

CURRICULUM VITAE

Leif Søndergaard

Personal information:

Name: Leif Søndergaard
Address: Vangedevej 39, 2820 Gentofte
Telephone: 3968 0551
Date of birth: 6. April 1948, Copenhagen, Denmark

Education:

1967 - 1975 Cand. scient. (Master of Science) – Biology: Genetics,
University of Copenhagen
1975 - 1978 Lic.scient. (Ph.D.), Genetics, University of Copenhagen

Employment::

1978 - 1980 Adjunkt (Assistant Professor), Institute of Genetics,
University of Copenhagen
1980 - Lektor (Associate Professor), Institute of Genetics, University
of Copenhagen
1.12.1985 - 30.11.1986: Visiting professor at Laboratoire de Génétique Moléculaire des
Eucaryotes du CNRS og Ecole Supérieure de Biotechnologie du
Strasbourg, Université Louis Pasteur, Strasbourg, France

Professional experience:

1978 - Teaching and examination: teaching in genetics and molecular
biology at the University of Copenhagen, both at Bachelor level and
Master and Ph.D. level.
Supervisor for Master and Ph.D. students.
Examiner at the Institute of Molecular Biology and officially
appointed examiner at the Royal Veterinary High School, both at
Master and Ph.D. level.
Research: Molecular biological and biochemical investigations of
pyrimidine metabolism of *Drosophila*.
Characterization of the genetic regulation of the egg yolk protein
genes in *Drosophila*.
Genetic and molecular characterization of genes coding for 7-
transmembrane receptors in *Drosophila*.
Expression of cloned heterologous genes in large scale culture of
Drosophila cells.

Administrative experience:

1982 - 1984 Chairman of the Study Board of Biology.
1987 - 1989 Member of the Study Board of Biology.

1990 - 1996 Head of Institute of Genetics.
1994 - Member of the chairmanship for the officially appointed examiners
 at the Royal Veterinary High School.

Publications:

Articles in international journals

1. Søndergaard, L. (1973).
 Studies on the behaviour of the paralytic mutant *Out-cold^{ts}*.
 Drosophila Inform. Serv. 50: 76.
2. Søndergaard, L., Nielsen, N.C. and Smillie, R.M. (1975).
 The effect of the *Out-cold^{ts}* mutation on temperature induced changes in the Arrhenius
 activation energy of succinate-cytochrome c reductase activity in *Drosophila*.
 FEBS Letters 51: 126.
3. Søndergaard, L. (1975).
 A temperature sensitive behavioural mutant of *Drosophila melanogaster*: *Out-cold^{ts}*.
 Hereditas 81: 199.
4. Søndergaard, L. (1976).
 Temperature induced changes in succinate-cytochrome c reductase activity in behavioural
 mutants of *Drosophila*.
 Hereditas 82: 51.
5. Søndergaard, L. (1979).
 Dominant cold paralytic mutations on the X-chromosome of *Drosophila melanogaster*.
 Hereditas 90: 93.
6. Søndergaard, L. (1979).
 Role of proteins and lipids in non-linear Arrhenius plots of *Drosophila* mitochondrial
 succinate-cytochrome c reductase studied by rebinding experiments.
 Biochimica et Biophysica Acta 557: 208.
7. Søndergaard, L. (1980).
 Dominant cold paralytic mutations on the autosomes of *Drosophila melanogaster*.
 Hereditas 92: 335.
8. Bahn, E. and Søndergaard, L. (1983).
 Suppression of the semi-dominant *suppressor of black* by *rudimentary* mutants in
 Drosophila melanogaster.
 Hereditas 99: 309.
9. Søndergaard, L. (1983).
 Mating capacity of *e/e* and *e/+* males under non-competitive conditions.
 Drosophila Inform. Serv. 59: 120.

10. Barr, C. and Søndergaard, L. (1984).
A reliable *Drosophila* counter.
Drosophila Inform. Serv. 60: 214.
11. Barr, C. and Søndergaard, L. (1984).
An efficient etherizer without any health risk.
Drosophila Inform. Serv. 60: 213.
12. Søndergaard, L. (1985).
Mating competition in artificial populations of *Drosophila melanogaster* polymorphic for *ebony*. I. Role of light and the male to female ratio on mating success.
Hereditas 103: 47.
13. Søndergaard, L. and Sick, K. (1985).
Long-term frequencies of *ebony* in artificial *Drosophila melanogaster* populations kept in light and darkness.
Hereditas 103: 57.
14. Søndergaard, L. (1986).
The nuclear mutation *Ocd^{ts-1}* changes the 2-D electrophoretic pattern of *Drosophila* mitochondria.
Hereditas 104: 313.
15. Søndergaard, L. (1986).
Mating competition in artificial populations of *Drosophila melanogaster* polymorphic for *ebony*. II. A test for minority male mating advantage.
Genet. Res. Camb. 47: 205.
16. Søndergaard, L. and Kolbak, D. (1987).
More precise map position of the semidominant suppressor of *black Su(b)⁸⁰¹* and a new allele, *Su(b)^{DK7}*.
Drosophila Inform. Serv. 66: 134.
17. Søndergaard, L. and Sick, K. (1987).
Evidence for geoneutrality in *Drosophila melanogaster* larvae, with respect to pupation site preference.
Drosophila Inform. Serv. 66: 134.
18. Søndergaard, L., Bourouis, M., Jarry, B. and Elkaim, R. (1987).
Production of active human factor IX in cultured *Drosophila* cells.
EEC Report on the Research Action Programme on Biotechnology.
19. Søndergaard, L. and Jarry, B. (1987).
Some physical factors affecting the expression of recombinant human FIX protein in transfected *Drosophila* cells.
EEC Report on the Research Action Programme on Biotechnology.
20. Søndergaard, L. (1993)
Homology between the mammalian liver and the *Drosophila* fat body.
Trends in Genetics 9 (6): 193.

21. Abrahamsen, N., Martinez, A., Kjær, T., Søndergaard, L. and Bownes, M. (1993). Cis-regulatory sequences leading to female-specific expression of yolk protein genes 1 and 2 in the fat body of *Drosophila melanogaster*. **Mol.Gen.Genet.** 237: 41-48.
22. Piškur, J., Kolbak, D., Søndergaard, L. and Pedersen, M.B. (1993). The dominant *suppressor of black* indicates that *de novo* pyrimidine biosynthesis is involved in the *Drosophila* tan pigmentation pathway. **Mol.Gen.Genet.** 241: 335.
23. Søndergaard, L. (1994). Morphological changes of *Drosophila* S-2 cells accompanying changes in culture conditions. **In Vitro Cell. Dev. Biol.** 30A: 18.
24. Søndergaard, L., Mauchline, D. Egetoft, P., Wulff, P. and Bownes, M. (1995). Nutritional response elements in a *Drosophila* yolk protein gene promoter. **Mol.Gen.Genet.** 248: 25.
25. Piškur, J., Søndergaard, L., Gojkovic, Z., Stokbro, B., Hjulsager, C., Davison, J., DeMoll, E., Rawls, J. and Bahn, E. (1995). Observed resistance to pyrimidine analogs and sensitivity to uracil in *Drosophila* is attributed to deregulation of pyrimidine metabolism, pp. 559. **In: Advances in Experimental Medicine and Biology.** Purine and Pyrimidine Metabolism in Man VIII. Sohota, A. and Taylor, M., eds. Plenum Press. New York.
26. Søndergaard, L. (1996). *Drosophila* cells can be grown to high cell densities in a bioreactor. **Biotechnology Techniques** 10: 161.
27. Søndergaard, L. (1996). Efficiency of different lipofectin agents in *Drosophila* S-2 cells. **In Vitro Cell. Dev. Biol.** 32: 386.
28. Hansen, B.E., Andersson, E.C., Madsen, L.S., Engberg, J., Søndergaard, L., Svejgaard, A. and Fugger, L. (1998). Functional characterization of HLA-DRB1*0401/-DRA1*0101 molecules expressed in *Drosophila melanogaster* cells. **Tissue Antigens** 51 (2): 119-128.
29. Munch-Petersen, B., Piškur, J. & Søndergaard, L. (1998). Four deoxynucleoside kinase activities from *Drosophila melanogaster* are contained within a single monomeric enzyme, a new multifunctional deoxynucleoside kinase. **J. Biol. Chem.** 273 (7): 3926-3911.
30. Munch-Petersen, B., Piškur, J. & Søndergaard, L. (1998). The single deoxynucleoside kinase in *Drosophila melanogaster*, Dm-dNK, is multifunctional and differs from the mammalian deoxynucleoside kinases. **In: Advances in Experimental Medicine and Biology. Purine and Pyrimidine Metabolism in Man IX.** pp. 465-469. Eds.: Griesmacher, A., Chiba, P., and Müller, M.M., Plenum Press, New York.

31. Hauser, F., Søndergaard, L. & Grimmelikhuijzen, C.J.P. (1998).
Molecular cloning, genomic organization and developmental regulation of a novel receptor from *Drosophila melanogaster* structurally related to gonadotropin-releasing hormone receptors from vertebrates.
Biochem. Biophys. Res. Comm. 249: 822-828.
32. Lenz, C., Søndergaard, L. and Grimmelikhuijzen, C.J.P. (2000).
Molecular cloning and genomic organisation of a novel receptor from *Drosophila melanogaster* structurally related to mammalian galanin receptors.
Biochem. Biophys. Res. Comm. 269: 91-96.
33. Munch-Petersen, B., Knecht, W., Lenz, C., Søndergaard, L. & Piškur, J. (2000).
Functional expression of a multisubstrate deoxynucleoside kinase from *Drosophila melanogaster* and its C-terminal deletion mutants.
J. Biol. Chem. 275: 6673-6679.
34. Eriksen, K.K., Hauser, F. Schiött, M. Pedersen, K.-M., Søndergaard, L. & Grimmelikhuijzen, C.J.P. (2000).
Molecular cloning, genomic organisation developmental regulation and a knock-out mutant of a novel leu-rich repeats-containing G protein coupled receptor (DLGR-2) from *Drosophila melanogaster*.
Genome Research 10:924-938
35. Staubli, F., Jørgensen, T.J.D., Cazzamali, G., Williamson, M., Lenz, C., Søndergaard, L., Roepstorff, P. & Grimmelikhuijzen. (2002)
Molecular identification of the insect adipokinetic hormone receptors.
Proc.Natl.Acad.Sci., 99: 3446-3451.
36. Lang, H., Jacobsen, H., Ikemizu, S., Anderson, C., Harlos, K., Masen, L., Hjort, P., Søndergaard, L., Sveigaard, A., Wucherpfenning, K., Stuart, D., Bell, J.I., Jones. E.Y. & Fugger. L. (2002)
A functional and structural basis for TCR cross-reactivity in multiple sclerosis.
Nature Imm. 3: 940-943.
37. Knecht, W., Petersen, G.E., Sandrini, M.P.B., Søndergaard, L., Munch-Petersen, B. & Piškur, J. (2003).
Mosquito has a single multisubstrate deoxynucleoside kinase characterized by unique substrate specificity.
Nucleic Acid Res. 31: 1665-1672.
38. Rosenkilde, C., Cazzamali, G., Williamson, M., Hauser, F., Søndergaard, L., Delotto, R. and Grimmelikhuijzen, C.J.P. (2003).
Molecular cloning, functional expression, and gene silencing of two *Drosophila* receptors for the *Drosophila* neuropeptide pyrokinin-2.
Biochem. Biophys. Res Commun. 309: 485-494.
39. Gårdsvoll, H., Werner, F., Søndergaard, L., Danø, K., and Ploug, M. (2004).
Characterization of low-glycosylated forms of soluble human urokinase receptor expressed in *Drosophila* Schneider 2 cells after deletion of glycosylation-sites.
Protein Expression and Purification 34: 284-295.

