

## Brief CV: Prof. Dan-E. Nilsson

*Born* in Goteborg, Sweden, 1954 (civil reg nr 541113-5014)

*Married* to Maria Abbe Nilsson, a daughter born 1995 and a son born 1998.

*BSc* 1977, Chemistry–Biology–Zoology, University of Goteborg.

*PhD* 1983, Structural Zoology, University of Lund.

*Docent (DSc)* 1987, University of Lund

*Postdoctoral fellow* 1983 - 1984, Department of Neurobiology, Australian National University, Canberra, Australia

*Research fellow* (Forskarassistent) 1984 -1989, Department of Zoology, University of Lund

*Lecturer* (Universitetslektor) 1989 - 1995, Department of Zoology, University of Lund

*Professor*, chair in Zoology: functional morphology 1995, Department of Zoology (from 2002 Department of Cell and Organism Biology), Lund University

*Visiting Fellow*: Centre for Visual Sciences, Australian National University, Canberra, 1989 –1990

*Visiting Professor*: School of Biological Sciences, Flinders University, South Australia, 1996

*Fellow* of the Institute for Advanced Studies (Wissenschaftskolleg), Berlin 1997

*Visiting Professor*: Vision Touch and Hearing Research Center, University of Queensland, Australia, 1999

*Scientific cruises*: YMER-80 to the Arctic sea 1980, and HMS Discovery to the mid Atlantic 1987

*Dean (Prodekanus)*: Natural Sciences faculty, Lund University 2000-2006

*Member* of the Biology committee (BK) at the Swedish Natural Science Research Council 1997-2000

*Chairman*: National Professors Council for Basic Research 1996-1998

*Member* of Lund University Strategic Research Committee 1999

*Chairman* of Lund Biology Centre Planning Committee 1996-2001

*Chairman* of the Faculty Appointments Board for Biology and Geosciences 2000-2006

*Chairman* of the Faculty Library Board 2006-current

*Organiser* of the International Conference on Invertebrate Vision, Bäckaskog Castle, Sweden 2001

*Editorial board* of the Journal of Comparative Physiology A 1996-current

*Editorial board* of Zoomorphology 1995-1998

*Editorial board* of Acta Zoologica 1996-2004

*Editorial advisory board* of Trends in Comparative Biochemistry & Physiology 2005-current

*Member* of Sällskapet riksdagsmän och forskare

*Scientific award*: The Florman award, Royal Swedish Academy of Sciences 1988

*Fellow* of the Royal Physiographic Society, elected 1998

*Fellow* of the Swedish Academy of Sciences, Stockholm, elected 2002

*Fellow* of the Academia Europaea, elected 2002

*Fellow* of the World Innovation Foundation, elected 2003

*Fellow* of the German Academy of Natural Scientists, Leopoldina, elected 2005

*Graduated PhD students*: Dr Alf-Inge Ro 1993, Dr Ann-Charlotte Järemo Jonson 1995, Dr Jan-Olof Seyer 1998, Dr Pär Brännström 1999, Dr Marie Dacke 2003, Dr Karin Nordström 2003

*Current PhD students*: Megan O'Connor, Ronald Petie

*Postdoctors*: Eric Warrant (Australia) 1990-1992, Melissa Coates (USA) 2003-2004, Charlotta Skogh (Lund) 2003-2004, Anders Garm (Denmark) 2003-current, Yves Possart (Canada) 2005

*20 most important publications:*

- Nilsson D-E (1983) Evolutionary links between apposition and superposition optics in crustacean eyes. *Nature* 302: 818-821
- Nilsson D-E, Land MF, Howard J (1984) Afocal apposition optics in butterfly eyes. *Nature* 312: 561-563
- Nilsson D-E, Land MF, Howard J (1988) Optics of the butterfly eye. *J Comp Physiol A* 162: 341-366
- Nilsson D-E (1988) A new type of imaging optics in compound eyes. *Nature* 332: 76-78
- Nilsson D-E (1989) Optics and evolution of the compound eye. In: Stavenga DG, Hardie R (eds), *Facets of vision*. Springer, Berlin Heidelberg
- Nilsson D-E (1990) From cornea to retinal image in invertebrate eyes. *Trends Neurosci* 13: 55-64
- Nilsson D-E, Modlin RF (1994) A mysid shrimp carrying a pair of binoculars. *J Exp Biol* 189: 213-236
- Nilsson D-E, Pelger S (1994) A pessimistic estimate of the time required for an eye to evolve. *Proc R Soc Lond B* 256: 53-58
- Nilsson D-E, Ro A-I (1994) Did neural pooling for night vision lead to the evolution of neural superposition eyes? *J Comp Physiol A* 175: 289-302
- Nilsson D-E (1994) Eyes as optical alarm systems in fan worms and ark clams. *Phil Trans R Soc B* 346: 195-212
- Nilsson D-E (1996) Eye ancestry: Old genes for new eyes. *Current Biol.* 6: 39-42
- Warrant EJ, Nilsson D-E (1998) Absorption of white light in photoreceptors. *Vision Res* 38: 195-207
- Dacke M, Nilsson D-E, Warrant EJ, Blest AD, Land MF, O'Carroll DC (1999) Built in polarizers form part of a compass organ in spiders. *Nature* 401: 470-473
- Land MF, Nilsson D-E (2002) **Animal Eyes**, Oxford Univ Press, 221 pp
- Gislén A, Dacke M, Kröger RHH, Abrahamsson M, Nilsson D-E, Warrant EJ (2003) Superior underwater vision in a human population of sea gypsies. *Curr Biol* 13: 833-836.
- Dacke M, Nilsson D-E, Scholtz CH, Byrne M, Warrant EJ (2003) Insect orientation to polarized moonlight. *Nature* 424: 33
- Nordström K, Wallén R, Seymour J, Nilsson D-E (2003) A simple visual system without neurons in jellyfish larvae. *Proc R Soc Lond B* 270: 2349-2354
- Nilsson D-E (2004) Eye evolution: a question of genetic promiscuity. *Curr Opin Neurobiol* 14: 407-414
- Nilsson D-E, Gislén L, Coates MM, Skogh C, Garm A (2005) Advanced optics in a jellyfish eye. *Nature* 435: 201-205
- Warrant E, Nilsson D-E (2006) *Invertebrate Vision* (eds). Cambridge University Press, Cambridge