

CURRICULUM VITAE

BARBARA WILLI, PH.D., DIPL. ACVIM



PERSONAL DATA

Address: Clinical Infectiology
Clinical Laboratory and Clinic for Small Animal Internal Medicine
Vetsuisse-Faculty, University of Zurich
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<http://www.kltmed.uzh.ch/aboutus/infektiologie.html>

Language: German: first language
English: fluently
France: high school level

RESEARCH EDUCATION

2004 – 2007 Ph.D. project at the Vetsuisse-Faculty, University of Zurich
Topic: *Importance of Hemoplasma infections in felids*

2004 – 2005 Postgraduate (PG) course in Experimental Medicine and Biology, University of Zurich

2003 – 2004 Scientific assistant, Clinical Laboratory, Vetsuisse-Faculty, University of Zurich

2001 – 2003 Doctoral thesis, Institute of Veterinary Biochemistry and Molecular Biology, University of Zurich
Topic: *Optimised bacterial expression of three DNA quality control proteins, the checkpoint proteins Rad9, Rad1 and Hus1*

CLINICAL EDUCATION

2008 – 2011 Residency ACVIM at the Clinic for Small Animal Internal Medicine, Vetsuisse-Faculty, University of Zurich

2007 – 2008 Internship at the Clinic for Small Animal Internal Medicine, Vetsuisse-Faculty, University of Zurich

1996 - 2002 Studies of Veterinary Medicine, University of Zurich

1989 - 1996 High School, Matura Typus B, Gymnasium St. Antonius, Appenzell, Switzerland

DIPLOMA

2011 Diplomate of the American College of Veterinary Internal Medicine (ACVIM)

2007 Ph.D. degree, Vetsuisse-Fakultät, University of Zurich
Topic: *Importance of Hemoplasma infections in felids*

- 2003 Doctoral degree in Veterinary Medicine, Vetsuisse-Faculty, University of Zurich
Topic: *Optimised bacterial expression of three DNA quality control proteins, the checkpoint proteins Rad9, Rad1 and Hus1*
- 2002 Federal veterinary medicine diploma, Vetsuisse-Faculty, University of Zurich

AWARDS

- 2001 Arovet award. Best exam in bacteriology, virology and anaesthesiology, Vetsuisse-Faculty, University of Zurich

CONTINUING EDUCATION

RESEARCH

- 2005 Ph.D. courses, University of Bern: Functional Cell Biology (10 days), Epidemiology and Biostatistics (10 days)
- 2004 – 2005 37th PG course in Experimental Medicine and Biology, University of Zurich: Structural and Developmental Biology (10 days); Tumor Biology (5 days); Immunology (21 days); Neurobiology (9 days); Cell Physiology (7 days); Metabolism and Hormones (12 days); Biometry (5 days); Radiobiology and Genetic Engineering (5 days); Virology (2 days); Electron Microscopy (4 days); Molecular Biology (15 days)
- 2004 January Writing research papers for publication. H. Murray. Language centre of the University of Zurich and ETH Zurich (3 days)
- 2003 September Introductory course in laboratory animal science. LTK Modul 1. University of Zurich (5 days)
- 2003 June Seminar cat. Institute of Laboratory Animal Science, University of Zurich (1 day)

CLINICS

- 2009 August Externship, School of Clinical Veterinary Science, University of Bristol, Langford, Bristol (4 weeks)
- 2000-2001 Small Animal Practice Dr. E. & F. Goldinger-Keller, Müllheim (3 months)

COMMUNICATION

- 2012 Leadership Training, Dunamis, Zurich (3 days)
- 2009 Nonviolent communication training (NVC) according to Marshall B. Rosenberg, Metapuls, Zurich (6 days)

TEACHING

- 2012 October *Medizinische Fallbeispiele: aus der Praxis – für die Praxis*
Virbac seminar for veterinarians, Zurich and Solothurn
- 2012 August *Rotation in clinical laboratory diagnostics.* 5th year veterinary medicine students, Vetsuisse Faculty, University of Zurich
- 2012 March *Reise- und Immunprophylaxe.* 4th year veterinary medicine students
Vetsuisse Faculty, University of Zurich

2011 October	<i>Klinische Infektiologie: Infektionsprophylaxe und Fallvorstellung</i> Virbac seminar for veterinarians, Zurich
2011 August	<i>Positiver Anaplasma phagozytophilum Titer: was bedeutet das?</i> GZT seminar for veterinarians, Volketswil
2011 January	<i>Gefährdet die Wildstaube unsere Hundepopulation?</i> Nobivac seminar for veterinarians, Zurich and Bern
2010 March	Clinical case presentation in Small Animal Internal Medicine, 1 st year veterinary medicine students, Vetsuisse Faculty, University of Zurich
2007 – 2011	Clinical teaching of 5 th year veterinary medicine students during their rotation at the Clinic for Small Animal Internal Medicine, Vetsuisse Faculty, University of Zurich
2004 – 2006	Haematology course, 2 nd year veterinary medicine students, Vetsuisse Faculty, University of Zurich
2003 – 2006	<i>Importance, Transmission and Prevalence of Haemobartonella felis.</i> Ringkolloquium, Vetsuisse Faculty, University of Zurich.
2003 June	<i>Seminar cat.</i> Institute of Laboratory Animal Science, University of Zurich
2003 Mai	<i>Update on Haemobartonella felis.</i> Mittwochseminar, Vetsuisse Faculty, University of Zurich

TALKS AT INTERNATIONAL AND NATIONAL CONGRESSES

2012	<i>Vektor-übertragene Erkrankungen beim Hund.</i> <i>Wenn einer eine Reise tut – ein Update zu praxisrelevanten Reisekrankheiten.</i> bpt congress, Bielefeld, 25 th – 26 th of February 2012
2011	<i>Akut aggressive und chronische Calicivireninfektionen</i> <i>Anaplasma phagozytophilum</i> <i>Mein Ferien-Cocktail für den Süden</i> Small Animal Infectious Disease congress, Zurich, 4 th – 5 th of November 2011
2008	<i>Development and application of a universal haemoplasma screening assay based on the SYBR Green PCR principle.</i> 18 th ECVIM-CA Congress, Ghent. 5 th of September 2008
2007	<i>Real-time PCR investigations of possible transmission routes and reservoirs of feline hemoplasmas.</i> 25 th Annual ACVIM Congress, Seattle, 6 th - 9 th of June 2007.
2006	<i>The third feline haemoplasma 'Candidatus Mycoplasma turicensis': an international study in pet cats.</i> 16 th ECVIM-CA Congress, Amsterdam. 16 th of September 2006
2006	<i>Haemoplasma Infektionen bei Hauskatzen: Identifikation einer neuen Spezies, Diagnose, Prävalenz und klinische Bedeutung.</i> InnLab 2006, 14. Jahrestagung der Fachgruppe Innere Medizin und Klinische Labordiagnostik der DVG, Munich. 13 th - 14 th of May 2006
2006	<i>The third feline haemoplasma 'Candidatus Mycoplasma turicensis': an international study in felids.</i> International Organization of Mycoplasmology (IOM), 16 th International Congress, Cambridge. 9 th - 14 th of July 2006.
2005	<i>Prevalence and clinical importance of the two known and a third novel feline hemoplasma species in cats in Switzerland.</i> 15 th ECVIM-CA Congress, Glasgow. 1 st - 3 rd of September 2005
2005	<i>Prävalenz und klinische Bedeutung der zwei bekannten und einer bisher unbekanntem Haemoplasmen Spezies bei Katzen in der Schweiz.</i> Vets 2005/ 36. Jahresversammlung SVK/ASMPA, 8 th -10 th of September 2005

- 2004 *Importance of hemotropic Mycoplasma species in Swiss cats and detection of a new Mycoplasma-like agent in a clinically ill cat.*
22nd Annual ACVIM FORUM, Minneapolis. 9th – 12th of June 2004
- 2004 *Mycoplasma haemofelis infection in Swiss cats.*
Forschung an der Vetsuisse-Faculty, University of Zurich, Zurich. 4th of November 2004

POSTERS AT INTERNATIONAL AND NATIONAL CONGRESSES

- 2004 *Mycoplasma haemofelis infection in Swiss cats.*
Symposium zum Forschungskredit, University of Zurich. 26th of March 2004

PUBLICATION LIST

39. Willi B, Kook PH, Quante S, Boretti FS, Sieber-Rückstuhl NS, Scherrer O, Riond B, Hofmann-Lehmann R, Nussberger J, Reusch CE. 2012. Primärer Hyperaldosteronismus bei Katzen: eine Fallserie. Schweiz Arch Tierheilkd. 154 (12):529 – 537.
38. Krengel A, Meli ML, Cattori V, Wachter B, Willi B, Thalwitzer S, Melzheimer J, Hofer H, Lutz H, Hofmann-Lehmann R. 2012. First evidence of hemoplasma infection in free-ranging Namibian cheetahs (*Acinonyx jubatus*). Vet Microbiol (Epub ahead of print) doi:pii: S0378-1135(12)00548-2.
37. Filoni C, Catão-Dias JL, Cattori V, Willi B, Meli ML, Ramiro Corrêa SH, Cristina Marques M, Harumi Adania C, Ramos Silva JC, Vianna Marvulo MF, Ferreira Neto JS, Luiz Durigon E, de Carvalho VM, Dall'acqua Coutinho S, Lutz H, Hofmann-Lehmann R. 2011. Surveillance using serological and molecular methods for the detection of infectious agents in captive Brazilian neotropic and exotic felids. J Vet Diagn Invest. 24(1): 166 – 173.
36. Novacco M, Boretti FS, Wolf-Jäckel GA, Riond B, Meli ML, Willi B, Lutz H, Hofmann-Lehmann R. 2011. Chronic '*Candidatus Mycoplasma turicensis*' infection. Vet Res. 42(1):59.
35. Willi B, Museux K, Novacco M, Schraner EM, Wild P, Groebel K, Ziegler U, Wolf-Jäckel GA, Kessler Y, Geret C, Tasker S, Lutz H, Hofmann-Lehmann R. 2010. First morphological characterization of '*Candidatus Mycoplasma turicensis*' using electron microscopy. Vet. Microbiol. 149 (3-4): 367 – 373.
34. Peters IR, Helps CR, Willi B, Hofmann-Lehmann R, Gruffydd-Jones TJ, Day MJ, Tasker S. 2011. Detection of feline haemoplasma species in experimental infections by in-situ hybridisation. Microb Pathog. 50(2): 94 – 99.
33. Kook PH, Hagen R, Willi B, Ruetten M, Venzin C. 2010. Rectal duplication cyst in a cat. J Feline Med Surg. 12(12):978-81.
32. Meli ML, Kaufmann C, Zanolari P, Robert N, Willi B, Lutz H, Hofmann-Lehmann R. 2010. Development and application of a real-time TaqMan® qPCR assay for detection and quantification of '*Candidatus Mycoplasma haemolamae*' in South American camelids. Vet Microbiol. 146(3-4):290-294.
31. Meli ML, Willi B, Dreher UM, Cattori V, Knubben-Schweizer G, Nuss K, Braun U, Lutz H, Hofmann-Lehmann R. 2010. Identification, molecular characterization, and occurrence of two bovine hemoplasma species in Swiss cattle and development of real-time TaqMan quantitative PCR assays for diagnosis of bovine hemoplasma infections. J Clin Microbiol. 48(10):3563-3568.
30. Willi B, Novacco M, Meli M, Wolf-Jäckel G, Boretti F, Wengi N, Lutz H, Hofmann-Lehmann R. 2010. Haemotropic mycoplasmas of cats and dogs: transmission, diagnosis, prevalence and importance in Europe. Schweiz Arch Tierheilkd. 152(5):237-244.
29. Novacco M, Meli ML, Gentilini F, Marsilio F, Ceci C, Pennisi MG, Lombardo G, Lloret A, Santos L, Carrapiço T, Willi B, Wolf G, Lutz H, Hofmann-Lehmann R. 2010. Prevalence and geographical distribution of canine hemotropic mycoplasma infections in Mediterranean countries and analysis of risk factors for infection. Vet Microbiol. 19;142(3-4):276-284.

28. Willi B, Meli ML, Lüthy R, Honegger H, Wengi N, Hoelzle LE, Reusch CE, Lutz H, Hofmann-Lehmann R. 2009. Development and application of a universal Hemoplasma screening assay based on the SYBR green PCR principle. *J Clin Microbiol.* 47(12):4049-4054.
27. Tasker S, Peters IR, Day MJ, Willi B, Hofmann-Lehmann R, Gruffydd-Jones TJ, Helps CR. 2009. Distribution of *Mycoplasma haemofelis* in blood and tissues following experimental infection. *Microb Pathog.* 47(6):334-340.
26. Hornok S, Meli ML, Perreten A, Farkas R, Willi B, Beugnet F, Lutz H, Hofmann-Lehmann R. 2010. Molecular investigation of hard ticks (*Acari: Ixodidae*) and fleas (*Siphonaptera: Pulicidae*) as potential vectors of rickettsial and mycoplasmal agents. *Vet Microbiol.* 140(1-2):98-104.
25. Tasker S, Peters IR, Papasouliotis K, Cue SM, Willi B, Hofmann-Lehmann R, Gruffydd-Jones TJ, Knowles TG, Day MJ, Helps CR. 2009. Description of outcomes of experimental infection with feline haemoplasmas: copy numbers, haematology, Coombs' testing and blood glucose concentrations. *Vet Microbiol.* 18;139(3-4):323-332
24. Santos AP, Messick JB, Biondo AW, Oliveira ST, Pedralli V, Lasta CS, Lacerda LA, Esteves VS, Hofmann-Lehmann R, Willi B, González FH. 2009. Design, optimization, and application of a conventional PCR assay with an internal control for the detection of '*Candidatus Mycoplasma turicensis*' 16S rDNA in domestic cats from Brazil. *Vet Clin Pathol.* 38(4):443-452.
23. Museux K, Boretti FS, Willi B, Riond B, Hoelzle K, Hoelzle LE, Wittenbrink MM, Tasker S, Wengi N, Reusch CE, Lutz H, Hofmann-Lehmann R. 2009. *In vivo* transmission studies of '*Candidatus Mycoplasma turicensis*' in the domestic cat. *Vet Res.* 40(5):45.
22. Boretti FS, Perreten A, Meli ML, Cattori V, Willi B, Wengi N, Hornok S, Honegger H, Hegglin D, Woelfel R, Reusch CE, Lutz H, Hofmann-Lehmann R. 2009. Molecular investigations of *Rickettsia helvetica* infection in dogs, foxes, humans and *Ixodes* ticks. *Appl Environ Microbiol.* 75(10):3230-3237.
21. Meli ML, Cattori V, Martínez F, López G, Vargas A, Simón MA, Zorrilla I, Muñoz A, Palomares F, López-Bao JV, Pastor J, Tandon R, Willi B, Hofmann-Lehmann R, Lutz H. 2009. Feline leukemia virus and other pathogens as important threats to the survival of the critically endangered Iberian lynx (*Lynx pardinus*). *PLoS One.* 4(3):e4744.
20. Hornok S, Meli ML, Gönczi E, Ignits E, Willi B, Lutz H, Hofmann-Lehmann R. 2008. First molecular identification of '*Candidatus Mycoplasma haemominutum*' from a cat with fatal haemolytic anaemia in Hungary. *Acta Vet Hung.* 56(4):441-50.
19. Gentilini F, Novacco M, Turba ME, Willi B, Bacci ML, Hofmann-Lehmann R. 2008. Use of combined conventional and real-time PCR to determine the epidemiology of feline haemoplasma infections in northern Italy. *J Feline Med Surg.* 11(4):277-85.
18. Peters IR, Helps CR, McAuliffe L, Neimark H, Lappin MR, Gruffydd-Jones TJ, Day MJ, Hoelzle LE, Willi B, Meli M, Hofmann-Lehmann R, Tasker S. 2008. RNase P RNA gene (rnpB) phylogeny of Hemoplasmas and other *Mycoplasma* species. *J Clin Microbiol.* 46(5):1873-1877.
17. Cattori V, Pepin AC, Tandon R, Riond B, Meli ML, Willi B, Lutz H, Hofmann-Lehmann R. 2008. Real-time PCR investigation of feline leukemia virus proviral and viral RNA loads in leukocyte subsets. *Vet Immunol Immunopathol.* 123(1-2):124-128.
16. Tandon R, Cattori V, Willi B, Lutz H, Hofmann-Lehmann R. 2008. Quantification of endogenous and exogenous feline leukemia virus sequences by real time PCR assays. *Vet Immunol Immunopathol.* 123(1-2):129-133.
15. Willi B., Boretti FS, Tasker S, Meli ML, Wengi N, Reusch CE, Lutz H, Hofmann-Lehmann R. 2007. From *Haemobartonella* to haemoplasma: molecular methods provide new insights. *Vet Microbiol.* 125(3-4):197-209.
14. Peters IP., Helps CR, Willi B, Hofmann-Lehmann R, Tasker S. 2007. The prevalence of three species of feline haemoplasmas in samples submitted to a diagnostics service as determined by three novel real-time duplex PCR assays. *Vet. Microbiol.* 126(1-3):142-150.
13. Wengi N, Willi B, Boretti FS, Cattori V, Riond B, Meli ML, Reusch CE, Lutz H, Hofmann-Lehmann R. 2007. Real-time PCR-based prevalence study, infection follow-up and molecular characterization of canine hemotropic mycoplasmas. *Vet Microbiol.* 126(1-3):132-141.

12. Willi B, Boretti FS, Meli ML, Bernasconi MV, Casati S, Heggin D, Puorger M, Neimark H, Cattori V, Wengi N, Reusch CE, Lutz H, Hofmann-Lehmann R. 2007. Real-time PCR investigation of possible transmission routes and reservoirs of feline hemoplasmas. *Appl Environ Microbiol.* 73(12):3798-3802.
11. Willi B, Filoni C, Catão-Dias J, Cattori V, Meli ML, Vargas A, Martines F, Roelke-Parker M, Ryser-Degiorgis MP, Lutz H, Hofmann-Lehmann R. 2007. Worldwide occurrence of feline hemoplasma infections in different wild felid species. *J Clin Microbiol* 45(4): 1159-66.
10. Pepin AC, Tandon R, Cattori V, Niederer E, Riond B, Willi B, Lutz H, Hofmann-Lehmann R. 2007. Cellular segregation of feline leukemia provirus and viral RNA in leukocyte subsets of long-term experimentally infected cats. *Virus Res.* 127(1):9-16.
9. Tandon R, Cattori V, Willi B, Meli ML, Gomes-Keller MA, Lutz H, Hofmann-Lehmann R. 2007. Copy number polymorphism of endogenous feline leukemia virus-like sequences. *Mol Cell Probes.* 21(4):257-266.
8. Hofmann-Lehmann R, Cattori V, Tandon R, Boretti FS, Meli ML, Riond B, Pepin AC, Willi B, Ossent P, Lutz H. 2006. Vaccination against the feline leukaemia virus: outcome and response categories and long-term follow-up. *Vaccine.* 25(30):5531-5539.
7. Willi B, Tasker S, Boretti FS, Doherr MG, Cattori V, Meli ML, Lobetti RG, Malik R, Reusch CE, Lutz H, Hofmann-Lehmann R. 2006. Phylogenetic and risk factor analysis for '*Candidatus Mycoplasma turicensis*' in United Kingdom, Australian and South African pet cats. *J Clin Microbiol.* 44(12):4430-4435.
6. Boretti FS, Sieber-Ruckstuhl NS, Willi B, Lutz H, Hofmann-Lehmann R, Reusch CE. 2006. Comparison of the biological activity of recombinant human thyroid-stimulating hormone with bovine thyroid-stimulating hormone and evaluation of recombinant human thyroid-stimulating hormone in healthy dogs of different breeds. *Am J Vet Res* 67(7):1169-1172.
5. Willi B, Boretti FS, Baumgartner C, Tasker S, Wenger B, Cattori V, Meli ML, Reusch CE, Lutz H, Hofmann-Lehmann R. 2006. Prevalence, risk factor analysis, and follow-up of infections caused by three feline hemoplasma species in cats in Switzerland. *J Clin Microbiol* 44(3):961-969.
4. Willi B, Boretti FS, Baumgartner C, Cattori V, Meli ML, Doherr MG, Reusch CE, Hofmann-Lehmann R. 2006. Feline haemoplasma in Switzerland: identification of a novel species, diagnosis, prevalence, and clinical importance. *Schweiz Arch Tierheilkd* 148(3):139-150.
3. Hofmann-Lehmann R, Tandon R, Boretti FS, Meli ML, Willi B, Cattori V, Gomes-Keller MA, Ossent P, Golder MC, Flynn JN, Lutz H. 2006. Reassessment of feline leukaemia virus (FeLV) vaccines with novel sensitive molecular assays. *Vaccine.* 24(8):1087-1094.
2. Willi B, Boretti FS, Cattori V, Tasker S, Meli ML, Reusch CE, Lutz H, Hofmann-Lehmann R. 2005. Identification, molecular characterization, and experimental transmission of a new hemoplasma isolate from a cat with hemolytic anemia in Switzerland. *J Clin Microbiol.* 43(6):2581-2585.
1. Hofmann-Lehmann R, Meli ML, Dreher UM, Gönczi E, Deplazes P, Braun U, Engels M, Schüpbach J, Jörgler K, Thoma R, Griot C, Stärk KD, Willi B, Schmidt J, Kocan KM, Lutz H. 2004. Concurrent infections with vector-borne pathogens associated with fatal hemolytic anemia in a cattle herd in Switzerland. *J Clin Microbiol.* 42(8): 3775-3780.