

CURRICULUM VITAE

Name : BORST, Piet
Present position : Staff member of The Netherlands Cancer Institute
Birth date : July 5th, 1934
Birth place : Amsterdam, The Netherlands
Nationality : Dutch
Sex : Male
Married to : Jinke C.S. Houwing (since 1957)
Children : Sophie Regine (born 1960)
: Jacob Gerard Gerbrant (born 1961)
: David Wessel Marc (born 1966)
Home address : Meentweg 87, 1406 KE Bussum
Telephone : 035-691 4453 (home)
Work address : The Netherlands Cancer Institute
Plesmanlaan 121, 1066 CX Amsterdam, The Netherlands
teleph.*31-20-512 2087; fax *31-20-669 1383; e-mail: p.borst@nki.nl

Education:

1946-1952 Barlaeus Gymnasium, Amsterdam
1952-1958 &
1961-1962 Medical studies, University of Amsterdam
1958-1961 Trained as biochemist in the Laboratory of Physiological Chemistry (now Laboratory of Biochemistry), University of Amsterdam, under the supervision of Prof. E.C. Slater
1961 PhD (cum laude), University of Amsterdam
1963 MD, University of Amsterdam
1963-1964 Additional training in molecular biology in the Biochemistry Department of New York University under the supervision of Prof. S. Ochoa.

Major research interests: Gene expression in eukaryotes; biogenesis of cell organelles; antigenic variation in trypanosomes; multidrug resistance in cancer cells; the function of ABC-transporters; DNA base J in trypanosomatids.

Positions held:

1958-1961 Research assistant, Laboratory of Biochemistry, UvA *
1963-1964 Post-doctoral research fellow, Biochemistry Department, New York University
1964 Senior Research assistant, Laboratory of Biochemistry, UvA
1965-1969 Associate-professor of Physiological Chemistry, UvA
1966-1983 Head of the Section for Medical Enzymology, Laboratory of Biochemistry, UvA (since 1973 named Section for Medical Enzymology and Molecular Biology)
1969-1974 Professor of Physiological Chemistry, UvA
1972-1980 Director of the Institute of Animal Physiology, UvA
1974-1983 Professor of Biochemistry and Molecular Biology, UvA
1979-1981 Chairman of the Laboratory of Biochemistry, UvA
1983-1999 Research Director of the Netherlands Cancer Institute, Amsterdam
1983-2005 Extraordinary Professor of Clinical Biochemistry, UvA (part time)
1987-1999 Chairman Board of Directors of The Netherlands Cancer Institute -Antoni van Leeuwenhoek Hospital, Amsterdam
1999- Staff member of The Netherlands Cancer Institute

* UvA = University of Amsterdam

Major awards

- 1963 Rockefeller Foundation Fellowship
- 1981 Royal Dutch/Shell-prize for the Life Sciences (Netherlands)
- 1984 Paul-Ehrlich und Ludwig-Darmstaedter Prize, Germany (shared with Prof. George Cross)
- 1984 F.M.V.V. Prize of the Dutch Federation of Medical Scientific Societies
- 1989 Howard Taylor Ricketts Award of the University of Chicago, USA
- 1990 Dr. G. Wander award of the Wander Foundation in Bern, Switzerland
- 1990 Gold medal of the Genootschap voor Natuur-, Genees- en Heelkunde in Amsterdam
- 1992 Dr. H.P. Heineken prize for biochemistry and biophysics of the Royal Netherlands Academy of Sciences
- 1992 Gold medal of the Robert Koch Foundation in Cologne, Germany
- 1993 Prof.dr P. Muntendam prize of the Dutch Cancer Society
- 1999 Commander in the Order of the Dutch Lion, Amsterdam
- 1999 Silver Medal of merit of the City of Amsterdam
- 1999 Medal of the University of Amsterdam for exceptional contributions to the university
- 2000 Hamilton Fairley Award for Clinical Research, European Society for Medical Oncology, Hamburg.
- 2003 Honorary degree of Leiden University
- 2007 The distinguished Service Award, awarded at the Miami Nature Biotechnology Winter Symposium, Miami Beach, Florida, USA.
- 2007 Honorary Commander of the British Empire (CBE)
- 2007 Honorary degree (Doctor of Laws) of the University of Dundee, Scotland
- 2010 Gebroeders Bruinsma Erepenning of the Nederlandse Vereniging tegen de Kwakzalverij, Amsterdam.

Membership of academies

- 1978 Royal Netherlands Academy of Arts and Sciences
- 1983 Hollandsche Maatschappij der Wetenschappen (the second Dutch academy)
- 1986 Foreign member of the Royal Society of Great Britain
- 1989 Academia Europaea
- 1991 Foreign associate National Academy of Sciences, Washington, U.S.A.
- 1995 Foreign honorary member of the American Academy of Arts and Sciences, U.S.A.
- 2009 Fellow of the European Academy of Cancer Sciences

Lectures at (recent) major symposia, special lectureships, etc.

- 2010 3rd FEBS Special Meeting: “ATP-binding Cassette (ABC) Proteins from Multidrug Resistance to Genetic Diseases, lecture: “The contribution of ABC transporters to drug resistance in a realistic mouse mammary tumor model”, Innsbruck, Austria, March 1.
- 2010 AACR Conference “Translational Cancer Medicine 2010 (Europe)”, lecture: “Resistance to targeted therapies in a realistic mouse breast cancer model”, Amsterdam, The Netherlands, March 24.
- 2010 ASPET Symposium “ABC Transporters, their role in Physiology, Toxicology, and Cancer”. Lecture: “The Contribution of ABC Transporters to Drug Resistance in a Realistic Mouse Mammary Tumor Model”, Anaheim, USA, April 27.
- 2010 “12th European Workshop on Cytogenetics and Molecular Genetics of Solid Tumors (EWCMTS). Lecture: “The contribution of ABC-transporters to drug resistance in a realistic mouse mammary tumor model”, Nijmegen, The Netherlands, June 6.
- 2011 13th National Longcancer Symposium; lecture: “Healthy doubts”, January 21.
- 2011 ErasmusMC, Rotterdam, 15th Mol. Medicine Day, keynote lecture: “Sharp practices, cutting corners, and other unsavoury practices in biomedical research”, Februari 3.
- 2011 4th kinetoplastid Mol. Cell Biol. Meeting, EMBL, Woods Hole, “Base J, history, distribution, biosynthesis and function”, April 8-12.
- 2011 Gordon Conf, Les Diablerets, Switzerland: lecture “Drug Transport Mechanisms and Role of Drug Transporters in Resistance and Survival”, June 12-17.
- 2011 The EMBO Meeting, Vienna: lecture “Base J is required for proper termination of RNA polymerase II transcription”, September 10-13.

- 2011 IMM talk, Lisbon; lecture: "DNA base J (glucosyl-hydroxymethyluracil); biosynthesis and essential role in transcriptional termination in Leishmania", October 10.
- 2012 AMC, Hugo Heijmans lecture: "Cancer: the struggle with residual disease and multidrug resistance", February 16.
- 2012 FEBS ABC2012, Innsbruck, Austria: lecture "Diversity of ABC Transporter Function", March 3-9.
- 2012 TROP Farewell Symposium, Brussel: lecture: "From glycosome to base J; never a dull day", June 8.
- 2012 George Cross retirement symposium: "From antigenic variation to base J; never a dull day", Cambridge, UK, July 5-7.
- 2012 Rockefeller symp. G. Cross retirement, lecture: "From antigenic variation in trypanosomes to base J in Leishmania", September 20.
- 2012 XXVIII Annual Meeting of the Brazilian Society of Protozoology / XXXIX Annual Meeting on Basic Research in Chagas' Disease. Lecture "From antigenic variation in trypanosomes to base J in Leishmania" in Caxambu, Minas Gerais, Brasil, October 1-3.
- 2012 10th French-Belgian ABC Meeting, lecture: "Finding physiological functions of drug transporters using KO mice, LC-MS and transportomics", Brussels, BE, October 19.
- 2013 Gordon Research Conference. Lecture "Importance of Multidrug Efflux Systems", Ventura USA, March 17-22.
- 2014 2nd Young Faculty Network Symposium; LUMC, Leiden: "Bumps and potholes in the road to success". February 6
- 2014 5th FEBS Special Meeting on ATP-Binding Cassette (ABC) Proteins: From Multidrug Resistance to Genetic Diseases, Innsbruck, Austria. March 8-14.
- 2014 Seattle Parasitology Conference, Seattle, US: "From antigenic variation in tryps to DNA base J: never a dull day". May 7 -10.
- 2014 MNR; BMFZ-Colloquium, Dusseldorf, DE: "How cancer cells become drug resistant". June 4-6
- 2014 PXE 2014 Biennial Research Meeting, Bethesda USA: "How an erroneous hypothesis in the end led to the solution of the PXE mystery". September 22-23
- 2014 NTvG dag, Amsterdam: (Medische nieuws, waan of waar?) "Wetenschap en media". November 1
- 2014 CALN annual meeting NKI: "Cancer therapy: new possibilities and new setbacks". November 15
- 2015 SNSF meeting, Bern Switzerland. Lecture "What KO mice have taught us about ABC-transporters, focussing on novel substrates of ABCC5". January 21-24
- 2015 ErasmusMC: Course Basic & Translational Oncology. Lecture "Drug resistance", February 5.

Editorial functions:

- 1972-1982 Editor Biochimica et Biophysica Acta
- 1978-1983 Editor Plasmid
- 1979-1988 Advisory Editor International Review of Cytology
- 1980- Advisory Editor Laboratory Techniques in Biochemistry and Molecular Biology
- 1981-1983 Editor EMBO Journal
- 1982-1987 Managing Editor Biochimica et Biophysica Acta
- 1983-1988 Associate Editor of Cell
- 1985-2010 Editor Trends in Genetics
- 1986-1988 Member Editorial Board of Nucleic Acids Research
- 1986-2007 Member Editorial Board of Molecular and Biochemical Parasitology
- 1989-1992 Editor The New Biologist
- 1990-2009 Member Editorial Board Current Opinion in Genetics and Development
- 1990-1995 Advisory Editor European Journal of Cancer
- 1993-1999 Member Board of Reviewing Editors Science
- 1993-1996 Member Editorial Board The FASEB Journal
- 1993- Columnist NRC Handelsblad
- 1997- Member Editorial Board Drug Resistance Updates
- 1999-2010 Member Genome Biology Advisory Board.
- 2000-2004 Member Editorial Board Proc. Natl. Academy of Sciences, USA

Membership of international professional organizations

- 1974- Member European Molecular Biology Organization (EMBO)
- 1986- Member American Association for Cancer Research

Major Dutch advisory and organizational functions

- 1973-1977 Member FUNGO council
- 1977-1979 Member of the "Commissie belast met het Toezicht op de Genetische Manipulatie" (The Dutch Recombinant Advisory Committee)
- 1978-1983 Member Selection Committee Beyerinck Medal
- 1978-1983 Member Selection Committee Dr. H.P. Heineken Prize
- 1979-1982 Member of the ad-hoc Committee Recombinant DNA (the Dutch Recombinant Advisory Committee)
- 1981-1984 Member Evaluation Committee Biotechnology of the Dutch Organization for the Advancement of Pure Research (ZWO)
- 1981-1987 Member of the Scientific Council of the Royal Academy for the Fight Against Cancer
- 1989-1992 Member of the Medical Research Council of the Netherlands Scientific Research Organisation (NWO-gebiedsbestuur voor de medische wetenschappen)
- 1996 Member of the International Evaluation Committee Dutch Research Councils (NWO)
- 1999-2009 Member Board Sylvania Tóth Foundation
- 2000-2001 Member "Committee Knowledge/Infrastructure Genomics" to advise the Minister of Economic Affairs (Economische Zaken) and Education, Culture and Science (OC &W)
- 2001-2002 Health Council Committee on stem cells for transplantation (Gezondheidsraad); chairman
- 2005 Member NWO Taskforce National Programme for Investments in Large Scale Research Facilities 2005
- 2007-2010 Member "Innovation Platform", a small think tank chaired by the Dutch prime-minister
- 2007-2012 Member Comité van Aanbeveling Wetenschapsoriëntatie Nederland (WON)
- 2008- Member Advisory Board Bionanoscience, Delft
- 2013- Member Supervisory Board Stichting Vrienden van het Herseninstituut

Major international scientific and organizational functions

- 1978-1984 Elected Member EMBO Council (1982-1984 vice chairman)
- 1985-1991 Member of the Scientific Advisory Committee of the EMBL, Heidelberg (1988-1991, chairman)
- 1985-1990 Member of the Scientific Advisory Committee Basel Institute for Immunology
- 1986-1993 Member Scientific Advisory Board Research Institute of Molecular Pathology, Vienna
- 1991-2004 Member of the Scientific Committee of the Foundation Louis Jeantet, Genève (since 1997 president)
- 1992-1998 Member of the Scientific Committee of the Swiss Institute for Experimental Cancer Research (ISREC), Epalinges/Lausanne
- 1994-2000 Member of the Scientific Advisory Committee of the Imperial Cancer Research Fund, London
- 1999-2005 Member Scientific Advisory Board of the Zentrum für Molekulare Biologie, Heidelberg
- 2000-2005 Member External Scientific and Strategic Committee (CEOSS) Institut Pasteur, Paris (since 2004 chairman)
- 2000-2006 Member Supervisory Board Schering A.G., Berlin
- 2004-2008 Chairman Scientific Advisory Board Fritz-Lipmann Institut (formerly IMB), Jena
- 2005-2012 Member Science Advisory Group London Research Institute Lincoln's Inn Fields Laboratories,
- 2005-2012 Member Board of Scientific Governors of The Scripps Research Institute, USA.

2013- Member SAB of the European Research Institute for the Biology of Ageing (ERIBA), Groningen.

Search committees directors international institutes

2004-2005 Research Institute of Molecular Pathology (IMP), Vienna (chair)

2005 Institut Pasteur, Paris

2006-2007 Fritz-Lipmann Institut (formerly IMB), Jena (chair)

2009 Fritz-Lipmann Institut (formerly IMB), Jena (chair)