

Vanden Bossche, Geert/ Curriculum Vitae

Personal

Name : Geert Vanden Bossche

Residence: Ottenburg (Huldenberg), Belgium

Nationality: Belgian/US resident and green card holder (granted since 13/7/2010 based on 'advanced degrees and exceptional abilities')

Languages: Native Dutch, fluent English, French & German

Education and Professional Training

1977-1980 **UNIVERSITY OF NAMUR (FNDP), BE**
Faculty of Veterinary Medicine (cum laude)

1980-1983 **UNIVERSITY OF GHENT (RUG), BE**
Graduated in Veterinary Medicine (cum laude)
Doctoral Script (DVM): "Synthesis and Characterization of Monoclonal Antibodies against Bovine Rotavirus"

1996 **UNIVERSITY OF HOHENHEIM/ STUTTGART, Germany**
Habilitation & *venia legendi* in Virology, Faculty of Agricultural Sciences

Ph.D. Thesis: "Colloidal Aspects of Enteroviral Infectivity in Aqueous Environments" (i.e., exploring correlates between surfactant-triggered changes in surface properties of viral particles and their infectious behavior)

Executive Training / Certifications:

Certifications:

- Board Certified in Equine Medicine and Surgery ("Fachtierarzt für Pferde"), Veterinary Board of Berlin, Germany, 1988
- GRE certified (Graduate Record Examination: Quantitative, Verbal, Analytical) and TOEFL certified (Test of English as a Foreign Language), Graduate School, Cornell University, Ithaca, New York, USA, 1989
- Board certified in Veterinary *Virology* ("Fachtierarzt für Virologie"), Veterinary Board of Westfalen-Lippe, Germany, 1990
- Board certified in Veterinary *Microbiology* ("Fachtierarzt für Mikrobiologie"), Veterinary Board of Baden-Württemberg, Germany, 1992
- Board certified in *Environmental Hygiene* ("Fachtierarzt für Tierhygiene"), Veterinary Board of Rheinland-Pfalz, 1992

Postdoctoral training:

- Equine Veterinary Practice & Surgery in private equine clinics in the UK, France and Germany and at the Free University of Berlin (certificates available), 1983-mid 1987
- Postdoctoral Fellowship in Virology at James A. Baker Institute for

Animal Health (Prof. Dr. J. Appleton), New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14850, USA, Sept. 1990- mid 1991

- European Master in Environmental Management, European Association for Environmental Management Education (EAEME), Preparatory & Basic Module, University Trier, Germany, Oct. 1994- mid 1995

Continuing Education

- Pandemics and Epidemics; Workshop on prevention, preparedness, response and recovery; Interdisciplinary colloquium at the Chatham house, London, UK, Oct 2015
- Global Pandemic Preparedness; Research and development summit and workshop (WHO), Geneva, Switzerland, May 2015
- Global Vaccine Development for World Health Symposium. Workshop on Regulatory Pathways of Vaccines for Global Diseases. FDA, EMEA, Emerging regions, NGO, and Industry Perspectives. Bethesda, MD, USA, Nov 2009
- Master Class – Vaccine Safety. Canadian Association of Immunization Research and Evaluation (CAIRE), Ontario, Canada, Feb 2009
- Master Class – Vaccine Efficacy, Canadian Association of Immunization Research and Evaluation (CAIRE), Vancouver, Canada, Sept 2009
- Nanotechnology in Pharmaceuticals and Biotech; Examining progress towards commercialization of nanotechnology in drug discovery, development, delivery and diagnostics. NH-Amsterdam Centre, The Netherlands, April 2006
- Commercial Strategies in the Pharmaceutical Industry: How to make the difference? The Center for Professional Advancement, Den Haag, The Netherlands, May 2004
- Surfactants, Colloids and Interfaces. The Center for Professional Advancement, Den Haag, The Netherlands, March 2004
- Advanced Course in Liposome Technology and Vaccine Delivery. School of Pharmacy, University of London, UK, Dec 2003
- Photon Correlation Spectroscopy/ Zetapotential Cursus. Goffin Meyvis Analytical & Medical Systems B.V., Etten-Leur, the Netherlands, Feb 2003
- Advanced Course in Liposome Technology and Vaccine Delivery. School of Pharmacy, University of London, UK, Dec 2003
- Advanced Vaccinology Course. Foundation Mérieux, Veyrier-du-Lac, Annecy, France, June 2002
- An Introduction to the New European Regulatory System for Medical Devices, Russell Square Quality Associates Ltd, Rixensart, Belgium, Nov 2001
- Masterclass for Equine Vets, Intervet Belgium N.V., Brussels, Belgium, Sep 2001
- Regular education and training in Project Management Skills ('Goal Directed Project Management', Coopers & Lybrand, United Kingdom), 1998-2000:

– 'Presenting with success'

- ‘Communication skills and tools’
 - ‘Managing conflicts’
 - ‘Team building and how to lead a team’
 - ‘Managing priorities in a multi-project environment’
 - ‘Managing the time-resource-results triad’
 - ‘Developing practical networks’
 - Training in milestone charts and MS Project (software for Project Management)
- Masterclass Equine Medicine & Surgery. Belgian Equine Practitioners Society (BEPS), Brussels, Belgium, Nov 1999
 - Training in Clinical Epidemiology & Advanced Methods for Epidemiological Research, Institute for Tropical Medicine, Antwerp, Belgium; Statistical Experimentation (UBCA, Antwerp), April 1996

Professional Experience

March 2018-Present ***Countering Immune Evasion***

Independent Researcher

- Design and develop NK cell-based vaccines inducing universally and broadly protective immune responses to infectious pathogens and other, non-infectious immune subversive agents (in collaboration with Academia and Industry).

Aug 2017-Dec 2017 **German Center for Infection Research (DZIF) at the University Hospital of Cologne**

Head of the Vaccine Development Office

- Coordinating and managing a portfolio of translational vaccine research projects conducted at German universities and research centers sponsored by DZIF. Responsible for strategic alignment of translational infection research.

2012-Aug 2019 **VaReCo (Vaccine Research and Collaborations)**

Managing Director

- Providing scientific advice to vaccine biotech and Animal Health companies as well as to nonprofit organizations (e.g., GAVI, PATH, Bill & Melinda Gates Foundation, GALVmed, NIH, WHO, Academia) on health interventions, immunology-, vaccine- and adjuvant-related matters and nutraceuticals. Expert witness on vaccine-related litigations

- Mid 2011-End 2017** **UNIVAC llc (USA) and UNIVAC NV (BE)**
- CSO***
- Initiating, coordinating and implementing all vaccine R&D work in collaboration with external partners (Company focus: Universal, NK cell-based vaccines & innovative approaches to immune intervention in veterinary and human infectious and immune-mediated diseases)
- Mid 2015-Mid 2016** **GLOBAL ALLIANCE FOR VACCINES AND IMMUNIZATION (GAVI), Geneva, Switzerland**
Ebola Vaccine Program Manager
- Coordinating GAVI's Ebola Vaccine Program in collaboration with partners (WHO, Bill & Melinda Gates Foundation, CDC, UNICEF), regulators (FDA) and vaccine manufacturers
 - Key mission: to establish a target product profile tailored to the needs of immune interventions in Global Health, to enable selection of the most suitable Ebola vaccine candidate(s) for use in an Ebola epidemic in collaboration with Manufacturers and Partners and to implement an integrated vaccine work plan in Ebola-affected countries
- Mid 2013-Mid 2015** **REGA INSTITUTE, KUL, Belgium**
- Research Fellow, Department of Microbiology & Immunology***
- Mid 2008-Mid 2011** **BILL & MELINDA GATES FOUNDATION, Seattle, Washington, USA**
- Senior Program Officer, Global Health, Vaccine Discovery***
- Initiating and managing grants on vaccine platforms and programs relevant to Global Health (e.g., HIV-1, Malaria, TB, Influenza, Polio...); establishing international product development partnerships on vaccine discovery and immunization programs in Global Health (e.g., with Academia, Biotech Industry, NIH, Wellcome Trust, WHO, PATH)
- Mid 2007 – Mid 2008** **SOLVAY BIOLOGICALS, Weesp, NL**
- Global Project Director Influenza Vaccines***
- Responsible for preclinical development of adjuvanted Influenza vaccines
 - Implementation of commercial-scale production of cell-based methods and expansion of Influenza vaccine production capacity such as to meet DHSS (U.S. Department of Human Health Services) contractual requirements (Pandemic Influenza Preparedness Plan)

- Mid 2006 – Mid 2007** **NOVARTIS VACCINES & DIAGNOSTICS, Siena, IT & Emeryville, USA**
- Director, Research Program Leader and Head of Adjuvants***
- Vaccine Research Program/Adjuvant Program responsibilities:
- Project leader on adjuvanted RSV (Respiratory Syncytial Virus) and Influenza vaccines.
 - Overseeing Preclinical Development of combined seasonal RSV-Influenza vaccine for elderly & high risk adults
 - Shaping the scope and strategy of Adjuvant and Vaccine Delivery Technologies including management of NVD's adjuvant portfolio, opportunity sourcing, and establishment of an internal interdisciplinary due diligence team for the evaluation of vaccine-relevant extramural opportunities
- Mid 1995 – Mid 2006** **GSK BIOLOGICALS, Rixensart, BE**
- Mid 2005 – Mid 2006** ***Associate Director, R&D Partnerships***
- Major responsibilities:
- Outlicensing of analytical and product development activities and providing scientific advice to Vaccine Project Teams on in-licensing opportunities for new vaccine technologies
 - Evaluation of competitive intelligence and intellectual property within the context of R&D collaborations with external partners from the Vaccine Biotech Industry
 - Subcontracting analytical and process activities on GSK Bio vaccine candidates
- Mid 2001 – Mid 2005** ***Head of Biophysical Vaccine Characterization, Adjuvant Technologies and Alternative Deliveries, R&D New Technologies***
- Major responsibilities:
- Research Program Leader on Vaccine Formulation Development & Alternative Deliveries and in charge of biophysical characterization activities on adjuvanted vaccine formulations
 - Coordination and follow-up of extramural contracts & collaboration agreements on new immunization strategies and innovative vaccine adjuvant, delivery and formulation technologies
 - Development and validation of vaccine and adjuvant characterization assays
 - Study of adjuvant-antigen interactions and structure-function relationships in vaccine formulations
 - Coordination and resource management of preclinical activities including CMC section of INDs and cGMP production of (adjuvanted) vaccine candidates
 - Planning laboratory activities and establishing outside collaborations with academia

Mid 1998 – Mid 2001 *Senior Project Leader ‘Adolescent Vaccine Projects’*

Major responsibilities:

- Project Management on Raw Material Traceability (RAMATRA) and vaccine projects in Late Development, e.g., Herpes Simplex Virus type 2, Hepatitis B, Streptococcus Pneumoniae and Enterotoxigenic Escherichia Coli (in collaboration with SBL Vaccines, Sweden)

Mid 1995 – Mid 1998 *New Biotech Vaccine Development and QC-QA Manager*

Major responsibilities:

- Management and coordination of vaccine product development, optimization as well as validation of analytical methods in accordance with regulatory requirements or guidelines and vaccine business constraints
- Budget management of all activities related to QC assay development and CMC documentation.
- Transfer from R&D and further development of new QC-relevant characterization techniques on new vaccine candidates (e.g., HSV-2 vaccine, Lyme disease vaccine); contacts with national/international regulatory and health authorities (e.g., FDA, NIBSC, IHE, WHO,...) on technical dossiers and active participation in pre-IND meetings

1990-1994

**INSTITUTE OF ANIMAL AND ENVIRONMENTAL HYGIENE
(Director: Prof. Dr. R. Böhm), UNIVERSITY OF HOHENHEIM/
STUTTGART, Germany**

Senior Research Scientist

Main tasks included:

- Development of molecular, virological and molecular tools for the detection of viral pathogens in environmental samples of water (e.g., waste water, drinking water and recreational waters), air and soil.
- Management, coordination, planning and execution of environmental virology research projects including aspects related to the influence of surface active agents on the enhancement of viral infectious behavior
- Provided appropriate scientific input and advice to public organizations and private companies on microbial sanitation and disinfection methods.
- *In vitro* testing of microbicidal activity of disinfectants
- Tracking and management of research budgets
- Training and scientific supervision of 4 master degree and 8 doctoral students

1987-1990

**VETERINARY INSTITUTE OF VIROLOGY, IMMUNOLOGY AND
MOLECULAR BIOLOGY (Director: Prof. Dr. H. Ludwig), FREE
UNIVERSITY OF BERLIN, Germany**

Research Associate

- Research activities included the setup of molecular, serological and immunological techniques for the diagnosis of viral infectious diseases and/or the characterization of mechanisms underlying natural or vaccine-induced immunity including such that correlate with protection against infectious diseases
- Research areas primarily included molecular identification, screening and characterization of Equine Herpesviruses and the development and validation of serological tools enabling simple and rapid detection of immune responses against Feline Infectious Peritonitis

Teaching Assignments

- 1998 - 2004 Visiting Professor in Environmental Virology (International Course Programs, ICP; 90 hours of classroom teaching per year) at the European Faculty for Environmental Sanitation (Chair: Prof. Dr. M. Pensaert), University of Ghent, Belgium
- 1997- 2000 Adjunct Professor ('Privatdozent') in Environmental Virology and Zoonotic Diseases at the Faculty of Agricultural Sciences, University of Stuttgart, Germany (40 hours per year of teaching viral and zoonotic diseases to biology students)

Supervised PhD theses (as promoter or co-promoter)

- Einfluss der Langzeitlagerung von Gülle auf die Tenazität von Viren, 1993; Jürgen Kegele
- Untersuchungen zum Vorkommen von luftgetragenen Viren an Arbeitsplätzen in der Müllentsorgung und -verwertung, 1994; Pfirrmann, Andrea
- Virologische Untersuchungen zur kombinierten UV-Ozon Behandlung biologisch vorgereinigter Abwässer unter Berücksichtigung des Schwebstoffgehalts, 1994; Stephan Krietemeyer

Foreign research assignments (minimum 1 month)

see under 'postdoctoral training' (Postdoctoral Fellowship in Virology at James A. Baker Institute for Animal Health)

Organized conferences or symposia

- BMGF Symposium & Workshop on Dendritic cell – T cell interactions in early HIV infection, December 8-10, 2009, Seattle, USA
- Organizing Committee 4th International Conference on Vaccines & Vaccination, OMICS group, September 24-26, 2014 Valencia, Spain
- Organizing Committee Member for EuroVaccines – since 2015 (OMICS Group Conferences)

Funds acquired as head or co-promotor

Innovation grant of 400k Euro obtained from IWT for period of one year (April 1st 2014- April 1st 2015) on behalf of Univac NV ('Proof of concept of innovative universal vaccine technology based on activation of natural helper cells by promiscuous pathogen-derived peptides').

Other

Committee assignments

- 1998: Assignment as scientific veterinary expert consultant by the Belgian Ministry of Agriculture ('98-'99: Dioxin crisis; 2000-2001: Bovine Spongiform Encephalitis and Foot-and-Mouth Disease) and the Belgian Ministry of Public Health (2002: Provisional legislation and position paper on 'Nutraceuticals and the Use of Additives and Other Ingredients as Nutritional Supplements in Animal Nutrition')

Professional Affiliations

- American Society for Microbiology (ASM)
- American Association for Advancement of Science (AAAS)
- Infectious Disease Society of America (IDSA)
- American Association of Veterinary Immunologists (AAVI)
- Society for Biomaterials
- HIV Medicine Association
- Canadian Association for Immunization Research and Evaluation (CAIRE)
- Society for Glycobiology

National & International Speaking Invitations (2008-2019)

- Invited Meeting Chair and plenary presentation: "Biophysics in Adjuvant Formulations"; Immunopotentiators in Modern Vaccines; Montego Bay, Jamaica, 5/21-23/2008
- Invited oral presentation: "Adjuvants in Vaccine Formulations"; Infectious Disease Research Institute (IDRI), Seattle, USA, 6/17/2008
- Invited keynote presentation: "Adjuvants in Vaccine Formulations: Old Laws, New Paradigms"; CAIRE Master Class, Vancouver, Canada, 9/19/2008
- Invited Advisory Panellist and oral presentation: "How to use adjuvants? Keep it simple and safe"; Workshop on Adjuvants and Adjuvanted Preventive and Therapeutic Vaccines for Infectious Disease Indications; Advisory Panel Meeting CBER & NIH, Washington D.C., USA, 12/2-3/2008
- Invited keynote presentation: "Understanding Vaccine Adjuvantcity"; CAIRE Master Class, Ontario, Canada, 2/5- 6/2008
- Invited keynote presentation: " Rational Vaccine Design: Where to start?"; Cutting Edge Vaccine for 21st Century, Conference at Flinders University, Adelaide, Australia, 3/12-13/2009
- Invited oral presentation: "Bridging the Gap between Adjuvant Discovery and Adjuvant Development"; World Vaccine Congress, Washington D.C., USA, 4/20-24/2009
- Invited oral presentation: "Improved Vaccines for Fighting and Controlling Persistent Infections"; Serum Institute of India, Pune, India. 7/23/2009
- Invited plenary presentation: "Understanding Vaccine Adjuvantcity: The Biggest Gap & Challenge in Modern Vaccinology", The 3rd International Conference on Modern Vaccine Adjuvants and Delivery Systems (MVADS), Vienna, Austria, 10/28- 30/2009

- Invited oral presentation: “Vaccine strategies to enhance immune responses in neonates”; International Neonatal and Maternal Immunization Symposium (INMIS-2009), Antalya, Turkey; 11/8-9/2009
- Invited plenary presentation: “HIV Immune Prevention. From Empiricism to Rational Vaccine Design: “First Dissect, then Direct?”; Workshop on Dendritic Cell - T Cell Interactions in Early HIV Infection, Seattle, USA, 12/8-10/2009
- Invited plenary presentation: “ Use New Technologies to Design Vaccines that ‘Help’ Immune Recognition”; World Vaccine Congress Asia, Singapore, 6/8-11/2010
- Invited oral presentation: “Rational Vaccine Design and the Search for Correlates of Protection: Which comes first? The Immunotherapeutics & Vaccine Summit, Cambridge, MA, USA, 8/17-19/2010
- Invited plenary presentation: “(T-)HELP for Vaccines in Need”; MVAF 2010 , 13-15 October , Cannes, France
- Invited oral presentation: “Vaccine platforms and Technologies”; 6th Annual GCGH meeting, 2010, 24-27 October, Seattle, USA
- Invited keynote presentation: “Biophysics in adjuvanted vaccine formulations: The weakest link in modern vaccine development”; Vaccines Europe 2010, 1-2 December, London, UK
- Invited keynote presentation: “Paradigm shifting concepts in modern vaccine adjuvantation”; MVVA 2010, 17-19 November, Budapest, Hungary
- Invited opening plenary presentation: “Advancing adjuvant technologies in modern vaccinology: Needs & opportunities”, Immunopotentiators in Modern Vaccines, IV. Int. Conference, 6 – 8 April 2011, Porto, Portugal
- Invited seminar: “Innovation in Vaccine technologies: Needs and opportunities for novel technologies in modern vaccine development”, National Research Council Canada, 31. May 2011, Ottawa, Canada
- Invited oral presentation: “Microneedles with built-in immunoadjuvant properties”, Skin Vaccination Summit, 12-14 October, Washington DC, USA
- Invited presentation: “Alternative preservatives for vaccines” , WHO Informal Consultation to develop further guidance on vaccines for UNEP-convened Intergovernmental Negotiating Committee Meeting 4 (INC 4), 3-4 April 2012, Geneva, Switzerland
- Invited oral presentation: “Adjuvant landscaping: Evaluation and rational selection of vaccine adjuvants tailored to the needs of Global Health programs”, organized by Steering Committee on Polio Vaccine Initiative at PATH, 2-3 May 2012, Seattle, USA
- Invited plenary presentation: “Universally protective vaccines: An achievable/ reasonable objective?”, MVADS (Modern Vaccines Adjuvants & Delivery Systems), Copenhagen Denmark, 4-6 July 2012
- Invited oral presentation: “Choosing the 'right' adjuvant: The trickiest part of modern vaccinology”, Informa LifeScience’s 7th annual conference on Veterinary Vaccines, Brussels, Belgium, 5-6 December 2012
- Invited plenary presentation: “From empiricism and alchemy to rational vaccine design: A badly needed (r)evolution”, MVAF (Modern Vaccine Adjuvants and Formulations), Lausanne, Switzerland, 15-17 May 2013
- Invited presentation: “Innovation in Vaccine Research”, REGA Institute, University Leuven, Belgium, 17 June 2013
- Invited plenary presentation: “ Re-thinking Vaccinology”, Immunopotentiators in Modern Vaccines, 7-9 May 2014, Albufeira, Algarve, Portugal
- Invited presentation: “Nonadjuvanted Universal Vaccines”, Biovision Life Sciences Forum, 5-6 June 2014
- Invited presentation: “Disruptive Innovation in Vaccinology”; 4th International Conference on Vaccines & Vaccination, 24-26 September 2014, Valencia, Spain

- Invited presentation: “Universally protective synthetic vaccines: The Holy Grail in Modern Vaccinology”, 2nd International Conference on Systems & Synthetic Biology, August 18-20, 2016, London, UK
- Invited presentation: “Universally protective vaccines: A revolution in modern vaccinology”, International Precision Vaccines Conference, October 23-24, 2017, Boston, MA USA
- Invited presentation: “Universally protective vaccines: A revolution in modern vaccinology”, 21st World Congress and exhibition on Vaccines, Vaccination & Immunization, November 09-10, 2017, Vienna, Austria
- Keynote presentation: “Translational Vaccinology: A myth?”, 21st World Congress and Exhibition on Vaccines, Vaccination & Immunization, November 09-10, 2017, Vienna, Austria and Modern Vaccines Adjuvants Formulation, May 02-04, 2018, Leiden, The Netherlands
- Keynote presentation: “Why don’t our vaccines reach the high-hanging fruit?” Euro Vaccines 2019, 6th Euro Global Summit and Expo on Vaccines & Vaccination, June 03 -04, 2019, London, UK.,
- Keynote presentation: “*Quo vadis* vaccinology? An urgent call for change!”, 2nd European Congress on Vaccine R&D and Vaccination, EuroSciCon, June 11-12, 2019, Prague, Czech Republic
- Invited presentation: “Why current vaccine approaches fail in reaching the high-hanging fruit?”, Vaccines Research and Development, November 18-20, 2019, Boston, USA
- Keynote presentation: “Why should current Covid-19 vaccines not be used for mass vaccination during a pandemic?” Vaccines Summit Ohio (VSOHI021), March 1-3, 2021, Ohio, USA

Scientific and Advisory Panels

- Modern Vaccine Adjuvants and Delivery Systems (MVADS) 2006; 12-14 Sept, The Royal Society of Medicine, London, UK
- Immunopotentiators in Modern Vaccines (IMV) 2008; 21-23 May 2008, Montego Bay, Jamaica
- Workshop on Adjuvants and Adjuvanted Preventive and Therapeutic Vaccines for Infectious Disease Indications; Advisory Panel Meeting CBER & NIH, 2-3 December 2008, Washington D.C., USA
- Modern Vaccine Adjuvants and Delivery Systems (MVADS) 2009; 28-30 Oct 2009, The Austrian Industrial Association, Vienna, Austria
- Scientific Working Group on Immunogens and Antigen Processing. Global HIV Vaccine Enterprise; 15-16 July 2009, New York, USA
- Modern Vaccine Adjuvants and Formulations (MVAF) 2010 , 13-15 October , Cannes, France
- Joint annual adjuvant development and discovery contractors meeting (NIAID, NIH); 18-20 October 2010, Bethesda, USA
- Modern Veterinary Vaccines ad Adjuvants, (MVVA) 2010, 17-19 November, Budapest, Hungary
- Immunopotentiators in Modern Vaccines (IMV), IV. Int. Conference, 6 – 8 April 2011, Porto, Portugal
- 2010-2012: Chairing multiple vaccine sessions at World Vaccine Congress and European Vaccine Congress
- WHO Informal Consultation and Advisory meeting to develop further guidance on vaccines for UNEP-convened Intergovernmental Negotiating Committee Meeting 4 (INC 4), 3-4 April 2012, Geneva, Switzerland
- MVADS 2012, 4-6 July, Copenhagen Denmark
- MVAF (Modern Vaccine Adjuvants and Formulations), Lausanne, Switzerland, 15-17 May 2013

- Immunopotentiators in Modern Vaccines, 7-9 May 2014, Albufeira, Algarve, Portugal
- Organizing Committee 4th International Conference on Vaccines & Vaccination, OMICS group, September 24-26, 2014 Valencia, Spain
- Organizing Committee Member for EuroVaccines – since 2015 (OMICS Group Conferences)
- MVAF (Modern Vaccine Adjuvants and Formulations), Leiden, The Netherlands, 02-04 May 2018
- Organizing Committee Member for Vaccine R&D and Vaccination, EuroSciCon, June 11-12, 2019, Prague, Czech Republic

Posters and invited lectures (1988-1997)

Posters

- Vanden Bossche, G., Krietemeyer, S.: *Application of anionic detergents for improvement of the isolation rate of enteroviruses from waste water*; 6th International Symposium on Microbial Ecology, Barcelona, Spain, 6-11 .09.1992
- Vanden Bossche, G.: *The impact of interfacial interactions on the in vitro infectivity of detergent-treated virus samples*; 2nd International Conference on the Fundamental Aspects of Bioadhesion and Flocculation and their Implications in Technological, Ecological and Medical Fields, Bioadhesion II, University of Louvain-la-Neuve, Belgium, 23- 27.05.1993
- Vanden Bossche, G.: *In vitro modulation of virus infectivity by surface- active agents*; 9th International Congress of Virology, Glasgow, Scotland, 8-13.08.1993
- Krietemeyer, S., Vanden Bossche, G., Schmitt, J., Flemming, H.C.: *Einsatz von ionischen Tensiden zum Virus- nachweis in Biofilmen aus Trinkwasseraufbereitungssystemen (Use of ionic surfactants for the detection of viruses in biofilms from drinking water treatment systems)*; Bio-Engineering Congress VAAM-DGHM, Hannover, F.R.G., 7-9.03.1994
- Vanden Bossche, G., Krietemeyer, S.: *Use of ionic detergents for the detection of human enteroviruses in biofilm samples from drinking water systems*; International Workshop on New Approaches in Microbial Ecology, Elsinore, Denmark, 21-25.08.1994
- Vanden Bossche, G., Krietemeyer, S.: *Isolierung von humanen Enteroviren aus Biofilmen von Trinkwasser- aufbereitungssystemen mittels Detergens-Konditionierung (Isolation of human enteroviruses in biofilms of drinking water treatment systems using detergent-conditioning)*; 46th Congress of the German Association for Hygiene and Microbiology (DGHM), Kiel, F.R.G., 26-29.09.1994

Lectures

- 'Neuere Entwicklungen (auch am lebenden Tier) in der Coronavirus-Diagnostik'
Berliner Tierärztliche Gesellschaft, Berlin, F.R.G., 15.06.1988
(*New developments (also in live animals) of Coronavirus diagnostics*)
- 'Viral diseases in cats: A survey'
Deutscher Edelkatzen-Verein, International Congress Centrum, Berlin, F.R.G., 16.11. 1988
- 'Zur Standardisierung and Interpretation der serologischen Coronavirus-Diagnostik bei der Katze: Korrelation zum klinischen bzw. anatomisch-pathologischen Befund' (*Coronavirus diagnostics in cats: Standardization and interpretation of serological results: Clinical and anatomo- pathologic correlates*)
Bundesverband pralctischer Tierarzte, Hamburg, F.R.G., 7.06.1988
- 'Molecular epidemiology of Equine Herpesvirus type 1 (EHV-1) in non-equine hosts'
9th Intern. Symp. of Infections of the reproductive system of some domestic animal species, Perugia, Sept. 1988
- 'Rol van surfactant in de pathophysiologie van chronische bronchitis bij het paard'
(*The role of surfactant in the pathophysiologie of chronic bronchitis in horses*)
Vereniging van Belgische Paardenpractici, Brussels, Belgium, 10.12.1988

- ‘Zur Anwendung von Zell-Elisa, Immunblotting and Genom-Hybridisierung im virologischen Labo’
(*The use of Cell-Elisa, Immunoblotting and genome hybridization in virological labs*)
Deutscher Verband Technischer Assistenten in der Medizin e. V., 5th 'Deutscher MTA-Kongress', Mannheim, F.R.G., 8-10.03.1989
- ‘Die Parvovirus-Typ 2-Infektion beim Hund: Diagnostik and Immunprophylaxe’
(*Diagnostics and immune prophylaxis of Parvovirus-Typ 2-Infections in dogs*)
Berliner Tierärztliche Gesellschaft, Berlin, F.R.G., 10.05.1989
- ‘Zur Wahl der Testviren bei der Prüfung chemischer Desinfektionsmittel in der Veterinärmedizin’ (*The choice of test viruses in testing of chemical disinfectants in veterinary medicine*)
Deutsche Veterinarmedizinische Gesellschaft, 3th Hohenheimer Seminar, Stuttgart, F.R.G., 18-19.11.1990
- ‘Fortschritte bei der Diagnose and Prophylaxe virusbedingter Infektionen’
(*Progress in the diagnosis and prophylaxis of viral infections*)
Sanitätsamt der Bundeswehr für medizinischen ABC-Schutz, Munich, F.R.G., 20.11.1990
- ‘Zur Pathogenese and Epidemiologie der feline infektiösen Peritonitis (FIP)’
(*Pathogenesis and epidemiology of Feline Infectious Peritonitis (FIP)*)
Stuttgarter Tierärztliche Gesellschaft, Stuttgart, F.R.G., 4.12.1990
- ‘Einsatz von Carbonsäuren zur Dekontamination von Futtermitteln and Küchenabfällen’
BASF-Aktiengesellschaft, Ludwigshafen, F.R.G., 11.09.1991
- ‘Fehlinterpretation der viruziden Wirksamkeit bei der Prüfung tensidhaltiger Desinfektionsmittel’
Österreichische Gesellschaft für Hygiene, Mikrobiologie and Präventivmedizin. 12. Dosch-symposium, Vienna, Austria, 2-3.11. 1992
- ‘Alternative Desinfektionsmittel - Die Desinfektionswirkung von Kalkanstrichen and organischen Säuren’
Workshop 'Desinfektion bei der Tierseuchenbekämpfung', Allmendingen, F.R.G., 16.06.1992
- ‘Optimization of virus recovery from sewage by crossflow filtration’
6th International Symposium on Microbial Ecology, Barcelona, Spain, 6-11.09.1992
- ‘Neue Methoden zur Potenzierung der Nachweisrate von infektiösen Viruspartikeln in Umweltproben’
(*New methods for the enhanced detection of infectious viral particles in environmental samples*)
Institute of Virology, Molecular Biology and Immunology, Free University of Berlin, Berlin, F.R.G., 8.02.1993
- ‘Neue Methoden zur Potenzierung der Nachweisrate von infektiösen Viruspartikeln in Umweltmedien’
Umweltbundesamt, Symposium 'Überwachungsmethoden Gentechnik: Nachweisverfahren für Mikroorganismen, Viren and Gene in der Umwelt', TU Berlin, Berlin, F.R.G., 25-26.03.1993
- ‘Vorkommen, Isolierung und Desinfektion epidemiologisch relevanter Viren in Abwasser’
(*Occurrence, Isolation and Disinfection of epidemiologically relevant viruses in waste water*)
Stuttgarter Tierärztliche Gesellschaft, Stuttgart, 12.05.1993 and Aulendorf, 13.05.'93, F.R.G.
- ‘Evaluation of virucidal activity of detergent-containing disinfectants’
Unilever Research Colworth Laboratory, Sharnbrook, Bedford, England, 29.07.1993
- ‘Die Prüfung chemischer Desinfektionsmittel auf viruzide Wirksamkeit: Hinweise auf grundsätzliche methodische Unzulänglichkeiten’
(*The testing of chemical disinfectants for virucidal efficacy: Evidence of fundamental methodological shortcomings*)
45th Congress of the 'Deutsche Gesellschaft für Hygiene and Mikrobiologie - DGHM', Karlsruhe, F.R.G., 27- 30.09.1993

- 'Einfluss von Grenzflächenphänomenen auf das infektiöse Verhalten unbehüllter Viren: Fakten and Konsequenzen für Forschung and Praxis'
(*Impact of surface active phenomena on the infectious viral behavior of uncoated viruses: Facts and consequences for research and practice*)
Workshop "Kolloidchemische Aspekte der Virusinfektiosität", University of Hohenheim, Stuttgart, F.R.G., 10.03.1994
- 'Wechselwirkungen zwischen Viren and oberflächenaktiven Verbindungen in Abwasser: Implikationen für die Hygiene von Gewässern'
(*Interactions between viruses and surface active compounds in waste water: Implications for water hygiene practice*)
State Institute for Environmental Hygiene of Water, Soil and Air (Wa-Bo-Lu), Federal Public Health Authority (BGA), Berlin, F.R.G., 13.04.1994
- 'Kolloidchemische Einflüsse auf das Infektiositätsverhalten von (unbehüllten) Viren'
(*Colloidal-chemical influences on the infectious behavior of non-enveloped viruses*)
Federal Research Centre for Virus Diseases of Animals (BfA für Viruserkrankheiten), Tübingen, F.R.G., 21.04.1994
- 'Humanpathogene Viren and ihr Verhalten bei der Wassergewinnung and Aufbereitung'
(*Human pathogenic viruses and their behavior in terms of water production and treatment*)
5th International Symposium "Contamination of the Environment by Viruses and Methods of Control", University of Agriculture, Forestry and Renewable Resources, Vienna, Austria, 3-4.05.1994
- 'Detergent conditioning of environmental samples: A (The?) most sensitive method for the detection of viral infectivity?'
International Symposium on Health-Related Water Microbiology, Budapest, Hungary, 24-30.07.1994
- 'Epidemiological importance of viruses pathogenic to man and spreading in soil and ground water'
International Conference on Waterborne Infectious Diseases, Haifa, Israel, 02-06.09.1994
- 'Emission von Viren (an verschiedenen Arbeitsplätzen) in Kompostwerken and anderen Müllverarbeitenden Betrieben'
(*Emission of viruses (at several different locations) in composting and other waste processing facilities*)
5th Hohenheimer Seminar Nachweis and Bewertung von Keimemissionen bei der Entsorgung von kommunalen Abfällen sowie spezielle Hygieneprobleme der Bioabfallkompostierung', University of Hohenheim, Stuttgart, F.R.G., 5-6.10.1994
- 'Neue Strategien zur Immunprophylaxe von Virusinfektionen und Beispiele für deren Anwendung in der Veterinärmedizin' (*New strategies for immunoprophylaxis of viral infections and examples of their application in veterinary medicine*)
University of Hohenheim, Stuttgart, Germany, 05.12.1996
- 'Zum Einsatz von rekombinanten Virusvektoren in der Veterinärmedizin zur Therapie and Immunprophylaxe' (*The use of recombinant viral vectors in veterinary medicine for therapy and immunoprophylaxis*)
University of Hohenheim, Stuttgart, Germany, 10.01.1997

Publications G. Vanden Bossche (1987-1995 ; 2017)

1) A1 PUBLICATIONS

1. Vanden Bossche, G. (1994): Alterations of viral infectious behavior by surface active agents; *Microbiol. Research* **149** (2), 105-114

2. Vanden Bossche, G. (1994): Use of ionic detergents for enterovirus recovery from waste water; *Microbiol. Research* **149** (3), 231-240
3. Vanden Bossche, G., Wustmann U., Krietemeyer, S. (1994): Ozone disinfection dynamics of enteric viruses provide evidence that infectious titer reduction is triggered by alterations to viral colloidal properties; *Microbiol. Research* **149**(4), 351-370
4. Vanden Bossche, G. (1995): The impact of interfacial interactions on poliovirus infectivity in detergent-treated monolayer cultures; *Microbiol. Research* **150** (3), 247-263
5. Pfirrmann, A., Vanden Bossche, G. (1994): Vorkommen und Isolierung von humanen Enteroviren aus der Luft von Abfallbeseitigungs- und -verwertungsanlagen; *Zbl. Hyg. Umweltmed.* **195**, 136-144
(*Occurrence and isolation of airborne human enteroviruses from the air from waste-disposal and utilization plants*)

2) ARTICLES NOT BELONGING TO THE A1 CATEGORY

1. Vanden Bossche, G. (1987): Chronische Otitis media-interna mit Beeinträchtigung des Nervus facialis und Nervus vestibulocochlearis: Fallbericht und allgemeine Betrachtungen; *Pferdeheilkunde* **3**, 157-164
(*Chronic otitis media-interna and impact on the facial and vestibulocochlear nerve: Case report and general considerations*)
2. Wintzer, H.-J., Vanden Bossche, G., Ludwig, H., Bischof, B. (1987): Seuchenverlauf nach EHV-1-Infektion in einem Reitpferdebestand; *Dtsch. Tierärztl. Wschr.* **94**, 149-152
(*Epidemiology of EHV-1 infection in a horse riding stable*)
3. Ludwig, H., Chowdhury, S.I., Vanden Bossche, G., Wintzer, H.-J., Krauser, K. (1987): Neurologische Symptomatik bei einer Warmblutstute mit akutem tödlichem Verlauf. Molekuläre Charakterisierung des Gehirnisolates und pathologische Korrelate; *Berl. Münch. Tierärztl. Wschr.* **100**, 147-15
(*Neurological symptoms in a warmblood mare with acute and fatal clinical outcome. Molecular characterization of brain tissue samples and pathological correlates*)
4. Vanden Bossche, G. (1987): Hämatologische und biochemische Befunde beim gesunden Esel; *Pferdeheilkunde* **5**, 277-280
(*Hematology and biochemical findings in healthy donkeys*)
5. Vanden Bossche, G., Krauser, K. (1988): Cachexiesyndrom bei einer Eselstute infolge einer toxisch-infektiösen Enteritis. 1^{ste} Mitteilung: Primärsymptomatologie und Pathologie (5a); 2^{te} Mitteilung: Anämie als sekundärer Symptomenkomplex (5b); 3^{te} Mitteilung: Hyperlipämie als sekundäre Komplikation (5c); *Berl. Münch. Tierärztl. Wschr.* **101**, 113-116 (5a), 116-119 (5b), 190-193 (5c)
(*Cachexia syndrome in a donkey mare caused by toxic-infectious enteritis. 1. Primary symptoms and pathology; 2. Anaemia as secondary symptom complex; 3. Hyperlipaemia as secondary complication*)
6. Vanden Bossche, G., Ludwig, H. (1989): Zur klinischen Bedeutung der serologischen Coronavirus-Diagnostik bei der Katze; *REPORT: Physiologie, Diagnostik und Therapie in der Kleintiermedizin* **28**, 15-19 (EFFEM-Forschung für Heimtiernahrung)
(*The clinical relevance of serology to Coronavirus diagnostics in cats*)
7. Vanden Bossche, G. (1990a): Zur Anwendung, zum Prinzip und zur praktischen Durchführung der SDS-PAGE und Western Blotting. Teil I: Theoretische Grundlagen; *Fachzeitschrift MTA Januar*, 11-14
(*Overall principle, application and practical implementation of SDS-PAGE and Western Blotting. Part I: Theoretical background*)
8. Vanden Bossche, G. (1990b): Zur Anwendung, zum Prinzip und zur praktischen Durchführung der SDS-PAGE und Western Blotting. Teil I: Praktische Durchführung; *Fachzeitschrift MTA Februar*, 110-115
(*Overall principle, application and practical implementation of SDS-PAGE and Western Blotting. Part II: Practical implementation*)

9. Vanden Bossche, G. (1990a): Zur epizootiologischen Interpretation der Coronavirus-Serologie bei gesunden und non-FIP (Feline Infektiöse Peritonitis) kranken Katzen mittels der indirekten Immunfluoreszenz (IF); *Kleintierpraxis* **35**, 189-191
(*Epizootiological considerations on the interpretation of serologic results from Coronavirus diagnostics in healthy and non-FIP (Feline Infectious Peritonitis) diseased cats using an indirect immunofluorescence technique*)
10. Vanden Bossche, G. (1990b): Zur Serodiagnose der Feline Infektiösen Peritonitis (FIP) mittels einem indirekten Immunfluoreszenz-Test (IFT): Eine statistische Bewertung der diagnostischen Treffsicherheit; *Kleintierpraxis* **35**, 201-213
(*Using an indirect immunofluorescence technique for serodiagnosis of Feline Infectious Peritonitis (FIP): A statistical evaluation of diagnostic accuracy*)
11. Dörwald, M.-L., Vanden Bossche, G., Gerull, A. (1991): Zur Surfactant-Phospholipidzusammensetzung im Tracheobronchialsekret des Pferdes und ihrer klinischen Relevanz für die Beurteilung des Lungenstatus bei chronisch lungenkranken Pferden; *Wiener Tierärztliche Monatsschrift* **78**, 118-126
(*The composition of surfactant phospholipid in tracheobronchial secretions from horses and clinical relevance thereof for the assessment of pulmonary function in horses with chronic lung disease*)
12. Vanden Bossche, G., Dörwald, M.-L., Gerull, A. (1991): Belastungsinduzierte Veränderungen der Surfactantphospholipidzusammensetzung im Tracheobronchialsekret von gesunden und chronisch lungenkranken Pferden; *Wiener Tierärztliche Monatsschrift* **78**, 145-152
(*Stress-induced changes of surfactant phospholipid composition in tracheobronchial secretions of healthy horses and horses with chronic lung disease*)
13. Vanden Bossche, G., Strauch, D. (1991): Zur Wirksamkeit von Flächendesinfektionsmitteln und ihrem Einsatz in der Tierhaltung; *BL-Journal-Laborpraxis in Biologie und Landwirtschaft* **April/Mai**, 110-126
(*Review on the effectiveness of surface disinfectants and their use in animal husbandry*)
14. Vanden Bossche, G. (1991): Zum Einsatz von Säuren als Desinfektionsmittel: Spezifische Wirkungsmechanismen und -spektren sowie typische Anwendungseigenschaften. *Hygiene + Medizin* **April**, 167-172
(*Review on the use of acids as disinfectants: Specific mechanisms of action, spectrum of effects as well as specific applications*)
15. Philipp, W., Rapp, A., Kegele, J., Vanden Bossche, G., Strauch, D. (1992): Einfluss der Langzeitlagerung von Gülle auf die Tenazität von Krankheitserregern; *Tierärztl. Umschau* **47**, 521-524
(*Influence of long-term storage of manure on the tenacity of pathogens*)
16. Vanden Bossche, G. (1993): The impact of physicochemical interactions on viral infectivity in water samples. Proceedings of 4th International Symposium on Contamination of the Environment by Viruses and Methods of Control, Vienna; **September 3-4, 1993**. In: *Wiener Mitteilungen*, 34-42
17. Vanden Bossche, G., Kriemeyer, S. (1994): Detergent conditioning: A (The) most sensitive method for the detection of enterovirus infectivity in biofilm samples; *Wat. Sci. Tech.* **30**, 2231-2239
18. Vanden Bossche, G. (1995): Colloidal aspects of enteroviral infectivity in aqueous environments (with special emphasis on Poliovirus type 1). Habilitation Thesis, <http://lib.ugent.be/nl/catalog/rug01:000349688>
19. Vanden Bossche (2017): Re-thinking vaccinology: "Act universally, think NK cells ?"; *J Molec Immunol Res.* **1(1)**, 1-6