November 2016

**Curriculum vitae**



**Björn Olof Nilsson**

Professor Bjorn O. Nilsson, the President of the Royal Swedish Academy of Engineering Sciences (IVA), has a doctorate degree in biochemistry from the Royal Institute of Technology (KTH) in Stockholm, where he today holds an adjunct position. Prof. Nilsson has served in a number of management and executive roles in the biotechnology and pharmaceutical industry, mainly within the Pharmacia group of companies. These leading operational positions include roles as public company CEO, President and Vice President. Prof. Nilsson was also for a period of four years Chairman of the Swedish Biotechnology Industry Organization (SwedenBIO). Today, in addition to the IVA presidency, he serves as corporate Board member, including Chairman of the Board of the public biotechnology company BioInvent International AB (OMX Small Cap) and a board director of the engineering company AF (OMX Mid Cap). Prof. Nilsson is also a board and committee member of a number of international, national, governmental and non-governmental organizations in areas such as science, education and innovation. Most notably in 2016, Prof. Nilsson was elected as a member of the Governing Board of the European Institute of Innovation and Technology (EIT) and he served on the Reference Group in preparation of the Research Bill of the Swedish government. Further, he is since March 2016 President of the Swedish Athletic Association.

 Born January 11, 1956 in Sollentuna, Stockholm, Sweden

**Post Graduate Education** September 1976 - September 1981  
 Royal Institute of Technology (RIT, *Swedish: KTH*), Stockholm, Sweden  
 *Degree:* Master of Science in Chemistry, specialized in Biotechnology  
 (*Swedish: Civ.Ing. i Kemi)*

February 1982 - October 1986  
 RIT Graduate school, Dept of Biochemistry, Stockholm, Sweden  
 *Degree:* Ph.D. in Biochemistry (*Swedish: Tekn. D. i Biokemi)*

October 1986 - October 1988  
Post-Doctoral Research Fellowship at Genentech, Inc., Dept of Protein Engineering, South San Francisco, USA

**Positions held**Feb. 1982 - Oct. 1986 Research Assistant (Ph.D. student), RIT, Dept of Biochemistry & Biotechnology, Stockholm, Sweden

Oct. 1986 - Oct. 1988 Post-Doctoral Research Fellow, Department of Protein Engineering, Genentech, Inc., South San Francisco, USA

Nov. 1988 - May 1990 Assistant Professor at RIT (Dept of Biochemistry), Stockholm, Sweden

May 1990 - May 1991 Scientist, Kabi Pharmacia, BioScience Center, Stockholm, Sweden

May 1990 - Adjunct Associate Professor, RIT, Dept of Biochemistry, Stockholm, Sweden

May 1991 - June 1992 Senior Scientist, Kabi Pharmacia BioScience Center, Stockholm, Sweden

June 1992 - October 1996 Head of Structural Biochemistry, Kabi Pharmacia Biopharmaceuticals,  
 Stockholm, Sweden

October 1996 –Dec. 1997 Director of Biology Research, Pharmacia & Upjohn AB, Stockholm, Sweden

Jan. 1998 – June 2001 Global Vice President Protein Area R&D, Vice President R&D Sweden, Amersham Pharmacia Biotech, SE-751 84 Uppsala,  
 Sweden

July 2001 – March 2005 President & Chief Executive Officer,  
 Karo Bio AB, Novum, SE-141 57 Huddinge,  
 Sweden

June 2005 – October 2006 Senior Vice President, Business &  
 Technology Development,  
 Biacore International AB,  
 SE-754 50 Uppsala, Sweden

January 2007 - May 2008 Senior Vice President  
 Corporate Development  
 Biovitrum AB,  
 SE-112 76 Stockholm, Sweden

August 2008 - Professor, President   
 Royal Swedish Academy of Engineering  
 Sciences (IVA)  
 Box 5073  
 10242 Stockholm

**On-going and completed Non-Employment External Assignments**

***Corporate / Foundations***

* Chairman of the Board of the public company *Bioinvent International* (Lund, Sweden) (OMX Small Cap, director since 1999, chairman since 2011-)
* Board Director and member of the Audit Committee of the public company *ÅF* (OMX Mid Cap, Stockholm, Sweden) (2010-)
* Chairman of the Board of the foundation *ÅForsk* (director since 2008, chairman since 2015-) which is the largest shareholder of ÅF
* Chairman of the *Stockholm Science City Foundation* (2015-)
* Member of the Board of the foundation *Stiftelsen Tage Erlanders fond för naturvetenskap och teknik* (2016-)

***Academic / Others***

* Chairman of the *Swedish Athletic Association* (Svenska Friidrottsförbundet, SFIF) (2016-)
* Member of the Governing Board of the *European Institute of Innovation and Technology (EIT)* (2016-)
* Member of the Strategic Board of the *Umea Institute of Design* (2013-)
* Member of the Board of the NGO *SwedNanoTech* (2010-)
* Chairman of the research informatics initiative *SweCRIS* of the *Swedish Research Council* (2010-)
* Board member of the technology group of the *Agency for Strategic Products* (2008-)
* Member of the Board of *EuroCASE*, representing the Royal Swedish Academy of Engineering Sciences, IVA (2008-)
* Member of the Board of the *Royal Swedish Academy of Engineering Sciences (IVA)* (2008-)
* Member of the Board of the NGO *Vetenskap och Allmänhet (“Science and Society”) (VA)* (2008-)
* Member of the Board of the NGO Science Center *Universeum* (2008-)
* Chairman of the Board of the *Protein Technology Center* of Vinnova (“ProNova”) at Royal Institute of Technology (2006-)
* Adjunct Associate Professorship, Department of Biochemistry, RIT  
  (May 1990-)

[NGO means *Non-governmental Organization*]

***Selected Completed Assignments***

* Member of the Government’s reference group in preparation of the *Swedish Research Bill 2016* (2015-2016)
* Member of the Board of the *Swedish Educational Broadcasting Company (UR)* (2013-2016)
* Member of the Executive Committee of *Euro-CASE*, the joint organization of 22 European engineering science academies (2013-2016)
* Member of the Board of *University of Gavle* (2013-2016)
* Chairman of the Board of the *Center for Biomembrane Research* of the Swedish Strategic Research Foundation at Stockholm University (2006-2016)
* Chairman of the Science Working Group of the *Swedish Biotechnology Industry Organization,* SwedenBIO (2006-2008)
* Member of the Board of the *Strategic Research Center of Integrative Recognition in the Immune System* of the Swedish Strategic Research Foundation at Karolinska Institute (2005-2008)
* Board Director of the public company *Diamyd Medical AB* (Stockholm, Sweden) (2005-2007)
* Chairman of the *Swedish Biotechnology Industry Organization,* SwedenBIO (2002-2006)
* Member of the *Board of the Wallenberg Foundation Functional Genomics Program North* (2000-2006)
* Member of the Vinnova Steering group for *National Biotechnology Plan* (2005)
* Board Director of *Karo Bio* (Huddinge, Sweden) (2002-2005)
* Chairman of the Board of the *Structural Biology Program* of the Swedish Strategic Research Foundation (1996-2004)
* Deputy Chairman of Section X (Biotechnology) of the *Royal Swedish  
  Academy of Engineering Sciences* (2001-2003)
* Ph.D. faculty opponent (Royal Institute of Technology, Stockholm) (2003)
* Member of the *Life Science Strategy Group of the* *Swedish Strategic Research Foundation* (2001-2002)
* Member of the *Evaluating Committee of the Biotechnology Program of* the *Swedish Research Council of Engineering Sciences* (TFR) (1998-  
  2002)
* Member of the Board of the *Nanochemistry Program* of the *Swedish Strategic Research Foundation* (1998-2002)
* Member of the Board of the *National Committee for Biophysics* (branch of the *Swedish Royal Academy of Sciences*) (1996-2001)
* Member of “IVA 2000”, a working group within the *Royal Swedish Academy of Engineering Sciences* for the re-engineering of the organisation (2000)
* Member of the *Board of the Stockholm Biomedical Graduate School Program* of the Swedish Strategic Research Foundation (1996-1999)
* Participant of the *Royal Technology Mission* to Canada 1999, Headed by HM King Carl XVI Gustaf
* Member of the *Medicinal Chemistry Committee* of the Swedish Pharmaceutical Society (1996-1998)

 Member of the *Board of the European Synchrotron Research Facility*  
(ESRF) Committee of NFR (1994-1998)

* Member of the Industrial Research Group of the *Royal Swedish Academy of Engineering Sciences* (1995-1997)

 Member of the Board of the *Swedish Chemical Society* ("Kemistsamfundet"), Stockholm Division (1993-1997)

 Member of Board of the *Department of Biochemistry* at the Royal Institute  
of Technology (RIT; KTH) in Stockholm (1994-1997)

* Expert evaluator of the *European Commission for the IV framework* program (Biotechnology) (1996)
* Chairman of the *Molecular Recognition National Planning Group* of the Swedish Strategic Research Foundation (1995)

 Member of the *Medical BioScience Committee* of the Swedish Strategic Research Foundation (1994-1996)

 Member of *NUTEK Biotechnology Committee BoTiS* ("Biologi och Teknik i Samverkan") (1994)

 Member of the *Structural Biology National Planning Group* of the Swedish Strategic Research Foundation (1994)

 Faculty Ph.D. opponent twice (Karolinska Institutet & University of Linköping) (1994)

 Scientific organizer of the *Scheele Symposium* (November 1994)

**Memberships / Others**  Fellow of the *Royal Swedish Academy of Engineering Sciences*  
 (Swedish: Kungl. Ingenjörsvetenskapsakademien, IVA), Section for  
 Biotechnology (1996-)

 Member of the *American Association for the Advancement of Sciences* (AAAS) (1986-)

 Member of the *Protein Society* (1988-)

 Member of the *Swedish Chemical Society* ("Kemistsamfundet") (1992-)

 Member of the *Swedish Pharmaceutical Society* ("Apotekarsocieteten") (1995-)

**Bibliography**Ph.D. Thesis entitled "*Fusions to the gene encoding staphylococcal protein A"*  (Royal Institute of Technology, Stockholm, 1986,  
 ISBN 91-7170-997-5), 63 full scientific papers and 8 patents.

**Recognition Awards**  Post-Doc Fellowship award from *the Swedish Research Council of Engineering Sciences* (TFR) (1986-1988)

 *Genentech Recognition Award* (1988)

 *Pharmacia & Upjohn Science and Medicine Award* (1996)  
  
  Recipient of a *Bulgarian presidential award* (2016)

 Recipient of *H.M. The King of Sweden's Medal of the 8th size with the  
 ribbon of the Order of the Seraphim* (2016)

**Supervision of graduate students:**  Helena Rohndal, Ph.D. 1994

 Sophia Hober, Ph.D. 1997

 Magnus Jansson, Ph.D. 1998

 Lena Jendeberg, Ph.D. 1998

**Bibliography**

***Full scientific papers:***

1. Uhlén, M., Nilsson, B., Guss, B., Lindberg, M., Gatenbeck, S. & Philipson, L. "Gene fusion vectors based on Staphylococcal Protein A"(1983)*Gene* **23**, 369-378.

2. Nilsson, B., Uhlén, M., Josephson, S., Gatenbeck, S. & Philipson, L. "An improved positive selection vector constructed by oligonucleotide mediated mutagenesis” (1983)*Nucleic Acids Research* **11**, 8019-8030.

3. Uhlén, M., Guss, B., Nilsson, B., Gatenbeck, S., Philipson, L. & Lindberg, M. "Complete sequence of Staphylococcal Protein A-A gene evolved through multiple duplications" (1984)*J. Biol. Chem.* **259**, 1695-1702.

4. Guss, B., Uhlén, M., Nilsson, B., Lindberg, M., Sjöquist, J. & Sjödahl, J. "Region X, the cell wall attachment part of Staphylococcal Protein A"(1984)*Eur. J. Biochem.* **138**, 413-420.

5. Uhlén, M., Guss, B., Nilsson, B., Götz, F. & Lindberg, M. "Expression of the cloned Staphylococcal gene encoding Protein A in *Staphylococcus aureus* and coagulase negative *Staphylococci*"(1984) *J. Bacteriol.* 159, 713-719.

6. Nilsson, B., Holmgren, E., Josephson, S., Gatenbeck, S. & Uhlén, M. "Efficient secretion and purification of human insulin-like growth factor I with a gene fusion vector in *Staphylococci*" (1985)*Nucleic Acids Research* **13**, 1151-1162.

7. Olsson, A., Hagström, T., Nilsson, B., Uhlén, M & Gatenbeck, S. "Molecular cloning of the *Bacillus sphaericus* penicillin V amidase gene and its expression in *Escherichia coli* and *Bacillus subtilis*" (1985) *Appl. Env. Microbiol*. **49**, 1084-1092.

8. Nilsson, B., Abrahmsén, L. & Uhlén, M. "Immobilization and purification of enzymes with Staphylococcal Protein A gene fusion vectors"(1985)*EMBO J.* **4**, 1075-1081.

9. Uhlén, M., Nilsson, B., Holmgren, E., Josephson, S., Guss, B. & Lindberg, M. "Expression of foreign genes in *Staphylococcus aureus*" *In:* Staphylococci and Staphylococcal Infections (ed. J. Jeljaszewicz), Gustav Fischer Verlag, Stuttgart, 577-582 (1985)

10. Lindberg, M., Guss, B., Nilsson, B., Götz, F. & Uhlén, M. "Expression of the cloned gene for Staphylococcus Protein A" *In:* Staphylococci and Staphylococcal Infections (ed. J. Jeljaszewicz), Gustav Fischer Verlag, Stuttgart, 583-588 (1985)

11. Abrahmsén, L., Moks, T., Nilsson, B., Hellman, U. & Uhlén, M. "Analysis of the signals for secretion in the Staphylococcal Protein A gene"(1985) *EMBO J.* **4**, 3901-3906.

12. Moks, T., Abrahmsén, L., Nilsson, B., Hellman, U., Sjöquist, J. & Uhlén, M. "Staphylococcal Protein A consists of five IgG-binding domains"(1986) *Eur. J. Biochem.* **14**, 7487-7500.

13. Abrahmsén, L., Moks, T., Nilsson, B. & Uhlén, M. "Secretion of heterologous gene products to the culture medium of *Escherichia coli*" (1986) *Nucleic Acids Research* **14**, 7487-7500.

14. Löwenadler, B., Nilsson, B., Abrahmsén, L., Moks, T., Ljungqvist, L., Holmgren, E., Paleus, S., Josephson, S., Philipson, L. & Uhlén, M. "Production of specific antibodies against Protein A fusion proteins"(1986)*EMBO J.* **5**, 2393-2398.

15. Nilsson, B., Moks, T., Jansson, B., Abrahmsén, L., Elmblad, A., Holmgren, E., Henrichson, C., Jones, T.A. & Uhlén, M. "A synthetic IgG-binding domain based on Staphylococcal Protein A"(1987)*Protein Engineering* **1**, 107-113.

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***Ph.D. Thesis*** Nilsson, B. "Fusions to the gene encoding Staphylococcal Protein A" (1986)Royal Institute of Technology, Stockholm, ISBN 91-7170-997-5.

***Patent applications***P1. Olsson, A., Nilsson, B., Uhlén, M. & Gatenbeck, S. "Recombinant DNA molecule, transformed microorganism and process for producing penicillin V amidase" Swedish patent application 8403929-6 (in addition applications in USA, Japan and Germany).

P2. Abrahmsén, L., Moks, T., Nilsson, B. & Uhlén, M. "A method to export gene products to the growth medium of Gram negative bacteria" Swedish patent application 8505921-0 (in addition applications in USA, Japan and Europa).

P3. Abrahmsén, L., Moks, T., Nilsson, B. & Uhlén, M. "Construction of an IgG-binding protein to facilitate downstream processing using protein engineering" Swedish patent application 8505922-8 (in addition applications in USA, Japan and Europa).

P4. Nilsson, B., Uhlén, M., Löwenadler, B. & Holmgren, E. "Preparation of fused proteins, antibodies and process thereof" Swedish patent application 8601940-3 (in addition applications in USA, Japan and Europa).

P5. Enfors, S.-E., Köhler, K., Ljungquist, C., Nilsson, B. & Veide, A. "A method for isolating and purifying peptides and proteins" Swedish patent application 9003534-6 (in addition applications in USA, Japan and Europa).

P6. Sirtori, C., Franceschi, G., Abrahmsén, L., Holmgren, E., Lake, M., Lind, P. & Nilsson, B. "Apolipoprotein" Swedish patent application 9103701-0 (in addition applications in USA, Japan and Europa).

P7. Hober, S. & Nilsson, B. "Use of Insulin-like Growth Factor (IGF) Binding Protein to promote correct folding of IGF-I" Swedish patent application 9303784-4 (in addition applications in USA, Japan and Europa).

P8. Nilsson, B., Nygren, P.-Å. & Uhlén, M. "Bacterial Receptor Structures" International patent application PCT/SE 95/00034

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