

## 7 Literaturverzeichnis

- Agrawal, A.G. und Petersen, L.R. 2003.** Human immunoglobulin as a treatment for West Nile virus infection. *J Infect Dis* 188: 1-4.
- Akov, Y. und Goldwasser, R. 1966.** Prevalence of antibodies to arboviruses in various animals in Israel. *Bull World Health Organ* 34: 901-909.
- Allwinn, R., Doerr, H. W., Emmerich, P., Schmitz, H. und Preiser, W. 2002.** Cross-reactivity in flavivirus serology: new implications of an old finding? *Med Microbiol Immunol (Berl)* 190: 199-202.
- Anderson, J.F., Main, A.J., Andrealis, T.G., Wikel, S.K. und Vossbrink, C.R. 2003.** Transstadial transfer of West Nile virus by three species of ixodid ticks (Acari: Ixodidae) *J Med Entomol* 40: 528-533.
- Austin, R. J., Whiting, T. L., Anderson, R. A. und Drebot, M. A. 2004.** An outbreak of West Nile virus-associated disease in domestic geese (*Anser anser domesticus*) upon initial introduction to a geographic region, with evidence of bird to bird transmission. *Can Vet J* 45: 117-123.
- Bairlein, F. 1996.** Ökologie der Vögel. Gustav Fischer Verlag, Stuttgart, Jena, Lübeck.
- Bakonyi, T., Hubalek, Z., Rudolf, I. und Nowotny, N. 2005a.** Novel flavivirus or new lineage of West Nile virus, central Europe. *Emerg Infect Dis* 11: 225-231.
- Bakonyi, T., Gould, E.A., Kolodziejek, J., Weissenböck, H. und Nowotny, N. 2004.** Complete genome analysis and molecular characterization of Usutu virus that emerged in Austria in 2001: comparison with the South African strain SAAR-1776 and other flaviviruses. *Virology* 328: 301-310.
- Bakonyi, T., Lussy, H., Weissenböck, H., Hornyak, A. und Nowotny, N. 2005b.** In vitro host-cell susceptibility to Usutu virus. *Emerg Infect Dis* 11: 298-301.
- Bakonyi, T., Ivanics, E., Erdelyi, K., Ursu, K., Ferenczi, E., Weissenböck, H. und Nowotny, N. 2006.** Lineage 1 and 2 strains of encephalitic West Nile virus, central Europe. *Emerg Infect Dis* 12: 618-623.
- Ballagi-Pordany, A. und Belak, S. 1996.** The use of mimics as internal standards to avoid false negatives in diagnostic PCR. *Mol Cell Probes* 10: 159-164.
- Baqar, S., Hayes, C.G., Murphy, J.R. und Watts, D.M. 1993.** Vertical transmission of West Nile virus by *Culex* and *Aedes* species mosquitoes. *Am J Trop Med Hyg* 48: 757-762.

- Bauer, H.G., Berthold, P., Boye, P., Knief, W., Südbeck, P. und Witt, K. 2002.** Rote Liste der Brutvögel Deutschlands 3, überarbeitete Fassung 8.5.2002. Ber. Vogelschutz 39: 13-59.
- Beasley, D.W. 2005.** Recent advances in the molecular biology of west nile virus. *Curr Mol Med* 5: 835-850.
- Ben-Nathan, D. 1994.** Stress and infectious diseases. *Isreal Journal of veterinary medicine* 49: 105-112.
- Berthet, F.X., Zeller, H.G., Drouet, M.T., Rauzier, J., Digoutte, J.P. und Deubel, V. 1997.** Extensive nucleotide changes and deletions within the envelope glycoprotein gene of Euro-African West Nile viruses. *J Gen Virol* 78 (Pt 9): 2293-2297.
- Berthold, P., van Bossche, W. Lesham, Y. Kaatz, C. Kaatz, M., Nowak, E. und Querner, U. 1997.** Saliten-Telemetrie der Jahreswanderungen eines Weißstorchs *Ciconia ciconia* und Diskussion der Orientierungsmechanismen des Heimzugs. *J. Ornithol.* 138: 229-233.
- Berthold, P. 2001.** Vogelzug: eine neue Theorie zur Evolution, Steuerung und Anpassungsfähigkeit des Zugverhaltens. *J. Ornithol.* 142: 148-159.
- Besselaar, T.G., Blackburn, N.K. und Aldridge, N. 1989.** Comparison of an antibody-capture IgM enzyme-linked immunosorbent assay with IgM-indirect immunofluorescence for the diagnosis of acute Sindbis and West Nile infections. *J Virol Methods* 25: 337-345.
- Blitvich, B.J., Marlenee, N.L., Hall, R.A., Calisher, C.H., Bowen, R.A., Roehrig, J.T., Komar, N., Langevin, S.A. und Beaty, B.J. 2003.** Epitope-blocking enzyme-linked immunosorbent assays for the detection of serum antibodies to west nile virus in multiple avian species. *J Clin Microbiol* 41: 1041-1047.
- Borowski, P., Niebuhr, A., Mueller, O., Bretner, M., Felczak, K., Kulikowski, T. und Schmitz, H. 2001.** Purification and characterization of West Nile virus nucleoside triphosphatase (NTPase)/helicase: evidence for dissociation of the NTPase and helicase activities of the enzyme. *J Virol* 75: 3220-3229.
- Brambell, F.W. 1969.** The transmission of immune globulins from the mother to the foetal and newborn young. *Proc Nutr Soc* 28: 35-41.
- Brault, A.C., Langevin, S.A., Bowen, R.A., Panella, N.A., Biggerstaff, B.J., Miller, B.R. und Nicholas, K. 2004.** Differential virulence of West Nile strains for American crows. *Emerg Infect Dis* 10: 2161-2168.

- Briese, T., Glass, W.G. und Lipkin, W.I. 2000.** Detection of West Nile Virus sequences in cerebrospinal fluid. *The Lancet* 355: 1614-1615.
- Briese, T., Jia, X.Y., Huang, C., Grady, L.J. und Lipkin, W.I. 1999.** Identification of a Kunjin/West Nile-like flavivirus in brains of patients with New York encephalitis. *Lancet* 354: 1261-1262.
- Briese, T., Rambaut, A., Pathmajeyan, M., Bishara, J., Weinberger, M., Pitlik, S. und Lipkin, W.I. 2002.** Phylogenetic analysis of a human isolate from the 2000 Israel West Nile virus epidemic. *Emerg Infect Dis* 8: 528-531.
- Brinkworth, R.I., Fairlie, D.P., Leung, D. und Young, P.R. 1999.** Homology model of the dengue 2 virus NS3 protease: putative interactions with both substrate and NS2B cofactor. *J Gen Virol* 80 (Pt 5): 1167-1177.
- Brinton, M.A. 2001.** Host factors involved in West Nile virus replication. *Ann N Y Acad Sci* 951: 207-219.
- Brinton, M.A. 2002.** The molecular biology of West Nile Virus: a new invader of the western hemisphere. *Annu Rev Microbiol* 56: 371-402.
- Brown, C.R., Komar, N., Quick, S.B., Sethi, R.A., Panella, N.A., Brown, M.B. und Pfeffer, M. 2001.** Arbovirus infection increases with group size. *Proc Biol Sci* 268: 1833-1840.
- Buckley, A., Dawson, A., Moss, S.R., Hinsley, S.A., Bellamy, P.E. und Gould, E.A. 2003.** Serological evidence of West Nile virus, Usutu virus and Sindbis virus infection of birds in the UK. *J Gen Virol* 84: 2807-2817.
- Bunning, M.L., Bowen, R.A., Cropp, C.B., Sullivan, K.G., Davis, B.S., Komar, N., Godsey, M.S., Baker, D., Hettler, D.L., Holmes, D.A., Biggerstaff, B.J. und Mitchell, C.J. 2002.** Experimental infection of horses with West Nile virus. *Emerg Infect Dis* 8: 380-386.
- Burton, J.M., Kern, R.Z., Halliday, W., Mikulis, D., Brunton, J., Fearon, M., Pepperell, C. und Jaigobin, C. 2004.** Neurological manifestations of West Nile virus infection. *Can J Neurol Sci* 31: 185-193.
- Calisher, C.H., Monath, T.P., Karabatsos, N. und Trent, D.W. 1981.** Arbovirus subtyping: applications to epidemiologic studies, availability of reagents, and testing services. *Am J Epidemiol* 114: 619-631.

- Calisher, C.H., Karabatsos, N., Dalrymple, J.M., Shope, R.E., Porterfield, J.S., Westaway, E.G. und Brandt, W.E. 1989.** Antigenic relationships between flaviviruses as determined by cross-neutralization tests with polyclonal antisera. *J Gen Virol* 70 (Pt 1): 37-43.
- Campbell, G.L., Marfin, A.A., Lanciotti, R.S. und Gubler, D.J. 2002.** West Nile virus. *Lancet Infect Dis* 2: 519-529.
- Cantile, C., Di Guardo, G., Eleni, C. und Arispici, M. 2000.** Clinical and neuropathological features of West Nile virus equine encephalomyelitis in Italy. *Equine Vet J* 32: 31-35.
- Castle, E. und Wengler, G. 1987.** Nucleotide sequence of the 5'-terminal untranslated part of the genome of the flavivirus West Nile virus. *Arch Virol* 92: 309-313.
- CDC. 2005.** Centers of Disease Control and Prevention. Division of Vector-Borne Infectious Diseases. West Nile virus, Entomology.  
<http://www.cdc.gov/ncidod/dvbid/westnile/mosquitoSpecies.htm>.
- CDC. 2006a.** Centers of Disease Control and Prevention. Division of Vector-Borne Infectious Diseases. West Nile Virus, Vertebrate Ecology.  
<http://www.cdc.gov/ncidod/dvbid/westnile/birdspecies.htm>.
- CDC. 2006b.** Centers of Disease Control and Prevention. Division of Vector-Borne Infectious Diseases. West Nile Virus, Statistics, Surveillance, and Control.  
<http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>.
- CDC. 2006c.** Centers of Disease Control and Prevention. Epidemic/Epizootic West Nile Virus in the United States: Guidelines for Surveillance. Prevention and Control.  
<http://www.cdc.gov/ncidod/dvbid/westnile/resources/wnv-guidelines-aug-2003.pdf>.
- Charrel, R.N., Brault, A.C., Gallian, P., Lemasson, J.J., Murgue, B., Murri, S., Pastorino, B., Zeller, H., de Chesse, R., de Micco, P. und de Lamballerie, X. 2003.** Evolutionary relationship between Old World West Nile virus strains. Evidence for viral gene flow between Africa, the Middle East, and Europe. *Virology* 315: 381-388.
- Chiles, R.E. und Reisen, W.K. 1998.** A new enzyme immunoassay to detect antibodies to arboviruses in the blood of wild birds. *J Vector Ecol* 23: 123-135.
- Chmielewicz, B., Nitsche, A., Schweiger, B. und Ellerbrok, H. 2005.** Development of a PCR-based assay for detection, quantification, and genotyping of human adenoviruses. *Clin Chem* 51: 1365-1373.

- Chu, J.J. und Ng, M.L. 2002.** Infection of polarized epithelial cells with flavivirus West Nile: polarized entry and egress of virus occur through the apical surface. *J Gen Virol* 83: 2427-2435.
- Chu, J.J. und Ng, M.L. 2004a.** Interaction of West Nile virus with alpha v beta 3 integrin mediates virus entry into cells. *J Biol Chem* 279: 54533-54541.
- Chu, J.J. und Ng, M.L. 2004b.** Infectious entry of West Nile virus occurs through a clathrin-mediated endocytic pathway. *J Virol* 78: 10543-10555.
- Chu, J.J., Leong, P.W. und Ng, M.L. 2006.** Analysis of the endocytic pathway mediating the infectious entry of mosquito-borne flavivirus West Nile into *Aedes albopictus* mosquito (C6/36) cells. *Virology* 349: 463-475.
- Chung, K.M., Nybakken, G.E., Thompson, B.S., Engle, M.J., Marri, A., Fremont, D.H. und Diamond, M.S. 2006.** Antibodies against West Nile Virus nonstructural protein NS1 prevent lethal infection through Fc gamma receptor-dependent and -independent mechanisms. *J Virol* 80: 1340-1351.
- Chvala, S., Bakonyi, T., Hackl, R., Hess, M., Nowotny, N. und Weissenböck, H. 2005.** Limited pathogenicity of Usutu virus for the domestic chicken (*Gallus domesticus*). *Avian Pathol* 34: 392-395.
- Chvala, S., Bakonyi, T., Hackl, R., Hess, M., Nowotny, N. und Weissenböck, H. 2006.** Limited pathogenicity of Usutu virus for the domestic goose (*Anser anser f. domestica*) following experimental inoculation. *J Vet Med B Infect Dis Vet Public Health* 53: 171-175.
- Colcher, D., Heberling, R.L., Kalter, S.S. und Schlom, J. 1977.** Squirrel monkey retrovirus: an endogenous virus of a new world primate. *J Virol* 23: 294-301.
- Couzin, J. 2004.** Hybrid Mosquitoes Suspected in West Nile Virus Spread. *Science* 303: 1451.
- Crance, J.M., Scaramozzino, N., Jouan, A. und Garin, D. 2003.** Interferon, ribavirin, 6-azauridine and glycyrrhizin: antiviral compounds active against pathogenic flaviviruses. *Antiviral Res* 58: 73-79.
- Davis, C.T., Beasley, D.W., Guzman, H., Raj, R., D'Anton, M., Novak, R.J., Unnasch, T.R., Tesh, R.B. und Barrett, A.D. 2003.** Genetic variation among temporally and geographically distinct West Nile virus isolates, United States, 2001, 2002. *Emerg Infect Dis* 9: 1423-1429.

- De Madrid, A.T. und Porterfield, J.S. 1969.** A simple micro-culture method for the study of group B arboviruses. *Bull World Health Organ* 40: 113-121.
- Despres, P., Combredet, C., Frenkiel, M.P., Lorin, C., Brahic, M. und Tangy, F. 2005.** Live measles vaccine expressing the secreted form of the West Nile virus envelope glycoprotein protects against West Nile virus encephalitis. *J Infect Dis* 191: 207-214.
- Deubel, V., Fiette, L., Gounon, P., Drouet, M. T., Khun, H., Huerre, M., Banet, C., Malkinson, M. und Despres, P. 2001.** Variations in biological features of West Nile viruses. *Ann N Y Acad Sci* 951: 195-206.
- Diamond, M.S., Shrestha, B., Marri, A., Mahan, D. und Engle, M. 2003a.** B cells and antibody play critical roles in the immediate defense of disseminated infection by West Nile encephalitis virus. *J Virol* 77: 2578-2586.
- Diamond, M.S., Shrestha, B., Mehlhop, E., Sitati, E. und Engle, M. 2003b.** Innate and adaptive immune responses determine protection against disseminated infection by West Nile encephalitis virus. *Viral Immunol* 16: 259-278.
- Dietrich, G., Monteneri, J.A., Panella, N.A., Langevin, S., Lasater, S.E., Klenk, K., Kile, J.C. und Komar, N. 2005.** Serologic evidence of west nile virus infection in free-ranging mammals, Slidell, Louisiana, 2002. *Vector Borne Zoonotic Dis* 5: 288-292.
- Docherty, D.E., Long, R.R., Griffin, K.M. und Saito, E.K. 2004.** Corvidae feather pulp and West Nile virus detection. *Emerg Infect Dis* 10: 907-909.
- Dohm, D.J., Sardelis, M.R. und Turell, M.J. 2002a.** Experimental vertical transmission of West Nile virus by *Culex pipiens* (Diptera: Culicidae). *J Med Entomol* 39: 640-644.
- Dohm, D.J., O'Guinn, M.L. und Turell, M.J. 2002b.** Effect of environmental temperature on the ability of *Culex pipiens* (Diptera: Culicidae) to transmit West Nile virus. *J Med Entomol* 39: 221-225.
- Dokland, T., Walsh, M., Mackenzie, J.M., Khromykh, A.A., Ee, K.H. und Wang, S. 2004.** West Nile virus core protein; tetramer structure and ribbon formation. *Structure* 12: 1157-1163.
- Ebel, G.D., Dupuis, A.P., 2nd, Nicholas, D., Young, D., Maffei, J. und Kramer, L.D. 2002.** Detection by enzyme-linked immunosorbent assay of antibodies to West Nile virus in birds. *Emerg Infect Dis* 8: 979-982.
- Eidson, M., Schmit, K., Hagiwara, Y., Anand, M., Backenson, P.B., Gotham, I. und Kramer, L. 2005.** Dead crow density and West Nile virus monitoring, New York. *Emerg Infect Dis* 11: 1370-1375.

- Eisenhut, M., Schwarz, T.F. und Hegenscheid, B. 1999.** Seroprevalence of dengue, chikungunya and Sindbis virus infections in German aid workers. *Infection* 27: 82-85.
- Estrada-Franco, J.G., Navarro-Lopez, R., Beasley, D.W., Coffey, L., Carrara, A.S., Travassos da Rosa, A., Clements, T., Wang, E., Ludwig, G.V., Cortes, A.C., Ramirez, P.P., Tesh, R.B., Barrett, A.D. und Weaver, S.C. 2003.** West Nile virus in Mexico: evidence of widespread circulation since July 2002. *Emerg Infect Dis* 9: 1604-1607.
- Euring. 2006.** Euring, co-ordinating bird ringing throughout Europe. <http://www.euring.org/>.
- Faulde, M. und Hoffmann, G. 2001.** Vorkommen und Verhütung vektorassoziierter Erkrankungen des Menschen in Deutschland unter Berücksichtigung zoonotischer Aspekte. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 44: 116-136.
- Fonseca, D., Keyghobadi, N., Malcolm, C., Mehmet, C., Schaffner, F., Mogi, M., Fleischer, R. und Wilkerson, R. 2004.** Emerging Vectors in the *Culex pipiens* Complex. *Science* 303: 1535-1538.
- Fradin, M.S. und Day, J.F. 2002.** Comparative efficacy of insect repellents against mosquito bites. *N Engl J Med* 347: 13-18.
- Gancz, A.Y., Campbell, G., Barker, I., Lindsay, R. und Hunter, B. 2004.** Detecting West Nile Virus in Owls and Raptors by an Antigen-capture assay. *Emerg Infect Dis* 10: 2204-2206.
- Gasparini, J., McCoy, K.D., Haussy, C., Tveraa, T. und Boulinier, T. 2001.** Induced maternal response to the Lyme disease spirochaete *Borrelia burgdorferi* sensu lato in a colonial seabird, the kittiwake *Rissa tridactyla*. *Proc Biol Sci* 268: 647-650.
- Gibbs, S.E., Hoffman, D.M., Stark, L.M., Marlenee, N.L., Blitvich, B.J., Beaty, B.J. und Stallknecht, D.E. 2005.** Persistence of antibodies to West Nile virus in naturally infected rock pigeons (*Columba livia*). *Clin Diagn Lab Immunol* 12: 665-667.
- Giladi, M., Metzkor-Cotter, E., Martin, D.A., Siegman-Igra, Y., Korczyn, A.D., Rosso, R., Berger, S.A., Campbell, G.L. und Lanciotti, R.S. 2001.** West Nile encephalitis in Israel, 1999: the New York connection. *Emerg Infect Dis* 7: 659-661.
- Glass, J.D., Samuels, O. und Rich, M.M. 2002.** Poliomyelitis due to West Nile virus. *N Engl J Med* 347: 1280-1281.
- Glutz von Blotzheim, U.N.H. 1998.** Handbuch der Vögel Mitteleuropas, bearb. u.a. von Kurt M. Bauer und Urs N. Glutz von Blotzheim. AULA-Verlag GmbH, Wiesbaden.

- Gollins, S.W. und Porterfield, J.S. 1985.** Flavivirus infection enhancement in macrophages: an electron microscopic study of viral cellular entry. *J Gen Virol* 66 (Pt 9): 1969-1982.
- Goudswaard, J., Noordzij, A. und Stam, J.W. 1978.** Pigeon IgA: a major antigen in pigeon breeder's disease. *Immunol Commun* 7: 661-668.
- Gould, E.A. 2002.** Evolution of the Japanese encephalitis serocomplex viruses. *Curr Top Microbiol Immunol* 267: 391-404.
- Granwehr, B.P., Lillibridge, K.M., Higgs, S., Mason, P.W., Aronson, J.F., Campbell, G.A. und Barrett, A.D. 2004.** West Nile virus: where are we now? *Lancet Infect Dis* 4: 547-556.
- Gryboski, J., Weinstein, D. und Ordway, N.K. 1961.** Toxic encephalopathy apparently related to the use of an insect repellent. *N Engl J Med* 264: 289-291.
- Gubler, D.J. 1996.** The global resurgence of arboviral diseases. *Trans R Soc Trop Med Hyg* 90: 449-451.
- Gubler, D.J. 2001.** Human arbovirus infections worldwide. *Ann N Y Acad Sci* 951: 13-24.
- Gubler, D.J. und Rosen, L. 1976.** Variation among geographic strains of *Aedes albopictus* in susceptibility to infection with dengue viruses. *Am J Trop Med Hyg* 25: 318-325.
- Gylstorff, I. und Grimm, F. 1998.** Vogelkrankheiten. Verlag Eugen Ulmer, Stuttgart.
- Haley, M., Retter, A.S., Fowler, D., Gea-Banacloche, J. und O'Grady, N.P. 2003.** The role for intravenous immunoglobulin in the treatment of West Nile virus encephalitis. *Clin Infect Dis* 37: e88-90.
- Hall, R.A. und Khromykh, A.A. 2004.** West Nile virus vaccines. *Expert Opin Biol Ther* 4: 1295-1305.
- Hall, R.A., Broom, A.K., Smith, D.W. und Mackenzie, J.S. 2002.** The ecology and epidemiology of Kunjin virus. *Curr Top Microbiol Immunol* 267: 253-269.
- Hall, R.A., Nisbet, D.J., Pham, K.B., Pyke, A.T., Smith, G.A. und Khromykh, A.A. 2003.** DNA vaccine coding for the full-length infectious Kunjin virus RNA protects mice against the New York strain of West Nile virus. *Proc Natl Acad Sci U S A* 100: 10460-10464.



- Hamdan, A., Green, P., Mendelson, E., Kramer, M.R., Pitlik, S. und Weinberger, M. 2002.** Possible benefit of intravenous immunoglobulin therapy in a lung transplant recipient with West Nile virus encephalitis. *Transpl Infect Dis* 4: 160-162.
- Heinz, F.X., Stiasny, K., Puschner-Auer, G., Holzmann, H., Allison, S.L., Mandl, C.W. und Kunz, C. 1994.** Structural changes and functional control of the tick-borne encephalitis virus glycoprotein E by the heterodimeric association with protein prM. *Virology* 198: 109-117.
- Heinz, F.X., Collett, M.S., Purcell, R.H., Gould, E.A., Howard, C.R., Houghton, M., Moormann, R.J.M., Rice, C.M. und Thiel, H.J. 2000.** Family Flaviviridae. In *Virus Taxonomy. Seventh Report of the International Committee on Taxonomy of Viruses.* In *Virus Taxonomy. Seventh Report of the International Committee on Taxonomy of Viruses:* 860-878.
- Higgs, S., Snow, K. und Gould, E.A. 2004.** The potential for West Nile virus to establish outside of its natural range: a consideration of potential mosquito vectors in the United Kingdom. *Trans R Soc Trop Med Hyg* 98: 82-87.
- Hogrefe, W.R., Moore, R., Lape-Nixon, M., Wagner, M. und Prince, H.E. 2004.** Performance of immunoglobulin G (IgG) and IgM enzyme-linked immunosorbent assays using a West Nile virus recombinant antigen (preM/E) for detection of West Nile virus- and other flavivirus-specific antibodies. *J Clin Microbiol* 42: 4641-4648.
- Hoogstraal, H., Clifford, C.M. und Keirans, J.E. 1979.** The *Ornithodoros* (*Alectorobius*) *capensis* group (Acarina: Ixodoidea: Argasidae) of the palearctic and oriental regions. *O. (A.) coniceps* identity, bird and mammal hosts, virus infections, and distribution in Europe, Africa, and Asia. *J Parasitol* 65: 395-407.
- Hubalek, Z. 2000.** European experience with the West Nile virus ecology and epidemiology: could it be relevant for the New World? *Viral Immunol* 13: 415-426.
- Hubalek, Z. 2004.** An annotated checklist of pathogenic microorganisms associated with migratory birds. *J Wildl Dis* 40: 639-659.
- Hubalek, Z. und Halouzka, J. 1999.** West Nile fever--a reemerging mosquito-borne viral disease in Europe. *Emerg Infect Dis* 5: 643-650.
- Huggins, J.W. 1989.** Prospects for treatment of viral hemorrhagic fevers with ribavirin, a broad-spectrum antiviral drug. *Rev Infect Dis* 11 Suppl 4: S750-761.
- ICTVdB. 2006.** The Universal Virus Database of The International Committee on Taxonomy of Viruses. <http://www.ncbi.nlm.nih.gov/ICTVdb/index.htm>.

- Ikeda, S., Watanabe, T., Ohmatsu, M. und Oda, T. 1995.** Characterization of human proteins that bind the repeated sequences in the squirrel monkey retrovirus enhancer. *Cell Mol Biol (Noisy-le-grand)* 41: 1113-1118.
- Iwamoto, M., Jernigan, D.B., Guasch, A., Trepka, M. ., Blackmore, C.G., Hellinger, W.C., Pham, S.M., Zaki, S., Lanciotti, R.S., Lance-Parker, S.E., DiazGranados, C.A., Winquist, A.G., Perlino, C.A., Wiersma, S., Hillyer, K.L., Goodman, J.L., Marfin, A.A., Chamberland, M.E. und Petersen, L.R. 2003.** Transmission of West Nile virus from an organ donor to four transplant recipients. *N Engl J Med* 348: 2196-2203.
- Jensen, E. und Pauli, G. 2004.** Fallbericht: Wahrscheinliche West-Nil-Virus-Erkrankung - dritter importierter Fall in Deutschland. *Epidemiologisches Bulletin* 48: 5.
- Jia, X.Y., Briese, T., Jordan, I., Rambaut, A., Chi, H.C., Mackenzie, J.S., Hall, R.A., Scherret, J. und Lipkin, W.I. 1999.** Genetic analysis of West Nile New York 1999 encephalitis virus. *Lancet* 354: 1971-1972.
- Johnson, A.J., Langevin, S., Wolff, K.L. und Komar, N. 2003.** Detection of anti-West Nile virus immunoglobulin M in chicken serum by an enzyme-linked immunosorbent assay. *J Clin Microbiol* 41: 2002-2007.
- Johnson, L. 1992.** Die Vögel Europas und des Mittelmeerraumes. Franckh-Kosmos, Stuttgart.
- Jordan, I., Briese, T., Fischer, N., Lau, J.Y. und Lipkin, W.I. 2000.** Ribavirin inhibits West Nile virus replication and cytopathic effect in neural cells. *J Infect Dis* 182: 1214-1217.
- Juricova, Z., Pinowski, J., Literak, I., Hahm, K.H. und Romanowski, J. 1998.** Antibodies to alphavirus, flavivirus, and bunyavirus arboviruses in house sparrows (*Passer domesticus*) and tree sparrows (*P. montanus*) in Poland. *Avian Dis* 42: 182-185.
- Kanesa-Thanan, N., Putnak, J.R., Mangiafico, J. A., Saluzzo, J.E. und Ludwig, G.V. 2002.** Short report: absence of protective neutralizing antibodies to West Nile virus in subjects following vaccination with Japanese encephalitis or dengue vaccines. *Am J Trop Med Hyg* 66: 115-116.
- Kilpatrick, A.M., Kramer, L.D., Campbell, S.R., Alleyne, E.O., Dobson, A.P. und Daszak, P. 2005.** West Nile virus risk assessment and the bridge vector paradigm. *Emerg Infect Dis* 11: 425-429.
- Kimura-Kuroda, J. und Yasui, K. 1986.** Antigenic comparison of envelope protein E between Japanese encephalitis virus and some other flaviviruses using monoclonal antibodies. *J Gen Virol* 67 (Pt 12): 2663-2672.

- Kissling, R.E., Eidson, M.E. und Stamm, D.D. 1954.** Transfer of maternal neutralizing antibodies against eastern equine encephalomyelitis virus in birds. *J Infect Dis* 95: 179-181.
- Klee, A.L., Maidin, B., Edwin, B., Poshni, I., Mostashari, F., Fine, A., Layton, M. und Nash, D. 2004.** Long-term prognosis for clinical West Nile virus infection. *Emerg Infect Dis* 10: 1405-1411.
- Klenk, K., Snow, J., Morgan, K., Bowen, R., Stephens, M., Foster, F., Gordy, P., Beckett, S., Komar, N., Gubler, D. und Bunning, M. 2004.** Alligators as West Nile virus amplifiers. *Emerg Infect Dis* 10: 2150-2155.
- Klimadiagramme. 2006.** Die Temperaturen in Baden-Württemberg. <http://www.klimadiagramme.de/ttnn.html>.
- Komar, N. und Clark, G.G. 2006.** West Nile virus activity in Latin America and the Caribbean. *Rev Panam Salud Publica* 19: 112-117.
- Komar, N., Lanciotti, R., Bowen, R., Langevin, S. und Bunning, M. 2002.** Detection of West Nile virus in oral and cloacal swabs collected from bird carcasses. *Emerg Infect Dis* 8: 741-742.
- Komar, N., Langevin, S., Hinten, S., Nemeth, N., Edwards, E., Hettler, D., Davis, B., Bowen, R. und Bunning, M. 2003.** Experimental infection of North American birds with the New York 1999 strain of West Nile virus. *Emerg Infect Dis* 9: 311-322.
- Komar, O., Robbins, M.B., Contreras, G.G., Benz, B.W., Klenk, K., Blitvich, B.J., Marlenee, N.L., Burkhalter, K.L., Beckett, S., Gonzalez, G., Pena, C.J., Peterson, A.T. und Komar, N. 2005.** West Nile virus survey of birds and mosquitoes in the Dominican Republic. *Vector Borne Zoonotic Dis* 5: 120-126.
- Koppelman, M.H., Sjerps, M.S., de Waal, M., Reesink, H.W. und Cuypers, H.T. 2006.** No evidence of West Nile virus infection in Dutch blood donors. *Vox Sang* 90: 166-169.
- Koraka, P., Zeller, H., Niedrig, M., Osterhaus, A.D. und Groen, J. 2002.** Reactivity of serum samples from patients with a flavivirus infection measured by immunofluorescence assay and ELISA. *Microbes Infect* 4: 1209-1215.
- Koren, G., Matsui, D. und Bailey, B. 2003.** DEET-based insect repellents: safety implications for children and pregnant and lactating women. *Cmaj* 169: 209-212.

- Kuhn, R.J., Zhang, W., Rossmann, M.G., Pletnev, S.V., Corver, J., Lenches, E., Jones, C.T., Mukhopadhyay, S., Chipman, P.R., Strauss, E.G., Baker, T.S. und Strauss, J.H. 2002.** Structure of dengue virus: implications for flavivirus organization, maturation, and fusion. *Cell* 108: 717-725.
- Kuno, G., Chang, G.J., Tsuchiya, K.R., Karabatsos, N. und Cropp, C.B. 1998.** Phylogeny of the genus *Flavivirus*. *J Virol* 72: 73-83.
- Lanciotti, R.S., Ebel, G.D., Deubel, V., Kerst, A.J., Murri, S., Meyer, R., Bowen, M., McKinney, N., Morrill, W.E., Crabtree, M.B., Kramer, L.D. und Roehrig, J.T. 2002.** Complete genome sequences and phylogenetic analysis of West Nile virus strains isolated from the United States, Europe, and the Middle East. *Virology* 298: 96-105.
- Lanciotti, R.S., Roehrig, J.T., Deubel, V., Smith, J., Parker, M., Steele, K., Crise, B., Volpe, K.E., Crabtree, M.B., Scherret, J.H., Hall, R.A., MacKenzie, J.S., Cropp, C.B., Panigrahy, B., Ostlund, E., Schmitt, B., Malkinson, M., Banet, C., Weissman, J., Komar, N., Savage, H.M., Stone, W., McNamara, T. und Gubler, D.J. 1999.** Origin of the West Nile virus responsible for an outbreak of encephalitis in the northeastern United States. *Science* 286: 2333-2337.
- Langevin, S.A., Brault, A.C., Panella, N.A., Bowen, R.A. und Komar, N. 2005.** Variation in virulence of West Nile virus strains for house sparrows (*Passer domesticus*). *Am J Trop Med Hyg* 72: 99-102.
- Lawrie, C.H., Uzcategui, N.Y., Gould, E.A. und Nuttall, P.A. 2004.** Ixodid and argasid tick species and west nile virus. *Emerg Infect Dis* 10: 653-657.
- Lee, L.G., Connell, C.R. und Bloch, W. 1993.** Allelic discrimination by nick-translation PCR with fluorogenic probes. *Nucleic Acids Res* 21: 3761-3766.
- Lindenbach, B.D. und Rice, C.M. 1997.** Trans-Complementation of yellow fever virus NS1 reveals a role in early RNA replication. *J Virol* 71: 9608-9617.
- Lorono-Pino, M.A., Blitvich, B.J., Farfan-Ale, J.A., Puerto, F.I., Blanco, J.M., Marlenee, N.L., Rosado-Paredes, E.P., Garcia-Rejon, J.E., Gubler, D.J., Calisher, C.H. und Beaty, B.J. 2003.** Serologic evidence of West Nile virus infection in horses, Yucatan State, Mexico. *Emerg Infect Dis* 9: 857-859.
- Macdonald, J., Tonry, J., Hall, R.A., Williams, B., Palacios, G., Ashok, M.S., Jabado, O., Clark, D., Tesh, R.B., Briese, T. und Lipkin, W.I. 2005.** NS1 protein secretion during the acute phase of West Nile virus infection. *J Virol* 79: 13924-13933.

- Malan, A.K., Martins, T.B., Hill, H.R. und Litwin, C.M. 2004.** Evaluations of commercial West Nile virus immunoglobulin G (IgG) and IgM enzyme immunoassays show the value of continuous validation. *J Clin Microbiol* 42: 727-733.
- Malan, A.K., Stipanovich, P.J., Martins, T.B., Hill, H.R. und Litwin, C.M. 2003.** Detection of IgG and IgM to West Nile virus. Development of an immunofluorescence assay. *Am J Clin Pathol* 119: 508-515.
- Malkinson, M. und Banet, C. 2002.** The role of birds in the ecology of West Nile virus in Europe and Africa. *Curr Top Microbiol Immunol* 267: 309-322.
- Malkinson, M., Banet, C., Weisman, Y., Pokamunski, S., King, R., Drouet, M.T. und Deubel, V. 2002.** Introduction of West Nile virus in the Middle East by migrating white storks. *Emerg Infect Dis* 8: 392-397.
- Marano, N. und Pappaioanou, M. 2004.** Historical, new, and reemerging links between human and animal health. *Emerg Infect Dis* 10: 2065-2066.
- Mayr, A., Bachmann, P. A., Bibrack B. und Wittmann, G. 1977.** Virologische Arbeitsmethoden, Band II Serologie, VEB Gustav Fischer Verlag, Jena.
- McLean, R.G., Ubico, S.R., Bourne, D. und Komar, N. 2001a.** West Nile Virus in Livestock and Wildlife. *Curr Top Microbiol Immunol* 267: 271-308.
- McLean, R.G., Ubico, S.R., Docherty, D.E., Hansen, W.R., Sileo, L. und McNamara, T.S. 2001b.** West Nile virus transmission and ecology in birds. *Ann N Y Acad Sci* 951: 54-57.
- Medlock, J.M., Snow, K.R. und Leach, S. 2005.** Potential transmission of West Nile virus in the British Isles: an ecological review of candidate mosquito bridge vectors. *Med Vet Entomol* 19: 2-21.
- Mellor, P.S. 2000.** Replication of arboviruses in insect vectors. *J Comp Pathol* 123: 231-247.
- Mellor, P.S. und Leake, C.J. 2000.** Climatic and geographic influences on arboviral infections and vectors. *Rev Sci Tech* 19: 41-54.
- Miller, B., Mael, M., Baldwin, C., Burtle, G., Ingram, D., Hines, M.E. und Franzier, K.S. 2003.** West Nile virus in farmed alligators. *Emerg Infect Dis* 9: 794-799.
- Minke, J.M., Siger, L., Karaca, K., Austgen, L., Gordy, P., Bowen, R., Renshaw, R.W., Loosmore, S., Audonnet, J.C. und Nordgren, B. 2004.** Recombinant canarypoxvirus vaccine carrying the prM/E genes of West Nile virus protects horses against a West Nile virus-mosquito challenge. *Arch Virol Suppl*: 221-230.

- Miramontes, R., Jr., Lafferty, W.E., Lind, B.K. und Oberle, M.W. 2006.** Is agricultural activity linked to the incidence of human West Nile virus? *Am J Prev Med* 30: 160-163.
- Modrow, S., Falke, D. und Truyen, U. 2003.** *Molekulare Virologie*. Spektrum Akademischer Verlag 2. Auflage, Heidelberg.
- Mohring, W. 1969.** *Die Culiciden Deutschlands, Untersuchungen zur Taxonomie, Biologie und Ökologie der einheimischen Stechmücken*. Fischer Verlag, Jena.
- Monath, T.P., Liu, J., Kanesa-Thasan, N., Myers, G.A., Nichols, R., Deary, A., McCarthy, K., Johnson, C., Ermak, T., Shin, S., Arroyo, J., Guirakhoo, F., Kennedy, J.S., Ennis, F.A., Green, S. und Bedford, P. 2006.** A live, attenuated recombinant West Nile virus vaccine. *Proc Natl Acad Sci U S A* 103: 6694-6699.
- Moreau, R. 1972.** *The Palaearctic-African bird migration systems*. Academic Press, London, New York.
- Mukhopadhyay, S., Kim, B.S., Chipman, P.R., Rossmann, M.G. und Kuhn, R.J. 2003.** Structure of West Nile virus. *Science* 302: 248.
- Mumcuoglu, K., Malkinson, M., Banet-Noach, C. und Shalom, U. 2003.** Vectorial capacity of ticks for west Nile virus. Annual meeting of the Israel Society for Parasitology, Protozoology and tropical Diseases, Kfar Hamakabia.
- Murgue, B., Zeller, H. und Deubel, V. 2002.** The ecology and epidemiology of West Nile virus in Africa, Europe and Asia. *Curr Top Microbiol Immunol* 267: 195-221.
- Murgue, B., Murri, S., Triki, H., Deubel, V. und Zeller, H. G. 2001a.** West Nile in the Mediterranean basin: 1950-2000. *Ann N Y Acad Sci* 951: 117-126.
- Murgue, B., Murri, S., Zientara, S., Durand, B., Durand, J. P. und Zeller, H. 2001b.** West Nile outbreak in horses in southern France, 2000: the return after 35 years. *Emerg Infect Dis* 7: 692-696.
- Naficy, K. und Saidi, S. 1970.** Serological survey on viral antibodies in Iran. *Trop Geogr Med* 22: 183-188.
- Nasci, R.S., Savage, H.M., White, D.J., Miller, J.R., Cropp, B.C., Godsey, M.S., Kerst, A.J., Bennett, P., Gottfried, K. und Lanciotti, R.S. 2001.** West Nile Virus in Overwintering *Culex* Mosquitoes, New York City, 2000. *Emerg Infect Dis* 7: 742-744.

- Nasci, R.S., Gottfried, K.L., Burkhalter, K.L., Kulasekera, V.L., Lambert, A.J., Lanciotti, R.S., Hunt, AR. und Ryan, J.R. 2002.** Comparison of vero cell plaque assay, TaqMan reverse transcriptase polymerase chain reaction RNA assay, and VecTest antigen assay for detection of West Nile virus in field-collected mosquitoes. *J Am Mosq Control Assoc* 18: 294-300.
- Nemeth, N., Gould, D., Bowen, R. und Komar, N. 2006.** Natural and experimental West Nile virus infection in five raptor species. *J Wildl Dis* 42: 1-13.
- Ng, M.L. und Lau, L.C. 1988.** Possible involvement of receptors in the entry of Kunjin virus into Vero cells. *Arch Virol* 100: 199-211.
- Niedrig, M., Linke, S., Zeller, H. und Drosten, C. 2006.** First International Proficiency Study on West Nile Virus Molecular Detection. *Clin Chem.* 52: 1851-1854.
- Nowak, T., Farber, P.M., Wengler, G. und Wengler, G. 1989.** Analyses of the terminal sequences of West Nile virus structural proteins and of the in vitro translation of these proteins allow the proposal of a complete scheme of the proteolytic cleavages involved in their synthesis. *Virology* 169: 365-376.
- Oliphant, T., Engle, M., Nybakken, G.E., Doane, C., Johnson, S., Huang, L., Gorlatov, S., Mehlhop, E., Marri, A., Chung, K.M., Ebel, G.D., Kramer, L.D., Fremont, D.H. und Diamond, M.S. 2005.** Development of a humanized monoclonal antibody with therapeutic potential against West Nile virus. *Nat Med* 11: 522-530.
- Paisley, J.E., Hinckley, A.F., O'Leary, D.R., Kramer, W.C., Lanciotti, R.S., Campbell, G.L. und Hayes, E.B. 2006.** West Nile virus infection among pregnant women in a northern Colorado community, 2003 to 2004. *Pediatrics* 117: 814-820.
- Panella, N.A., Kerst, A.J., Lanciotti, R.S., Bryant, P., Wolf, B. und Komar, N. 2001.** Comparative West Nile Virus Detection in Organs of Naturally Infected American Crows (*Corvus brachyrhynchos*). *Emerg Infect Dis* 7: 754-755.
- Pasteur, I. 2006.** Virus d'Afrique. <http://www.pasteur.fr/recherche/banques/CRORA/>.
- Pauli, G. 2004.** West Nile virus. Prevalence and significance as a zoonotic pathogen. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz* 47: 653-660.
- Pealer, L.N., Marfin, A.A., Petersen, L.R., Lanciotti, R.S., Page, P.L., Stramer, S.L., Stobierski, M.G., Signs, K., Newman, B., Kapoor, H., Goodman, J.L. und Chamberland, M.E. 2003.** Transmission of West Nile virus through blood transfusion in the United States in 2002. *N Engl J Med* 349: 1236-1245.

- PEI. 2004.** Änderung der Anordnung vom 2. September 2003 über den Ausschluss von Blutspendern zur Verhinderung einer möglichen Übertragung des West-Nil-Virus durch zelluläre Blutprodukte oder gefrorenes Frischplasma (vom 25. Mai 2004). Bundesanzeiger 118: 13.
- Petersen, L.R. und Roehring, J.T. 2001.** West Nile Virus: a Reemerging Global Pathogen. *Emerging Infectious Diseases* 7: 611-614.
- Petersen, L.R. und Marfin, A.A. 2002.** West Nile Virus: A Primer for the Clinician. *Ann Intern Med.* 137: 173-179.
- Petersen, L.R., Roehrig, J.T. und Hughes, J.M. 2002.** West Nile Virus Encephalitis. 347: 1225-1226.
- Peterson, A.T., Vieglais, D.A. und Andreasen, J.K. 2003.** Migratory birds modeled as critical transport agents for West Nile Virus in North America. *Vector Borne Zoonotic Dis* 3: 27-37.
- Pilaski, J. und Mackenstein, H. 1985.** Isolation of Tahyna virus from mosquitoes in 2 different European natural foci. *Zentralbl Bakteriolog Mikrobiol Hyg* 180: 394-420.
- Prince, H.E., Tobler, L.H., Lape-Nixon, M., Foster, G.A., Stramer, S.L. und Busch, M.P. 2005.** Development and persistence of West Nile virus-specific immunoglobulin M (IgM), IgA, and IgG in viremic blood donors. *J Clin Microbiol* 43: 4316-4320.
- ProMED. 2006a.** West Nile virus, equines - Argentina. OIE Disease Alert.
- ProMED. 2006b.** Chikungunya - Indian Ocean update (23): Germany. Thomas Roesel.
- Reed, C.J. und Münch, H. 1938.** A simple method of estimating fifty percent endpoints. *American Journal of Hygiene* 27: 493-497.
- Reeves, W.C., Sturgeon, J.M., French, E.M. und Brookman, B. 1954.** Transovarian transmission of neutralizing substances to western equine and St. Louis encephalitis viruses by avian hosts. *J Infect Dis* 95: 168-178.
- Reinhardt, B., Jaspert, R., Niedrig, M., Kostner, C. und L'Age-Stehr, J. 1998.** Development of viremia and humoral and cellular parameters of immune activation after vaccination with yellow fever virus strain 17D: a model of human flavivirus infection. *J Med Virol* 56: 159-167.
- Rios, M., Zhang, M.J., Grinev, A., Srinivasan, K., Daniel, S., Wood, O., Hewlett, I.K. und Dayton, A.I. 2006.** Monocytes-macrophages are a potential target in human infection with West Nile virus through blood transfusion. *Transfusion* 46: 659-667.



- RKI. 2000.** Zur Situation bei wichtigen Infektionskrankheiten im Jahr 1999, Teil 3: Importierte Infektionskrankheiten. *Epidemiologisches Bulletin* 29: 231-235.
- Roehring, J.T. 2003.** Antigenic structure of flavivirus proteins. *Adv Virus Res.* 59: 141-175.
- Roehrig, J.T., Nash, D., Maldin, B., Labowitz, A., Martin, D.A., Lanciotti, R.S. und Campbell, G.L. 2003.** Persistence of virus-reactive serum immunoglobulin m antibody in confirmed west nile virus encephalitis cases. *Emerg Infect Dis* 9: 376-379.
- Rosen, L. 1988.** Further observations on the mechanism of vertical transmission of flaviviruses by *Aedes* mosquitoes. *Am J Trop Med Hyg* 39: 123-126.
- Rosenstrauss, M., Wang, Z., Chang, S.Y., DeBonville, D. und Spadoro, J.P. 1998.** An internal control for routine diagnostic PCR: design, properties, and effect on clinical performance. *J Clin Microbiol* 36: 191-197.
- Sanger, F., Nicklen, S. und Coulson, A.R. 1977.** DNA sequencing with chain-terminating inhibitors. *Proc Natl Acad Sci U S A* 74: 5463-5467.
- Savage, H.M., Ceianu, C., Nicolescu, G., Karabatsos, N., Lanciotti, R., Vladimirescu, A., Laiv, L., Ungureanu, A., Romanca, C. und Tsai, T.F. 1999.** Entomologic and avian investigations of an epidemic of West Nile fever in Romania in 1996, with serologic and molecular characterization of a virus isolate from mosquitoes. *Am J Trop Med Hyg* 61: 600-611.
- Schade, R., Behn, I., Erhard, M., Hlinak, A., Staak, C. 2000.** Chicken egg yolk antibodies, production and application: IgY-technology, Springer Verlag, Berlin, Heidelberg, New York.
- Scherret, J.H., Poidinger, M., Mackenzie, J.S., Broom, A.K., Deubel, V., Lipkin, W.I., Briese, T., Gould, E.A. und Hall, R.A. 2001.** The relationships between West Nile and Kunjin viruses. *Emerg Infect Dis* 7: 697-705.
- Schmidt, J. und El Mansoury, H. 1963.** Natural and experimental infection of Egyptian equines with West Nile virus. *Ann Trop Med Parasitol* 54: 415-427.
- Schübler, E. 2000.** Tahyna Virus: Untersuchung zum Vorkommen am Oberrhein und Sequenzvergleiche des M-Segments bei zehn Virusisolaten, Ruprecht-Karls-Universität Heidelberg.
- Schüz, E., Berthold, P., Gwinner, E. und Oelke, H. 1971.** Grundriss der Vogelkunde, Berlin-Hamburg.

- Schwarz, T.F., Jager, G., Gilch, S., Pauli, C., Eisenhut, M., Nitschko, H. und Hegenscheid, B. 1996.** Travel-related vector-borne virus infections in Germany. Arch Virol Suppl 11: 57-65.
- Sejvar, J.J., Haddad, M.B., Tierney, B.C., Campbell, G.L., Marfin, A.A., Van Gerpen, J.A., Fleischauer, A., Leis, A.A., Stokic, D.S. und Petersen, L.R. 2003.** Neurologic manifestations and outcome of West Nile virus infection. Jama 290: 511-515.
- Shapiro, H. und Micucci, S. 2003.** Pesticide use for West Nile virus. Cmaj 168: 1427-1430.
- Shimoni, Z., Niven, M.J., Pitlick, S. und Bulvik, S. 2001.** Treatment of West Nile virus encephalitis with intravenous immunoglobulin. Emerg Infect Dis 7: 759.
- Smithburn, K.C., Hughes, T.P., Burke, A.W. und Paul, J.H. 1940.** A neutropic virus isolated from the blood of a native of Uganda. Am J Trop Med Hyg 20: 471-492.
- Solomon, T., Ooi, M.H., Beasley, D.W. und Mallewa, M. 2003.** West Nile encephalitis. Bmj 326: 865-869.
- Spieckermann, D. und Ackermann, R. 1974.** Studies of natural foci of Tahyna virus in Southern Germany. Zentralbl Bakteriologie 228: 291-295.
- Stock, I. 2004.** Das West-Nil-Virus ein ungewöhnliches Flavivirus mit zunehmender Bedeutung. Chemotherapie Journal 13: 166-173.
- Stout, W.E., Cassini, A.G., Meece, J.K., Papp, J.M., Rosenfield, R.N. und Reed, K.D. 2005.** Serologic evidence of West Nile virus infection in three wild raptor populations. Avian Dis 49: 371-375.
- Süss, J., Fingerle, V., Hunfeld, K.P., Schrader, C. und Wilske, B. 2004.** Tick-borne human pathogenic microorganisms found in Europe and those considered nonpathogenic. Part II: Bacteria, parasites and mixed infections. Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz 47: 470-486.
- Swayne, D., Beck, J., Smith, C., Shieh, W.J., und Zaki, S. 2001.** Fatal Encephalitis and Myocarditis in Young Domestic Geese (*Anser anser domesticus*) Caused by West Nile virus. Emerg Infect Dis 7: 751-753.
- Taylor, L.H., Latham, S.M. und Woolhouse, M.E. 2001.** Risk factors for human disease emergence. Philos Trans R Soc Lond B Biol Sci 356: 983-989.
- Taylor, R., Wiork, T., Hurlbutt, H. und Rizik, F. 1956.** A Study Of The Ecology Of West Nile Virus In Egypt. Am J Trop Med Hyg 5: 579-620.

- Tesh, R.B. 2003.** Cross Immunity: West Nile vs. St. Louis Encephalitis in areas of Overlap, Fourth National conference on West Nile virus in the United States. CDC, New Orleans, Louisiana.
- Throsby, M., Geuijen, C., Goudsmit, J., Bakker, A.Q., Korimbocus, J., Kramer, R.A., Clijsters-van der Horst, M., de Jong, M., Jongeneelen, M., Thijsse, S., Smit, R., Visser, T.J., Bijl, N., Marissen, W.E., Loeb, M., Kelvin, D.J., Preiser, W., ter Meulen, J. und de Kruif, J. 2006.** Isolation and characterization of human monoclonal antibodies from individuals infected with West Nile Virus. *J Virol* 80: 6982-6992.
- Tizard, I. 2002.** The Avian Antibody Response. *Seminars in Avian and Exotic Pet Medicine* 11: 2-14.
- Tonry, J.H., Brown, C.B., Cropp, C.B., Co, J.K., Bennett, S.N., Nerurkar, V.R., Kuberski, T. und Gubler, D.J. 2005.** West Nile virus detection in urine. *Emerg Infect Dis* 11: 1294-1296.
- Turell, M.J., Spring, A., Miller, M. und Cannon, C. 2002.** Effect of Holding Conditions on the Detection of West Nile Viral RNA by Reverse Transcriptase-Polymerase Chain Reaction from Mosquito (Diptera; Culicidae) Pools. *J. Med. Entomol.* 29: 1-3.
- Turell, M.J., Sardelis, M.R., O'Guinn, M. und Dohm, D.J. 2001.** Potential Vectors of West Nile Virus in North America. *Ann NY Acad Sci* 951: 317-324.
- Turell, M. , Bunning, M., Ludwig, G.V., Ortman, B., Chang, J., Speaker, T., Spielman, A., McLean, R., Komar, N., Gates, R., McNamara, T., Creekmore, T., Farley, L. und Mitchell, C.J. 2003.** DNA vaccine for West Nile virus infection in fish crows (*Corvus ossifragus*). *Emerg Infect Dis* 9: 1077-1081.
- van der Meulen, K.M., Pensaert, M.B. und Nauwynck, H.J. 2005.** West Nile virus in the vertebrate world. *Arch Virol* 150: 637-657.
- van Regenmortel, M.H.V.E., Fauquet, C.M.E., Bishop, D.H.L.E., Carsten, E.B.E., Estes, M.K.E., Lemon, S.M.E., Maniloff, J.E., Mayo, M.A.E., McGeoch, D.J.E., Pringle, C.R.E. und Wickner, R.B.E. 2000.** *Virus Taxonomy: Classification and Nomenclature of Viruses: Seventh Report of the International Committee on Taxonomy of Viruses.* Academic Press, San Diego, San Francisco, New York, Boston, London, Sydney, Tokyo.
- Weingartl, H.M., Drebot, M.A., Hubalek, Z., Halouzka, J., Andonova, M., Dibernardo, A., Cottam-Birt, C., Larence, J. und Marszal, P. 2003.** Comparison of assays for the detection of West Nile virus antibodies in chicken serum. *Can J Vet Res* 67: 128-132.

- Weissenböck, H., Kolodziejek, J., Url, A., Lussy, H., Rebel-Bauder, B. und Nowotny, N. 2002.** Emergence of Usutu virus, an African mosquito-borne flavivirus of the Japanese encephalitis virus group, central Europe. *Emerg Infect Dis* 8: 652-656.
- Weissenböck, H., Kolodziejek, J., Fragner, K., Kuhn, R., Pfeffer, M. und Nowotny, N. 2003a.** Usutu virus activity in Austria, 2001-2002. *Microbes Infect* 5: 1132-1136.
- Weissenböck, H., Hubalek, Z., Halouzka, J., Pichlmair, A., Maderner, A., Fragner, K., Kolodziejek, J., Loupal, G., Kolbl, S. und Nowotny, N. 2003b.** Screening for West Nile virus infections of susceptible animal species in Austria. *Epidemiol Infect* 131: 1023-1027.
- Wengler, G. und Wengler, G. 1981.** Terminal sequences of the genome and replicative-form RNA of the flavivirus West Nile virus: absence of poly(A) and possible role in RNA replication. *Virology* 113: 544-555.
- Wengler, G. und Wengler, G. 1989.** Cell-associated West Nile flavivirus is covered with E+pre-M protein heterodimers which are destroyed and reorganized by proteolytic cleavage during virus release. *J Virol* 63: 2521-2526.
- Wengler, G., Castle, E., Leidner, U., Nowak, T. und Wengler, G. 1985.** Sequence analysis of the membrane protein V3 of the flavivirus West Nile virus and of its gene. *Virology* 147: 264-274.
- Whitfield, S.G., Murphy, F.A. und Sudia, W.D. 1971.** Eastern equine encephalomyelitis virus: an electron microscopic study of *Aedes triseriatus* (Say) salivary gland infection. *Virology* 43: 110-122.
- WHO, FAO und OIE. 2004.** Report of the WHO/ FAO/ OIE joint consultation on emerging zoonotic diseases.
- Wigley, P., Hulme, S.D., Bumstead, N. und Barrow, P.A. 2002.** In vivo and in vitro studies of genetic resistance to systemic salmonellosis in the chicken encoded by the SAL1 locus. *Microbes Infect* 4: 1111-1120.
- Wigley, P., Hulme, S., Rothwell, L., Bumstead, N., Kaiser, P. und Barrow, P. 2006.** Macrophages isolated from chickens genetically resistant or susceptible to systemic salmonellosis show magnitudinal and temporal differential expression of cytokines and chemokines following *Salmonella enterica* challenge. *Infect Immun* 74: 1425-1430.
- Work, T., Hurlbutt, H. und Taylor, R. 1955.** Indigenous wild birds of the Nile delta as potential West Nile virus circulating reservoirs. *Am J Trop Med Hyg* 4: 872-878.

**WRBU. 2006.** Walter Reed Biosystematics Unit 2001 Systematic Catalog of Culicidae.  
<http://www.mosquitocatalog.org/>

**Xiao, S.Y., Guzman, H., da Rosa, A.P., Zhu, H.B. und Tesh, R.B. 2003.** Alteration of clinical outcome and histopathology of yellow fever virus infection in a hamster model by previous infection with heterologous flaviviruses. *Am J Trop Med Hyg* 68: 695-703.