

Curriculum Vitae for Anders Lansner

Born December 6, 1949.

1. MSc degree in Engineering Chemistry from KTH in 1974.
2. PhD degree in Computer Science in 1986 on the thesis “Investigations into the Pattern Processing Capabilities of Associative Nets” with Prof. Stefan Arnborg as supervisor and Prof. Jan-Olof Eklundh as co-supervisor.
3. Guest professor at the Brain and Mind Center at École Polytechnique Fédérale de Lausanne (EPFL), Switzerland (Headed by Prof. Henry Markram) October to December 2002.
4. Associate professor (docent) in 1992
5. Full Professor in “Computer science with applications in the natural sciences” at NADA (Stockholm University), March 2002, with 70% research in the position.
6.
 - a) Employee at the National Board for Workers Safety and Health, 1975 - 1979
 - b) PhD studies in Computer science at Nada, KTH, 1980 – 1986
 - c) Assistant professor, Nada, KTH, 1987
 - d) Docent, Nada, KTH, 1992
 - e) Appointed Professor, Nada, KTH, 1999
7. Parental leave 6 months, 1989
8. Anders Holst, September 1997; Jeanette Hellgren Kotaleski, June 1998; Tom Wadden, June 1998; Anders Sandberg, June 2003; Pål Westermark, September 2005; Christopher Johansson, October 2006; Martin Rehn, November 2006; Daniel Gillblad, June 2008. Postdoctoral collaborators: Örjan Ekeberg, Docent, 1992 – 1999; Jeanette Hellgren Kotaleski (Docent), 1999–2007; Alexander Kozlov (research associate) October 1998 – ; Sverker Sikström (guest lecturer) September 2008 – ; Pawel Herman (postdoc) March 2009 –;

Dr Lansner formed the neural network research group SANS (“Studies of Artificial Nervous Systems”) in 1987 and was manager of that group until its ending in 2005. In 2005 the SANS group changed name to CBN (Computational Biology and Neurocomputing). July 2006 – September 2007 he was director of the newly formed Department of Computational Biology at the School of Computer Science and Communication, KTH.

From September 2005 Dr Lansner is PI of Stockholm Brain Institute (SBI, www.stockholmbrain.se) and manages the computational and modeling platform of SBI. From February 2007 – 2008, he was responsible for the Swedish INCF (International Neuroinformatics Coordinating Facility) node (www.incf.org), now replaced by Prof Jeanette Hellgren Kotaleski.

Faculty and Professional Organizations

Dr Lansner is Member of the Royal Swedish Academy of Engineering Sciences (IVA) since April 2008 and in the scientific advisory board of the Helmholtz Association, Alliance on System Biology, from February 2009. He is former board member of the European Neural Network Society (ENNS), member of the International Neural Network Society (INNS), and member of the Society for Neuroscience and of the Swedish Physiological Society.

Organized Conferences, Workshops and Summer Schools 2003-present

An international workshop on olfaction, the GOSPEL Biotechno Workshop: From Biological Olfaction to Sensor Technology. Skokloster Wårdshus, February 25-26, 2008.

The 1st INCF Workshop on Large-scale Modeling of the Nervous System, December 2006.

The 3rd Nordic Workshop in Neuroinformatics, Aronsborg, September 9-11, 2005 (with Sten Grillner, Karolinska institutet).

The “PSCI Biocomputing Workshop” at Wennergren Center, October 21-22, 2004 (with Jeanette Hellgren Kotaleski).

Member of the organizing committees of The Seventh International Conference on Information Fusion (FUSION 2004), Stockholm, June 28 – July 1 and The eighths “From Animals to Animats” conference (SAB 2004), Los Angeles, July 13 – 17.

International committees etc.

Referee (neurocomputing) for the Norwegian Science Council, spring 2003. External examiner (“opponent”) on a licentiate dissertation (Robert Pallbo) on neural networks, Lund University, March 1994 and on a PhD dissertation (Christian Balkenius) Lund May 1995; Kwok Chong, Univ Leicester, UK, June 2007; Martin Pospischil, Univ Pierre and Marie Curie, France, September 2007. Member of several PhD grading committees.

Selected presentations 2003 – present

June, October 2003	Two seminars on “Se Hjärnan” for Vetenskapsrådet and Riksställningar in preparation for a national exhibition opening 2005
December 2003	“Memory modulation in an attractor model of cortical memory”, The Riken-Sweden Symposium on Neuroscience, Wako, Tokyo, December 1-3
April 2004	93 rd Dahlem workshop, “Microcircuits: The Interface between Neurons and Global Brain Function”. Organizer: Sten Grillner. Berlin April 25-30
August 2004	Lecture on “Large-scale cortical network models” at the Edinburgh Summer School in Neuroinformatics Simulation Tools, organized by University of Edinburgh,
September 2004	“Towards Cortex sized Artificial Nervous Systems”, presentation at the Knowledge-Based Intelligent Information & Engineering Systems (KES) 2004 Conference, Wellington, New Zealand, September 22-24
April 2005	“Modelling the associative memory capabilities of attractor networks with specific reference to cortical olfactory processing”, 11 th Int Symp on Olfaction and Electronic Nose (ISOEN), Barcelona, April 13-16
May 2005	Workshop on "Data-Driven Modelling and Simulation in Neuroscience" Hohenwart Forum, Hohenwart, Germany.
January 2007	”From ANN to biomimetic information processing”, invited presentation at the Workshop on "Bio-inspired Signal Processing" Barcelona, Spain.
September 2007	“Dynamic associative memory properties of a biophysically detailed neuronal network model of neocortical layers 2/3”, invited presentation on September 26 at Gatsby Computational Neuroscience Unit, UCL, London
April 2008	“Simulation of large-scale architectures of spiking neurons” invited presentation at the First Capo Caccia workshop toward Cognitive Neuromorphic Engineering, April 21-29, Capo Caccia, Sardinia, Italy.
October 2008	“Associative memory properties of a biophysically detailed neuronal network model of layers 2/3 of mammalian cortex”, invited presentation at the Joint Cold Spring Harbor Lab and Wellcome Trust meeting on Integrative Approaches to Brain Complexity, October 1-5, Hinxton, Cambridge
November 2008	“Brain Modeling – Current Status and Future Outlook”, invited presentation at IBM Life Sciences Modeling & Simulation Summit, Palisades, NY
November 2009	“Large scale modeling of cortical associative memory function”, invited presentation at the Neuroparkville Symposium on Neuroscience, Melbourne, and “Brain modelling and brain-inspired computing” invited presentation in the Melbourne University ICT for Life Sciences lecture series.
January 2010	“Modularization dramatically increases stability of an oscillating attractor neural network”. Invited presentation at the 2 nd Polish-Norwegian workshop on Neuroinformatics, Warsaw Jan 14-16, 2010.

Supervised doctoral students, postdoctoral fellows

Magnus Stensmo, Lic 1991
Örjan Ekeberg, PhD December 1992
Hans Tråvén, PhD June 1993
Björn Levin, PhD October 1995
Per Hammarlund, PhD June 1996
Erik Fransén, PhD October 1996
Jesper Tegnér, PhD September 1997¹
Anders Holst, PhD September 1997
Tom Wadden, PhD June 1998
Jeanette Hellgren Kotaleski, PhD June 1998
Roland Orre, Lic June 1998
Guang Li, PhD November 1999²
Anders Sandberg, PhD June 2003
Baran Cürüclü, Lic Dec 2003³
Christopher Johansson, Lic, June 2004
Peter Raicevic, Lic, December 2004
Martin Rehn, Lic, May 2005
Pål Westermark, PhD, September 2005
Christopher Johansson, PhD, October 2006
Martin Rehn, PhD, November 2006
Malin Sandström, Lic, June 2007
Mikael Huss, PhD, June 2007⁴
Fredrik Edin, PhD, January 2008⁵
Daniel Gillblad, PhD, June 2008
Mikael Djurfeldt, PhD, June 2009⁶
Johannes Hjorth, PhD June 2009⁷

Postdoctor collaborators Alexander Kozlov (now research associate), from October 1998, Martin Rehn from March 2007, Pawel Herman from February 2009.

¹ Co-supervised with KI (Prof. Sten Grillner, Neuroscience Dept.)

² Co-supervised with Chalmers (Prof. Bertil Svensson, Computer Sci. and Eng. Dept.)

³ Co-supervised with University of Mälardalen (Prof. Björn Lisper, Computer Eng, Dept.)

⁴ Co-supervised with Jeanette Hellgren

⁵ Co-supervised with Jesper Tegnér

⁶ Co-supervised with Örjan Ekeberg

⁷ Co-supervised with Jeanette Hellgren