# CURRICULUM VITAE - Prof. Dr. Thierry VandenDriessche

## 1. Current positions

1) **Full Professor** - Faculty of Medicine – Free University of Brussels (VUB), Belgium www.vub.be

2) **Director - Department of Gene Therapy & Regenerative Medicine – VUB** http://emge.vub.ac.be/GTRM.php

3) **Full Professor** - Faculty of Medicine - University of Leuven (KUL), Belgium www.kuleuven.be

## 2. Education

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|---|---|
| 1983-1987: | M.Sc. in Biology, Free University of Brussels (VUB); **maxima cum laude** |
| 1989-1991: | M.Sc. in Molecular Biology and Biotechnology, Free University of Brussels (VUB); **maxima cum laude** |
| 1987-1992: | Ph.D., Free University of Brussels (VUB); **maxima cum laude** (with felicitations of the jury) |

## 3. Positions and employment

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| 1992-1993 | Postdoctoral fellow National Institutes of Health (NIH) National Heart Lung and Blood Institute (Lab chief: Dr. W. French Anderson), USA. |
| 1993-1995 | Postdoctoral fellow NIH, USA, National Center for Human Genome Research (Lab chief: Dr. R. Blaese) |
| 1995-2010 | Group leader Vesalius Research Center, Flanders Institute for Biotechnology (VIB), Leuven, Belgium. |
| 1997-2003 | Assistant Professor - Faculty of Medicine - University of Leuven, Belgium |
| 2001 | Visiting Senior Scientist – NIH, USA (Lab chief: Dr. M. Nirenberg; Nobel Prize 1968) |
| 2003-2010 | Associate Professor – University of Leuven (Belgium), Coordinator PhD school, Chair PhD Commission |
| 2003-2006 | Guest Professor -Faculty of Sciences – Free University of Brussels (Belgium) |
| 2007-2010 | Assistant Professor -Faculty of Sciences – Free University of Brussels (Belgium) |
| 2005-2010 | Guest Professor, Faculty of Medicine - Free University of Brussels (Belgium); Coordinator MSc Program |
| 2010- | Full Professor – Faculty of Medicine & Pharmacy – Free University of Brussels (VUB) |
| 2010- | Full Professor – Faculty of Medicine - University of Leuven (KUL) |

## 4. Publications: approx. 3000 citations

**4.1. Articles in international peer-reviewed scientific journals** (impact factor & citations)

(* = equal contribution 1ste and 2nd author)

1) Verschaeve, L., Verschueren, H., **VandenDriessche, T.**, Vanhecke, D., Verhaegen, S. and De Baetselier P. Suggestive evidence that genes controlling invasion and metastasis are located on chromosome 3. Genes, Chromosomes and Cancer 1:19-31, (1989). (I.F.: 4.9)

2) **VandenDriessche, T.**, Verschueren, H. and De Baetselier, P. Association between MHC class I antigen expression and malignancy of murine T lymphoma variants. Invasion and Metastasis 10: 65-85 (1990). (I.F.: 1.3)

3) Bilej, M., Scheerlinck, J.P., **VandenDriessche, T.**, De Baetselier, P. and Vetvicka, V. The flow cytometric analysis of in vitro phagocytic activity of earthworm coelomocytes (Eisinia foetida; Annelida). Cell Biol. Int. Rep. 14 (9): 831-837 (1990). (I.F.: 0.7)

4) **VandenDriessche, T.**, Verschueren, H., Verhaegen, S., Van Hecke, D. and De Baetselier P. Experimental analysis of the metastatic phenotype of malignant leukocytes. Anticancer Res. 11: 49-74 (1991). (I.F.: 1.4)

5) Bilej, M., Rossman, P., **VandenDriessche, T.**, Scheerlinck, J.P., De Baetselier, P., Tuckova L., Vetvicka V. and Rejnek J. detection of antigen in the coelomocytes of the earthworm, Eisinia foetida (Annelida). Immunol. Lett. 29: 241-246 (1991). (I.F.: 1.5)

6) **VandenDriessche, T.**, Bakkus, M., Toussaint-Demylle, D., Thielemans, K., Verschueren, H. and De Baetselier, P. Tumorigenicity of mouse T lymphoma cells is controlled by the level of major histocompatibility complex class I H-2Kk antigens. Clin. Exp. Metastasis 12: 73-83 (1994). (I.F.: 2)

7) **VandenDriessche, T.**, Geldhof, A., Bakkus, M., Toussaint-Demylle, D., Brys, L., Thielemans, K., Verschueren, H. and De Baetselier, P. Metastasis of mouse T lymphoma cells is controlled by the level of major histocompatibility complex class I H-2Dk antigens. Int. J. Cancer, 58: 217-225 (1994). (I.F.: 3.5)

8) Chuah, M.K.L.*, **VandenDriessche, T.***, Chang, H.S., Ensoli, B., and Morgan, R.A. Inhibition of human immunodeficiency virus type-1 by

retroviral vectors expressing antisense TAR. Hum. Gene Ther. 5:1467-1475 (1994). (I.F.: 6.4)

9) **VandenDriessche, T.***, Chuah, M.K.L.*, Chiang, L., and Morgan, R.A. Inhibition of clinical HIV-1 isolates in primary $CD4^+$ T lymphocytes by retroviral vectors expressing anti-HIV genes. J. Virol., 69, 4045-4052 (1995). (I.F.: 5.9)

10) Ragheb, J., Bressler, P., Daucher, M.B., Chiang, L., Chuah, M.K.L., **VandenDriessche, T.**, Fauci, A.S., and Morgan, R.A. Analysis of transdominant mutants of the HIV-1 Rev protein for their ability to inhibit Rev function and HIV-1 replication. AIDS Res. Hum. Retroviruses, 11: 1343-1353 (1995). (I.F.: 2.6)

11) Chuah, M.K.L.*, **VandenDriessche, T.***, and Morgan, R.A. Development and analysis of retroviral vectors expressing human factor VIII as a potential gene therapy for hemophilia A. Hum. Gene Ther., 6:1363-1377 (1995). (I.F.: 6.4)

12) Raes, G., Geldhof, A., **VandenDriessche, T.** , Opdenakker, G., Sibille, C., and De Baetselier, P. Immunogenization of a murine T-cell lymphoma via transfection with interferon-γ. Leukemia 9:121-127 (1995). (I.F.: 3.6)

13) Morgan, R., et al.[#] Clinical protocol: gene therapy for AIDS using retroviral mediated gene transfer to deliver HIV-1 antisense-TAR and trans-dominant Rev protein genes to syngeneic lymphocytes in HIV-1 infected identical twins. Hum. Gene Ther. 7:1281-1306 (1996). [#] Collaborators: Bunnell, B.A., Chuah, M.K.L., Krecko, E., Muul, L.M., Ramsey, W.J., Tolstoshev, P., **VandenDriessche, T.** Associate (clinical) investigators: Blaese, R.M., Carter, C.S., Davey, R.T., Falloon, J., Klein, H., Lane H.C., Leitman, S.F., Polis, M.A. (I.F.: 6.4)

14) Geldhof, A.B., **VandenDriessche, T.**, Opdenakker, G. and De Baetselier, P. Introduction of the interferon γ gene into mouse T lymphoma cells with low MHC class I expression results in selective induction of H-2Dk and concomitant enhanced metastasis. Cancer Immunol. Immunother. 42:329-38 (1996). (I.F.: 2.3)

15) Chuah, M.K.L., Brems, H., Vanslembrouck, V., Collen, D., and **VandenDriessche, T.** Bone marrow stromal cells as potential targets for hemophilia "A" gene therapy. Hum. Gene Ther. 9:353-365, (1998). (I.F.: 6.4)

16) Chuah, M.K.L., Collen, D. and **VandenDriessche, T.** Gene therapy for haemophilia: hopes and hurdles. Crit. Rev. Oncol. Hemat., 28(3):153-171 (1998). (I.F.: 1.4)

17) **VandenDriessche, T**., Vanslembrouck, V., Goovaerts, I., Zwinnen, H., Vanderhaeghen, M.L., Collen, D., and Chuah, M.K.L. Long-term expression of human coagulation factor VIII and correction of hemophilia A after in vivo retroviral gene transfer in factor VIII-deficient mice. Proc. Natl. Acad. Sci. USA, 18 (96): 10379-10384 (1999). (I.F.: 10.8)

+ *Commentary* Kay. M.A. and High K. Gene therapy for the hemophilias . Proc. Natl. Acad. Sci. USA, 18 (96): 9973-9975 (1999).

18) Chuah, M.K.L., Van Damme, A., Zwinnen, H., Vanslembrouck, V., Goovaerts, I., Collen, D., **VandenDriessche, T**. Therapeutic levels of human coagulation factor VIII and long-term persistence of engineered cells following ex vivo gene therapy with human bone marrow stromal cells in non-myeloablated immunodeficient mice. Hum. Gene Ther. 11 (5): 729-738 (2000). (I.F.:6.4)

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20) **VandenDriessche T.** Journal of Gene Medicine 1999 Young Investigator Award. J. Gene Med. 2(1):71-72 (2000).(I.F.: 3.1).

21) Carmeliet, P., Moons L., Luttun, A., Vincenti, V., Compernolle, V., De Mol, M., Wu, Y., Bono, F., Devy, L., Beck, H., Scholz, D., Acker, T., DiPalma, T., Dewerchin, M., Noel, A., Stalmans, I., Barra, A., Blacher, S., **VandenDriessche, T.,** Ponten, A., Eriksson, U., Plate, K.H., Foidart, J.M., Schaper, W., Charnock-Jones, D.S., Hicklin, D.J., Herbert, J.M., Collen, D., Persico, M.G. Synergism between vascular endothelial growth factor and placental growth factor contributes to angiogenesis and plasma extravasation in pathological conditions. Nat Med. 2001;7(5):575-83. (I.F.27.9)

22) **VandenDriessche, T.** Collen D., and Chuah, M. Gene therapy for hemophilia. J. Gene Med. 3(1):3-20 (2001)(I.F.: 3.1).

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25) Garcia-Martin, C., Chuah, M.K.L., Van Damme, A., Ofosu, F., **VandenDriessche, T.,** and Hortelano, G. Therapeutic levels of human factor VIII in mice implanted with encapsulated cells: potential for gene therapy of hemophilia A, J. Gene Med. 4(2): 215-223 (2002).

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27) **VandenDriessche, T.,** Thorrez, L., Naldini, L., Follenzi, A., Moons, L., Berneman, Z., Collen, D., and Chuah, M.K.L. Lentiviral vectors containing the HIV-1 central polypurine tract can efficiently transduce non-dividing hepatocytes and antigen-presenting cells in vivo. Blood 100 (3): 813-822 (2002). (I.F.: 10.1).

28) **VandenDriessche, T.** Clinical gene therapy – First International Conference. Idrugs (3): 209-212 (2002).

29) **VandenDriessche, T.,** Collen, D., and Chuah, M.K.L. Gene therapy for hemophilia A: immune consequences of viral-vector mediated factor VIII gene transfer. Haematologica, 87: 93-100 (2002).

30) Chuah, M.K.L., Schiedner, G., Thorrez, L., Brown, B., Johnston, M., Hertel, S., Lillicrap, D., Collen, D., **VandenDriessche, T.** [§]**,** Kochanek, S.,[§]**corresponding author.** Therapeutic factor VIII levels and negligible toxicity in mouse and dog models of hemophilia A following gene therapy with high-capacity adenoviral vectors. Blood 101(5):1734-1743 (2003)(I.F.: 10.1).

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32) Van Damme, A., Chuah, M.K.L, Dell' Accio, F., De Bari, C., Luyten, F., Collen, D., **VandenDriessche, T.** Bone marrow mesenchymal cells for hemophilia A gene therapy using retroviral vectors with modified long terminal repeats. Haemophilia 9(1): 94- 103 (2003).

33) **VandenDriessche T.**, Collen, D. and Chuah, M.K.L. Gene therapy for the hemophilias. J. Thromb. Hemost. 1(7): 1550-1558 (2003) (State of the art lecture International Society of Thrombosis & Hemostasis Meeting 2003)

34) **VandenDriessche, T.** and Chuah, M.K.L. Biosafety of onco-retroviral vectors. Curr. Gene Ther. 3(6): 501-515 (2003).

35) Chuah, M.K.L., and **VandenDriessche, T.** Biosafety of adenoviral vectors. Curr. Gene Ther. 3(6): 527-543 (2003).

36) Yamada, T., Iwasaki, Y., Tada, H., Iwabuki, H., Chuah, M.K.L., **VandenDriessche, T.,** Kondo, A., Ueda, M., Seno, M., Tanizawa, K., and Kuroda, S. Nanoparticles for the delivery of genes and drug into hepatocytes. Nature Biotech. 21(8):885-890 (2003) (I.F.: 17.7).; see also:

i) Commentary by Russell, S.J. Rise of the nanomachines Nat. Biotechnol. 21(8): 872-873.
ii) Commentary by Lawrence, D. Nanotechnology takes another small step forward. Lancet 362: 48, (2003).
iii) Commentary in "The Scientist"
iv) Commentary by P. Basu. Technologies that deliver. Nat. Med., 9(9): 1100-1101 (2003).

37) **VandenDriessche, T.** Challenges and progress in gene therapy for hemophilia A. Blood 102: 1938-1939 (2003) (I.F.: 10.1).

38) Chuah, M.K.L., Collen, D., **VandenDriessche, T.** Clinical gene transfer studies for hemophilia a. Semin Thromb Hemost. 30(2):249-56 (2004).

39) Van Damme, A., Chuah M.K.L., Collen, D., **VandenDriessche, T.** Onco-retroviral and lentiviral vector-based gene therapy for hemophilia: preclinical studies. Semin Thromb Hemost. 30(2):185-95 (2004).

40) Thorrez, L., **VandenDriessche, T.,** Collen, D., Chuah, M.K.L. Preclinical gene therapy studies for hemophilia using adenoviral vectors. Semin Thromb Hemost. 30(2):173-83 (2004).

41) **VandenDriessche, T.** Liver gene transfer keeps immune system in check. Blood 104 (4): 910-911 (2004) (I.F.: 10.1).

42) Chuah, M.K.L., Collen, D. and **VandenDriessche, T.** Preclinical and clinical gene therapy for hemophilia. Haemophilia 10: 1-7 (2004) .

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44) **VandenDriessche T.** American Society of Gene Therapy - Eighth Annual Meeting. IDrugs ;8(8):629-31 (2005).

45) Van Damme, A., Thorrez, L., Ma, L., Vandenburgh, H., Eyckmans, J., Dell'Accio, F., De Bari, C., Luyten, F., Lillicrap, D., Collen, D., **VandenDriessche, T.**, Chuah, M.K. Efficient lentiviral transduction and improved engraftment of human bone marrow mesenchymal cells. Stem Cells 24(4):896-907 (2006).

46) **VandenDriessche, T.** CAPitalizing on AAV. Blood.108:4-5 (2006)

47) Thorrez, L., Vandenburgh, H., Callewaert, N., Mertens, N., Shansky, J., Wang, L., Arnout, J., Collen, D., Chuah, M., **VandenDriessche, T.** Angiogenesis Enhances Factor IX Delivery and Persistence from Retrievable Human Bioengineered Muscle Implants. Mol Ther. 14(3):442-51 (2006).

48) De Meyer, S.F., Vanhoorelbeke, K., Chuah, M.K., Pareyn, I., Gillijns, V., Hebbel, R.P., Collen, D., Deckmyn, H., **VandenDriessche, T.** Phenotypic correction of von Willebrand disease type 3 blood-derived endothelial cells with lentiviral vectors expressing von Willebrand factor. Blood 107(12):4728-36 (2006)

+ Commentary: Montgomery, R. A package for VWD endothelial cells, Blood 107(12): 4580-4581 (2006).

49) **VandenDriessche, T.,** Thorrez, L., Acosta-Sanchez, A,. Petrus, I., Wang, L., Ma, L., De Waele, L., Iwasaki, Y., Gillijns, V., Wilson, J.M., Collen, D., Chuah, M.K. Efficacy and safety of adeno-associated viral vectors based on serotype 8 and 9 versus lentiviral vectors for hemophilia B gene therapy. J Thromb Haemost. 5: 16-24 (2007).

+ Commentary: Arruda V.R. and Xiao, W. It's all about the clothing: capsid domination in the adeno-associated viral vector world. J. Thromb Haemost. 5: 1-4 (2007).

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56) **VandenDriessche, T.** FIXing bleeding joints. Blood, 112(12):4366 (2008).

57) Mates, L.*, Chuah, M.*, Belay, E., Jerchow, B., Manoj, N., Acosta-Sanchez, A., Judis, C., Schmitt, A., Matrai, J., Ma, L., Samara-Kuko, E., Gysemans, C., Pryputniewicz, D., Fletcher, B., **VandenDriessche, T.**,** Ivics, Z., Iszvak, Z.**. Molecular Evolution of a Novel Hyperactive Sleeping Beauty Transposase Enables Robust Stable Gene Transfer in Vertebrates. Nature Genetics 1(6):753-61 (2009) (IF = 30.3) (* equal contribution; ** joint corresponding authors)

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63) **VandenDriessche, T.** Muscling through AAV immunity. Blood, 114(10):2009-10 (2009) (IF = 10.4).

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Tiberghien P, **VandenDriessche T**, Ziehr H, Ylä-Herttuala S, von Kalle C, Gahrton G, Carrondo M. Relevance of an Academic GMP Pan-European Vector Infra-structure (PEVI). Curr Gene Ther. 10(6):414-22 (IF = 4.85).

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93) Cantore, A., Nair, N., Della Valle, P. , Di Matteo, M., Màtrai, J., Sanvito, F., Brombin, C., Di Serio, C., D'Angelo, A., Chuah, M.K., Naldini, L. and **VandenDriessche, T.** Hyper-functional coagulation factor IX improves the efficacy of gene therapy in hemophilic mice. Blood, submitted (2012).

94) Michaki, V., Wahle, T., Vennekens, K., Dingwall, C., Davis, J.B., Chuah, M.K.L, **VandenDriessche, T.,** Feiguin, F., Dotti, C.G. Novel modulators of gamma-secretase with substrate selectivity. Nature Neurosc., in revision (2012).

95) Geraerts M, Familiari A, Shimizu T, Calzolari S, Vanuytsel K, Chuah M, **VandenDriessche T**, Verfaillie CM. Strain differences in neural differentiation potency in mouse embryonic stem cells are maintained in induced pluripotent stem cells, submitted, Plos One, 2012.

96) Petrus, I., Chuah, M.K.L., Acosta-Sanchez, A., Bing, Y., De Bleser, P., Hooghe, B., Matrai, J., Ma, L., Samara-Kuko, E., **VandenDriessche, T.** Combinations of hepatocyte-specific transcription-factor binding sites identified de novo using a novel bioinformatics algorithm yield robust liver-specific expression (in preparation, to be submitted to Nat. Biotech.) (IF: 22.7).

**4.2. Monographies/Book chapters**

1) **VandenDriessche, T.**, Chuah, M.K.L., and Morgan, R.A. Gene therapy for AIDS. In: AIDS Updates; V.T. De Vita, S. Hellman and S.A. Rosenberg, eds. (J.B. Lippincott Co, Philadelphia, PA), 7(4), 1-14 (1994).

2) Chuah, M.K.L., **VandenDriessche, T.** and Morgan, R.A. Gene therapy for viral diseases. In: Molecular and Cell Biology of Human Gene Therapeutics; G. Dickson, ed. (Chapman & Hall) , 175-194 (1995).

3) **VandenDriessche, T.,** Chuah, M.K.L., and Morgan, R.A. Gene therapy. In: AIDS: Biology, Diagnosis and Prevention, 4th edition, V.T. De Vita, S. Hellman and S.A. Rosenberg, eds. (J.B. Lippincott Co, Philadelphia, PA), 3-12 (1996).

4) **VandenDriessche, T.,** and Collen, D. Gentherapie in Vlaanderen. In: Gentherapie. Stichting Bio-Wetenschappen en Maatschappij. van Bekkum, ed., p. 30-31 (1996).

5) **VandenDriessche, T.,** Chuah, M.K.L. and Collen, D. Gentherapie: geneeskunde voor de XXIe eeuw. Lessen voor de XXIe eeuw (Ed. Davidsfonds, Leuven) (2000).

6) **VandenDriessche, T.,** Collen D., and Chuah, M, Hemophilia gene therapy . In: "Clinical use of recombinant derived clotting factors"; H.H. Brackman, ed. (Unimed, Bremen) (2004).

7) Chuah, M, Collen D., and **VandenDriessche, T.** Development of recombinant and transgene producst. In: "Clinical use of recombinant derived clotting factors"; H.H. Brackman, ed. (Unimed, Bremen), (2004).

8) Chuah, M.K.L., Petrus, I., **VandenDriessche, T.** Gene therapy for von Willebrand's disease. In : von Willebrand's Disease: Basic and Clinical Aspects. Wiley. Eds. A.B. Federici, C. Lee, E. Berntorp, D. Lillicrap, B. Montgomery (2011).

9) Matrai, J., Chuah, M.K., **VandenDriessche, T.** Lentiviral vectors. In "A guide to human gene therapy". Eds. R. Herzog & S. Zolotukhin (2010).

10) Chuah, M.K., **VandenDriessche, T**. Genetic modification of adult stem cells and induced pluripotent stem cells with emerging transposon technologies, Ed. O. Cohen-Haguenauer, *in press* (2012).

11) **VandenDriessche, T.,** Dickson, G., Gansbacher, B., Klatzmann, D., Yla-Herttuala, S., Cohen-Haguenauer, O. CliniGene and Gene Therapy in Europe: Past, Present & Future Prospects. Ed. O. Cohen-Haguenauer, *in press* (2012).

12) Chuah, M., Nair, N., **VandenDriessche, T**. Gene therapy for hemophilia A and B. Gene therapy for hemophilia A and B. Advanced Textbook on Gene transfer, Gene Therapy and Genetic Pharmacology. Ed. D. Sherman. Imperial College, *in press*, 2012.

**4.3. Articles in scientific journal without referee system**

1) De Rom, A., VandenDriessche, T., Chuah, M.K.L., Gen therapie. Natuur & Techniek, 66(10):20-29, (1998).

- Bekroond met de Smithkline-Beecham Prijs (250,000 BEF aan De Rom A.).

2) **VandenDriessche, T.** and Chuah, M.K. Gene therapy for hemophilia A: Em. Med. J. 20(2):117-119 (2002).

3) **VandenDriessche, T.** Recente Ontwikkelingen in Gentherapie. Verhandelingen - Koninklijke Academie voor Geneeskunde, 66(4):305-17; discussion 317-20 (2004).

4) Chuah M.K., **VandenDriessche T.** Gene therapy for hemophilia "A" and "B": efficacy, safety and immune consequences. Verh K Acad Geneeskd Belg. 69(5-6):315-34 (2007).

5) Chuah, M.K., **VandenDriessche T.** Gene therapy for haemophilia "A" and "B": efficacy, safety and immune consequences. Bull Mem Acad R Med Belg. 162(5-6):357-61 (2007).

**4.4. Guest editor**

Guest Editor: Sem. Thromb. Hemost. 30(2): 157-268 (2004).

**4.5. Presentations at international conferences published as proceedings**

Invited speaker. Gene therapy for hemophilia. **Plenary Address**. XXVI International Congress of the World Federation of Hemophilia October 2004, (Bangkok, Thailand). **VandenDriessche T.**, Collen, D. and Chuah, M.K.L. Gene therapy for the hemophilias. J. Thromb. Hemost. 1(7): 1550-1558 (2003) (State of the art lecture International Society of Thrombosis & Hemostasis Meeting 2003).

Invited speaker. Emerging genetic and cellular approaches for the treatment of hemophilia. XXVII International Congress of the World Federation of Hemophilia, Vancouver, Canada, 21-25 May 2006. Lillicrap D, VandenDriessche T, High K. Cellular and genetic therapies for haemophilia. Haemophilia ;12 Suppl 3:36-41 (2006).

**4.6. Presentations at international conferences published as abstracts (or not published): invited speaker or selected oral presentation**

1) Selected oral presentation. Association between differential MHC antigen expression and malignancy of murine T lymphoma variants. International Immunology meeting, Berlin (Germany), 30.07-05.08.89.

2) Invited speaker. Improvement of retroviral *ex vivo* and *in vivo* gene therapy strategies for hemophilia A. 1st International Conference on Vectors for Gene Therapy, Brussels, Belgium, March 12-14, 1998.

3) Invited speaker. Gene therapy: state-of-the-art. 1st International Meeting on Life Science Applications. Ghent, Belgium, April 26-29, 1998.

4) Invited speaker. Principles of gene therapy. 2nd Postgraduate Course in Molecular and Cellular Endocrinology, Turku, Finland, June 7-10, 1998.

5) Selected oral presentation. Long-term expression of human coagulation factor VIII and stable correction of hemophilia A after non-invasive retroviral gene transfer in factor VIII-deficient mice.. *Plenary Session,* 2nd Annual Meeting of the American Society of Gene Therapy, June 9-13, 1999 (Washington DC, USA).

**(One of top 8 abstracts selected out of 1000)**

6) Selected oral presentation. Long-term expression of human coagulation factor VIII and stable correction of hemophilia A after non-invasive retroviral gene transfer in factor VIII-deficient mice. XVII Congress of the International Society on Thrombosis and Hemostasis, August 14-21, 1999 (Washington DC, USA).

7) Selected oral presentation. Therapeutic levels of human coagulation factor VIII and long-term persistence of engineered cells following ex vivo gene therapy with human bone marrow stromal cells in non-myeloablated immunodeficient mice. XVII Congress of the International Society on Thrombosis and Hemostasis, August 14-21, 1999 (Washington DC, USA).

8) Invited speaker. Annual lecture on Gene Therapy. Third Workshop of the European Pediatric Network for Hemophilia Management, September 16-18, 1999 (Salzburg, Austria).

9) Selected oral presentation. Long-term factor VIII expression and stable correction of hemophilia A after in vivo retroviral gene transfer in factor VIII-deficient mice. Abstract + Poster presentation. 7th Meeting of the European Society of Gene Therapy, November 26-28, 1999 (Munchen, Germany).

10) Invited speaker. *Ex vivo* and *in vivo* gene therapy for hemophilia A using retroviral and lentiviral vectors. 2nd Annual Meeting of the Dutch Gene Therapy Society, March 10, 2000.

11) Invited speaker. *Ex vivo* and *in vivo* gene therapy for hemophilia A using retroviral and lentiviral vectors. NIH Gene Therapy Interest Group, March 23, 2000.

12) Invited speaker. Long-term correction of hemophilia A retroviral gene transfer in factor VIII-deficient mice by *in vivo* retroviral gene transfer.

National Hemophilia Foundation 3rd Workshop on Gene Therapies for Hemophilia, March 24-25, 2000 (Washington DC, USA).

13) Selected oral presentation. Gene Therapy for Hemophilia A Using Retroviral and Lentiviral Vectors Expressing Human or Canine Factor VIII. American Society of Gene Therapy Meeting ( 31.5-4.6.00, Denver, Colorado).

14) Invited speaker. Pre-clinical studies with retroviral and lentiviral vectors. Third Annual Meeting American Society of Gene Therapy ( 31.5-4.6.00, Denver, Colorado).

15) Invited speaker. Development of *ex vivo* and *in vivo* gene therapy for hemophilia A using retroviral and lentiviral vectors expressing factor VIII. First International North Sea Conference on Thrombosis and Hemostasis, June 12-14, 2000 (Maastricht, NL).

16) Invited speaker. Gene therapy for hemophilia A: hopes and hurdles. German Society of Thrombosis & Hemostasis, February 14, 2001 (Dusseldorf, D).

17) Invited speaker. Gene Therapy Symposium: from bench to bedside. Gene therapy for hemophilia A using viral vectors. Georg-Speyer-Haus, July 8, 2001 (Frankfurt, D).

18) Invited speaker. Pre-clinical studies for hemophilia A with onco-retroviral and lentiviral vectors. National Hemophilia Foundation 4th Workshop on Gene Therapies for Hemophilia, April 19-21, 2000 (San Diego, USA).

19) Invited speaker / chairman. Gene therapy for hemophilia A using viral vectors. Wyeth Genetics Institute Satelite Symposium – "B-domain-deleted recombinant Factor VIII - Gene Therapy for Haemophilia A", 12.11.2001.

20) Invited speaker. In vivo gene therapy for hemophilia A using viral vectors. IVth International Workshop on Immune Tolerance in Haemophilia. November 22, 2001 (Bonn, Germany).

21) Selected oral presentation. Gene therapy for hemophilia A using onco-retroviral, lentiviral and gutless adenoviral vectors. 9th Meeting of the European Society of Gene Therapy, November, 2-4, 2001, Turkey.

22) Invited speaker. Gene therapy for hemophilia A. 1st International Conference on Clinical Gene Therapy, January 24-26, 2002, Groningen, The Netherlands.

23) Invited speaker. Supra-physiologic levels of human and canine B-domain deleted factor VIII in hemophilic mice using gutless adenoviral vectors.

National Hemophilia Foundation 5th Workshop on Gene Therapies for Hemophilia, March 2002 (Philadelphia, Pennsylvania, USA).

24) Selected oral presentation. Gene therapy with high-capacity adenoviral vectors in hemophilic mice and dogs: limiting effects of adaptive and innate immune responses. 10th Meeting of the European Society of Gene Therapy, October 13-16, 2002, France.

25) Invited speaker. First International Conference on Germline Gene Therapy, 6-8 December 2002 (Brussels, Belgium).

26) Invited speaker. Gene therapy for hemophilia. Insights into Hemophilia – Addressing the Challenges. Wyeth Symposium on Hemophilia A, February 27– March 1, 2003 (Budapest, Hungary).

27) Invited speaker. Therapeutic human and canine factor VIII levels and negligible toxicity in hemophilic mouse and dog models following gene therapy with high-capacity adenoviral vectors. National Hemophilia Foundation 4th Workshop on Gene Therapies for Hemophilia, April 25-26, 2003 (San Diego, California, USA).

28) Selected oral presentation. Immune tolerance induction using retrovirally transduced B-cells. 6th Annual Meeting of the American Society of Gene Therapy, June 2003 (Washington DC, USA).

29) Invited speaker. New developments in gene therapy. 8th Congress of the European Hematology Association, 12-15 June 2003 (Lyon, France).

30) Invited speaker/Chairman. Gene therapy for hemophilia. **State-of-the-Art Lecture.** 18th Congress of the International Society of Thrombosis & Hemostasis, July 2003, (Birmingham, UK).

31) Selected oral presentation. Gene therapy for hemophilia A with high-capcity adenoviral vectors: preclinical studies in mice and dogs. 18th Congress of the International Society of Thrombosis & Hemostasis, July 2003, (Birmingham, UK).

32) Invited speaker. Gene therapy: from the bench to the bedside. August 2003, University of Okayama (Okayama, Japan).

33) Invited speaker. Flow cytometry in gene therapy research. 17 September 2003, (Kuopio, Finland).

34) Invited speaker. Gene therapy for hemophilia, Annual Meeting of the German Society of Gene Therapy, 25 September 2003 (Gunzburg, Germany).

35) Invited speaker. Gene therapy for hemophilia. Conference: From Stem Cells to Tissue September 25, 2003 (Frankfurt, Germany).

36) Invited speaker. Preclinical and clinical gene therapy for hemophilia. XXVI International Congress of the World Federation of Hemophilia, Bangkok, Thailand, 17-21 October 2004

37) Invited speaker. Transduction of antigen-presenting cells using viral vectors: a double edged sword. 8th Annual Meeting of the American Society of Gene Therapy, June 2005 (St Louis, USA).

37) Selected oral presentation. Gene delivery to the heart and liver using a novel adeno-associated viral vector based on human serotype 9: implications for cardiovascular disease and hemophilia. 13th Annual Meeting of the European Society of Gene & Cell Therapy, (Prague, Czech Republic), 29 October- 1 November 2005.

38) Invited speaker. Gene therapy for hemophilia. Dutch Society for Gene Therapy, Rotterdam, 9 March 2006.

39) Invited speaker. Retroviral and lentiviral vectors. Dutch Society for Gene Therapy, Rotterdam, 9 March 2006.

40) Invited speaker. Gene therapy for hemophilia. Swedish Society of Gene Therapy, Stockholm, March 11, 2006.

41) Invited speaker. Gene therapy for hemophilia A using bioengineered muscle implants and alternative AAV8 & 9 serotypes. VIIIth Annual Workshop on Novel Technologies and Gene Transfer for Hemophilia. Philadelphia, USA, March 31 - April 1, 2006.

42) Invited speaker. Gene therapy for hemophilia. 39th Nordic Coagulation Meeting (Nordcoag). Malmö, Sweden, May 4-6, 2006.

43) Invited speaker. Emerging genetic and cellular approaches for the treatment of hemophilia. International Congress of the World Federation of Hemophilia, Vancouver, Canada, 21-25 May 2006.

44) Selected oral presentation: Widespread and efficient gene delivery to the heart and liver using AAV serotype 9: implications for cardiovascular disease and hemophilia. 9th Annual Meeting of the American Society of Gene Therapy, May 31-June 4, 2006 (Baltimore, USA).

45) Invited speaker. Current status of gene therapy for hemophilia. European Pediatric Network for Hemophilia Management), 10th Workshop, Amsterdam, September 28-30, 2006.

46) Selected oral presentation. Efficacy and safety of lentiviral versus adeno-associated viral vectors based on serotype 8 and 9 for hemophilia B gene therapy. Annual Meeting of the European Society of Gene & Cell Therapy, selected oral presentation, Athens, Greece, 9- 12 November 2006.

47) Invited speaker. Gene therapy. Holst symposium, Eindhoven (NL) December 8, 2006.

48) Invited speaker. Gene therapy for hemophilia. Erasmus lecture series, Rotterdam, Erasmus Hospital, December 2006.

49) Invited speaker. Improved vectors for gene therapy of hemophilia. Biotest Meeting, Seefeld, Austria, 22 March 2007.

50) Invited speaker. Gene therapy for hemophilia. 12th Congress of the European Hematology Association, Vienna, Austria, 8 June 2007.

51) Invited speaker. Gene therapy for hemophilia. European Society of Gene & Cell Therapy (ESGCT), Rotterdam, NL, 27 October 2007.

52) Invited speaker. Gene therapy: state of the art. Bayer Clotters Meeting, London, UK, October 2007.

53) Invited speaker. Improved viral and non-viral vectors for hemophilia gene therapy. 9th Workshop on Novel Technologies & Gene Transfer for Hemophilia (Philadelphia, USA), February 22-23, 2008.

54) Invited speaker. Transduction of antigen-presenting cells using viral vectors: a double edged sword. Gordon Research Conference on The Science of Viral Vectors for Gene Therapy: The Host Response to Viral Infection. 2-7 March, (Ventura, California, USA)

55) Invited speaker. 6th Bari International Conference on hemophilia, von Willebrand factor and ADAMTS-13. Gene therapy for hemophilia: efficacy, safety and immune consequences (Pugnochioso, Italy), May 18-20, 2008.

56) Invited speaker. Novel enhanced transposases result in robust stable gene transfer into hematopoietic, mesenchymal and muscle progenitor/stem cells ex vivo and hepatocytes in vivo. 11th Annual Meeting of the American Society of Gene Therapy, selected oral presentation (Boston, USA) 28 May-1 June 2008.

57) Invited speaker. Gene therapy workshop: Innovations XXVIII International Congress of the World Federation of Hemophilia, (Istanbul, Turkey) 1-5 June 2008.

58) Invited speaker. Novel enhanced transposases result in robust stable gene transfer into hematopoietic, mesenchymal and muscle progenitor/stem cells ex vivo and hepatocytes in vivo. 6th Annual International Conference on Transposition and Animal Biotechnology Berlin. (Berlin, Germany). 19-21 June 2008.

59) Invited speaker. Gene therapy for hemophilia 16th Congress of the European Society of Gene & Cell Therapy (ESGCT). (Brugge, Belgium), 13-16 November 2008.

60) Invited speaker. Symposium on Recombinase-based non-viral gene transfer. Efficient in vivo gene delivery with novel hyperactive transposases obtained by in vitro evolution. (Brugge, Belgium), 12 November 2008.

61) Invited speaker. Gene therapy for haemophilia. 6th British Society of Gene Therapy. Annual Conference (London, UK), 21-23 April 2009.

62) Invited speaker. Gene therapy for hemophilia. Annual Meeting Dutch Society of Gene Therapy (Nijmegen, NL), 8 May 2009.

63) Selected oral presentation. De novo identification of combinations of hepatocyte-specific transcription factor binding sites using a novel bio-informatics algorithm yield robust liver-specific expression. American Society of Gene & Cell Therapy (San Diego, US), 27-30 May 2009.

64) Invited speaker. Novel transposases obtained by Darwinian evolution and selection result in stable gene transfer in CD34+ cells and efficient gene marking in vivo following hematopoietic reconstitution. 8ème Congrès de la Société Francophone de Thérapie Cellulaire et Génique Paris, 21-23 June 2009.

65) Invited speaker. Translational research: from animal models to clinical practice. Bayer Schering Pharma 2009 Hematology Conference (Riga, Latvia), 17-19 September 2009.

66) Invited speaker. Gene therapy for hemophilia. XVIIth Annual Meeting of the European Society of Gene & Cell Therapy (Hannover, Germany), 20-25 November 2009.

67) Keynote speaker. Darwinian evolution and selection in gene therapy. XVIIth Annual Meeting of the European Society of Gene & Cell Therapy (Hannover, Germany), 20-25 November 2009.

68) Invited speaker. Hyperactive Transposons and Integration-Defective Lenti for Hemophilia B Gene Therapy. 10th Workshop on Novel Technologies & Gene Transfer for Hemophilia (North Carolina, USA), 5-6 February 2010.

69) Selected oral presentation. Hyperactive transposons for genetic modifcation of induced pluripotent and adult stem cells: a non-viral paradigm for coaxed differentiation. 13th Annual Meeeting of the American Society of Gene & Cell Therapy (Washington, D.C., USA), 17-22 May 2010.

70) Invited speaker. Transposons for stem cell engineering and gene therapy FASEB Meeting on Genome Engineering: Research and Therapeutic Applications (Steamboat, Colorado, USA), 6-11 June 2010.

71) Invited speaker. Liver-mediated gene transfer for induction of immune tolerance and novel non-viral approaches for robust stem cell gene transfer. Collaborative Research Center International Symposium: Cellular Therapy and Immune Tolerance in Transplantation (Hannover, Germany), 2-4 September 2010.

72) Invited speaker. Emerging use of transposons for gene therapy. XVIIIth Annual Meeting of the European Society of Gene & Cell Therapy (Milano, Italy), 22-25 November 2010.

73) Selected oral presentation. Integrase-defective lentiviral vectors enable tolerogenic expression of bioactive molecules in the liver with minimal genotoxic risk. XVIIIth Annual Meeting of the European Society of Gene & Cell Therapy (Milano, Italy), 22-25 November 2010.

74) Invited speaker. Recent advances with Sleeping Beauty and PiggyBac transposons for gene therapy. National Institutes of Health Recombinant DNA Advisory Committee (RAC) and CliniGene Workshop: Retroviral and Lentiviral Vectors for Long-Term Gene Correction: Clinical Challenges in Vector and Trial Design. (Bethesda, USA), 9-10 December 2010.

75) Invited speaker. Cell and gene therapy: 10 years on. **Opening lecture**. XXth Annual Meeting of the French Society of Gene & Cell Therapy (Nantes, France), June 6-8, 2011.

76) Invited speaker. Hemophilia as a trailblazer for gene therapy. 36th FEBS Congress: Biochemistry for Tomorrow's Medicine (Torino, Italy), June 25-30, 2011.

77) Invited speaker. New technologies for non-viral gene therapy based on transposons. 17th Annual Meeting of the Japan Society of Gene Therapy (Fuluoka, Japan), July 14-17, 2011.

78) Invited speaker. Gene therapy for hemophilia: translational studies and clinical trials. 17th Annual Meeting of the Japan Society of Gene Therapy (Fuluoka, Japan), July 14-17, 2011.

79) Invited speaker. Recent progress in gene therapy in Europe. 17th Annual Meeting of the Japan Society of Gene Therapy (Fuluoka, Japan), July 14-17, 2011.

80) Invited speaker. Emerging potential of transposons in gene therapy and regenerative medicine. VIth Congres of the Spanish Society of Gene & Cell Therapy (Saragossa, Spain), September 21-23, 2011.

81) Invited speaker. Gene therapy for hemophilia A and B. XXIInd Van Creveld symposium on hemophilia and von Willebrand disease (Amersfoort, NL), September 29, 2011.

82) Invited speaker. Gene therapy for hemophilia: recent developments and future perspectives. Hematology Innovation Summit (Budapest, Hungary), October 13, 2011.

83) Invited speaker. Zooming in on the target: transcriptional and transductional targeting. XIXth Annual Meeting of the European Society of Gene & Cell Therapy (Brighton, UK), October 27-31, 2011.

84) Invited speaker. Integration defective lenti and new AAV vectors for FVIII and FIX delivery. 11th Workshop on Novel Technologies and Gene Transfer for Hemophilia (Philadelphia, Pennsylvania, USA), 2-3 March 2012.

85) Invited speaker. Advances in gene therapy for hemophilia. 18th Annual Meeting of the German Society for Gene Therapy (DG-GT); Perspective Conference of the Stiftung Häimotherapie-Forschung on the Role of Haemotherapy and Transfusion Medicine; 1st Symposium of the LOEWE Center for Cell and Gene Therapy Frankfurt (CGT). Perspectives in gene-based medicines (Frankfurt, Germany), 15-17 March 2012.

86) Invited speaker. Non-viral and viral vectors for liver gene therapy: proof-of- concept and translational studies. International symposium on hepatic glycogen storage diseases (Lyon, France), 4-6 April 2012.

87) Selected oral presentation. *De novo* design of tissue-specific regulatory elements results in robust transduction in heart and liver: implications for cardiovascular disease and haemophilia. **Presidential symposium - Selected top abstract – out of nearly 2000 paricipants.** 15th Annual Meeting of the American Society of Gene Therapy (Philadelphia, Pennsylvania, USA), May 15-19, 2012.

88) Invited speaker. Methods of Gene delivery - Pros and Cons. XXXth World Federation of Hemophilia World Congress (Paris, France), July 8-12, 2012.

89) Invited speaker. Stem cells in personalized medicine. Euroscience Open Forum (ESOF) (Dublin, Ireland), July 11-15, 2012.

**4.7. Posters & abstracts** (abstracts published in international peer-reviewed journals are underlined)

1) **VandenDriessche, T.**, Verschueren, H. and De Baetselier, P. Differential expression of class I MHC antigens on T lymphoma cells and association with their metastatic potential. Abstract + poster, 3rd International Congress of the Metastasis Research Society, Eilat (Israël), 6-11.09.87.

2) **VandenDriessche, T.**, Eisenbach, L. and De Baetselier, P. Association between differential MHC antigen expression and malignancy of murine T lymphoma variants. Abstract + poster. International Immunology meeting, Berlin (Germany), 30.07-05.08.89.

3) Verschaeve, L., Verschueren, H., **VandenDriessche T.**, Vanhecke, D., Verhaegen, S. and De Baetselier, P. Suggestive evidence that genes controlling invasion and metastasis are located on chromosome 3. Abstract, FEBS meeting on "The role of oncogenes and biological response modifiers in tumour invasion and metastasis." Athens (Greece), 9-14.11.89.

4) **VandenDriessche, T.** and De Baetselier, P. Experimental metastasis of mouse BW-derived T lymphoma variants is controlled by the level of MHC class I H-2D$^k$ antigens. Abstract + poster 8th International Congress of Immunology, Budapest (Hungary), 23-28.8.92.

5) **VandenDriessche, T.**, Bakkus, M., Toussaint-Demylle, D., Verschueren, H., Thielemans, K. and De Baetselier, P. MHC class I H-2Kk and H-2Dk antigens control the malignant phenotype of BW5147-derived T lymphoma variants via different mechanisms. Abstract + poster, 4th International Congress of the Metastasis Research Society, Paris (France), 31.8-4.9.92.

6) **VandenDriessche, T.** and De Baetselier, P. Experimental metastasis of mouse BW-derived T lymphoma variants is controlled by the level of MHC class I H-2D$^k$ antigens. J. Cellul. Biochem., suppl. 16F, p.51 (1992). Keystone Symposium on Gene Therapy, Colorado, USA.

7) Ragheb, J., Chuah, M.K.L., **VandenDriessche, T.**, Morgan, R.A. and Anderson, W.F., Retroviral mediated gene transfer as a polypharmaceutical anti-HIV agent. Poster, Keystone Symposium on Genetically Targeted Research & Therapeutics: antisense and gene therapy, Keystone (Colorado) 12-18.93.

8) Morgan, R.A., Ragheb, J., Chuah, M.K.L., **VandenDriessche, T.**, Dettenhofer M. and Bressler P. Progress towards gene therapy for AIDS. Abstract + poster, NCDDG-HIV Symposium on Coordinated therapies for HIV infection, Washington DC, 11-16.7.93.

9) Morgan, R.A., Ragheb, J., Chuah, M.K.L., **VandenDriessche, T.**, Dettenhofer, M. and Bressler, P. Progress towards gene therapy for AIDS. Abstract + Poster: Laboratory of Tumor Cell Biology Meeting, Bethesda (Maryland), 22-28.8.93.

10) Morgan, R.A., Ragheb, J., Chuah, M.K.L., **VandenDriessche, T.**, Dettenhofer, M. and Bressler, Progress towards gene therapy for AIDS. Exp. Hematol. 21: (8) 1012-1012 AUG 1993

11) **VandenDriessche, T.**, Chuah, M.K.L., Newman, K., Mullen, C. and Morgan, R.A. Development and analysis of retroviral vectors expressing human factor VIII and factor IX as a potential gene therapy for hemophilia**.** Blood 82 (10), suppl. 1, p.67a (1993). American Society of Hematology Meeting, St. Louis, USA.

12) Morgan, R.A., Chuah, M.K.L., **VandenDriessche, T.**, Bunell, B., Bressler, P. and Blaese, R.M. Preclinical studies comparing anti-HIV-1 retroviral vectors and their use in an AIDS gene therapy trial in identical twins. Abstract + Poster, Cold Spring Harbour Meeting on Gene Therapy, September 1994, Cold Spring Harbour, NY, USA.

13) Morgan, R.A., Ragheb, J., Chuah, M.K.L., **VandenDriessche, T.** and Bressler, P. Development of retroviral vectors that optimize the inhibition of HIV-1 at multiple points of the viral life cycle. J. Cellul. Biochem., suppl. 18A, p.243 (1994). Keystone Symposium on Gene Therapy, Colorado, USA.

14) Chuah, M.K.L., **VandenDriessche, T.**, Newman, K., Mullen, C. and Morgan, R.A. Development and analysis of retroviral vectors expressing human factor VIII and factor IX as a potential gene therapy for hemophilia. J. Cellul. Biochem., suppl. 18A, p.236 (1994). Keystone Symposium on Gene Therapy, Colorado, USA.

15) **VandenDriessche, T.**, Chuah, M.K.L., Chang, H.K., Ensoli, B. and Morgan, R.A. Inhibition of HIV-1 by retroviral vectors expressing antisense RNA and trans-dominant proteins. AIDS Res. Hum. Retroviruses. suppl. 3, p. S149 (1994). LTCB Meeting, Bethesda, USA.

16) Chang, H.K., **VandenDriessche, T.**, Chuah, M.K.L., Morgan, R.A., Gallo, R.C., and Ensoli, B. Block of HIV-1 replication by simultaneous inhibition of Tat and Rev function with an antisense Tat/Rev expressing

vector. AIDS Res. Hum. Retroviruses. suppl. 3, abstr 344, p. S149 (1994). Laboratory of Tumor Cell Biology Meeting, Bethesda, USA.

17) Geldhof, A., **VandenDriessche, T.,** Raes, G., Opdenakker, G. and De Baetselier, P. Transfection of mouse IFN-γ in different BW5147 derived T lymphoma variants results either in immunogenization or enhanced metastasis. Clin. Exp. Metastasis 12(5), abstr. 239, p. 87 (1994). International meeting of the Metastasis Research Society, Bethesda, USA.

18) Morgan, R.A., Chuah, M.K.L., **VandenDriessche, T.**, Bunell, B., Bressler, P. and Blaese, R.M. Preclinical studies comparing anti-HIV-1 retroviral vectors and their use in an AIDS gene therapy trial in identical twins**.** J. Cellul. Biochem., suppl. (1995). Keystone Symposium on Gene Therapy, Colorado, USA.

19) **VandenDriessche, T.,** Morgan, R.A., Collen, D., and Chuah, M.K.L. Analysis of factor VIII retroviral vectors for hemophilia "A" gene therapy. Gene Ther. , 2 S37, (1995). 3rd European Working Group on Gene Therapy Meeting, Barcelona, Spain.

20) Evans, G.L., Chuah, M.K.L., **VandenDriessche, T**., and Morgan, R.A. Development and analysis of retroviral vectors expressing human factor VIII as a potential gene therapy for hemophilia A. Blood 86 (10), suppl. 1, p.997a (1995). American Society of Hematology Meeting, Memphis, USA.

21) Bunell, B., Donahue, B., Chuah, M.K.L., **VandenDriessche, T.**, Muul, L., Blaese, R.M., and Morgan, R.A. Optimization of transduction efficiency of human CD4+ T lymphocytes. Poster, Keystone Symposium on Gene Therapy, (Colorado, USA), J. Cellul. Biochem., suppl. (1995). Poster.

22) Evans, G.L., Chuah, M.K.L., **VandenDriessche, T**., Bodine, D., Kazazian, H.H., and Morgan, R.A. Gene therapy for hemophilia A in a factor VIII-knockout mouse: retroviral delivery of human factor VIII by bone marrow transplant. Cold Spring Harbour gene therapy meeting, September 1996, Cold Spring Harbour NY.

23) Evans, G.L., Chuah, M.K.L., **VandenDriessche, T**., Kazazian, H.H., and Morgan, R.A. Retroviral delivery of human factor VIII by bone marrow transplant in a murine disease model. Abstract + Poster, Keystone Symposium on Molecular and Celluar Biology of Gene Therapy (Utah, USA), 13-19 April 1997.

24) Evans, G.L., Chuah, M.K.L., **VandenDriessche, T**., Kazazian, H.H., and Morgan, R.A. Retroviral delivery of human factor VIII by bone marrow transplant in a murine disease model. Abstract + Poster, NIH Workshop on

immunogenetics of inhibitor formation in hemophilia (Bethesda, USA), 19-20 June 1997.

25) Evans, G.L., Chuah, M.K.L., **VandenDriessche, T**., Kazazian, H.H., and Morgan, R.A. Retroviral delivery of human factor VIII by bone marrow transplant in a murine disease model. Abstract + Poster, 2nd International FDA/NIH Conference on Gene Therapy (Bethesda, USA), 15-18 July 1997.

26) Chuah, M.K.L., Brems, H., Vanslembrouck, V., Collen, D., and **VandenDriessche, T.** Bone marrow stromal cells as potential targets for hemophilia A gene therapy. Abstract + Poster, International Symposium on Gene Therapy for Hemophilia, Chapel Hill (North Carolina, USA), 4-6 September 1997.

27) Evans, G.L., Chuah, M.K.L., **VandenDriessche, T**., Morgan. R.A. Genetic induction of immune tolerance to factor VIII in a murine model for hemophilia A. Abstract + Poster, International Symposium on Gene Therapy for Hemophilia, Chapel Hill (North Carolina, USA), 4-6 September 1997.

28) Chuah, M.K.L., Brems, H., Vanslembrouck, V., Collen, D., and **VandenDriessche, T.** Bone marrow stromal cells as potential targets for gene therapy of hemophilia A. Abstract + Poster, Keystone Symposium on Molecular and Celluar Biology of Gene Therapy (Colorado, USA), 19-25 January, 1998.

29) **VandenDriessche, T.,** Collen, D. and Chuah, M.K.L. Improvement of retroviral *ex vivo* and *in vivo* gene therapy strategies for hemophilia A. Abstract. 1st International Conference on Vectors for Gene Therapy, Brussels, Belgium, March 12-14, 1998.

30) Chuah, M.K.L., Collen, D., **VandenDriessche, T.** Towards *ex vivo* and *in vivo* gene therapy for hemophilia A using retroviral vectors. Abstract. Cold Spring Harbour gene therapy meeting, September 1998, (Cold Spring Harbour, NY, USA).

31) **VandenDriessche, T.,** Vanslembrouck V., Goovaerts, I., Zwinnen, H., Collen, D., and Chuah, M.K.L. Long-term expression of human coagulation factor VIII and stable correction of hemophilia A after non-invasive retroviral gene transfer in factor VIII-deficient mice. 2nd Annual Meeting of the American Society of Gene Therapy, June 9-13, 1999 (Washington DC, USA).

32) Chuah, M.K.L., Vanslembrouck V., Goovaerts, I., Zwinnen, H., Collen, D., and **VandenDriessche, T.** Therapeutic levels of human coagulation factor VIII and long-term persistence of engineered cells following ex vivo gene therapy with human bone marrow stromal cells in non-myeloablated

immunodeficient mice. 2nd Annual Meeting of the American Society of Gene Therapy, June 9-13, 1999 (Washington DC, USA).

33) **VandenDriessche, T.,** Vanslembrouck V., Goovaerts, I., Zwinnen, H., Collen, D., and Chuah, M.K.L. Long-term expression of human coagulation factor VIII and stable correction of hemophilia A after non-invasive retroviral gene transfer in factor VIII-deficient mice. Thromb. Hemost. , suppl., p. 30, (1999). XVII Congress of the International Society of Thrombosis and Hemostasis, August 14-21, 1999.

34) Chuah, M.K.L., Zwinnen, H., Goovaerts, I., Vanslembrouck V., Collen, D., and **VandenDriessche, T.** Therapeutic levels of human coagulation factor VIII and long-term persistence of engineered cells following ex vivo gene therapy with human bone marrow stromal cells in non-myeloablated immunodeficient mice. Thromb. Hemost. , suppl., p. 30, (1999). XVII Congress of the International Society of Thrombosis and Hemostasis, August 14-21, 1999.

35) Peerlinck, K., Jacquemin, M., Benhida, A., Lavend'homme, R., Chuah, M., **VandenDriessche, T.,** Gilles, J-G., Saint-Remy, J.M., Vermylen, J. Mutation Arg2150His decreases FVIII binding to vWF but does not prevent a clinically effective response to DDAVP. Thromb. Hemost. Suppl., p.229 (1999). XVII Congress of the International Society of Thrombosis and Hemostasis, August 14-21, 1999.

36) Chuah, M.K.L., Van Damme A., Zwinnen, H., Vanslembrouck V., Goovaerts, I., Vanzieleghem, B., Saint-Remy, J.M., Collen, D., and **VandenDriessche, T.,** Therapeutic levels of human factor VIII in non-myeloablated immunodeficient mice injected with retrovirally transduced human bone marrow mesenchymal stromal cells. J. Gene Med. 1(6), suppl., p.69. Abstract + Poster presentation. 7th Meeting of the European Society of Gene Therapy, November 26-28, 1999 (Munchen, Germany).

37) **VandenDriessche, T.,** Van Damme, A., Naldini, L., Lillicrap, D., Van Zieleghem, B., Saint-Remy, J.M., Collen, D. & Chuah, M.K.L. Gene Therapy for Hemophilia A Using Retroviral and Lentiviral Vectors Expressing Human or Canine Factor VIII. Abstract + selected oral presentation. American Society of Gene Therapy Meeting ( 31.5-4.6.00, Denver, Colorado). Mol. Ther. 1(5): S28, (2000).

38) Garcia-Martin, C., Chuah, M.K.L., **VandenDriessche, T**., Ofosu, F., and Hortelano, G. Therapeutic levels of human factor VIII in mice implanted with encapsulated recombinant myoblasts:potential for gene therapy of hemophilia A. American Society of Gene Therapy Meeting ( 31.5-4.6.00, Denver, Colorado). Mol. Ther. 1(5): S290, (2000).

39) **VandenDriessche, T.,** Van Damme, A., Naldini, L., Lillicrap, D., Van Zieleghem, B., Saint-Remy, J.M., Collen, D. & Chuah, M.K.L. Development of *ex vivo* and *in vivo* gene therapy for hemophilia A using retroviral and lentiviral vectors expressing factor VIII. First International North Sea Conference on Thrombosis and Hemostasis, June 12-14, 2000 (Maastricht, NL). Haemostasis 30:5-27 (2000)

40) Jacquemin, M., Lavend'homme, R., Benhida, A., Vanzieleghem, B., d'Oiron, R., Chuah, M.K.L., **VandenDriessche, T.,** Gilles, J.G., Peerlinck, K., Vermylen, J., and Saint-Remy, J-M. Mutations Arg2150His and Ile2098Ser in rFVIII impair vWF binding. First International North Sea Conference on Thrombosis and Hemostasis (12.6-14.6.00, Maastricht, NL). Haemostasis 30:5-28 (2000)

41) **VandenDriessche, T.,** Van Damme, A., Naldini, L., Lillicrap, D., Van Zieleghem, B., Saint-Remy, J.M., Collen, D. & Chuah, M.K.L. Gene Therapy for Hemophilia A Using Retroviral and Lentiviral Vectors. J.Gen. Med. 2(5): 119 (2000).

42) Garcia-Martin C, Chuah MK, **VandenDriessche T,** Ofosu FA, Hortelano G Therapeutic levels of human factor VIII in mice implanted with encapsulated recombinant myoblasts: Potential for gene therapy of hemophilia A. Transfusion 40: (10) 1S-1S, Suppl. S OCT 2000

43) **VandenDriessche, T.,** Thorrez, L., Van Damme, A., Naldini, L., Lillicrap, D., Saint-Remy, J.M., Collen, D., Chuah, M. Lentiviral and oncoretroviral vector-based gene therapy for hemophilia A. Thromb. Haemost. Supplement, Abstract (2001) (ISSN 0340-6245).

44) **VandenDriessche, T.,** Van Damme, A., Thorrez, L., Schiedner, G., Kochanek, S., Naldini, L., Follenzi, A., Lillicrap, D., Collen, D., Chuah, M. Gene therapy for hemophilia A using onco-retroviral, lentiviral and gutless adenoviral vectors. Abstract. 9th Meeting of the European Society of Gene Therapy, November 2-4, 2001 (Antalya, Turkey).

45) Van Damme, A., **VandenDriessche T.,** Naldini, L., Lillicrap, D., Collen, D., Chuah, M. Development of an ex vivo gene therapy strategy for hemophilia A using bone marrow stromal cells for gene transfer. Abstract. 1st International Conference on Clinical Gene Therapy, January 24-26, 2002, Groningen, The Netherlands.

46) **VandenDriessche, T.,** Schiedner, G., Thorrez, L., Naldini, L., Follenzi, A., Lillicrap, D., Collen, D., Kochanek, S., Chuah, M.K.L. Gene therapy for hemophilia A using onco-retroviral, lentiviral and gutless adenoviral vectors. Mol. Ther., June 2002, American Society of Gene Therapy Meeting, USA.

47) **VandenDriessche, T.,** Schiedner, G., Thorrez, L., Lillicrap, D., Brown, B., Van Rooijen, N., Collen, D., Kochanek, S., Chuah, M.K.L. Gene therapy with high-capacity adenoviral vectors in hemophilic mice and dogs: limiting effects of adaptive and innate immune responses, J.Gene Med. European Society of Gene Therapy Meeting, Antibes, France, 2003.

48) **VandenDriessche, T.,** Schiedner, G., Thorrez, L., Lillicrap, D., Brown, B.[3], Van Rooijen, N., Collen, D., Chuah, M.K.L., Kochanek, S., Therapeutic human and canine factor VIII levels and negligible toxicity in hemophilic mice and dog models following gene therapy with high capacity adenoviral vectors. National Hemophilia Foundation Meeting, San Diego, April, 2003.

49) **VandenDriessche, T.,** Schiedner, G., Thorrez, L., Brown, B., Lillicrap, D., Van Rooijen, N., Collen, D., Chuah, M.K.L., Kochanek, S., Induction of immune tolerance following gene therapy with high-capacity adenoviral vectors by Kupffer cell depletion. Mol. Ther.7(5), 2003, American Society of Gene Therapy Meeting, USA.

50) **VandenDriessche, T.,** Janssens, W., Jacquemin, M., Collen, D., Saint-Remy, J., Chuah, M.K. (2003). Immune tolerance induction using retrovirally transduced B-cells, Mol. Ther. 7(5), S152-S152. Annual Meeting of the American Society of Gene Therapy. , USA, 1-5 June 2003.

51) Van Damme, A., Chuah, M., Dell'Accio, F., De Bari, C., Luyten, F., Naldini, L., Lillicrap, D., Follenzi, A., Collen, D., **VandenDriessche, T.** (2003). Lentiviral vectors efficiently transduce human bone marrow mesenchymal cells. Mol. Ther. 7(5), S339-S339. Annual Meeting of the American Society of Gene Therapy. , USA, 1-5 June 2003.

52) **VandenDriessche, T.,** Schiedner, G., Thorrez, L., Brown, B., Lillicrap, D., Van Rooijen, N., Collen, D., Chuah, M.K.L., Kochanek, S. Gene therapy for hemophilia A with high-capacity adenoviral vectors: preclinical evaluation in hemophilic mice and dogs. J. Thromb. Hemost., 2003, International Society for Thrombosis and Hemostasis Meeting, Birmingham, July 2003.

53) Thorrez, L., Maris, M., Miao, C, Van Rooijen, N., Collen, D., Chuah, M., **VandenDriessche, T**.. Development and characterization of lentiviral vectors for hemophilia gene therapy. 7th Annual Meeting of the American Society of Gene Therapy, June 2004 (Minneapolis, USA). Mol. Ther. 9 (suppl. 1): S158 (2004).

54) Yamada, T., Iwasaki, Y., Tada, H., Iwabuki, H., Chuah, M.K.L., **VandenDriessche, T.**, Kondo, A., Ueda, M., Seno, M., Tanizawa, K., and Kuroda, S. Nanoparticles for targeted hepatocyte-specific gene delivery. 12th Annual Congress of the ESGCT, Tampere, Finland, Nov 4-7, 2004

55) Thorrez, L., Vandenburgh, H., Collen D., Shansky, J., **VandenDriessche , T.** , Chuah, M Enhanced Factor IX Delivery from Bioengineered Hybrid Human Skeletal Muscle Co-Expressing VEGF. 8th Annual Meeting of the American Society of Gene Therapy, June 2005 (St Louis, USA). Mol. Ther. 11 (suppl. 1): S17 (2005).

56) **VandenDriessche, T.,** Thorrez, L., Acosta-Sanchez, A., Wang, L., Gillijns, V., Ling, M., Wilson, J., Collen, D., Chuah, M. Gene delivery to the heart and liver using AAV serotype 9: implications for cardiovascular disease and hemophilia. 13th Annual Congress of the ESGCT, Prague, Czech Republic, Oct 29-Nov 1, 2005.

57) De Meyer, S., Vanhoorelbeke, K., Chuah, M.K.., et al. Phenotypic correction of von Willebrand disease type 3 blood-derived endothelial cells with lentiviral vectors expressing von Willebrand factor. Blood 106, 468B (2005). American Society of Hematology Meeting, 2005 (USA).

58) Chuah, M., Thorrez, L., Vandenburgh, H., Acosta-Sanchez, A., Wang, L., Gillijns, V., Ling, M., Wilson, J., Collen, D., **VandenDriessche, T.** Refining the tools for gene therapy of hemophilia. 3rd Annual Conference British Society for Gene Therapy March 28-30, 2006.

59) **VandenDriessche, T.,** Thorrez, L., Acosta-Sanchez, A., Wang, L., Gillijns, V., Ling, M., Vandenburgh, H., Mertens, N., Callewaert, N., Wilson, J., Collen, D., Chuah, M. Widespread and efficient gene delivery to the heart and liver using AAV serotype 9: implications for cardiovascular disease and hemophilia. 9th Annual Meeting of the American Society of Gene Therapy, June 2006 (Baltimore, USA). Mol. Ther. 13 (suppl. 1): S10 (2006).

60) De Meyer SF, Vanhoorelbeke K, Chuah MK, Pareyn I, Gillijns V, Hebbel RP, Collen D, Deckmyn H, **VandenDriessche T**. Phenotypic correction of von Willebrand disease type 3 blood-derived endothelial cells with lentiviral vectors expressing von Willebrand factor. 9th Annual Meeting of the American Society of Gene Therapy, June 2006 (Baltimore, USA) Mol. Ther. 13 (suppl. 1): S187 (2006).

61) Matsui, H., Shibata M, Brown B, Matsui A, Labelle C, Hegadorn C, Andrews C, Chuah M, **VandenDriessche T**, Miao C, Hough D, Lillicrap D. Successful induction of immune tolerance to canine factor VIII after lentiviral-mediated gene therapy in neonatal hemophilia A mice. 9th Annual Meeting of the American Society of Gene Therapy, June 2006 (Baltimore, USA) Mol. Ther. 13 (suppl. 1): S419 (2006).

62) Bossuyt, W., Van Miegroet, H., Mentens, N., Gillijns, V., **VandenDriessche, T.,** Marynen, P., Cools, J., Hassan, B. (2006). Cancer and differentiation: The

function of ATOH1 in cancer, J. Neurogenet. 92 (2006). Annual European Meeting on the Neurogenetics of Drosophilia, Belgium, 2-6 September 2006.

63) De Waele, L., Freson, K., Gillijns, V., Thys, C., Van Geet, C., Chuah, M.K., **VandenDriessche, T.** (2007). Megakaryocyte-specific lentiviral vectors for gene therapy of platelet disorders, Mol. Ther. American Society of Gene Therapy , Seattle, 30 May -3 June 2007.

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65) De Waele, L., Freson, K., Thys, C., Van Geet, C., Collen, D., **VandenDriessche, T.,** Chuah, M.K. (2007). Development of megakaryocyte-specific lentiviral vectors for gene therapy of platelet disorders, Blood 110:368B (2007). American Society of Hematology Meeting. , Atlanta, 9-13 December 2007.

66) De Meyer, S., Chuah, M.K., **VandenDriessche, T.,** Vandeputte, N., Pareyn, I., Petrus, I., Deckmyn, H., Vanhoorelbeke, K. (2007). Restoration of von Willebrand factor function in a murine model of severe von Willebrand disease after liver-specific gene transfer, Hum. Gene Ther. 18:1071-1072 (2007). European Society of Gene & Cell Therapy., the Netherlands, 27-30 October 2007.

67) Chuah, M.K., Belay, E., Matrai, J., Mates, L., Acosta-Sanchez, A., Samara-Kuko, E., Shrahna, M., Ivics, Z., Iszvak, Z., **VandenDriessche, T.** (2007). Novel enhanced transposases result in efficient ex vivo and in vivo stable gene transfer into stem cells and hepatocytes, Hum. Gene Ther. 974 (2007). Annual Meeting of the European Society of Gene & Cell Therapy. , the Netherlands, 27-30 October 2007.

68) Ahangarani, R., Janssens, W., Carlier, V., VanderElst, L., **VandenDriessche, T.,** Chuah, M., Jacquemin, M., Saint-Remy, J. (2007). Epigenetic control of IL-10 production in retrovirally transduced B cells confers long-term antigen-specific unresponsiveness, Hum. Gene Ther. 992 (2007). European Society of Gene & Cell Therapy, the Netherlands, 27-30 October 2007.

69) Sion, C., Matrai, J., Chuah, M.K., **VandenDriessche, T.,** Kingsman, S., Mitrophanous, K., Radcliffe, P. (2007). Evaluation of codon-optimized factor VIII genes in the development of lentiviral vectors for gene therapy of hemophilia A, Hum. Gene Ther. 1017 (2008). Annual Meeting of the European Society of Gene & Cell Therapy. Belgium, 13-16 November 2008.

70) Matrai, J., De Waele, L., Samara-Kuko, E., Acosta-Sanchez, A., **VandenDriessche, T.,** Chuah, M.K. (2008). Efficiency of stable transduction with integration-defective lentiviral vectors is tissue-dependent, Hum. Gene Ther. 1194 (2008). European Society of Gene & Cell Therapy. , Belgium, 13-16 November 2008.

71) Belay, E., Mates, L., Acosta-Sanchez, A., Matrai, J., Samara-Kuko, E., Ivics, Z., Chuah, M.K., Izsvak, Z., **VandenDriessche, T.** (2008). Long-term and robust transgene expression in the liver using novel hyperactive sleeping beauty transposases: Genomic integration profile varies depending on hepatocyte activation status, Hum. Gene Ther. 1079-1080 (2008). Annual Meeting of the European Society of Gene & Cell Therapy, Belgium, 13-16 November 2008.

72) Petrus, I., Chuah, M.K., Acosta-Sanchez, A., Yan, B., De Bleser, P., Hooghe, B., Matrai, J., Samara-Kuko, E., Van Roy, F., **VandenDriessche, T.** (2008). Combinations of hepatocyte-specific transcription factor binding sites identified de novo using a novel bioinformatics algorithm yield robust liver-specific expression, Hum. Gene Ther. 1077-78 (2008). Annual meeting of the European Society of Gene & Cell Therapy. , Belgium, 13-16 November 2008.

73) Chuah, M.K., Eyayu, B., Mates, L., Matrai, J., Acosta-Sanchez, A., Bing, Y., Samara-Kuko, E., Vermeesch, J., Mathieu, C., Ivics, Z., Iszvak, Z., **VandenDriessche, T.** (2008). Novel enhanced transposases result in robust stable gene transfer into hematopoietic, mesenchymal and muscle progenitor/stem cells, Hum. Gene Ther. (1071). Annual meeting of the European Society of Gene & Cell Therapy. , Belgium, 13-16 November 2008.

74) Ahangarani, R., Janssens, W., Carlier, V., VanderElst, L., **VandenDriessche, T.**, Chuah, M.K., Jacquemin, M., Saint-Remy, J. (2008). Retrovirally-transduced B cells constitutively produce IL-10 through a TLR2-STAT3 signaling pathways and elicit Tr-1 regulatory T cells after adoptive transfer, Hum. Gene Ther. 1091 (2008). Annual meeting of the European Society of Gene & Cell Therapy, Belgium, 13-16 November 2008.

75) Sion, C., Matrai, J., Chuah, M., **VandenDriessche, T.,** Kingsman, S., Mitrophanous, K., Radcliffe, P. (2008). Development of lentiviral vectors for haemophilia a gene therapy, Hum. Gene Ther. 1133-1134 (2008). European Society of Gene & Cell Therapy, Belgium, 13-16 November 2008.

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77) Belay, E., **VandenDriessche, T.,** Mates, L., Matrai, J., Ling, M., Acosta-Sanchez, A., Samara-Kuko, E., Miskey, C., Ivics, Z., Izsvak, Z., Chuah, M. (2009) . Novel Transposases Obtained by Darwinian Evolution and Selection Result in Stable Gene Transfer in CD34+ Cells and Efficient Gene Marking In Vivo Following Hematopoietic Reconstitution. Mol Ther, 2009. 17(S1): Abstract 766. Annual meeting of the American Society of Gene & Cell Therapy, US, May 2009

78) Petrus, I., Chuah, M.K., Acosta-Sanchez, A., Bing, Y., De Bleser, P., Hooghe, B., Matrai, J., Ma, L., Samara-Kuko, E., Van Roy, F., **VandenDriessche, T.** (2009). De novo identification of combinations of hepatocyte-specific transcription factor binding sites using a novel bio-informatics algorithm yield robust liver-specific expression. Mol Ther, 2009. 17(S1): p. S161. American Society of Gene & Cell Therapy, US, May 2009

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80) **VandenDriessche, T.** Gene therapy for hemophilia. Hum. Gene Ther. 20: 1357 (2009). Annual Meeting of the European Society of Gene & Cell Therapy, Belgium, 13-16 November 2008.

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83) Matrai, J., Chuah, M., Cantore, A., Acosta-Sanchez, A., Bartholomae, C., Samara-Kuko, E., Ma, L., De Waele, L., Schmidt, M., von Kalle, C., Naldini, L., **VandenDriessche, T.** Sustained therapeutic FIX expression in liver using integration-deficient lentiviral vectors. Hum. Gene Ther. 20: 1409(2009). XVIIth Annual Meeting of the European Society of Gene & Cell Therapy (Hannover, Germany), 20-25 November 2009.

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86) Belay, E., Matrai, J., Quatrocelli, M., Mates, L. , Acosta-Sanchez, A., Ma, L., Sancho Bru, P., Geeraerts, M., Vanuytsel, K., Yan, B., Vermeesch, J., Rincon, M., Samara-Kuko, E., Ivics, Z., Verfaillie, C., Sampaolesi, M., Iszvak, Z., **VandenDriessche T.,** Chuah, M.K.L. Hyperactive transposons for genetic modifcation of induced pluripotent and adult stem cells: a non-viral paradigm for coaxed differentiation. Mol. Ther. (2010). 13th Annual Meeeting of the American Society of Gene & Cell Therapy (Washington, D.C., USA), 17-22 May 2010.

87) Chuah, M.K.L., Belay, E., Matrai, J., Acosta-Sanchez, A., Ma, L., Quattrocelli, M., Mates, L., Sancho-Bru, P., Geraerts, M., Yan, B., Vermeesch, J. Samara-Kuko, E., Ivics, Z., Verfaillie, C., Sampaolesi, M., Izsvak, Z., **VandenDriessche, T.** Hyperactive Transposons for Genetic Modification of Induced Pluripotent and Adult Stem Cells: A Novel Non-Viral Paradigm for Coaxed Differentiation. Hum. Gene Ther. 21(9): 1174 (2010). 7th Annual Meeting of the German-Society for Gene Therapy (DG-GT).

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89) **VandenDriessche, T.** Emerging use of transposons for gene therapy. Hum. Gene Ther. 21(10): 1358 (2010). XVIIIth Annual Meeting of the European Society of Gene & Cell Therapy (Milano, Italy), 22-25 November 2010.

90) Cohen-Haguenauer O, Creff N, Cruz P, Tunc C, Aïuti A, Baum C, Bosch F, Blomberg P, Cichutek K, Collins M, Danos O, Dehaut F, Federspiel M, Galun E, Garritsen H, Hauser H, Hildebrandt M, Klatzmann D, Merten O, Montini E, O'Brien T, Panet A, Rasooly L, Scherman D, Schmidt M,

Schweitzer M, Tiberghien P, **VandenDriessche T**, Ziehr H, Ylä-Herttuala S, von Kalle C, Gahrton G, Carrondo M. Relevance of an Academic GMP Pan-European Vector Infra-structure (PEVI). Hum. Gene Ther. 21(10): 1382 (2010). XVIIIth Annual Meeting of the European Society of Gene & Cell Therapy (Milano, Italy), 22-25 November 2010.

91) **VandenDriessche T**. Hemophilia as trailblazer for gene therapy. FEBS J. 278:67–67 (2011). 36th FEBS Congress: Biochemistry for Tomorrow's Medicine (Torino, Italy), June 25-30, 2011.

91) **VandenDriessche, T.** and Chuah, M.K. Zooming in on the target: transductional and transcriptional targeting. Hum. Gene Ther. 22(10):13 (2011). XIXth Annual Meeting of the European Society of Gene & Cell Therapy (Brighton, UK), 27-31 October 2011.

92) Quattrocelli, M., Palazzolo, G., Perini, I., Thorrez, L., Berardi, E., Chuah, M., **VandenDriessche, T.,** Sampaolesi. M. Enhanced myogenic potential of mesoangioblast-derived induced pluripotent stem cells. Hum. Gene Ther. 22 (10):24 (2011). XIXth Annual Meeting of the European Society of Gene & Cell Therapy (Brighton, UK), 27-31 October 2011.

93) Viecelli HM, Harbottle RP, Chuah M, **VandenDriessche T**, Harding CO, Thony B. Liver Gene Therapy for PKU Using Naked DNA/Minicircle Vectors Expressing Phenylalanine Hydroxylase from a Synthetic Minigene. Mol. Ther. 20:S56–S56 (2012). 15th Annual Meeting of the American Society of Gene Therapy (Philadelphia, Pennsylvania, USA), May 15-19, 2012.

94) **VandenDriessche T**, Rincon M, Petrus I, Di Matteo M, De Bleser P, Matrai J, Le Guiner C, Blouin V, Moullier P, Mc Vey J, Ward N, Mingozzi F, High K, Chuah M. De Novo Design of Tissue-Specific Regulatory Elements Results in Robust Transduction in Heart and Liver: Implications for Cardiovascular Disease and Hemophilia. Mol. Ther. 20:S116–S116 (2012). 15th Annual Meeting of the American Society of Gene Therapy (Philadelphia, Pennsylvania, USA), May 15-19, 2012.

95) Cantore A, Annoni A, Damo M, Sergi LS, Bartolaccini S, **VandenDriessche T**, Bellinger D, Roncarolo MG, Nichols T, Naldini L. Liver Gene Therapy by Lentiviral Vectors Allows Partial Correction of Two Hemophilia B Dogs and Revert Pre-Existing Anti-Transgene Immunity in Mice. Mol. Ther. 20:S212–S212 (2012). 15th Annual Meeting of the American Society of Gene Therapy (Philadelphia, Pennsylvania, USA), May 15-19, 2012.

**4.8. Other presentations at meetings** (not published or as abstract only)

a) "Invited speaker" or selected oral presentations

1) Invited speaker. Retroviral-vector mediated gene therapy for hemophilia "A": preclinical studies. Annual Meeting of the Belgian Society for Thrombosis and Hemostasis. 30.11.96.

2) Selected oral presentation. The expression of H-2Kk and H-2Dk MHC class I antigens on murine BW T lymphoma variants correlates with their malignant behaviour. Plenary Session. Belgische Vereniging voor de Studie van Kanker (BVSK) meeting, "Markers for tumor progression in human and experimental cancer." Gent (Belgium), 20.10.89.

3) Invited speaker. Retroviral-vector mediated gene therapy for hemophilia "A": preclinical studies. Annual Meeting of the Belgian Society for Thrombosis and Hemostasis. 30.11.96.

4) Invited speaker. Development of retroviral vector-mediated in vivo gene therapy, 3rd Annual Meeting of the Flemish Institute for Biotechnology (Belgium), February 25, 1999.

5) Invited speaker. Gene therapy: state-of-the-art. Clinical Genetics Meeting, Leuven, Belgium March 11-12, 1999.

6) Invited speaker. Gene therapy for hemophilia A: perspectives. Clinical Genetics Meeting, Leuven, Belgium March 11-12, 1999.

7) Invited speaker. Pharmacia-Upjohn/F.W.O. Seminarie: Gentherapie voor Hemofilie (Brussel, November 1999).

8) Invited speaker + chairman (*Gene Therapy Session*). Development of *ex vivo* and *in vivo* gene therapy for hemophilia A using retroviral and lentiviral vectors expressing human or canine factor VIII. 3rd Annual VIB Meeting, February 17-18, 2000 (Mol, Belgium).

9) Invited speaker. Development of *ex vivo* and *in vivo* gene therapy for hemophilia A. Belgian Pediatric Hematology/ Oncology Meeting June 15, 2000 (Smith Kline Beecham, Rixensart).

10) Invited speaker. Gene therapy for Hemophilia. Belgian Haemophilia Society (14.10.2000).

11) Invited speaker. Gene Therapy Symposium. Gene therapy: from the bench to the bedside; Faculty of Pharmaceutical Sciences; KU Leuven (April, 2001).

12) Invited speaker. Gene therapy for Hemophilia. Belgian Haemophilia Society (5.10.2002).

13) Invited speaker. Stem-cell based gene therapy: hopes and hurdles. KUL Stem Cell Symposium , February 2003.

14) Invited speaker. Gene therapy. **Plenary lecture.** Annual Meeting Flanders Interuniversity Institute for Biotechnology, 13 March 2003 (Blankenberge, Belgium).

15) Invited speaker. Recente Ontwikkelingen in Gentherapie. Koninklijke Academie voor Geneeskunde. Brussels, Belgium, Februari 2004.

16) Invited speaker. Gene therapy for genetic bleeding disorders. 1st Annual Meeting INTHER - European Network on Transposons (Prague, Czech Republic), Oct 28-29, 2005.

17) Invited speaker. Gene therapy for genetic bleeding disorders. 2ndAnnual Meeting INTHER - European Network on Transposons (Athens, Greece), 9 November,2006.

18) Invited speaker. Comparing various vector systems towards gene therapy for hemophilia. Clinigene Symposium – 1st Annual Meeting European Network for the Advancement of Clinical Gene Transfer and Therapy Symposium, (Annecy, France), March 31, 2007.

19) Invited speaker. Gene therapy for genetic bleeding disorders. 3rdAnnual Meeting INTHER - European Network on Transposons (Rotterdam, NL), 27-30 October 2007.

20) Invited speaker. Novel enhanced transposases obtained by Darwinian evolution and selection result in robust stable gene transfer into hematopoietic, mesenchymal and muscle stem/progenitor cells. 1st Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 14-17, 2009.

21) Invited speaker. Hepatocyte-specific regulons identified de novo using a novel bioinformatics algorithm yield robust liver-specific expression: implications for gene therapy of hemophilia. 1st Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 14-17, 2009.

22) Invited speaker. AAV and lentiviral gene therapy for hemophilia B. 1st Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 14-17, 2009.

23) Invited speaker. Efficient ex vivo gene delivery into stem cells and in vivo gene delivery into hepatocytes with novel hyperactive transposases obtained by Darwinian evolution & selection. 3rd Annual Meeting Clinigene Symposium - European Network for the Advancement of Clinical Gene Transfer and Therapy Symposium, (Annecy, France), April 2-5, 2009.

24) Invited speaker. Hepatic and cardiac gene delivery using AAV vectors: implications for hemophilia and cardiovascular disease. Clinigene Symposium: In vivo application of AAV - European Network for the Advancement of Clinical Gene Transfer and Therapy Symposium, (Nantes, France). September 3-4, 2009.

25) Invited speaker. State of the art: conclusions. Clinigene Symposium: In vivo application of AAV –European Network for the Advancement of Clinical Gene Transfer and Therapy Symposium, (Nantes, France). September 3-4, 2009.

26) Invited speaker. Gentherapie voor Hemostase en Trombose. Symposium Trombosestichting Nederland 35 jaar jubileum. Amsterdam 23 October 2009.

27) Invited speaker. Non-viral gene transfer into HSC and liver using hyperactive transposons. 2nd Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 13-16, 2010.

28) Invited speaker. De novo generation of tissue-specific promoters. 2nd Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 13-16, 2010.

29) Invited speaker. Gene therapy for hemophilia. 2nd Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 13-16, 2010.

30) Invited speaker. Hyperactive transposons for gene delivery into iPS and adult stem cells: a novel paradigm for coaxed differentiation. 4th Annual Meeting Clinigene Symposium - European Network for the Advancement of Clinical Gene Transfer and Therapy Symposium, (Annecy, France), March 25-28, 2010.

31) Invited speaker. Gene therapy delivers. Symposium BioCenter Finland (Helsinki, Finland), 30.11.2011.

32) Invited speaker. The “heart of the matter”: cardio-selective AAV vectors 3rd Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 11-14, 2011.

33) Invited speaker. Hemophilia as a trailblazer for gene therapy: Preclinical non-human primate studies and "immune stealth" AAV. 3rd Annual Meeting PERSIST - European Network on Gene Therapy (Leukerbad, Switserland), January 11-14, 2011.

34) Invited speaker. Gene therapy for hemophilia. Erasmus lecture series, Rotterdam, Erasmus Hospital, February 2012.

b) Posters or abstracts

1) **VandenDriessche, T.**, Eisenbach, L. and De Baetselier, P. The expression of H-2Kk and H-2Dk MHC class I antigens on murine BW T lymphoma variants correlates with their malignant behaviour. Abstract + poster. Belgische Vereniging voor de Studie van Kanker (BVSK) meeting, "Markers for tumor progression in human and experimental cancer." Gent 20.10.89.

2) **VandenDriessche, T.**, Verschueren, H., Dewit, J. and De Baetselier, P. Malignancy of mouse T lymphoma cells is controlled by the level of MHC class I H-2D$^{k}$ antigens. Abstract + poster Belgische Vereniging voor de Studie van Kanker (BVSK) meeting, Liege, 18.10.91.

3) Chuah, M.K.L., **VandenDriessche, T.**, Chang, H.K., Ensoli, B. and Morgan, R.A. Inhibition of HIV-1 by retroviral vectors expressing antisense RNA and trans-dominant proteins. Poster, NCHGR/NIH meeting, Airlie, Virginia, December 1994.

4) **VandenDriessche, T.**, Chuah, M.K.L., and Morgan, R.A. Analysis of retroviral vectors expressing human factor VIII as a potential gene therapy for hemophilia. Poster, NCHGR/NIH meeting, Airlie, Virginia, December 1994.

5) **VandenDriessche, T.,** Brems, H., Collen, D. and Chuah, M.K.L. Generation of high-titer VSV-G pseudotyped factor VIII retroviral vectors for hemophilia A gene therapy. Abstract + Poster, 1st Annual Meeting of the Flemish Institute for Biotechnology (VIB, Ghent (Belgium), 18-19 June 1997.

6) Chuah, M.K.L., Brems, H., Vanslembrouck, V., Collen, D., and **VandenDriessche, T.** Bone marrow stromal cells as potential targets for hemophilia A gene therapy. Abstract + Poster, 1st Annual Meeting of the Flemish Institute for Biotechnology (VIB, Ghent, Belgium), 18-19 June 1997.

7) Chuah, M.K.L., Goovaerts I., Zwinnen H., Vanslembrouck, V., Paelinckx,I., Naldini, L. Collen , D. and **VandenDriessche, T**. Development of HIV-based and non-primate lentiviral vectors for cardiovascular gene therapy. 3rd Annual VIB Meeting, Mol 17-18.02.00. 3rd Annual VIB Meeting, February 17-18, 2000 (Mol, Belgium).

8) **VandenDriessche, T.,** Van Damme, A., Goovaerts, I., Vanslembrouck, V., Zwinnen, H., Van Zieleghem, B., Saint-Remy, J.M., Naldini, L., Collen, D., and Chuah, M.K.L. Gene therapy for hemophilia A using retroviral and lentiviral vectors expressing human or canine factor VIII. 3rd Annual VIB Meeting, Mol 17-18.02.00.

9) Van Damme, A., **VandenDriessche, T.,** Naldini, L., Lillicrap, D., Collen, D. & Chuah, M.K.L. Development of ex vivo and in vivo gene therapy for hemophilia A using retroviral and lentiviral vectors expressing FVIII. Abstract + poster. Belgian Society of Pediatrics, Terhulpen, Belgium, April 23-24, 2001.

10) Van Damme, A., **VandenDriessche T.,** Naldini, L., Lillicrap, D., Collen, D., Chuah, M. Ex vivo gene therapy for hemophilia A using human bone marrow mesenchymal cells transduced with onco-retroviral and lentiviral vectors. Abstract. Belgian Society on Thrombosis and Haemostasis Annual Meeting, November 22-23, 2001, Leuven, Belgium.

11) **VandenDriessche, T.,** Van Damme, A., Naldini, L., Lillicrap, D., Collen, D. & Chuah, M.K.L. Development of ex vivo and in vivo gene therapy for hemophilia A using retroviral and lentiviral vectors expressing FVIII. Abstract + poster. 5th Annual Meeting Flanders Interuniversity Institute for Biotechnology, March 8-9, 2001, Blankenberge, Belgium.

12) Thorrez L, **VandenDriessche T,** Naldini L, Berneman Z, Collen D, Chuah M. Efficient in vivo transduction of non-dividing cells with an improved lentiviral vector. VIB Seminar, March 7-8, 2002, Blankenberge, Belgium.

13) Thorrez L, Maris M, Collen D, Chuah M, **VandenDriessche T.** Development and characterization of improved lentiviral vectors for hepatic gene delivery. VIB seminar, March 11-12, 2004, Blankenberge, Belgium.

14) Thorrez L, Schiedner G, Gillijns V, Vanslembrouck V, Johnston M, Hertel S, Van Rooijen N, Collen D, Kochanek S, **VandenDriessche T,** Chuah M. Induction of long-term immune tolerance to neo-antigens following gene therapy with high-capacity adenoviral vectors by transient elimination of antigen presenting cells. VIB seminar, March 11-12, 2004, Blankenberge, Belgium.

15) Roohi Ahangarani, R., Janssens, W., Carlier, V., Vander Elst, L., **VandenDriessche, T.,** Chuah, M., Jacquemin, M., Saint-Remy, J. (2007). Elicitation of Tr1-like regulatory T cells in vivo using transgenic B cells in experimental asthma, VIB Seminar. VIB Seminar, 1-2 March 2007, Blankenberge, Belgium.

### 4.9. Research progress reports

Annual reports EU FP6 (INTHER)-(2006, 2007, 2008 & 2009)
Annual reports EU FP7 (PERSIST)-(2009)
Progress Reports Bayer (2009)
Progress Reports Actogenix (2009)
Progress report Oxford Biomedica (2007, 2008, 2009)
Progress Reports & Final reports FWO onderzoeksprojecten & "aspiranten"
Wetenschappelijke Onderzoeksgemeenschap & IWT beurzen (for the year 2000-2009)
VIB-CTG Strategy Document & Annual Report 1995-2009

### 4.10. Other publications

**VandenDriessche, T.:** MSc Thesis (VUB, 1987): Role of histocompatibility antigens in metastasis.

**VandenDriessche, T.:** PhD thesis (VUB, 1992): Possible role of major histocompatibility class I antigens in metastasis: implications for gene therapy. Annex thesis: Polycistronic retroviral vectors expressing multiple anti-HIV-1 genes may synergistically inhibit HIV-1 replication.

**Clinical Gene Therapy Protocol:**
Adoptive transfer of syngeneic CD4+ T lymphocytes engineered with antisense-TAR and trans-dominant Rev in HIV-1 discordant identical twins (Protocol approved by NIH Internal Review Board, NIAID Biosafety Commission, US Recombinant DNA Advisory Committee & US FDA) (1992-1995). National Center for Human Genome Research - National Institutes of Health.

This clinical trial was based on the following publications:

1) Chuah, M.K.L.*, **VandenDriessche, T.***, Chang, H.S., Ensoli, B., and Morgan, R.A. Inhibition of human immunodeficiency virus type-1 by retroviral vectors expressing antisense TAR. Hum. Gene Ther. 5:1467-1475 (1994).

2) **VandenDriessche, T.***, Chuah, M.K.L.*, Chiang, L., and Morgan, R.A. Inhibition of clinical HIV-1 isolates in primary $CD4^+$ T lymphocytes by retroviral vectors expressing anti-HIV genes. J. Virol., 69, 4045-4052 (1995).

3) Ragheb, J., Bressler, P., Daucher, M.B., Chiang, L., Chuah, M.K.L., **VandenDriessche, T.**, Fauci, A.S., and Morgan, R.A. Analysis of transdominant mutants of the HIV-1 Rev protein for their ability to inhibit Rev function and HIV-1 replication. AIDS Res. Hum. Retroviruses, 11: 1343-1353 (1995).

4) Chang, H.S., **VandenDriessche, T.**, Chuah, M.K.L., Morgan, R.A., Gallo, R.C., and Ensoli, B. Inhibition of HIV-1 replication by simultaneously blocking Tat and Rev function with vectors expressing an antisense tat/rev RNA. Hum. Gene Ther. AIDS Res. Hum. Retroviruses (revised manuscript submitted).

(*Contributions:* construction and characterization of anti-HIV retroviral vectors and retroviral vector producer cell lines, preclinical inhibition studies of HIV-1 *in vitro* in transduced T-cell lines and primary T lymphocytes, safety and efficacy analysis).

## 5. Research grants

1) Belgian Fund for Scientific Research (FWO) grant N°G.0110.00: Development of in vivo gene therapy for hemophilia A; (2000-2005) (161,000€)

2) FWO N°G.0254.01 Development of lentiviral vectors for cardiovascular gene therapy; (2001-2002) (55,776€)

3) FWO N° G.0341.05 Development of nanoparticle technology for gene therapy and "drug delivery" 1/1/2005-31/12/2008 (160,000)

4) FWO N° G.0631.07 Gene therapy for hemophilia A and B using improved adeno-associated viral vectors (2007-2010)(*) : 140,000€

5) FWO N° G.0632.07 Development of novel site-specific integrating vectors to minimize the risk of insertional oncogenesis (2007-2010): 120,000€

6) FWO N° G.0601.09 Role of micro-RNA in cardial hypertrophy: funadmental and therapeutic implications. Rol van micro–RNA in cardiale hypertrofie: fundamentele en therapeutische implicaties (2009-2011): 10600€

7) VIB: Research Grant of Flemish Government Gene therapy for hemophilia; 1/1/1996-1/1/2006 (structural financing: approx.450,000$/yr).

8) Concerted Research Action (GOA); University of Leuven Research Grant; Co-PI: T. VandenDriessche (2003-2008): (280,000€). Molecular regulation of blood platelet formation and function in hemostasis

9) European Union grant Framework 6 (EU FP6): Development and application of transposons and site-specific integration technologies as non-viral gene delivery methods for ex vivo gene-based therapies (2005-2008) (293,886€ personnel: 1 PhD student, 1 technician)

10) European Hematology Association: Hematopoietic stem cell based gene therapy for hereditary thrombocytopenia due to GATA-1 deficiency (2005-2006): 65,000€

11) Research Grant Muscular Dystrophy Association (USA): Therapeutic potential of VEGF for amyotrophic lateral sclerosis (2004-2006); PI: P. Carmeliet: 97,263€/yr (Collaborator T.VandenDriessche: 2004-2005)

12) Katharine Dormandy Trust (UK): Gene Therapy for hemophilia 2005 & 2006: 40,000€ & 73,000 €

13) US NASA grant: Attenuation of space travel induced skeletal muscle atrophy (2005): (PI: H. Vandenburgh/ collaborator: T.V.)

14) VIB, J& J COSAT grant: A lentiviral RNAi screen to identify tyrosine kinase genes required for the proliferation or survival of cancer (1/11/2006-31/10/2007): 125,000€ (personnel: 1 post-doc)

15) IWT O&O - Actogenix: Novel Concept for Oral delivery of Biopharmaceuticals (2007-2008: 300,000 €; personnel: 1 post-doc, 2 technicians)

16) Association Française contre les Myopathies (AFM): Cardiac gene delivery for Duchenne muscular dystrophy using novel adeno-associated viral vectors (AAV9) (2007-2008): 82,000 € (personnel: 1 post-doc)

17) Oxford Biomedica Ltd (UK): Gene therapy for hemophilia (2008-2009) (102,500 €)

18) European Union grant Framework 7 (EU FP7 - PERSIST): Persisting transgenesis (2009-2012): (1,000,000 €, personnel: 1 post-doc, 1 PhD student)

19) Cancer Foundation (Stichting tegen Kanker): Role of microRNA in hepatocarcinogenesis: in vivo validation, mechanisms and therapeutic implications (2009-2012): (280,000 €; personnel:1 PhD. Student)

20) Association Française contre les Myopathies (AFM): Non-viral stem cell-based gene therapy for muscular dystrophy using novel hyperactive transposons (2009: 65,000 €)

21) Cellectis: Meganuclease-mediated gene transfer (2009-2012: 596,581 €; personnel: 1 post-doc, 1 technician)

22) FWO : Role of microRNA regulation in the control of hepatocarcinogenesis: in vivo validation, molecular mechanism and therapeutic implications (G076310N 01/01/2010 - 31/12/2013) 169.600 €

23) Johnson & Johnson (O &O IWT): Development of novel platform and complex cell models for the identification of innovative drug targets (2010-2011: 480,000 €; personnel: 2 post-docs)

24) EU-FP6 (European Union grant Framework 6) - Clinigene (NoE): Transposon- based gene therapies (2011) 50000€

25) VUB GOA: EPIGEN: Interplay between epigenetic modification mechanisms and microRNAs: 309750€ (2011-2015)

26) Association Française contre les Myopathies (AFM): Hepatic gene therapy for hemophilia using integration-defective lentiviral vectors: effect of miRNA regulation on induction of immune tolerance (2011-2012) 150000€

27) FWO: G.0960.11 Development of stem cell based gene therapy for Duchenne muscular dystrophy (01/01/2011-31/12/2016) 96519€

28) FWO: G.0892.11 Hepatic gene therapy for hemophilia using integration-defective lentiviral vectors: effect of miRNA regulation on induction of immune tolerance. (01/01/2011-31/12/2016) 134683€

Fellowships:

1) FWO mandate aspirant An Van Damme, MD (1998-2003). Development of ex vivo gene therapy for hemophilia Promoter: Thierry VandenDriessche, Co-promoter: Marinee K.L. Chuah; KUL & VIB

2) FWO mandate aspirant Liesbeth De Waele, MD (2003-2007). Gene therapy for GATA-1 deficiency using genetically corrected hematopoietic stem cells. Promoter: Marinee K.L. Chuah, Co-promoters: Thierry VandenDriessche & Chris Van Geet; KUL & VIB

3) FWO mandate aspirant Mario di Matteo (2009-2013). Role of microRNA in controlling hepatic carcinogenesis: in vivo validation, mechanisms and therapeutic implications. Promoter: Marinee K.L. Chuah, Co-promoter: Thierry VandenDriessche; KUL & VIB

4) FWO post-doctoral mandate Karen Vanhoorelbeke (2003-2009). Gene therapy for VWD and in vivo processing of VWF by ADAMT13. Promoter: Hans Deckmyn, Co-promoters: Thierry VandenDriessche, Marinee K.L. Chuah; KULAK & VIB

5) IWT fellowship Lieven Thorrez (2000-2004). Gene therapy for hemophilia A and B using viral vectors. Promoter: Thierry VandenDriessche Co-promoter: Marinee K.L. Chuah; KUL & VIB.

6) IWT fellowship Simon De Meyer (2001-2005) Gene therapy for von Willebrand disease and role of von Willebrand factor in baboon in-stent stenosis KULAK Promoter: Hans Deckmyn; Co-promoters: Karen Vanhoorelbeke, Thierry VandenDriessche

7) IWT fellowship Inge Petrus (2005-2009). Development and evaluation of improved gene therapy strategies for hemophilia, based on adeno-associated viral vectors. Promoter: Thierry VandenDriessche, Co-promoter: Marinee K.L. Chuah; KUL & VIB.

8) EUFP6 & EU FP7 Eyayu Belay (2006-2010). Novel hyperactive transposons for efficient gene transfer into stem cells and hepatocytes. Promoter: Marinee K.L. Chuah; Co-promoter: Thierry VandenDriessche; KUL & VIB.

9) Post-doc fellowship Janka Matrai (Johnson & Johnson COSAT, AFM, IWT O & O, EUFP7) (2006-2010).

10) PhD fellowship COLCIENCIAS Melvin Rincon, MD: (Nov 2009-2013) (Colombian government) Novel cardiac gene and cell therapy approaches. (Promoter: Marinee K.L. Chuah; Co-promoter: Thierry VandenDriessche); KUL & VIB.

11) PhD fellowship Mariana Loperfido (2010-2013) (FWO): Stem cell-based gene therapy for muscular dystrophy; Promoter: Thierry VandenDriessche; Co-promoter: Marinee K.L. Chuah; KUL & VIB.

12) PhD fellowship Hui Wang (2012-2016) (Chinese Scholarship Council – CSC); Promoter: Thierry VandenDriessche; Co-promoter: Marinee K.L. Chuah; KUL & VIB.

## 6. Collaborative research networks

1) EU-FP6 network: European Union grant Framework 6 (EU FP6-STREP): Development and application of transposons and site-specific integration technologies as non-viral gene delivery methods for ex vivo gene-based therapies (2005-2008)

2) Concerted Research Actions (GOA): Molecular regulation of blood platelet formation and function in hemostasis. M. Hoylaerts, J. Arnout, M. Chuah, H. Deckmyn, **T. VandenDriessche,** C. Van Geet.

1) EU-FP7 collaborative network (IP): PERSIST (2009-2012): Persisting transgenes

2) Concerted Research Actions (GOA) (2011-2015): EpiGen. Interplay between epigenetic modification mechanisms V. Rogiers, K. Vanderkerken, M. Chuah, L. Van Grunsven**, T. VandenDriessche**

5) Present ongoing collaborations: Prof. Dr. P. De Baetselier (VUB/VIB), Prof. Dr. L. Naldini (San Rafaelle Institute, Italy), Prof. Dr. Z. Ivics & Prof. Dr. Z. Iszvak (Max Delbruck Center, Berlin, Germany), Prof. Dr. S Heymans (U. Maastricht, NL), Prof. Dr. P. Moullier (U. Nantes, France), Dr. P. Peters (J & J, Belgium), Dr. F. Paques & Dr. P. Duchateau (Cellectis, France), Prof. Dr. S. Janssens (KUL/VIB), Prof. Dr. C. Verfaillie & Prof. Dr. M. Sampaolesi (KUL/SCIL), Dr. P. De Blieser ( U Ghent, VIB), Prof. Dr. J.M. Saint-Remy, Prof. Dr. B. Thöny (University of Zürich Switzerland), Prof. Dr. C. Von Kalle & Prof. M. Schmidt (Nationales Centrum für Tumorerkrankungen (NCT) Heidelberg, Germany)

6) Recent collaborations (last 5 years): Prof. Dr. H. Vandenburgh (Harvard University & Brown University, USA), Prof. Dr. J. Wilson & Dr. L. Wang (U. Pennsylvania USA); Prof. Dr. D. Lillicrap (Queens University, Canada), Prof. P. Radcliffe (Oxford Biomedica, UK), Prof. Dr. S. Kochanek (U. Ulm, Germany), Prof. Dr. S. Kuroda & Prof. Dr. Seno (U. Okayama & U. Osaska, Japan), Prof. Dr. N. Mertens (RUG/VIB), Prof. Dr. B. Hassem (KUL/VIB), Prof. Dr. H. Büning (U. Cologne, Germany), Prof. Dr. J. Cools (KUL/VIB), Prof. Dr. H. Deckmyn (KUL), Prof. Dr. C. Van Geet (KUL)., Prof. Dr. C. Libert (U. Ghent, VIB), Prof. Dr. C. Dotti (KUL, VIB), Prof. Dr. E. Creemers (U. Amsterdam, NL), Dr. P. Rottiers (Actogenix), Prof. Dr. P. Carmeliet (KUL/VIB); Prof. Dr. S. Kochanek (U. Ulm, Germany), Prof. Dr. S. Kuroda & Prof. Dr. Seno (U. Okayama & U. Osaska, Japan)

## 7. Awards

1) 1983: Second Prize National Competition Scientific Seminars
2) 1989: First Prize National University Competition
3) 1999: Pharmacia & Upjohn Award for innovative medical research (€25000) (National)
4) 1999: Young Investigator Award (International Society Thrombosis & Hemostasis) - International competition
5) 1999: Annual Award of the European Society of Gene Therapy ($1000) Journal of Gene Medicine /ESGCT Young Investigator Award - International competition
6) 2002: International Johann Lucas Schönlein Award (€5000) for Thrombosis & Hemostasis (Hemophilia) (2002)

7) 2006: Sanofi-Aventis Prize for Research in Thrombosis, Hemostasis & Vascular Biology (€12500) (National)
8) 2007: Scientific Prize Belgian Royal Academy of Medicine (R. Secq & A. Houssiau Award for Hemophilia Research) (€5000) (National)
9) 2007: International Bayer-Schering Hemophilia Special Project Award ($200,000)
10) 2009: International Excellence in Research Award American Society in Gene & Cell Therapy (PhD student/I.Petrus)
11) 2009: International Molecule of the Year Award – ISMCBBPR (first time in history of this glable competition to non-US group)
12) 2011: International Bayer-Schering Hemophilia Special Project Award ($200,000)

## 8. Committee membership

### 8.1. Board and committee member international societies

1) 2005-2009: Member American Society of Gene Therapy Gene-based vaccines committee
2) 2005-2009: Member European Society of Gene & Cell Therapy Genetic disease committee
3) 2005-current: Committee Member World Federation of Hemophilia (WFH) - Gene Therapy and Novel Technologies Committee
4) 2005-current: World Federation of Hemophilia representative at the US National Hemophilia Foundation - Gene Therapy
5) 2005 -2008: Treasurer & Board Member European Society of Gene Therapy
6) 2005-2010: Member Executive Committee European Society of Gene Therapy
7) 2007: President-Elect/Vice-president: European Society of Gene and Cell Therapy www.esgct.net, www.esgct.eu
8) 2008-2010 President: European Society of Gene and Cell Therapy
9) 2009-2012: Association Française contre les Myopathies (AFM, France): Chair & Member Gene and Cell therapy of Rare Disorders Commission
10) 2009-2012: Member Committee of Advanced Therapeutics (CAT) - European Medicines Agency (EMEA).
11) Member of the Belgian Hemophilia Society Scientific & Ethical Advisory board

### 8.2. Member Scientific Advisory Boards and Grant Review Committees

1) Jury IWT scholarships, external examiner PhD (University of Leuven, Free University of Brussels, University of Antwerpen, University of Leiden, San Rafaelle Institute )
2) Member of the Grant Evaluation Committee US NIH Programs of Ecellence in Gene Therapy

3) Member of Grant Evaluation Committees (UK Gene Therapy Advisory Committee, Dutch Translational Gene Therapy Program: 16 M€, French Muscular Dystrophy Association, ANRS, Itialian & Swiss granting agencies)
4) Advisor *ad hoc* Scientific Evaluation Committee "Recombinant viral vectors, virosomes, recombinant vaccins, gene therapy" of the Belgian Biosafety Commission: safety evaluation of clinical gene therapy protocols (1996- current).
5) *Ad hoc* Consultant Flanders Investment Fund (GIMV)
6) *Ad hoc* Consultant & Scientific advisory board member European, US & Japan biotech companies specialized in gene transfer/gene therapy, stem cells
7) Consultant IWT industrial projects
8) Consultant King Boudewijn Foundation (2003)
9) 2009-2012: Association Française contre les Myopathies (AFM, France): Chair & Member Gene and Cell therapy of Rare Disorders Commission.
10) 2010: EU FP7 : European Research Councel (ERC) reviewer (starting grant).
11) Commission member FWO (Flanders Fund for Scientific Research): Cancer commission (2012-2015).

**8.3. Editorial board member**

2000-: Member of the Editorial Board of Current Gene Therapy
2000-: Member of the Editorial Board of Journal of Gene Medicine
2005-: Member of the Editorial Board Human Gene Therapy
2008-: Member of the Editorial Board Gene Therapy
2008-: Member of the Editorial Board Molecular Therapy
2012-: Editor Human Gene Therapy Methods
2012-: Methods Editor Human Gene Therapy

Reviewer for Hum. Gene Ther., Blood, J. Gene Med., Curr. Gene Ther., Thromb. & Hemost., Am. J. Physiol., Mol. Ther., Gene Ther., J. Thromb. Hemost., Nat. Med., J. Virol., Leukemia , …

**8.4. Member scientific societies**

1995-1998 European Working Group of Gene Therapy
1995-: European Society of Gene & Cell Therapy
1999-: American Society of Gene & Cell Therapy
2009: European Hematology Association

**8.5. Scientific advisory board - Consultancy**

*Ad hoc* Consultant & Scientific advisory board member European, US & Japan biotech companies specialized in gene transfer/gene therapy, stem cells

## 9. Organization international scientific conferences

1) Member Organizing Committtee Annual international meeting of the European Society of Gene & Cell Therapy (www.esgct.eu):

XIII$^{th}$ Annual Congress ESGCT: Prague, Cech Republic : 2005
XIV$^{th}$ Annual Congres ESGCT: Athens, Greece: 2006
XV$^{th}$ Annual Congress ESGCT: Rotterdam, NL: 2007
XVI$^{th}$ Annual Congress ESGCT: Brugge, Belgium: 2008 (ESGCT President-elect)
XVII$^{th}$ Annual Congress ESGCT: Hannover, Germany: 2009 (ESGCT President)
XVIII$^{th}$ Annual Congress ESGCT: Milano, Italy: 2010 (ESGCT President)

General organisation and management & coordination, scientific program, abstract selection, fund-raising -> typically between 500-700 participants

2) President Local Organizing Committee XVIth Annual meeting of the European Society of Gene & Cell Therapy meeting, Brugge , Belgium, 2008.

3) Member Organizing Committee Annual international congres American Society of Gene Therapy (Baltimore, 2005 & Seattle 2006): selection of speakers and program (gene vaccine session) -> typically 1500 participants (www.asgt.org)

4) Chair & member organizing Committee: biannual US National Hemophilia Foundation workshop on gene therapy & novel technologies: selection speakers & program -> typically 100 participants

5) Co-chair Organizing Committee FWO Research Consortium annual meetings: Belgian working group on gene therapy: selection of speakers and program -> 50-100 participants (2003-2006)

6) Co-chair Organizing Committee UK Round Table Conference on Gene Therapy for Hemophilia (sponsored by the Katherine Dormandy Trust): election of speakers and program -> 50-100 participants (2004)

7) Co-chair Organizing Committee Federation of American Societies for Experimental Biology (FASEB); Genome Engineering – Research & Applications September 2–7, 2012 Lucca, Italy

## 10. Patent applications

1) EP 97201480.7: Bone marrow stromal cells as targets for hemophilia A gene therapy. Chuah, M.K. and **VandenDriessche, T.** (inventors); VIB (assignee); May 16, 1997.

2) EP 97201857.6: Bone marrow stromal cells as targets for hemophilia A gene therapy. Chuah, M.K. and **VandenDriessche, T.** (inventors); VIB (assignee); June 18, 1997.

3) EP 98200382.4: Mammalian cell transduction for use in gene therapy. Chuah, M.K. and **VandenDriessche, T.** (inventors); LRD v.z.w. (assignee); February 9, 1998.

4) PCT/EP98/03013: Mammalian cell transduction for use in gene therapy. Chuah, M.K. and **VandenDriessche, T.** (inventors); LRD v.z.w. (assignee); May 18, 1998.

5) EP 98203203.9 (PCT application 9/99): Method to treat hemophilia by in vivo gene therapy with retroviral vectors. **VandenDriessche, T.** and Chuah, M.K.; VIB (assignee); September 23, 1998 /

6) EP 00870112.0: Systemic and cardiovascular transduction with lentiviral vectors. **VandenDriessche, T.,** Chuah, M.K.L. and Naldini, L.; VIB & University of Torino (Italy), (assignees); May 22, 2000.

7) TVD/GUTLESS/120 , National, Pending non-licensed, 08/07/2002. Inventors: **VandenDriessche, T.** , Chuah, M. Kochanek, S, Schiedner, G (patent granted). US 7,238,346 B2 High capacity recombinant adenoviral vector for treatment of hemophilia A.

8) Patent application: Human hepatocyte-specific gene delivery system for hemophilia. Inventors: Yamada, T., Iwasaki, Y.,,Tada, H., Iwabuki, H., Chuah, M.K.L., **VandenDriessche, T.,** Collen, D., Kondo, A., Ueda, M., Seno, M., Tanizawa, K., and Kuroda, S. (filed 2003)

9) GB0523529.6 18/11/2005 & GB0523526.2 21/11/2005 & GB0523728.4 23/11/2005 Inventors: VandenDriessche, T. , Chuah, M., Vanhoorelbeke, K., Deckmyn, H. "VWF"

10) US 60/978343, TVD/STEALTH/275, PRIO, Pending non-licensed, 05/12/2007 Inventors: Chuah, M. and **VandenDriessche, T.** "Novel AAV vector and uses thereof"

11) US 61/005668, MCH/ENH/282, PRIO, Pending non-licensed, 22/04/2008 Inventors: **VandenDriessche, T.** , Chuah, M., De Bleser, P. "Liver-specific nucleic acid regulatory elements and methods and use thereof"

12) B cell tolerance induction. Inventor(s): **T. VandenDriessche,** M. Chuah, J.M. Saint-Remy, M. Jacquemin (Patent Attorney Docket 2676-8583US) PCT filing in Oct 2008

13) Application number EP 09174519.0. ,Ref # MaCh/HENH/327, 29/10/2009 Inventors: **VandenDriessche, T.** , Chuah, M., De Bleser, P. "Cardiac-specific nucleic acid regulatory elements and methods and use thereof".

## 11. Teaching & Academic Assignments

### 11.1. Teaching MSc program

1) Seminars for MSc students (Free Universit of Brussels, University of Leuven)

2) Organization practical courses (Free Universit of Brussels, University of Leuven)

3) Free University of Brussels (VUB) - Faculty of Sciences – Cellular engineering: 15 hr + practical courses (Master in Biomedical Sciences, , Bio-engineering & Biology) (2003-current )

4) Free University of Brussels (VUB) – Faculty of Medicine - Methods in Cell & Gene Therapy: 10 hr (1st year)+ 5 hrs (2nd year) (Master in Biomedical Sciences) (2007-current )

5) Free University of Brussels (VUB) - Faculty of Medicine – Stem cell gene therapy 4 hr (2nd year) (2005- ) ("guest lecturer") (Master in Biomedical Sciences) (2007- current)

6) University of Leuven (KUL) Master's Molecular Medicine (2004-2008) " Gene therapy" (2 hr)

7) University of Leuven (KUL), Bachelor/Masters track "Cardiovascular Biology" (2007-current) – Fundamental and medical aspects of cardiovascular biology (60 hr jointly with other VRC/VIB PI's)

8) University of Leuven (KUL), Bachelor/Masters track: Hot topics in fundamental & medical aspects of cardiovascular biology (2007-current)

9) University of Namur: Guest lecturer Graduate School Course " Gene transfer, gene therapy & stem cell engineering" (2008, 1h)

10) University of Leuven (KUL), Coordinator (initiated and consolidated program along with M. Dewerchin) - Masters in Molecular Medicine

11) University of Leuven (KUL): Cellular Engineering, 2nd Bachelor (2010-2011).

12) University of Ghent (RUG): Viral gene therapy. 1st Master Biochemistry & Biotechnology (2010).

13) Free University of Brussels (VUB): Cell biology (52 hours) & practical course (30 hours).

**11.2. Teaching PhD and postgraduate programs**

1) University of Leuven (KUL), Doctoral School in Biomedical Sciences – Coordinator; Emerging concepts in molecular & cardiovascular medicine (2007-current)

2) University of Leuven (KUL), Doctoral School in Biomedical Sciences: Gene therapy and stem cell bioengineering in cardiovascular disease: development and characterization of gene delivery vectors, preclinical and clinical studies (2007-current)

3) Coordinator VIB International PhD program (in cooperation with other VIB PIs)

4) Interfaculty college University of Leuven (KUL): Lessen voor de 21ste Eeuw (Universitaire Permanente Vorming) :Gentherapie: geneeskunde voor de 21ste eeuw (31.1.2000) met examens (80 studenten)

5) Cyclus Derde Leeftijd. Gentherapie: geneeskunde voor de XXIe eeuw. Alumni Lovaniensis (1.2.2000).

**11. 3 Organisation and speaker Educational Symposia**

European Society of Gene and Cell Therapy:

XIIIth Annual Congress ESGCT: Prague, Cech Republic : 2005
XIVth Annual Congres ESGCT: Athens, Greece: 2006
XVth Annual Congress ESGCT: Rotterdam, NL: 2007
XVIth Annual Congress ESGCT: Brugge, Belgium: 2008

XVII$^{th}$ Annual Congress ESGCT: Hannover, Germany: 2009
XVIII$^{th}$ Annual Congress ESGCT: Milano, Italy: 2010

### 11.4. International courses

University of Milan (Italy): Guest lecturer graduate school course " Gene transfer & therapy" : In vivo and ex vivo gene therapy for hemophilia A (2006).

University of Turku (Finland): Principles of gene therapy: 2nd Postgraduate Course in Molecular and Cellular Endocrinology, Turku, Finland, June 7-10, 1998.

University Children's Hospital Zürich (Switzerland) Colloquium. Gene therapy: progress and challenges. 22.3.2010.

University of Utrecht (Netherlands): XTrack Symposium: Gene Therapy. 17.9.2010.

### 11.5. Other educational assignments

a) Setting up and coordination:

1. FUNDAMENTAL AND MEDICAL ASPECTS OF CARDIOVASCULAR BIOLOGY: Gene therapy and stem cell bioengineering in cardiovascular disease: development and characterization of gene delivery vectors, preclinical and clinical studies

2. HOT TOPICS IN FUNDAMENTAL AND MEDICAL ASPECTS OF CARDIOVASCULAR BIOLOGY Gene therapy and stem cell bioengineering in cardiovascular disease: transfection and viral vector production, ex vivo gene transfer, in vivo delivery approaches

3. PhD school: Advanced Course series in Cardiovascular Medicine, Faculty of Medicine, KUL, International Doctoral School for Biomedical Sciences mandatory training within the Doctoral School Programme Emerging concepts in cardiovascular medicine

4. VIB International PhD program , selection of PhD candidates

b) Academic assignments:

1) Member of the PhD Thesis Advisory Committee (University of Leuven, Faculty of Medicine) : evaluation of PhD students and research progress

2) Chair of the PhD Thesis Advisory Committee (University of Leuven, Faculty of Medicine) (2009-2012)

3) Departemental General Secretary - Molecular & Cellular Medicine Department (University of Leuven, Faculty of Medicine) (until 2011)

4) Initiation and coordination Master's in Molecular Medicine (University of Leuven, Faculty of Medicine)

5) Member VIB Groupleader Committee (2004-2006) www.vib.be

6) Member evaluation commission University of Leuven Research Grants

7) Member Education Commission Biomedical Sciences (OWC) – Free University of Brussels (VUB), Belgium

## 12. PhD supervisor - (co)promoter

1) Promotor PhD An Van Damme (M.D) start: 1/10/98: Development of ex vivo gene therapy for hemophilia/ PhD defense: September 2003. (Fund for Scientific Research – FWO scholarship), University of Leuven (Belgium).

2) Co-promotor PhD Wim Janssen (M.D.) start 1/10/99: B-cell induced tolerance to allergens. PhD defense 29 March 2004 (Fund for Scientific Research – FWO scholarship), University of Leuven (Belgium).

3) Promotor PhD Lieven Thorrez start 1/10/00. Gene therapy for hemophilia A and B using different viral vectors. PhD defense December 2005. (IWT scholarship), University of Leuven (Belgium).

4) Co-promotor PhD Simon De Meyer. Gene therapy for von Willebrand disease and role of von Willebrand factor in baboon in-stent stenosis. PhD defense: December 2005 (IWT scholarhsip), University of Leuven -Kortrijk (Belgium) (KULAK).

5) Co-promotor PhD Glenn Marsboom: Endothelial progenitor cells in the pathogenesis and treatment of pulmonary hypertension PhD defense: December 2007. (IWT scholarship), University of Leuven (Belgium).

6) Co-promotor PhD Liesbeth De Waele (M.D.) start 1/1/2003: GATA1 deficiency and gene therapy using genetically corrected hematopoietic stem

cells. PhD defense: May 2009 (Fund for Scientific Research – FWO scholarship), University of Leuven (Belgium).

7) Promotor PhD Inge Petrus: Development and evaluation of improved gene therapy approaches for hemophilia, based on adeno-associated viral vectors PhD defense: April 2010 (IWT scholarship), University of Leuven (Belgium).

8) Co-promotor PhD Eyayu Belay, start 3/2006: Novel hyperactive transposons for efficient gene transfer into stem cells and hepatocytes (thesis will be defended in 4/2010), University of Leuven (Belgium).

9) Promotor PhD Mario Di Matteo, start 1/10/2009: Role of microRNA in controlling hepatic carcinogenesis: in vivo validation, mechanisms and therapeutic implications (Fund for Scientific Research – FWO scholarship), University of Leuven (Belgium) & Free University of Brussels (VUB), Belgium.

10) Promotor PhD Melvin Rincon, start 11/2009: Novel cardiac gene and cell therapy approaches, University of Leuven & Free University of Brussels (VUB), Belgium.

11) Promotor PhD Marianna Loperfido, start 10/2009: Stem cell-based gene therapy for muscular dystrophy, University of Leuven & Free University of Brussels (VUB), Belgium.

12) Co-promotor PhD Alessio Cantore, Somatic Gene Therapy Unit, University of San Raffaele, Telethon Institute for Gene Therapy, Italy, Improved lentiviral gene therapy for hemophilia, 2008–2012.

13) Co-promotor PhD Dastidar Sumitava; start 12/2010: Development of novel gene and cell therapy approaches using induced pluripotent stem cells, Free University of Brussels (VUB), Belgium.

14) Co-promotor PhD Sarcar Shilpita start 5/2011: Development and validation of novel skeletal muscle specific-and combined cardiac/skeletal muscle-specific expression constructs for gene therapy of neuromuscular diseases, Free University of Brussels (VUB), Belgium.

15) Promotor PhD Ksitish Sing start 3/2011: Engineering stem cells using designer nucleases for gene and cell therapy, Free University of Brussels (VUB), Belgium.

16) Co-promotor PhD Nisha Nair start 12/2011: Gene therapy for hemophilia. Free University of Brussels (VUB), Belgium.

17) Promotor PhD Laura Kremer start 9/2012. Free University of Brussels (VUB), Belgium.

18) Promotor PhD Hui Wang start 9/2012. Free University of Brussels (VUB), Belgium.

**Supervisor pre-doc students**

1) Anja Geldhof – Free University of Brussels (VUB) (1991-92)

2) Danny Wille - Free University of Brussels (VUB) (1990-91)

3) Siv Nystrom - Free University of Brussels (VUB) (1990-91)

4) I.W.O.N.L./I.W.T. trainingsessions Free University of Brussels (VUB) (1990-92) and University of Leuven (1995-2006)

5) Joao Sayanda Erasmus Exchange student. Development of AAV Vectors for Hemophilia A Gene Therapy. (Universidade Nova de Lisboa, Portugal) - University of Leuven (1998-1999)

6) Thomas Tousseyn (September - Oktober 1996, University of Leuven

7) Michael Maris: Generation and characterization of lentiviral vectors for hepatic gene delivery. University of Leuven (2003-2004).

8) Bavo Heeman: Evaluation of alternative primate AAV serotypes for gene therapy. University of Leuven (2004-2005).

9) Brian Brown. Exchange Student Queens University, Canada. University of Leuven (2001).

10) Tina Shahani: Development of Improved Hepatocyte-Specific Vectors for Hemophilia B Gene Therapy. University of Leuven (2006-2007).

11) Danso-Abeam Dina: Development and validation of potent tissue specific synthetic promoters and improved vectors for gene therapy. University of Leuven (2008-2009).

12) Brenda Amondi: Development and validation of novel skeletal muscle specific expression constructs for gene therapy. Free University of Brussels (VUB), Belgium (2012).

13) Omid Ghandeharian, Free University of Brussels (VUB), Belgium (2012).

14) Jessica Willems, Free University of Brussels (VUB), Belgium (2012).

## 13. Guest professors

Prof. Dr. Herman Vandenburgh
Department of Pathology, Brown Medical School/Miriam Hospital, Providence, RI, 02906 U.S.A & Harvard University, Cambridge, USA Jan 2004 – Sep 2004 Development of Bioengineered muscle implants (BAMS) for hemophilia gene therapy.

Prof. Tada Hiroko; University of Okayama, Japan (2004): Development of hepatocyte specific nanoparticles for hemophilia gene therapy.

## 14. Public outreach, lay press

De Rom, A., **VandenDriessche, T.,** Chuah, M.K.L., Gen therapie. Natuur & Techniek, 66(10):20-29, (1998).

**VandenDriessche, T.,** Chuah, M.K.L. and Collen, D. Gentherapie: geneeskunde voor de XXIe eeuw. Lessen voor de XXIe eeuw (Ed. Davidsfonds, Leuven) (2000).

Publications and interviews in: Artsenkrant, Belgian Bioindustries Association News, BioWorld Today, VIB News, Mens & Molecule (23.4.2009), C2W Life Sciences (2009)

Hemophilia Association Belgium (AHVH), Invited speaker: Gene therapy for haemophilia & Von Willebrand's disease. April 2012.

Medical Doctor's Association (Koninklijke Geneesheren Vereniging – Oostende): Gene therapy as spin-off of genome engineering. April 2012.

http://www.stemcellmedicine.tv/moving-gene-therapy-forward-with-mobile-dna/
http://www.physorg.com/news160593465.html
http://www.sciencedaily.com/releases/2009/05/090503132615.htm
http://insciences.org/article.php?article_id=4734
http://esciencenews.com/articles/2009/05/03/moving.gene.therapy.forward.with.mobile.dna
http://www.bio-medicine.org/biology-news-1/Moving-gene-therapy-forward-with-mobile-DNA-8287-1/
http://www.scientistlive.com/European-Science-News/Genetics/Moving_gene_therapy_forward_with_mobile_DNA/22255/

http://www.bionity.com/news/e/100449/
http://www.sciencecentric.com/news/article.php?q=09050405-moving-gene-therapy-forward-with-mobile-dna
http://www.lsblog.org/blog/?p=2635
http://www.highbeam.com/doc/1G1-200005206.html
http://www.lifesciencesworld.com/biotechnology-news/view/104073?page=8
http://www.newsrx.com/newsletters/Biotech-Business-Week/2009-05-18/5051820091970BB.html
http://www.medicalnewstoday.com/articles/148663.php
http://www.eurekalert.org/pub_releases/2009-05/vfi-mgt043009.php
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