On An Obstacle Course: Otto Bock C-leg vs. Otto Bock 3R60 vs. SNS Mauch*. Annual Meeting of the American Academy of Orthotists and Prosthetists (AOPA) and the Association of Children's Prosthetic-Orthotic Clinics (ACPOC), Orlando, FL, USA, March 16-19, 2005.
- Childress D, Sam M, Hansen A, **Meier M**, Steer S, Lambla S, Grahn E, Rolock J, Knox E. *The Shape&Roll prosthetic foot*. Second Regional Conference Meeting of Experts: Reaching People's Needs by Building Partnerships in Disability, Technology and Integrated Rehabilitation. Mexico City, Mexico, October 13-15, 2004.
- Childress DS, Sam M, Hansen AH, **Meier M-R**, Lambla S, Grahn E, Rolock J, Knox EH. *The Shape&Roll prosthetic foot*. International Society for Prosthetics & Orthotics (ISPO) 11th World Congress, Hong Kong, August 1-6, 2004.
- Meier M-R**, Sam M, Hansen AH, Childress DS. *The Shape&Roll prosthetic foot: Field-testing in El Salvador*. International Society for Prosthetics & Orthotics (ISPO) 11th World Congress, Hong Kong, August 1-6, 2004.
- Hansen AH, **Meier M-R**, Lambla S, Sessoms PH, Childress DS. *Effects of prosthetic foot roll-over shape arc length on gait of trans-tibial prosthesis users*. International Society for Prosthetics & Orthotics (ISPO) 11th World Congress, Hong Kong, August 1-6, 2004.
- Meier M-R**, Gard SA, Hansen AH, Childress DS. *A Comparison of the C-Leg and 3R60 Prosthetic Knee Joint Performance*. American Society of Biomechanics (ASB), Annual Meeting, Toledo, OH, USA, September 25-27, 2003.
- Meier M-R**, Sam M, Hansen AH, Childress DS. *The Shape&Roll Prosthetic Foot (Part II): Field testing in El Salvador*. *Medicine, Conflict and Survival* 2004; 20(4): 307-325.
- Sam M, Childress DS, Hansen AH, **Meier M-R**, Lambla S, Grahn EC, Rolock JS. *The Shape&Roll Prosthetic Foot (Part I): Design and development of appropriate technology for low-income countries*. *Medicine, Conflict and Survival* 2004; 20(4): 294-306.
- Miff SC, Childress DS, Gard SA, **Meier M-R**, Hansen AH. *Temporal symmetries during gait initiation and termination in non-disabled ambulators and in people with unilateral transtibial limb loss*. *Journal of Rehabilitation Research and Development* (accepted)
- Hansen AH, **Meier M-R**, Sam M, Childress DS, Edwards, ML. *Alignment of trans-tibial prostheses based on roll-over shape principles*. *Prosthetics and Orthotics International* 2003; 27(2): 89-99.
- Hansen AH, Childress DS, **Meier M-R**. *A simple method for determination of gait events*. *Journal of Biomechanics* 2002; 35(1): 135-138.
- Meier M-R**, Desrosiers J, Bourassa P, Blaszczyk J. *Effect of Type II diabetic peripheral neuropathy on gait termination in the elderly*. *Diabetologia* 2001; 44(5): 585-592.
- Meier M-R**, Desrosiers J, Bourassa P, Blaszczyk J. *Gait termination in the young and the healthy elderly*. *Medical and Biological Engineering and Computing* 1999; 37(Suppl 2): 814-815.
- Bourassa P, **Meier M-R**, Buaka P. *Walking pattern and limit cycles: analysis, simulation and animation*. *Medical and Biological Engineering and Computing* 1999; 37(Suppl 2): 1126-1127.