

# CURRICULUM VITAE

(Latest update: May, 2012)

Name: Date of birth: Address: Marital Status: Thomas Sinkjær (TS) 9<sup>th</sup>. March 1958 Nørgårdsvej 3A, DK-9260 Gistrup, Denmark Married to Physiotherapist Marianne Wilgaard Two children. Sara (born 1991) and Anders (born 1994)

Research and teaching interests of TS is within human motor control. His research includes basic studies of the interaction of central neural control and reflex circuitry of the spinal cord and the intrinsic mechanical properties of the skeletal muscle system. His research also involves development of new principles to restore sensory-motor function through neurotechnologies and methods to enhance functional neural plastic changes.

His interests in interdisciplinary research and means to facilitate excellence in curiosity driven research made TS accept the position as Director of the Danish National Research Foundation in 2007. In 2008 TS played a key role in securing the Foundation 3 billion DKK from the Danish Government increasing the Foundations capital to 4 billion DDK (Dec. 2009). At the same time the Foundation by law is allowed from year 2010 to increase its annual funding in long term basic research endeavours from 250 to 400 million DKK.

### PROFESSIONAL BACKGROUND

- 1983: M.Sc.E.E., Aalborg University
- 1988: Ph.D; joint venture between Dept. of Medical Informatics and Image Analysis, Aalborg University and Department of Neuroscience, University of Calgary, Canada
- 1998: Dr.Med.Sci, University of Copenhagen

# POSITIONS HELD

- 2007- Director, Danish National Research Foundation
- 1993-06 Director, Center for Sensory-Motor Interaction (SMI), Aalborg University (Danish National Research Foundation Centre of Excellence)
- 1997-: Professor, Dept. of Health Science and Technology, Aalborg University
- 1993-97: Research Council Professor
- 1992-93: Head of Department of Medical Informatics and Image Analysis
- 1990-92: Senior Scholarship, Aalborg University
- 1989-93: Associate Professor with extraordinary research potential, Aalborg University
- 1988-89: Assoc. Professor, Dept. of Medical Informatics and Image Analysis, Aalborg University
- 1986-88: Assist. Professor, Dept. of Medical Informatics and Image Analysis, Aalborg University
- 1985-88: Ph.D. study at Aalborg University as "joint venture" with the Department of Clinical Neurosciences, University of Calgary, Alberta, Canada
- 1983-85: Assistant Professor, Dept. of Medical Informatics and Image Analysis, Aalborg University

# EXTENDED RESEARCH VISITS (+3 months)

- 2005: Honorary Guest Professor, Dept. of Sport and Exercise Sciences and Dept. of Bioengineering, University of Auckland, New Zealand (January-Marts)
- 1999: Guest Professor, Dept. of Kinesiology, Simon Fraser University, Vancouver, Canada (April-July)
- 1989-90: Visiting Research Fellow, Northwestern University, Chicago, U.S.A (August-January)
- 1985-86: Visiting Ph.D. student, Dept. of Clinical Neurosciences, University of Calgary, Canada

#### **PUBLICATIONS**

From 1983-11, TS has contributed to 250+ refereed publications (174 are listed on PubMed, H-index 32), including the book: "Control of Movement of the Physically Disabled" (Popovic and Sinkjær, pp. 481, Springer, 2000, Second Edition 2003). Furthermore, he has taken out/applied for eight patents.

## LECTURES

From 1983-09, TS has submitted 400+ abstracts for international meetings and conferences. TS has given more than 100 invited lectures at research institutions in Denmark and abroad

## PRE- AND POST GRADUATE ORGANISATIONS

- 1997 Co-founder of the 3-year Doctoral School in "Biomedical Sciences and Engineering". Presently 49 PhD students enrolled. www.smi.hst.aau.dk/docschool/
- 2000 TS initiated the 5-year M.Sc. (cand. polyt.) in Biomedical Engineering", Aalborg University. Presently 164 master students enrolled. www.hst.aau.dk/masterprogrammes.htm
- 2002 Co-initiator of Department of Health Science and Technology, Aalborg University, of which institute SMI is a part. www.hst.aau.dk
- 2006 Co-initiator of Master of Science in Medicine with Industrial Specialisation (cand. scient.med.), Aalborg University.
- 2006/7 Head of elite programme in Master of Biomedical Engineering, Aalborg University.

#### AWARDS AND HONOURS

- 1992: The Queen of Denmark's Silver Wedding Coin
- 1993: The Danish Foundation for Physical Disability Anniversary Award
- 1996: Villum Kann Rasmussen Foundation for outstanding international research
- 1996: Selected European personality in Aalborg
- 1997: Appointed as "Ambassador of Aalborg City"
- 1998: Dannins Award for scientific research
- 1999: Award for outstanding research, The National Association of Polio and Accident Victims (PTU)
- 2001: Astra-Tech Award
- 2002: Medico-Prize, Danish Medical Device Industry for outstanding research within biomedical engineering
- 2002: IDA-Award (The Association of Engineers), Denmark
- 2004: The International Steven Hoogendijk Award in Medical Engineering, Netherlands
- 2004: The Research Award of the Disability Foundation
- 2010: Mathilde and Jeppe Juhl's Memorial Scholarship

1993-2005: 8 "best paper" awards

# **BOARDS** (selected)

#### Science and innovation:

- 2010- FWO Fonds Wetenschappelijk Onderzoek, Health Sciences, Belgium
- 2008- Member of Advanced Grant Panel, European Research Council (ERC)
- 2005-06 Member of "Højteknologifonden" (Danish National Advanced Technology Foundation). Appointed by the Danish Minister for Science, Technology and Innovation
  2005 Head of Program Committee for Young Scientists, Danish Research Council
- 2005Head of Program Committee for Young Scientists, Danish Research Council2005-Member of the Board, SAHVA Foundation (from 2009 BEVICA Foundation)
- 2002-2008 Member of the Board, NOVI Science Park A/S
- 2001-2002 Member of the Danish Minister of Science's "think tank" for technological progress
- 1999-2001 Head of Academic Council, Danish Academy of Technical Sciences
- 1999-2001 Member of the Board, Danish Academy of Technical Sciences
- 1997-2003 Member of "Forskningsforum" (Board of the Danish Research Councils). Appointed by the Danish Minister of Research
- 1993 Member of the scientific advisory board for the International Neurobionics Institute, Hannover, Germany
- 1991-2000 Member of the Board, Danish Society for Biomedical Engineering

### Industry:

2006-	Member of the Board, DELTA
2006-	Member of the Board, Medotech A/S
2001-2004	Member of the Adv. Board, BioControl Inc.
1995-2005	Member of the Board, Neurodan A/S
	Co-founder of Neurodan A/S (1995) and NeuroReTrain ApS (2000)

### Education:

2002-07 Vice-chairperson of Board, Sundheds CVU Nordjylland (University College in Health)

1992-93 Member of the Electrical Engineering education advisory board for the Danish Minister of Education

### SCIENCE OFFICES

Selected Editorial (last 5 years):

- Associate Editor, IEEE Transaction on Neural Systems and Rehabilitation Engineering
- Associate Editor, Journal on Neural Engineering
- Editorial board member on the journal Neuromodulation
- Referee on "TINS" (Trends in Neurosciences) \_
- Referee on "Journal of Physiology" -
- Referee on "Journal of Motor Behaviour"
- Referee on "Experimental Brain Research" Referee on "Biocybernetics"
- \_
- Referee on "Journal of Electrophysiological Kinesiology"
- Referee on "Journal of Neurophysiology"
- Referee on "Journal of Neuroscience Methods" -
- Referee on "Muscle and Nerve'
- Referee on "Journal of Applied Neurophysiology"
- Peer Reviewer for Research Councils in Australia, Belgium, Canada, Ireland, Italy, Netherlands, Switzerland, Singapore, UK, USA
- Peer Reviewer and adviser for EU (DG XII and DGXIII)
- Peer Reviewer on private foundations such as "Welcome Trust" and "Multiple Sclerosis Society" England
- Member of International Committee to evaluate UNIVAP University, Brazil, 2000
- Head of Evaluation Committee of COM, DTU, appointed by The Danish Technical Research Council, 2001
- President and co-founder of the International Functional Electrical Stimulation Society (2002-05)
- Head of Evaluation Committee of Dept. of Computer Sciences, Aalborg University, 2006
- \_ Member of professor evaluation committees at universities in Denmark, Finland, Sweden, Norway, UK, USA, Canada, Ireland, the Netherlands

# COMMITTEES (selected)

- Member of Task Force, Danish Academy of Technical Science 2008-
- Technology Forecast Bio and Health Technology, Danish Ministry of Science, 2002-03
- Member of Board of Directors of IDA for "Technology-award", 2003-06
- Head of Council, ATV, on "Electronics and Informatics", 2001-2003
- -Member of Aalborg University's advisory board for research, 1993-2000
- Member of the committee "Medical Technology and Health", Minister of Industry. Appointed by the Danish Conference of Rectors, 1995-96
- Member of the committee under The Research Council conc. elucidation of neuro-research in Denmark", 1993-95
- Advisor in various EC research task forces within biomedical sciences and technology 1993-
- Member of The Danish National Handicap Advisory Board, Ministry of Social Affairs, 1994-98
- Medico/Health an industry analysis, the Danish Occupational Ministry (Erhvervsministeriet), 1999-00
- Member of the Programme Committee for "Health and Science", the Open University, Aalborg, 1990-2004
- Advisory Board of SWIM, University of Southampton 2006

# ORGANISATION AND PLANNING

Involved in the organisation of 30+ international conferences, workshops and PhD courses within neuroscience and biomedical engineering, including:

- Organiser and chairperson for the international conference EURO-BRAIN, Aalborg 1997
- Organiser and chairperson of the IFESS2000 and NP2000 Conferences at Aalborg University, Denmark, 2000

#### PROFESSIONAL MEMBERSHIPS

- The Society for Neuroscience
- International Federation for Medical and Biological Engineering
- International Brain Research Organization
- International Society for FES (IFESS) -
- IEEE, senior member
- The European Society of Medicine and Engineering
- The International Society of Postural and Gait Research -
- The Danish Society for Biomedical Engineering
- Danish Academy of Technical Sciences (ATV)

2006: Research management course, Copenhagen Business School

#### **MAJOR GRANTS**

From 1992-2006 TS has received major grants (>DKK 1M) as partner or principal investigator from Danish and international foundations of a grant total of DDK 274M:

1992-1995: AIM, EU, CAMARC-II (partner, DKK 1.2M) 1993-1996: Human Capital and Mobility EU program (Partner, DKK 1.5M) 1993-1996: The Danish Research Council ("Indopereret nerve-manchet-elektrode til styring af lammede muskler", Principal investigator, DKK 1.3M)

- 1993-1998: Research Council Professorship (DKK 5.0M)
- 1993-1998: The Technical and Medical Research Council (Principal investigator, DKK 4.5M)

1993-1998: The Danish National Research Foundation "Center for Sensory-Motor Interaction" (Director, DKK 25M)

- 1996-1999: BIOMED II, EU "SENSATIONS" (Principal investigator, DKK 6M)
- 1996-1999: TMR, EU, "NEUROS" (Partner, DKK 3M)
- 1996-1999: The Technical and Medical Research Council (Principal investigator, "Nervesystemets styring af gang" DKK 1M)
- 1996-1999: The Technical and Medical Research Council ("Nerve signals from the bladder", DKK 1.5M)
- 1997-2001: The Danish National Research Foundation "Doctoral School in Biomedical Science and Engineering" (DKK 40M)
- 1998-2001: The Danish National Research Foundation "Center for Sensory-Motor Interaction (Director, DKK 18M)
- 1998-2001: The Danish Medical Research Council, Centre for Biomedical Engineering (Principal investigator, DKK 20M)
- 1999: Velux Foundation and Aalborg University (Principal investigator, DKK 1 + 1M)
- 2000-2003: TMR, EU, "NeuralPRO" (Partner, DKK 2.5M)
- 2001-2006: The Danish National Research Foundation. Continuation of "Center for Sensory-Motor Interaction (Director, DKK 46M)
- 2001-2006: Aalborg University to Center for Sensory-Motor Interaction (DKK 18M) 2001: REBEC, EU (DKK 2M)
- "Cyberhand", EU (DKK 1M) 2002:
- 2004-2009: Center for NeuroEngineering (Principal investigator, DKK 14M, The Danish Technical Research Council)
- 2005: The Obel Family Foundation (Principal investigator, DKK 2.5M)
- Spar Nord Fond (Principal investigator, DKK 2.5M) 2005:
- 2006-2010: NOVO Ejendomsfond (Principal investigator, DKK 7.5M)
- 2006: North Jutland County (Principal investigator, DKK 5M)
- Aalborg City (Principal investigator, DKK 3M) 2006:
- 2006-2010: The Danish Advanced Technology Foundation (Partner, DKK 30M)
- 2006-2010: Center for Sundhedsteknologi (Principal investigator, DKK 10M the Danish Minister of Science)