



## **Curriculum Vitae - Poul NISSEN**

Professor of Protein Biochemistry

University of Aarhus (AU), Department of Molecular Biology

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### **Civil Status**

Born May 11, 1967 to Thora and Erik Nissen, Augustenborg, Denmark

Married to MD Marie Louise Jespersen. Two children (8 and 9)

### **Academic training and degrees**

Nov. 1997 - Oct. 2000 Post-doctoral fellow with Prof. T. A. Steitz, Yale University

Nov. 1993 - Feb. 1997 Ph.D. with Asc. prof. Jens Nyborg, Dept. Molecular Biology, AU

Sep. 1987 - Oct. 1993 MSc in Chemistry, Faculty of Science, Dept. Chemistry, AU

### **Professional Employment**

May 2006 - Full professor of Protein Biochemistry, Dept. Molecular Biology, AU

Oct. 2002 - April 2006 Associate professor, Dept. Molecular Biology, AU

Oct. 2000 - Sep. 2004 Ole Rømer research associate professor, Dept. Molecular Biology, AU

Nov. 1997 - Sep. 2000 Post-doc, Dept. Mol. Biophys. Biochem., Yale University with T.A. Steitz

Feb. 1997 - Oct. 1997 Post-doc, Dept. Molecular Biology with Jens Nyborg

### **Research competences**

Cloning, expression, purification, biochemical characterisation and crystallization of proteins, membrane proteins, protein-ligand complexes, and ribosomes. X-ray crystallographic structure determination of biological macromolecules. Interdisciplinary and collaborative approaches in biological systems.

### **Research areas**

Transmembrane transport, P-type ATPase pumps, sodium-dependent symporters, Sortilin-type neuroreceptors, eukaryotic ribosomes, structure-based drug discovery and design

### **Awards and honorary appointments**

- 2008 Member, The Royal Danish Academy of Sciences and Letters
- 2008 Elite Researcher Prize, Danish Ministry of Science and Technology
- 2007 Lars Ernster Lecture, Dept. Biochemistry Biophysics, Stockholm University
- 2006 Anders Jahre Prize for Young Researchers, Oslo University
- 2006 Member, European Molecular Biology Organisation (EMBO)
- 2006 Hede-Nielsen Prize for Young Researchers, Hede-Nielsen Foundation, Denmark
- 2005 Hallas-Møller stipend, Novo Nordisk Foundation
- 2002 Program grant award, Human Frontier Science Program
- 2002 Newcomb Cleveland Prize, American Association for the Advancement of Science
- 2001 EMBO Young Investigator
- 2000 Ole Rømer award, Danish Natural Science Research Council
- 1997 Gold Medal for Ph.D. thesis, Danish Academy of Natural Sciences
- 1997 Post Doctoral award, Danish Natural Science Research Council

### **Organizational and administrative duties (selected)**

- Director of PUMPKIN-centre of the Danish National Research Foundation (April 2007-)
- Director of Centre for Structural Biology (August 2005-)
- Chairman of the Ph.d. Committee of Molecular Biology, Univ. Aarhus (September 2005-)
- Principal investigator of research collaboration on neurotransmitter transporters (2004-2008)
- Principal investigator of HFSP program “Structure and function of the yeast ribosome” (2002-2006)
- Member of the Research Committee, Dept. Molecular Biology (2005-)
- Member of the Science Advisory Board, EMBL at PETRA-III synchrotron (2008-)
- Member of the International Advisory Board, Novo-Nordisk Protein Research Centre (2008-)
- Member of the Scientific Steering Committee and Work-package leader, EU-FP7 EDICT (2008-)
- International Reviewer and site-visit committee (Rennes, B. Felden), INSERM, France (2006)

- International Reviewer, Natural Sciences Engineering Research Council of Canada - NSERC (2006)
- International Reviewer, CNRS-USAR France "Jeunes Chercheuses, Jeunes Chercheurs" (2007)
- International Reviewer, Netherlands Organisation for Scientific Research - NWO (2008)
- Reviewer and interviewer on EMBO fellowship and YIP applications (approx. five per year)
- Member of Professor evaluation committee, Univ. Copenhagen (2008)
- Member of Professor evaluation committee, Univ. Aalborg (2008)
- Member of Professor evaluation committee, Carlsberg Research Laboratories (2005)
- Chairman of two Asc. prof. evaluation committees, Univ. Aarhus (2005, 2008)
- Chairman of six Ph.D. dissertation committees, Univ. Aarhus
- Member of five Ph.D. dissertation committees, Univ. Copenhagen
- International member of two Ph.D. dissertations/viva, CEA Saclay & MRC-LMB Cambridge
- External reader of two Ph.D. dissertations (Yale University, Mol. Biophysics Biochemistry)
- Referee since 1997 for major international journals, including *Nature*, *Science*, *Cell*, *EMBO J.*, *PNAS*, *J. Mol. Biol.*, *RNA*, *J. Biol. Chem.*, *Acta Cryst.*
- Contributor to Biomed Central "Faculty of 1000" (2002-)

### **Publications**

Total number of citations: >5000, H-index 24 (ISI Web of Science)

Co-author of 49 papers (peer-review), 4 book chapters

Approximately 10 annual reports at synchrotrons, funding agencies and University

### **Invited talks at international conferences, meetings and seminars**

Approx. 70 invited talks since 1993

22 invited talks since Jan. 1 2007 (35 including invitations transferred to students and post-docs)

### **Patents**

Co-inventor, US patents 6,952,650 / 6,947,845 / 6,947,844, / 6,939,848

4 patent applications

### **Supervision**

Completed: 7 MSc, 4 Ph.D., 4 post-doc

Currently supervising: 4 undergraduate students, 2 MSc, 6 Ph.D., 8 post-doc,  
Support staff: 1 research associate, 1 teaching assistant, 2 research assistants, 2 technicians, 1 administrator

### **Current Undergraduate Teaching**

- "Protein Crystallography 2", Dept. Molecular Biology - principal lecturer (2004-)
- "Protein Crystallography 1", Dept. Molecular Biology - principal lecturer (2004-)
- "Physical Biochemistry", Dept. Molecular Biology (2005-)
- "Biophysical Chemistry", Dept. Chemistry (2008-)

### **Current Graduate Teaching**

- "Bionanotools", iNANO Center, Aarhus (2005-)
- "Molecular Physiology", Dept. Molecular Biology (2008-)

Prof. Nissen 目前任職於丹麥歐胡斯大學分子生物系且擔任膜蛋白結構中心負責人，並獲選為丹麥皇家科學院院士與 EMBO 院士。

Prof. Nissen 於 1967 年出生於丹麥奧古斯登堡。在他青少年時，即清楚顯示出對科學的強烈興趣。他 1987 年進入歐胡斯大學化學系研讀，於 1997 年於 Prof. Nyborg 指導下獲頒分子生物學博士學位。獲得博士學位後，于美國耶魯大學 Prof. T.A. Steitz 門下進行博士後研究(1997-2000)，獲得豐碩成果及對結構生物學高度的掌握後，旋即於 2000 年回到丹麥歐胡斯大學分子生物系服務，於 2006 年起，擔任歐胡斯大學分子生物系終身職教授。

Prof. Nissen 對於膜蛋白以及核糖體的結構功能問題相當有興趣。膜蛋白對生命的維繫至關重要，而且其功能與調控基礎涉及到與細胞膜雙層磷酯的交互作用。因此，膜蛋白除了具生理上的重要參與角色，也是疾病與藥物作用的標靶。在膜蛋白中，Prof. Nissen 對負責 active transport 的蛋白，尤其是 P-type ATPases，特別感到興趣。