

Curriculum Vitae

Personal information **Johannes Blümel**

Work experience

1. Employer: Paul Ehrlich Institut
 - Start date: 101998
 - End date:
 - Position: Head of Virus Safety Section
 - Activities: Assessment of virus and TSE (prion) safety of medicinal products and blood donations. Research
 - Country: Germany
2. Employer: University Hospital Bonn
 - Start date: 031993
 - End date: 091998
 - Position: Virologist
 - Activities: virus diagnostics research
 - Country: Germany

Education and training

1. Subject: University of Freiburg
 - Start date: 011991
 - End date: 031993
 - Qualification: Ph D
 - Organisation: Virology
 - Country: Germany
2. Subject: University of Freiburg
 - Start date: 101984
 - End date: 121990
 - Qualification: Diploma Biology
 - Organisation: Molecular Biology, Microbiology, Biophysics, Physical Chemistry
 - Country: Germany

Additional information

Publications

1. Blümel J ,Matz B. (1995). Thermosensitive UL9 gene function is required for early stages of herpes simplex virus type 1 DNA replication. Journal of General Virology 76:3119_3124.
2. Blümel J, Matz B. (1996). Study on simian virus 40 DNA synthesis in herpes simplex virus_infected cells. Virology 217:407_412.
3. Remmert T, Blümel J, Kaiser R, Werner U, Matz B, Brackmann HH, Effenberger W, Langer G. (1996). Virusinaktivierung von Gerinnungskonzentraten im kontinuierlichen Kurzzeiterhitzungsverfahren. In 26. Hämophilie_Symposium Hamburg 1996. Ed. I. Scharrer und W. Schramm. pp223_231. Springer_Verlag, Heidelberg,
- 4.Dombrowski F, Eis_Hübinger AM, Ackermann T, Blümel J, Spengler U, Pfeiffer U (1997) Adenovirus_induced liver necrosis in a case of AIDS. Virchows Arch. 431:469_472.
5. Blümel J, Blümel E , Yassin A, Schmidt_Rotte H , Schaal KP (1998). Typing of Nocardia farcinica by pulsed_field gel electrophoresis reveals an endemic strain as source for hospital infections. Journal of Clinical Microbiology 36:118_122.
6. Lenz W, Blümel J, Pag U (1999). Staphylococcus aureus: den Infektionsketten auf der Spur. mta 14:556_562.
7. Blümel J, Gräper S, Matz B. (2000). Structure of simian virus 40 DNA replicated by herpes simplex virus type 1. Virology 276:445_454.
8. Schmidt I, Blümel J, Seitz H, Willkommen H, Löwer J. (2001). Parvovirus B19 DNA in plasma pools and plasma derivatives. Vox Sanguinis 81:228_235.
9. Blümel J, Schmidt I, Willkommen H, Löwer J. (2002). Inactivation of parvovirus B19 during pasteurization of human serum albumin. Transfusion 42: 1011_1018.
10. Blümel J, Schmidt I, Effenberger W, Seitz H, Willkommen H, Brackmann HH, Löwer J, Eis_Hübinger AM. (2002). Parvovirus B19 transmission by heat_treated clotting factor concentrates. Transfusion 42:1473_1481.
11. Seitz H, Blümel J, Schmidt I, Willkommen H, Löwer J.(2002). Comparable virus inactivation by bovine or vegetable derived Tween 80 during solvent/detergent treatment. Biologicals 30:197_205. 1
2. Blümel J. (2004). Cell culture_based assay of parvovirus B19 and the relevance of animal model viruses. Developments in Biologicals 118:107_112, 2004.
13. Boschetti N, Niederhauser I, Kempf C, Stühler A, Löwer J, Blümel J. (2004). Different susceptibility of B19 virus and mice minute virus to low pH treatment. Transfusion 44:1079_1086.
14. Schildgen O. Gräper S, Blümel J, Matz B (2005), Genome replication and progeny virus production of Herpes

Simplex virus type 1 mutants with temperature_sensitive lesions in the origin_binding protein. Journal of Virology 79:7273_7278.

15. Kupfer B, Ruf T, Matz B, Nattermann J, Spengler U, Rockstroh JK, Brackmann HH, Blümel J, Tacke M, Kaiser R. (2005). Comparison of GB virus C, HIV, and HCV infection markers in hemophiliacs exposed to non_inactivated or inactivated factor concentrates Journal of Clinical Virology 34:42_47.

16. Blümel J, Eis_Hübinger AM, Stühler A, Bönsch C, Gessner M, Löwer J. (2005). Characterization of Parvovirus B19 Genotype 2 in KU812Ep6 Cells. Journal of Virology 79:14197_14206.

17. Seitz R, von Auer F, Blümel J, Burger R, Buschmann A, Dietz K, Heiden M, Hitzler WE, Klamm H, Kreil T, Kretschmar H, Nübling M, Offergeld R, Pauli G, Schottstedt V, Volkert P, Zerr I. (2007). Impact of vCJD on blood supply. Biologicals 35:79_97.

18. Schneider B, Höne A, Tolba RH, Fischer HP, Blümel J, Eis_Hübinger AM. (2008). Simultaneous persistence of multiple genome variants of human parvovirus B19. J Gen Virol. 89:164_76.

19. Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Jansen B, Klamm H, Ludwig WD, Montag_Lessing T, Offergeld R, Pauli G, Seitz R, Schlenkrich U, Schottstedt V, Willkommen H, von König KH; with special support by Prof. Dr. Jürgen Knobloch (2008). Malaria. Transfus Med Hemother. 35:122_134.

20. Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Klamm H, Montag_Lessing T, Offergeld R, Pauli G, Seitz R, Schlenkrich U, Schottstedt V, Willkommen H, von König CH. (2008). Influenza Virus. Transfus Med Hemother. 35:42_49.

21. Pauli G, Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Klamm H, Montag_Lessing T, Offergeld R, Seitz R, Schlenkrich U, Schottstedt V, Willkommen H, Wirsing von König CH. (2008). Hepatitis E Virus. Transfus Med Hemother. 35:50_57

22. Pfeiderer C, Blümel J, Schmidt M, Roth WK, Houfar MK, Eckert J, Chudy M, Menichetti E, Lechner S, Nübling CM. 2008. West Nile virus and blood product safety in Germany. Journal of Medical Virology 80:557_63.

23. Blümel J, Stühler A, Dichtelmueller H. (2008). Kinetics of inactivating human parvovirus B19 and porcine parvovirus by dry heat_treatment. Transfusion 48:790_79.

24. Robertson JS, Blümel J, Brorson K, Gröner A, Kreil TR, Ruiz S, Willkommen H. 2009. Virus & TSE safety forum 2008. Biologicals. 37:345_54

25. Blümel J, Stühler A. (2010). [Important aspects of virus safety of advanced therapy medicinal products]. Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 53:38_44.German.

26. Pruss A, Caspari G, Krüger DH, Blümel J, Nübling CM, Gürtler L, Gerlich WH. (2010). Tissue donation and virus safety: more nucleic acid amplification testing is needed. Transpl Infect Dis. 12:375_86.

27. Baylis SA, Nick S, Blümel J, Micha Nübling C. (2010). Hepatitis E virus and blood donors in Germany. Vox Sanguinis 98:479.

28. Baylis SA, Chudy M, Blümel J, Pisani G, Candotti D, José M, Heath AB. (2010). Collaborative study to establish a replacement World Health Organization International Standard for parvovirus B19 DNA nucleic acid amplification technology (NAT)_based assays. Vox Sanguinis 98:441_6.

29. Baylis SA, Blümel J. (2010). Regulatory expectations of validation/qualification of adventitious virus assays. PDA J Pharm Sci Technol. 64:486_91.

30. Schottstedt V, Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Montag_Lessing T, Offergeld R, Pauli G, Seitz R, Schlenkrich U, Strobel J, Willkommen H, von König CH. (2010). Human Cytomegalovirus (HCMV) _ Revised. Transfus Med Hemother. 37:365_375.

31. Pauli G, Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Montag_Lessing T, Offergeld R, Seitz R, Schlenkrich U, Schottstedt V, Strobel J, Willkommen H, von König CH. (2010.) Orthopox Viruses: Infections in Humans. Transfus Med Hemother. 37:351_364.

32. Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Montag_Lessing T, Offergeld R, Pauli G, Seitz R, Schlenkrich U, Schottstedt V, Strobel J, Willkommen H, von König CH. (2010).. Parvovirus B19 – Revised. Transfus Med Hemother. 37:339_350.

33. Baylis SA, Finsterbusch T, Bannert N, Blümel J, Mankertz A (2011): Analysis of porcine circovirus type 1 detected in Rotarix vaccine. Vaccine 29: 690_697.

34. Reinhardt J, Stühler A, Blümel J. (2011). Safety of bovine sera for production of mesenchymal stem cells for therapeutic use. Hum Gene Therapy 22:775_776.

35. Baylis SA, Hanschmann KM, Blümel J, Nübling CM. (2011) Standardization of hepatitis E virus (HEV) nucleic acid amplification technique (NAT)_based assays: an initial study to evaluate a panel of HEV strains and investigate laboratory performance. Journal of Clinical Microbiology, 49, 1234_1239.

36. Baylis SA, Koc O, Nick S, Blümel J. (2011) Widespread distribution of hepatitis E virus in plasma fractionation pools. Vox Sanguinis 102:182_183.

37. Baylis SA, Gärtner T, Nick S, Overmyr J, Blümel J.(2012). Occurrence of hepatitis E virus RNA in plasma donations from Sweden, Germany, and the United States. Vox Sanguinis 103:89_90.

38. Blümel J, Rinckel LA, Lee DC, Roth NJ, Baylis SA. (2012). Inactivation and neutralization of parvovirus B19 Genotype 3. Transfusion 52:1490_7.

39. Gürtler L, Bauerfeind U, Blümel J, Burger R, Drosten C, Gröner A, Heiden M, Hildebrandt M, Jansen B, Montag_Lessing T, Offergeld R, Pauli G, Seitz R, Schlenkrich U, Schottstedt V, Strobel J, Willkommen H. (2013). Arbonematodes _ nematode infections transmissible by arthropods. Transfus Med Hemother. 40:50_62.

40. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Kreil TR, Robertson JS, Ruffing M, Ruiz S. (2013). Meeting reportworkshop on virus removal by filtration: trends and new developments. PDA J Pharm Sci Technol. 67:98_104.

41. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Kreil TR, Robertson JS, Ruffing M, Ruiz S. (2013). Meeting Report: PDA Virus and TSE Safety Forum. PDA J Pharm Sci Technol. 68:81_97.

42. Baylis SA, Blümel J, Mizusawa S, Matsubayashi K, Sakata H, Okada Y, Nübling CM, Hanschmann KM; HEV Collaborative Study Group. (2013). World Health Organization International Standard to harmonize assays for detection of hepatitis E virus RNA. Emerging Infectious Diseases 19:729_35.

43. Baylis SA, Tuke PW, Miyagawa E, Blümel J. (2013). Studies on the inactivation of human parvovirus 4. Transfusion 53:2685_2592.

44. Yang B, Wang H, Neske F, Baylis SA, Ho C, Lester P, Chen Q, Blümel J. (2013). Porcine circovirus (PCV) removal by Q Sepharose Fast Flow Chromatography. *Biotechnol Prog.* 29:1464_1471.
45. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Kreil TR, Robertson JS, Ruffing M, Ruiz S. (2013) Meeting report_workshop on virus removal by filtration: trends and new developments. *PDA J Pharm Sci Technol* 67:98_104.
46. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Kreil TR, Robertson JS, Ruffing M, Ruiz S. (2013). Meeting report: PDA Virus and TSE safety Forum. *PDA J Pharm Sci Technol* 67:81_97.
47. Pauli G, Bauerfeind U, Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Montag_Lessing T, Offergeld R, Seitz R, Schlenkrich U, Schottstedt V, Strobel J, Willkommen H. (2013). West Nile virus. *Transfus Med Hemother* 40:256_284. 47. Juhl D, Baylis SA, Blümel J, Görg S, Hennig H. (2014). Seroprevalence and incidence of hepatitis E virus infection in German blood donors. *Transfusion* 54:49_56.
48. Pauli G, Bauerfeind U, Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Offergeld R, Seitz R, Schlenkrich U, Schottstedt V, Strobel J, Willkommen H. (2014) Usutu Virus. *Transfus Med Hemother* 41:73_82.
49. Trösemeier J_H, Branting A, Lukashov V, Blümel J, Baylis SA. Genome sequences of parvovirus b19 reference strains. (2014). *Genome Announcements* 00830_14.
50. Stühler A., Blümel J. (2014). Viral safety of biological medicinal products. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 57(10):198_202.
51. Blümel J. (2014). Viral safety perspective from the Paul_Ehrlich_Institute. *PDA J Pharm Sci Technol* 68(1):11_2.
52. Pauli G, Bauerfeind U, Blümel J, Burger R, Drosten C, Gröner A, Gürtler L, Heiden M, Hildebrandt M, Jansen B, Offergeld R, Seitz R, Schlenkrich U, Schottstedt V, Strobel J, Willkommen H. (2014). Coxiella burnetii _ Pathogenic Agent of Q (Query) Fever. *Transfus Med Hemother* 41:60_72.
53. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Hubbard BR, Kreil TR, Ruffing M, Ruiz S, Scott D, Silvester G. (2014). Meeting Report: 2013 PDA Virus & TSE Safety Forum. 2014. *PDA J Pharm Sci Technol*. 68(3):193_214.
54. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Hubbard BR, Kreil TR, Ruffing M, Ruiz S, Scott D, Silvester G. Meeting report_workshop on spike characterizations and virus removal by filtration: trends and new developments. (2014). *PDA J Pharm Sci Technol.* 68(3):215_20.
55. Blümel J (2014): Viral safety perspective from the Paul_Ehrlich_Institut in Europe. *PDA J Pharm Sci Technol* 68: 11_12.
56. Blümel J, Tounekti O (2015): Session 4: overall integrated viral clearance and adventitious agents strategy. *PDA J Pharm Sci Technol* 69: 195_205.
57. Baylis SA, Crossan C, Corman VM, Blümel J, Scobie L, Dalton HR (2015): Unusual serological response to hepatitis E virus in plasma donors consistent with re_infection. *Vox Sang* 109: 406_409.
58. Baylis SA, Corman V, Ong E, Linnen J, Nübling CM, Blümel, J. (2016). Hepatitis E virus loads in plasma fractionation pools. *Transfusion* 56:2532_2537
59. Zhang W, Li L, Deng X, Blümel J, Nübling CM, Hunfeld A, Baylis SA, Delwart E. (2016). Viral nucleic acids in human plasma pools. *Transfusion* 56:2248_2255.
60. Trösemeier J_H, Musso D, Blümel J, Thézé J, Pybus O, Baylis SA. (2016). Genome sequence of a candidate World Health Organization reference strain for Zika virus for nucleic acid testing. *Genome Announcements* 4:e00917_16.
61. Domanovic D, Kitchen A, Politis C, Panagiotopoulos T, Bluemel J, Van Bortel W, Overbosch D, Lieshout_Krikke R, Fabra C, Facco G, Zeller H. (2016). Targeting of blood safety measures to affected areas with ongoing local transmission of malaria. *Transfusion Medicine*. 26:161_165.
62. Willkommen H, Blümel J, Brorson K, Chen D, Chen Q, Gröner A, Kreil TR, Ruffing M, Ruiz S, Scott D, Silvester G. (2016). Meeting Report: 2015 PDA Virus & TSE Safety Forum. *PDA J Pharm Sci Technol*. 70:177_188.
63. Blümel J, Brorson K. (2016). Company_Specific Data on Cycled Resin Testing. *PDA J Pharm Sci and Tech* 70 428_442.
64. Baylis SA, Hanschmann KO, Schnierle BS, Trösemeier JH, Blümel J. Zika Virus Collaborative Study Group. Harmonization of nucleic acid testing for Zika virus: development of the 1(st) World Health Organization International Standard. *Transfusion*. 2017 Mar;57(3pt2):748_761.
65. Blümel J, Musso D, Teitz S, Miyabayashi T, Boller K, Schnierle BS, Baylis SA. Inactivation and removal of Zika virus during manufacture of plasma_derived medicinal products. *Transfusion*. 2017 Mar;57(3pt2):790_796. 66. Baylis SA, Terao E, Blümel J, Hanschmann KO. Collaborative study for the establishment of the Ph. Eur. Hepatitis E virus RNA for NAT testing biological reference preparation batch 1. *Pharmeur Bio Sci Notes*. 2017;2017:12_28.
67. Chudy M, Nübling CM, Blümel J, Daas A, Costanzo A. 2017. Establishment of the Ph. Eur. Hepatitis A virus RNA for NAT testing BRP batch 1. *Pharmeur Bio Sci Notes*. 2017:29_43.
68. Domanović D, Tedder R, Blümel J, Zaaier H, Gallian P, Niederhauser C, Saulea Oliveras S, O'Riordan J, Boland F, Harritshøj L, Nascimento MSJ, Ciccaglione AR, Politis C, Adlhoch C, Flan B, Oualikene_Gonin W, Rautmann G, Strengers P, Hewitt P Hepatitis E and blood donation safety in selected European countries: A shift to screening? *Euro Surveill*. 20;22(16). pii: 30514.
69. Kaiser M, Kamili S, Hayden T, Blümel J, Baylis SA. Genome sequence of hepatitis E virus genotype 2 World Health Organization reference strain. *Genome Announcements* 2017;5:pii: e01664_16.
70. Heplidikler S., Johnson S., Blümel J., Proceedings of the 2017 Viral Clearance Symposium, Conclusion. *PDA J Pharm Sci and Tech* 2018, 72 488_49.
71. Blümel J., Ma J. Proceedings of the 2017 Viral Clearance Symposium, Session 3: Resin Lifetime. *PDA J Pharm Sci and Tech* 2018, 72 488_497.
72. Juhl D, Nowak_Göttl U, Blümel J, Görg S, Hennig H. Lack of evidence for the transmission of hepatitis E virus by coagulation factor concentrates based on seroprevalence data. *Transfus Med*. 2018 Dec;28(6):427_432.
73. Baylis SA, McCulloch E, Wallace P, Donoso Mantke O, Niedrig M, Blümel J, Yue C, Nübling CM. External Quality Assessment (EQA) of Molecular Detection of Zika Virus: Value of the 1st World Health Organization International Standard. *J Clin Microbiol*. 2018, 56(3): e01997_17.
74. Kaiser M, Delaune D, Chazouillères O, Blümel J, Roque_Afonso AM, Baylis SA. A World Health Organization Human Hepatitis E Virus Reference Strain Related to Similar Strains Isolated from Rabbits. *Genome Announc*. 2018

Apr; 6(16): e00292_18.

75. Khan AS, Benetti L, Blümel J, Deforce D, Egan WM, Knezevic I, Krause PR, Mallet L, Mayer D, Minor PD, Neels P, Wang G. Report of the international conference on next generation sequencing for adventitious virus detection in biologicals. *Biologicals* 2018; 55:1_16.

76. Baylis SA, Blümel J. External Quality Assessment for Zika Virus Molecular Diagnostic Testing, Brazil. *Emerg Infect Dis* 2018; 24(10):1966.

77. Kamp C, Blümel J, Baylis SA, Bekerredjian_Ding I, Chudy M, Heiden M, Henseler O, Keller_Stanislawski B, de Vos AS, Funk MB. Impact of hepatitis E virus testing on the safety of blood components in Germany _ results of a simulation study. *Vox Sang* 2018 113(8):811_813.

78. Schildgen O, Gräper S, , Blümel J, Külshammer M, Matz B. Temperature_sensitive origin_binding protein as a tool for investigations of herpes simplex virus activities in vivo. *J Gen Virol.* 2019 Jan;100(1):105_117.

79. Yue C, Teitz S, Miyabashi T, Boller K, Lewis_Ximenez LL, Baylis SA, Blümel J. Inactivation and Removal of Chikungunya Virus and Mayaro Virus from Plasma_derived Medicinal Products. *Viruses.* 2019 Mar 7;11(3). pii: E234. doi: 10.3390/v11030234.

80. Denner J, Pischke S, Steinmann E, Blümel J, Glebe D. Why all blood donations should be tested for hepatitis E virus (HEV). *BMC Infect Dis.* 2019 Jun 20;19(1):541. doi: 10.1186/s12879_019_4190_1

81. Baylis SA, Hanschmann KO, Matsubayashi K, Sakata H, Roque_Afonso AM, Kaiser M, Corman VM, Kamili S, Aggarwal R, Trehanpati N, Gärtner T, Thomson EC, Davis CA, da Silva Filipe A, Abdelrahman TT, Blümel J, Terao E; HEV collaborative study group. Development of a World Health Organization International Reference Panel for different genotypes of hepatitis E virus for nucleic acid amplification testing. *J Clin Virol.* 2019 Oct;119:60_67. doi: 10.1016/j.jcv.2019.05.006.

82. Tonnerre P, Melgaço JG, Torres_Cornejo A, Pinto MA, Yue C, Blümel J, de Sousa PSF, de Mello VDM, Moran J, de Filippis AMB, Wolski D, Grifoni A, Sette A, Barouch DH, Hoogeveen RC, Baylis SA, Lauer GM, Lewis_Ximenez LL. Evolution of the innate and adaptive immune response in women with acute Zika virus infection. *Nat Microbiol.* 2020 Jan;5(1):76_83. doi: 10.1038/s41564_019_0618_z

83. Blümel J, Schwantes A, Baylis SA, Stühler A. Strategies toward virus and prion safe human platelet lysates. *Transfusion.* 2020 Jan;60(1):219_220. doi: 10.1111/trf.15581

84. Yang B, Wang H, Kaleas K, Butler M, Franklin J, Bill A, Baylis SA, Chen Q, Blümel J. Clearance of porcine circovirus and porcine parvovirus from porcine_derived pepsin by low pH inactivation and cation exchange chromatography. *Biotechnol Prog.* 2020 Jul;36(4):e2968. doi: 10.1002/btpr.2968 . Epub 2020 Feb 13. PMID:3198978

85. Roth H, Schneider L, Eberle R, Lausen J, Modlich U, Blümel J, Baylis SA. Zika virus infection studies with CD34(+) hematopoietic and megakaryocyte_erythroid progenitors, red blood cells and platelets. *Transfusion.* 2020 Mar;60(3):561_574. doi: 10.1111/trf.15692

86. Baylis SA, Miskey C, Blümel J, Kaiser M, Kapusinszky B, Delwart E. Identification of a novel bovine copiparvovirus in pooled fetal bovine serum. *Virus Genes.* 2020 Aug;56(4):522_526. doi: 10.1007/s11262_020_01757_1.

87. Rabenau HF, Schwebke I, Blümel J, Eggers M, Rapp I, Steinmann J, Willkommen H. Comment on the significance, application and determination of the large volume plating (LVP) : 2. Communication of the DVV/GfV Virus Disinfection Expert Committee on the DVV/RKI Guideline in the version of December 1st, 2014. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2020 May;63(5):657_659. doi: 10.1007/s00103_020_03117_8.

88. Rabenau HF, Schwebke I, Blümel J, Eggers M, Rapp I, Steinmann J, Willkommen H. Guideline for testing chemical disinfectants regarding their virucidal activity within the field of human medicine : as of December 1st, 2014 Prepared by the German Association for the Control of Virus Diseases (DVV) and the Robert Koch Institute (RKI). *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2020 May;63(5):657_659. doi: 10.1007/s00103_020_03117_8.

89. Khan AS, Blümel J, Deforce D, Gruber MF, Jungbäck C, Knezevic I, Mallet L, Mackay D, Matthijnssens J, O'Leary M, Theuns S, Victoria J, Neels P. Report of the second international conference on next generation sequencing for adventitious virus detection in biologics for humans and animals. *Biologicals.* 2020 Sep;67:94_111. doi: 10.1016/j.biologicals.2020.06.002.

90. Kapsch AM, Farcet MR, Wieser A, Ahmad MQ, Miyabayashi T, Baylis SA, Blümel J, Kreil TR. Antibody_enhanced hepatitis E virus nanofiltration during the manufacture of human immunoglobulin. *Transfusion.* 2020 Nov;60(11):2500_2507. doi: 10.1111/trf.16014.

91. Roth H, Kreß J, Chudy M, Blümel J, Schmidt_Chanasit J, Cadar D, Niedrig M, Ferenczi E, Herrmann M, Baylis SA, Miskey C. Genome Sequences of West Nile Virus Reference Materials. *Microbiol Resour Anounc.* 2021 Oct 28;10(43):e0074021. doi: 10.1128/MRA.00740_21

92. Roush D, Blümel J. Proceedings of 2019 Viral Clearance Symposium, Session 4: Viral Clearance Strategy and Process Understanding. *PDA J Pharm Sci Technol.* 2021 Dec 15:pdajpst.2021.012680. doi: 10.5731/pdajpst.2021.01268.

93. Matz B, Blümel J, Schildgen O, Eis-Hübinger AM, Streeck H. Basic research on herpes simplex viruses: are mutants still needed? *Virus Genes.* 2023 Oct;59(5):790-794. doi: 10.1007/s11262-023-02005-y

94. Khan AS, Mallet L, Blümel J, Cassart JP, Knezevic I, Ng SHS, Wall M, Jakava-Viljanen M, Logvinoff C, Goios A, Neels P. Report of the third conference on next-generation sequencing for adventitious virus detection in biologics for humans and animals. *Biologicals.* 2023 Aug;83:101696. doi: 10.1016/j.biologicals.2023.101696

95. Eggers M, Schwebke I, Blümel J, Brandt F, Fickenscher H, Gebel J, Hübner N, Müller JA, Rabenau HF, Rapp I, Reiche S, Steinmann E, Steinmann J, Zwicker P, Suchomel M. Suitable Disinfectants with Proven Efficacy for Genetically Modified Viruses and Viral Vectors. *Viruses.* 2023 Oct 30;15(11):2179. doi: 10.3390/v15112179

96. Baylis SA, Chudy M, Blümel J. In Response: Getting the measure of hepatitis A virus (HAV): A better understanding of the RNA content of HAV reference material and blood donations. *Transfusion.* 2024 Feb;64(2):416-418. doi: 10.1111/trf.17713

Projects

Memberships

Other Relevant Information

Gesellschaft für Virologie