

CURRICULUM VITAE



Name: Dr. Jan Wijnholds

The Netherlands Institute for Neurosciences (NIN)
Het Nederlands Instituut voor Neurowetenschappen (NIN)
Royal Netherlands Academy of Arts and Sciences (KNAW)
Meibergdreef 47
1105 BA Amsterdam
The Netherlands
Tel. +31-20-5664597
Fax. +31-20-5666121
e-mail : j.wijnholds@nin.knaw.nl

Date of birth: March 19th, 1960

Place of birth: Vlagtwedde, The Netherlands

Languages: Dutch, English, German

Short bibliographic sketch

Dr. Wijnholds received his M.Sc. and doctoral degree from the University of Groningen in The Netherlands. He was a postdoctoral fellow in the laboratories of Peter Gruss at the Max Planck Institute for Biophysical Chemistry, Göttingen, and Piet Borst at the Netherlands Cancer Institute, Amsterdam, The Netherlands. Dr. Wijnholds has been principle investigator at the Netherlands Institute for Neuroscience, Netherlands Ophthalmic Research Institute, since 2000, serves as coordinator of a European research consortium, and coordinator of a ZonMw Gene Therapy program.

Research Interests

Neuroscience

Visual Science
Developmental Biology
Retinal progenitor cell biology
Cancer research

Jan Wijnholds uses mouse reverse genetics to study retinal degeneration in e.g. retinitis pigmentosa (RP), Leber congenital amaurosis (LCA), and the function of cell polarity proteins in retinal and neuro-degeneration. Development of cures (gene therapy and retinal progenitor cell transplantation) for LCA and RP are amongst the major aims.

Education and training

1981-1987	University of Groningen, Chemistry Study Specialization in biochemistry 8 months Molecular Genetics Laboratory (Prof. Dr. G. Venema) 1 year Biochemistry Laboratory (Prof. Dr. M. Gruber, Dr. G. AB)
1987	M.Sc. degree in chemistry, biochemistry (cum laude)
1987-1992	Researcher and Ph. D. student in the group of Dr. G. AB, University of Groningen
7/1990-11/1990	First 3½ month EMBO short-term fellowship in the group of Prof. Dr. F. Grosveld, National Institute for Medical Research, London, England.
May 31, 1991	Dr. degree in chemistry, specialization in biochemistry
10/1991-1/1992	Second 3½ month EMBO short-term fellowship in the group of Prof. Dr. F. Grosveld, National Institute for Medical Research, London, England.
2/1992-6/1995	Post-doctoral fellow, Max-Planck-Society fellowship, in the group of Prof. Dr. P. Gruss, Max-Planck-Institute for Biophysical Chemistry, Department of Molecular Cell Biology, Goettingen, Germany.
7/1995-2/2000	Post-doctoral fellow financed by the Dutch Cancer Society, in the group of Prof. Dr. P. Borst, The Netherlands Cancer Institute, Amsterdam, The Netherlands.
3/2000-1/2008	Honorary academic staff member and co-KWF project leader at The Netherlands Cancer Institute to collaborate with Prof. Dr. Piet Borst on Multidrug Resistance Proteins.
3/2000-1/2006	Head of Neuromedical Genetics, principal investigator and permanent staff member at the Netherlands Ophthalmic Research Institute (NORI, IOI), The Royal Netherlands Academy of Arts and Sciences (KNAW). Topics: Retinal degeneration and control of cell polarity. Elucidation of the molecular mechanisms underlying CRB1-associated blindness.

- 9/2000 Initiator and scientific research coordinator of EC Crumbs consortium consisting of six German, French, United Kingdom, Dutch, and Italian research groups.
- 2/2003 Additional task: Biological safety manager (levels MLI-III, DMI-II) at NORI – NIBR, NIN.
- 1/2006- Head of Neuromedical Genetics, principal investigator and permanent staff member at the Netherlands Institute for Neurosciences (NIN), The Royal Netherlands Academy of Arts and Sciences (KNAW).

Honors:

- I) EMBO short term Fellowship for 3 months at the NIMR, London (1991)
- II) EMBO short term Fellowship for 3 months at the NIMR, London (1992)
- III) Max Planck Fellowship (1992-1995)
- IV) Honorary staff member Netherlands Cancer Institute (2000-2008)

Other management tasks:

- 2000 - 2008 Honorary staff member Netherlands Cancer Institute, Amsterdam
- 2002 – 2006 Member management team NORI
- 2006 - Member team leaders meeting NIN
- 2002 - 2005 Coordinator European Crumbs Therapeutics consortium
- 2006 - 2012 Coordinator ZonMw Gene Therapy Program
- 2008 - 2012 Coordinator European Crumbs In Sight consortium
- 2008 Co-organizer International Summer School of Brain Research

Grants obtained as principle investigator:

- I) 2000: KWF project grant (496 k€ at NKI) for a postdoc & technician at the NKI for 4 years (2002-2006)
- II) 2000: Established an independent research group at the NORI, funding for 1 technician and 1 Ph.D. student.
- III) 2001: ZonMw / NWO project grant (500 k€ of which 295 k€ for JW), for 2 postdocs at the NORI for 2 and 3 years, respectively. Coördinator: Jan Wijnholds.
- IV) 2002: EC RTD project grant (2000 k€ of which 540 k€ for JW) of in total 6 applicants from 5 European countries. Research funding for 2 postdocs at the NORI for 3 years each. EC research and financial coördinator: Jan Wijnholds.
- V) 2002: NWO van Gogh French-Dutch scientific exchange program (9 k€) together with Dr. André Le Bivic (CNRS, Marseille, France).
- VI) 2004: Blindness funds grants (RVB, ANVtVB, OOG, LSVB; 120 k€). Research funding for a PhD student at NORI for 4 years.
- VII) 2004: Blindness funds grants (RVB, OOG; 10 k€). Additional research funding for a PhD student at NORI for 6 months.

- VIII)** 2005: ZonMw / NWO program grant Gene Therapy (1400 k€). Research funding for a postdoc, technician and bench fee at the NIN for 6 years. Research coördinator: Jan Wijnholds.
- IX)** 2007: EC RTD project grant (3000 k€ of which 838 k€ for JW) of in total 6 applicants from 5 European countries. Research funding for 1 postdoc and 1 PhD student at the NIN for 4 years each. EC research and financial coördinator: Jan Wijnholds.
- X)** 2007: Blindness funds grants (RVB, LSVB, GSB, BP; ANVVB, SB, S.B-P; 100 k€). Research funding for a senior postdoc at NIN for 1 year (Dr. W.M. Aartsen).
- XI)** 2008: Blindness funds grants (LSVB, BH; StOOG, RVB; 70 k€). Research funding for a junior researcher at NIN for 18 months.

Post-academic courses

- | | |
|---------------|--|
| 2002 (4 days) | Management training “Sturen in samenwerking” by GITP |
| 2003 (6 days) | Management training “Leergang leidinggeven” by GITP |

Selection of Congresses and Meetings:

Symposia in Keystone (USA, UCLA) April 1988; New York (USA, CSH) September 1989; Sorrento (Italy, IRBM) June 1991; Lunteren (The Netherlands, SON) December 1989; Lunteren (The Netherlands, SON) December 1991; Ringberg (Germany, Max Planck Society) December 1992; Manchester (England) April 1993; Ringberg (Germany, Max Planck Society) December 1993; Heraklion (Greece, EU), April 1994; Thousand Oaks (Amgen Inc. USA) 1994; Ringberg (Germany, Max Planck Society), December 1994; Lunteren (The Netherlands, SON) May 1997; Berlin (Germany, Max Planck Society) December 1997; Amsterdam (Netherlands Cancer Institute) September 1998; Philadelphia (AACR, 1999); London (Novartis Foundation Symposium) April 2001; Goettingen (Germany, Max Planck Society) May 2002; Dresden (Germany, ELSO) 2003; Glasgow (U.K., Bioscience 2004); Fort Lauderdale (ARVO, 2005); Fort Lauderdale (ARVO, 2006); Roscoff (Conferences Jacques-Monod, 2006), Cambridge (ISOCB, 2006), Monaco (Euretina, 2007), San Diego (SfN, 2008), Munich (Max Planck Society, 2007), San Diego (ISOCB, 2008), Potsdam (Retina Meeting, 2008).

Crumbs consortium meetings in Amsterdam (2001), Duesseldorf (2002), Nijmegen (2002), Marseille (2003), Milan (2003), Sheffield (2004), Amsterdam (2004), Marseille (2005), Duesseldorf (2005), Marseille (2006), Amsterdam (2006), Sheffield (2007), Dresden (2007), Marseille (2008), Amsterdam (2008).

Publications:

52. de Wolf,C., Jansen,R., Yamaguchi,H., de Haas,M., van de Wetering,K., Schinkel,A., Wijnholds,J., Beijen,J., Borst,P. (2008) Contribution of the drug transporter ABCG2 (Breast Cancer Resistance Protein) to resistance against anti-cancer nucleosides. **Molecular Cancer Therapeutics**, In Press.
51. Van de Pavert,S.A., Sanz Sanz,A., Aartsen,W.M., Vos,R.M., Versteeg,I., Beck,S.C., Klooster,J., Seeliger,M.W., and Wijnholds,J. (2007) Crb1 is a determinant of retinal apical Mueller glia cell features. **Glia** 55(14):1486-97.
50. Van de Pavert,S.A., Meuleman,J., Malysheva,A., Aartsen, W.M., Versteeg,I., Tonagel, T., Kamphuis, W., McCabe, C.J., Seeliger,M.W., and Wijnholds,J. (2007). A single amino acid substitution (Cys249Trp) in the sixth epidermal growth factor (EGF) domain of Crb1 causes retinal degeneration and deregulates expression of Pituitary tumor transforming gene 1 (Pttg1). **J. Neurosci.**, 27:564-573.
49. de Wolf,C.J.F., Yamaguchi,H., van der Heijden,I., Wielinga,P.R., Hundscheid,S.L., Ono,N., Scheffer,G.L., de Haas,M., Schuetz,J.D., Wijnholds,J., and Borst,P. (2007). cGMP transport by vesicles from human and mouse erythrocytes. **FEBS J.**, 274:439-450.
48. Gavarini,S., Becamel,C., Altier,C., Lory,P., Poncet,J., Wijnholds,J., Bockaert,J., and Marin,P. (2006) Opposite effects of PSD-95 and MPP3 PDZ proteins on serotonin 5-HT_{2C} receptor desensitization and membrane stability. **Mol. Biol. Cell**, 17: 4619-4631.
47. van Rossum,A.G., Aartsen,W.M., Meuleman,J., Klooster,J., Malysheva,A., Versteeg,I., Arsanto,J.-P., Le Bivic,A., and Wijnholds,J. (2006). Pals1/Mpp5 is required for correct localization of Crb1 at the sub-apical region in polarized Müller glia cells. **Hum. Mol. Genet.**, 15 :2659-72.
46. Richard,M., Roepman,R., Aartsen,W.M., van Rossum,A.G., den Hollander,A.I., Knust,E., Wijnholds,J., and Cremers,F.P. (2006). Towards understanding CRUMBS function in retinal dystrophies. **Hum. Mol. Genet.**, 15: R235-R243.
45. Aartsen,W.M., Kantardzhieva,A., Klooster, J., van Rossum,A.G. van de Pavert,S.A., Versteeg,I., Nunes Cardozo,B., Tonagel,F., Beck,S.C., Tanimoto,N., Seeliger,M.W., and Wijnholds,J. (2006). Mpp4 recruits Psd95 and Veli3 towards the photoreceptor synapse. **Hum. Mol. Genet.**, 15:1291-302.
44. Kantardzhieva,A., Alexeeva,S., Versteeg,I., and Wijnholds,J. (2006) MPP3 is recruited to the MPP5 protein scaffold at the retinal outer limiting membrane. **FEBS J.** 273:1152-1165.

43. Minich,T., Riemer,J., Schultz,J.B., Wielinga,P., Wijnholds,J., and Dringen,R. (2006) The multidrug resistance protein 1 (Mrp1), but not Mrp5, mediates export of glutathione and glutathione disulfide from brain astrocytes. **J. Neurochem.**, 97:373-384.
42. Zelcer,N., van de Wetering,K., de Waart,R., Scheffer,G., Marschall,H.U., Wielinga,P., Kuil,A., Kunne,C., Smith,A., van der Valk,M., Wijnholds,J., Oude Elferink,R. and Borst,P. (2006). Mice lacking Mrp3 (Abcc3) have normal bile salt transport, but display altered hepatic transport of endogenous glucuronides. **J. Hepatology**, 44:768-75.
41. Seeliger,M.W., Beck,S., Pereyra-Muñoz,N., Dangel,S., Tsai,J.-Y., Luhmann,U., van de Pavert,S., Wijnholds,J., Samardzija,M., Wenzel,A., Zrenner,E., Fahl,E., Tanimoto,N., Acar,N., and Tonagel,F. (2005). *In vivo* confocal imaging of the retina in animal models using scanning laser ophthalmoscopy. **Vision Res.** 45:3512-9.
40. Michel,D., Arsanto,J.P., Massey-Harroche,D., Beclin,C., Wijnholds,J., and Le Bivic,A. (2005). PATJ connects and stabilizes apical and lateral components of tight junctions in human intestinal cells. **J.Cell Sci.** 118:4049-57.
39. Kantardzhieva,A., Gosens,I., Alexeeva,S., Punte,I.M., Versteeg,I., Krieger,E., Neefjes-Mol,C.A., den Hollander,A.I., Letteboer,S.J.F., Klooster,J., Cremers,F.P.M., Roepman,R. and Wijnholds,J. (2005). MPP5 recruits MPP4 to the CRB1 complex in photoreceptors. **Invest Ophthalmol Vis Sci** 46:2192-201.
38. Wielinga,P., Hooijberg,J.H., Gunnarsdottir,G., Kathmann,I., Reid,R., Zelcer,N., van der Born,K., de Haas,M., van der Heijden,I., Kaspers,G., Wijnholds,J., Jansen,G., Peters,G., and Borst,P. (2005). The human multidrug resistance protein MRP5 transports folates and can mediate cellular resistance against antifolates. **Cancer Research** 65:4425-30.
37. Meuleman,J., van de Pavert,S., and Wijnholds,J. (2004). Crumbs homologue 1 in polarity and blindness. **Biochem. Soc. Trans.**, 32, 828-830.
36. van de Pavert,S., Kantardzhieva,A., Malysheva,A., Meuleman,J., Versteeg,I., Levelt,C., Klooster,J., Geiger,S., Seeliger,M., Rashbass,P., Le Bivic,A., and Wijnholds,J. (2004). Crumbs homologue 1 is required for maintenance of photoreceptor cell polarization and adhesion during light exposure. **J. Cell Sci.** 117, 4169-4177.
35. Borst,P., Balzarini,J., Ono,N., Reid,G., de Vries,H., Wielinga,P., Wijnholds,J., and Zelcer,N. (2004). The potential impact of drug transporters on nucleoside-analog-based antiviral chemotherapy. **Antiviral Res.** 62, 1-7.
34. Hu,X., Plomp,A., Wijnholds,J., Ten Brink,J., van Soest,S., van den Born,L.I., Leys,A., Peek,R., de Jong,P.T., and Bergen,A.A. (2003a). ABCC6/MRP6

mutations: further insight into the molecular pathology of pseudoxanthoma elasticum. **Eur. J. Hum. Genet.** *11*, 215-224.

33. Hu,X., Plomp,A.S., van Soest,S., Wijnholds,J., de Jong,P.T., and Bergen,A.A. (2003b). Pseudoxanthoma elasticum: a clinical, histopathological, and molecular update. **Surv. Ophthalmol.** *48*, 424-438.
32. Reid,G., Wielinga,P., Zelcer,N., de Haas,M., Van Deemter,L., Wijnholds,J., Balzarini,J., and Borst,P. (2003a). Characterization of the transport of nucleoside analog drugs by the human multidrug resistance proteins MRP4 and MRP5. **Mol. Pharmacol.** *63*, 1094-1103.
31. Reid,G., Wielinga,P., Zelcer,N., van,d.H., I, Kuil,A., de Haas,M., Wijnholds,J., and Borst,P. (2003b). The human multidrug resistance protein MRP4 functions as a prostaglandin efflux transporter and is inhibited by nonsteroidal antiinflammatory drugs. **Proc. Natl. Acad. Sci. U.S.A.** *100*, 9244-9249.
30. Wielinga,P.R., van,d.H., I, Reid,G., Beijnen,J.H., Wijnholds,J., and Borst,P. (2003). Characterization of the MRP4- and MRP5-mediated transport of cyclic nucleotides from intact cells. **J. Biol. Chem.** *278*, 17664-17671.
29. Wielinga,P.R., Reid,G., Challa,E.E., van,d.H., I, Van Deemter,L., de Haas,M., Mol,C., Kuil,A.J., Groeneveld,E., Schuetz,J.D., Brouwer,C., De Abreu,R.A., Wijnholds,J., Beijnen,J.H., and Borst,P. (2002). Thiopurine metabolism and identification of the thiopurine metabolites transported by MRP4 and MRP5 overexpressed in human embryonic kidney cells. **Mol. Pharmacol.** *62*, 1321-1331.
28. Wijnholds,J. (2002). Drug resistance caused by multidrug resistance-associated proteins. **Novartis. Found. Symp.** *243*, 69-79.
27. den Hollander,A.I., Ghiani,M., de Kok,Y.J., Wijnholds,J., Ballabio,A., Cremers,F.P., and Broccoli,V. (2002). Isolation of Crb1, a mouse homologue of *Drosophila* crumbs, and analysis of its expression pattern in eye and brain. **Mech. Dev.** *110*, 203-207.
26. Scheffer,G.L., Hu,X., Pijnenborg,A.C., Wijnholds,J., Bergen,A.A., and Scheper,R.J. (2002). MRP6 (ABCC6) detection in normal human tissues and tumors. **Lab Invest** *82*, 515-518.
25. ten Hove,T., Drillenburger,P., Wijnholds,J., Te Velde,A.A., and van Deventer,S.J. (2002). Differential susceptibility of multidrug resistance protein-1 deficient mice to DSS and TNBS-induced colitis. **Dig. Dis. Sci.** *47*, 2056-2063.
24. Schultz,M.J., Wijnholds,J., Peppelenbosch,M.P., Vervoordeldonk,M.J., Speelman,P., van Deventer,S.J., Borst,P., and van der Poll,P.T. (2001). Mice lacking the multidrug resistance protein 1 are resistant to *Streptococcus pneumoniae*-induced pneumonia. **J. Immunol.** *166*, 4059-4064.

23. Scheffer,G.L., Kool,M., Heijn,M., de Haas,M., Pijnenborg,A.C., Wijnholds,J., van Helvoort,A., de Jong,M.C., Hooijberg,J.H., Mol,C.A., van der,L.M., de Vree,J.M., van,d., V, Elferink,R.P., Borst,P., and Scheper,R.J. (2000). Specific detection of multidrug resistance proteins MRP1, MRP2, MRP3, MRP5, and MDR3 P-glycoprotein with a panel of monoclonal antibodies. **Cancer Res.** *60*, 5269-5277.
22. Allen,J.D., Brinkhuis,R.F., Van Deemter,L., Wijnholds,J., and Schinkel,A.H. (2000). Extensive contribution of the multidrug transporters P-glycoprotein and Mrp1 to basal drug resistance. **Cancer Res.** *60*, 5761-5766.
21. Wijnholds,J., de Lange,E.C., Scheffer,G.L., van den Berg,D.J., Mol,C.A., van,d., V, Schinkel,A.H., Scheper,R.J., Breimer,D.D., and Borst,P. (2000a). Multidrug resistance protein 1 protects the choroid plexus epithelium and contributes to the blood-cerebrospinal fluid barrier. **J. Clin. Invest.** *105*, 279-285.
20. Wijnholds,J., Mol,C.A., Van Deemter,L., de Haas,M., Scheffer,G.L., Baas,F., Beijnen,J.H., Scheper,R.J., Hatse,S., De Clercq,E., Balzarini,J., and Borst,P. (2000b). Multidrug-resistance protein 5 is a multispecific organic anion transporter able to transport nucleotide analogs. **Proc. Natl. Acad. Sci. U.S.A.** *97*, 7476-7481.
19. Borst,P., Evers,R., Kool,M., and Wijnholds,J. (2000). A family of drug transporters: the multidrug resistance-associated proteins. **J. Natl. Cancer Inst.** *92*, 1295-1302.
18. Borst,P., Evers,R., Kool,M., and Wijnholds,J. (1999). The multidrug resistance protein family. **Biochim. Biophys. Acta** *1461*, 347-357.
17. van Helvoort,A., de Brouwer,A., Ottenhoff,R., Brouwers,J.F., Wijnholds,J., Beijnen,J.H., Rijneveld,A., van der,P.T., van der Valk,M.A., Majoor,D., Voorhout,W., Wirtz,K.W., Elferink,R.P., and Borst,P. (1999). Mice without phosphatidylcholine transfer protein have no defects in the secretion of phosphatidylcholine into bile or into lung airspaces. **Proc. Natl. Acad. Sci. U.S.A.** *96*, 11501-11506.
16. Allen,J.D., Brinkhuis,R.F., Wijnholds,J., and Schinkel,A.H. (1999). The mouse Bcrp1/Mxr/Abcp gene: amplification and overexpression in cell lines selected for resistance to topotecan, mitoxantrone, or doxorubicin. **Cancer Res.** *59*, 4237-4241.
15. Wijnholds,J., Scheffer,G.L., van,d., V, van,d., V, Beijnen,J.H., Scheper,R.J., and Borst,P. (1998). Multidrug resistance protein 1 protects the oropharyngeal mucosal layer and the testicular tubules against drug-induced damage. **J. Exp. Med.** *188*, 797-808.
14. Wijnholds,J., Evers,R., van Leusden,M.R., Mol,C.A., Zaman,G.J., Mayer,U., Beijnen,J.H., van,d., V, Krimpenfort,P., and Borst,P. (1997). Increased sensitivity to anticancer drugs and decreased inflammatory response in mice lacking the multidrug resistance-associated protein. **Nat. Med.** *3*, 1275-1279.

13. Evers,R., Cnubben,N.H., Wijnholds,J., Van Deemter,L., van Bladeren,P.J., and Borst,P. (1997). Transport of glutathione prostaglandin A conjugates by the multidrug resistance protein 1. **FEBS Lett.** *419*, 112-116.
12. Smidt,M.P., Russchen,B., Snippe,L., Wijnholds,J., and Ab,G. (1995). Cloning and characterisation of a nuclear, site specific ssDNA binding protein. **Nucleic Acids Res.** *23*, 2389-2395.
11. Wijnholds,J., Chowdhury,K., Wehr,R., and Gruss,P. (1995). Segment-specific expression of the neuronatin gene during early hindbrain development. **Dev. Biol.** *171*, 73-84.
10. Smidt,M.P., Wijnholds,J., Snippe,L., van Keulen,G., and Ab,G. (1994). Binding of a bZip protein to the estrogen-inducible apoVLDL II promoter. **Biochim. Biophys. Acta** *1219*, 115-120.
9. Chalepakis,G., Wijnholds,J., Giese,P., Schachner,M., and Gruss,P. (1994a). Characterization of Pax-6 and Hoxa-1 binding to the promoter region of the neural cell adhesion molecule L1. **DNA Cell Biol.** *13*, 891-900.
8. Chalepakis,G., Wijnholds,J., and Gruss,P. (1994b). Pax-3-DNA interaction: flexibility in the DNA binding and induction of DNA conformational changes by paired domains. **Nucleic Acids Res.** *22*, 3131-3137.
7. Wijnholds,J., Philipsen,S., Pruzina,S., Fraser,P., Grosveld,F., and Ab,G. (1993). Estrogen-inducible and liver-specific expression of the chicken Very Low Density Apolipoprotein II gene locus in transgenic mice. **Nucleic Acids Res.** *21*, 1629-1635.
6. Chalepakis,G., Stoykova,A., Wijnholds,J., Tremblay,P., and Gruss,P. (1993). Pax: gene regulators in the developing nervous system. **J. Neurobiol.** *24*, 1367-1384.
5. Calkhoven,C.F., Ab,G., and Wijnholds,J. (1992). c/CEPB, a chicken transcription factor of the leucine-zipper C/EBP family. **Nucleic Acids Res.** *20*, 4093.
4. Wijnholds,J., Muller,E., and Ab,G. (1991). Oestrogen facilitates the binding of ubiquitous and liver-enriched nuclear proteins to the apoVLDL II promoter in vivo. **Nucleic Acids Res.** *19*, 33-41.
3. Beekman,J.M., Wijnholds,J., Schippers,I.J., Pot,W., Gruber,M., and Ab,G. (1991). Regulatory elements and DNA-binding proteins mediating transcription from the chicken very-low-density apolipoprotein II gene. **Nucleic Acids Res.** *19*, 5371-5377.
2. Wijnholds,J., Philipsen,J.N., and Ab,G. (1988). Tissue-specific and steroid-dependent interaction of transcription factors with the oestrogen-inducible apoVLDL II promoter in vivo. **EMBO J.** *7*, 2757-2763.

1. Smit, M.J., Wijnholds, J., Duursma, A.M., Bouma, J.M., and Gruber, M. (1986). Plasma clearance of mitochondrial aspartate aminotransferase in the rat: competition with mitochondrial malate dehydrogenase. **Biomed. Biochim. Acta** 45, 1557-1561.

Thesis

Wijnholds, J. Liver-specific regulation of the oestrogen-inducible apoVLDL II gene. University of Groningen, 1991. (PhD thesis)

Books:

Wijnholds, J. (2005). Multidrug Resistance Proteins and efflux of organic anions at the blood-brain and blood cerebrospinal fluid barriers. Chapter in "Efflux Transporters and the Blood-Brain Barrier" by Taylor, E.M. (Nova Science Publishers; ISBN: 1-59454-625-8).

Wijnholds, J. (2006). Multidrug Resistance Proteins and efflux of organic anions at the blood-brain and blood cerebrospinal fluid barriers. Chapter in "Multidrug Resistance-Associated Proteins" by Aiello, C.V. (Nova Science Publishers; ISBN: 1-60021-298-0).

Thesis of supervised PhD students:

Kantardzhieva, A. Crumbs and MAGUK proteins, from interaction to function. University of Amsterdam, 2006. (PhD thesis)

Current group members:

Wendy Aartsen, PhD, postdoctoral fellow
Koen van Cleef, PhD, postdoctoral fellow
Robert Hoek, PhD, postdoctoral fellow
Ditte Lundvig, PhD, postdoctoral fellow
Bokyung Park, PhD, postdoctoral fellow
Alicia Sanz Sanz, MSc, graduate student
Rogier Vos, BAS, research technician
Huda Ali, research technician student
Ab Klink, research technician student

Former group members:

Serge A. van de Pavert, PhD, postdoctoral fellow
Agnes van Rossum, PhD, postdoctoral fellow
Anna Malysheva, PhD, postdoctoral fellow
Jan Meuleman, PhD, postdoctoral fellow
Svetlana Alexeeva, PhD, postdoctoral fellow

Albena Kantardzhieva, PhD, graduate student
Dounia Willemsen, BAS, research technician
Carla A. Mol-Neefjes, BAS, research technician
Inge Versteeg, BAS, research technician

Memberships:

ARVO - Association for Research in Vision and Ophthalmology
SfN - Society for Neuroscience
ISOCB - International Society for Ocular Cell Biology
NVBMB - Nederlandse Vereniging voor Biochemie en Moleculaire Biologie
NVGT - Nederlandse Vereniging voor Gentherapie
EBSA - European BioSafety Action
NAV - Nederlandse Anthropogenetische Vereniging