

## Personal data

First, last names Caroline Franziska, Frey Marreros Canales  
Address Institute of Parasitology  
University of Bern  
Länggassstrasse 122  
CH-3012 Bern  
Switzerland  
Phone +41 (0)31 684 2418  
E-mail caroline.frey@unibe.ch



## Positions

August 2019 – present **Co-Director** of the Institute of Parasitology, University of Bern, Switzerland. **Professor** for Veterinary Parasitology. Tenure. National Reference Laboratory for *Trichinella* spp., *Echinococcus* spp., *Tritrichomonas foetus*, *Neospora caninum*, *Toxoplasma gondii*, *Besnoitia besnoiti*, *Trypanosoma equiperdum* and *T. evansi*

May 2017 – June 2019 **Research Scientist** at the Centre for Food-borne and Animal Parasitology, Canadian Food Inspection Agency (**CFAP-CFIA**), Saskatoon, Canada.

June 2017 – present **Adjunct Professor** at the Department of Veterinary Microbiology, Western College of Veterinary Medicine (WCVM), University of Saskatchewan, Saskatoon, Canada.

Aug. 2013 – Apr. 2017 **Head of the veterinary diagnostic unit & Head of the National Reference Laboratory** (*Trichinella* spp., *Tritrichomonas foetus*, *Neospora caninum*, *Toxoplasma gondii*, *Trypanosoma equiperdum* and *Besnoitia besnoiti*) at the Institute of Parasitology, University of Bern, Switzerland. **Quality manager** (ISO 17025).

Apr. 2012 – Jul. 2013 **Research fellow** at Saluvet group, Complutense University, Madrid, Spain. **Fellowship for Prospective Researchers of the Swiss National Science Foundation.**

- Apr. 2006 – Mar. 2012      **Head of the veterinary diagnostic unit & Head of the National Reference Laboratory** (*Trichinella* spp., *Tritrichomonas foetus*, *Neospora caninum*, *Toxoplasma gondii*, *Trypanosoma equiperdum* and *Besnoitia besnoiti*) at the Institute of Parasitology, University of Bern, Switzerland. **Quality manager** (ISO 17025).
- Mar. 2003 – Sept. 2003      **Clinical Assistant** at Kleintierpraxis Laupeneck in Bern, Switzerland

## Academic education

- 2021 – 2022      **H.I.T. Program** (High Potential University Leaders Identity & Skills Training Program - Inclusive Leadership in Academia)
- Oct. 2014      **Habilitation** at the Vetsuisse Faculty, University of Bern.  
Titel: Important veterinary parasitoses: development of diagnostic tests and their application in epidemiological studies in Switzerland
- Dec. 2011      Board certification in Veterinary Parasitology (**Dipl. EVPC**)
- Jan. 2007 – Nov. 2011      **Residency Program of the European Veterinary Parasitology College (EVPC)**
- Apr. 2009      Specialization in Laboratory Diagnostics and Veterinary Parasitology (**FVH-diploma**, awarded by the Swiss Society of Veterinarians)
- Jun. 2006      Award of the doctor title (**Dr. med. vet.**) by the Vetsuisse Faculty, University of Bern.
- Jan. 2004 – Mar. 2006      **Doctoral thesis** at the Institute of Virology and Immunoprophylaxis (IVI) in Mithelhäusern. Topic: Development and evaluation of a recombinant against Classical Swine Fever vaccine
- Dec. 2002      Award of the **Diploma as Veterinarian** by the Federal Department of Home Affairs
- Sept. 1997 – Dec. 2002      **Studies in veterinary medicine** at University of Bern

## Awards

- Dec. 2019:      Recipient of the **Haller Medal** awarded by the University of Bern

## Member of Societies

- World Association for the Advancement in Veterinary Parasitology (WAAVP)
- International Commission on Trichinellosis (ICT)
- European Scientific Counsel Companion Animal Parasites (ESCCAP) (Vice-president CH)
- European Veterinary Parasitology College (EVPC)
- Swiss Society of Veterinarians (GST)
- Swiss Society of Veterinary Laboratory Diagnosticians (SVVLD)
- Swiss Society of Tropical Medicine and Parasitology (SSTMP)

## Editorial board member

Since 2015: Food and Waterborne Parasitology (FAWPAR). 2018/19: Managing guest editor for a FAWPAR Special Issue on zoonotic *Echinococcus* spp. (10 invited manuscripts)

Since 2018: Parasitology; Veterinary Parasitology; 2024 Managing guest editor for a Vet. Par. Special Issue on ICT 16.

## Publications in peer-reviewed journals

1. Borel S, Marti I, Origgi FC, Delalay G, Breitenmoser C, Zürcher-Giovannini S, **Frey CF**, Basso W, Schweizer D, Kittl S, Ryser-Degiorgis MP, Keller S (2026). Causes of morbidity and mortality in free-ranging Eurasian lynx (*Lynx lynx*) in Switzerland, 2000-2022. *PLoS One*. 21(3):e0344107. doi: 10.1371/journal.pone.0344107.
2. Ali AO, Qossa W, Khalifa FA, **Frey CF**, Fereig RM (2026). Seroprevalence and Risk Factors of *Toxoplasma gondii* Infection in Buffalo (*Bubalus bubalis*) from Sohag, Egypt. *Vet Sci*. 13(2):166. doi: 10.3390/vetsci13020166
3. Ali AO, Qossa W, Khalifa FA, Mahmoud HYAH, **Frey CF**, Fereig RM (2026). Seroprevalence and risk factors associated with *Neospora caninum* infection in water buffaloes (*Bubalus bubalis*) in Sohag, Egypt. *Vet Parasitol Reg Stud Reports*. 68:101419. doi: 10.1016/j.vprsr.2025.101419.
4. Häner-Grolimund D, Stucki D, Schwarz J, Wiederkehr D, **Frey CF** (2026). Resistance concerns and coccidiosis management in rabbit farming: Insights from robenidine, diclazuril and feed evaluations. *Vet Parasitol*. 341:110651. doi: 10.1016/j.vetpar.2025.110651.
5. Moré G, Cigler P, Bize P, Hemphill A, Keller SA, **Frey CF**, Basso W (2025). *Crataerina melbae* louse flies are competent vectors of *Trypanosoma* sp. associated with nestling mortality in Alpine swifts (*Tachymarptis melba*). *Int J Parasitol Parasites Wildl*. 28:101170. doi: 10.1016/j.ijppaw.2025
6. Medici Z, Marreros N, Molteni S, Ferreira de Sousa MC, Basso W, Moré G, **Frey CF** (2025). High frequency of DNA detection of *Toxoplasma gondii* and zoonotic *Sarcocystis* spp. in ready-to-eat meat products purchased in Switzerland. *Food Waterborne Parasitol*. 41:e00301. doi: 10.1016/j.fawpar.2025.e00301.
7. Renfer H, **Frey CF**, Studer E, Dürr S, Pralong M, Zanolari P, Hirsbrunner G (2025). Seroprävalenz von *Neospora caninum* bei Eringerkühen im Kanton Wallis – Eine prospektive, repräsentative Feldstudie [Seroprevalence of *Neospora caninum* in Hérens cows in the canton Valais - A prospective, representative field study]. *Schweiz Arch Tierheilkd*. 167(11):619-624. German. doi: 10.17236/sat00467.
8. Lückner S, Moré G, Marti I, **Frey CF**, Fernandez JE, Belhout C, Basso W (2025). High prevalence of *Sarcocystis* spp. in the Eurasian wolf (*Canis lupus lupus*): Third-generation sequencing resolves mixed infections. *Int J Parasitol Parasites Wildl*. 28:101140. doi: 10.1016/j.ijppaw.2025.101140.
9. Kronenberg PA, Fouché N, Sekiya M, Liechti P, **Frey CF**, Mulcahy G, Eichenberger RM (2025). A serological test based on mutated recombinant *Fasciola hepatica* cathepsin L protease for the diagnosis of equine fasciolosis. *Vet Parasitol*. 340:110592. doi: 10.1016/j.vetpar.2025.110592.

10. **Frey CF**, Vasilev S, Rosenthal BM (2025). Special Issue: 16th International Conference on Trichinellosis. *Vet Parasitol.* 110510. doi: 10.1016/j.vetpar.2025.110510.
11. Basso W, Moré G, Gliga D, Marti I, Müller N, Lundström-Stadelmann B, **Frey CF** (2025). Detection of *Trichinella* spp. in free-ranging carnivores and wild boars in Switzerland. *Vet Parasitol.* 336:110454. doi: 10.1016/j.vetpar.2025.110454.
12. Basso W, Moré G, Pischon H, Merz S, Beres A, Norkus P, **Frey CF**, Pantchev N (2025). Cutaneous abdominal biopsy enabled the diagnosis of clinical *Trichinella britovi* infection in a hunting dog. *Vet Parasitol.* 335:110433. doi: 10.1016/j.vetpar.2025.110433.
13. Gliga DS, Zumthor JP, **Frey CF**, Basso W (2025). Enhancing farmer awareness: Vertical transmission of *Neospora caninum* in aborting cattle and the value of diagnostics tools. *Vet Parasitol.* 334:110403. doi: 10.1016/j.vetpar.2025.110403.
14. Schneider A, Moré G, Pewsner M, **Frey CF**, Basso W (2024). Cestodes in Eurasian wolves (*Canis lupus lupus*) and domestic dogs (*Canis lupus familiaris*) in Switzerland. *Int J Parasitol Parasites Wildl.* 26:101027. doi: 10.1016/j.ijppaw.2024.101027.
15. Fereig RM, El-Alfy ES, Alharbi AS, Abdelraheem MZ, Almuzaini AM, Omar MA, Kandil OM, **Frey CF** (2024). Seroprevalence of *Toxoplasma gondii* in Cattle in Southern Egypt: Do Milk and Serum Samples Tell the Same Story? *Animals (Basel).* 14(21):3122. doi: 10.3390/ani14213122.
16. Moré G, Rüegg-van den Broek P, Glardon OJ, Gliga DS, **Frey CF**, Basso W (2024). Identification and management of infections caused by *Giardia* sp., *Trichuris* sp. and *Demodex* sp. in captive Brazilian porcupines (*Coendou prehensilis*). *Int J Parasitol Parasites Wildl.* 25:100976. doi: 10.1016/j.ijppaw.2024.100976.
17. Fereig RM, Salama DB, Salem FK, Rouby SR, Shaapan RM, Draz S, Elsayy BSM, Elgiouhy MM, Altwaim SA, Aboelhadid SM, **Frey CF** (2024). Frequency of *Besnoitia besnoiti* and *Neospora caninum* antibodies in cattle and small ruminants from greater Cairo and Beni Suef governorates, Egypt. *Vet Parasitol Reg Stud Reports.* 53:101078. doi: 10.1016/j.vprsr.2024.101078.
18. Gliga DS, Kramer A, Moré G, **Frey CF**, Basso W (2024). Early Detection and Management of *Lamanema chavezii* infection in a llama (*Lama glama*) in Switzerland. *Vet Res Commun.* 48(5):3365-3369. doi: 10.1007/s11259-024-10465-2.
19. Kittl S, **Frey CF**, Brodard I, Scalisi N, Vargas Amado ME, Thomann A, Schierack P, Jores J (2024). Zoonotic bacterial and parasitic intestinal pathogens in foxes, raccoons and other predators from eastern Germany. *Environ Microbiol Rep.* 16(3):e13261. doi: 10.1111/1758-2229.13261.
20. Stettler M, Lotz C, Probst A, Marreros N, Lundström-Stadelmann B, **Frey CF**, Keiser J, Hofer A, Hoby S (2024). Safety and pharmacokinetics of praziquantel in European pond turtles (*Emys orbicularis*). *J Zoo Wildl Med.* 54(4):728-737. doi: 10.1638/2023-0031.
21. Santoro A, Santolamazza F, Cacciò SM, La Rosa G, Antolová D, Auer H, Bagrade G, Bandelj P, Basso W, Beck R, Citterio CV, Davidson RK, Deksne G, **Frey CF**, Fuglei E, Glawischnig W, Gottstein B, Harna J, Huus Petersen H, Karamon J, Jansen F, Jarošová J, Jokelainen P, Lundström-Stadelmann B, Maksimov P, Miljević M, Miterpáková M, Moks E, Origgi F, Ozolina Z, Ryser MP, Romig T, Šarkūnas M, Scorrano N, Saarma U, Šnábel V, Sréter T, Umhang G, Vengušt G, Žele Vengušt D, Casulli A (2024). Mitochondrial genetic diversity and

- phylogenetic relationships of *Echinococcus multilocularis* in Europe. *Int J Parasitol.* 54(5):233-245. doi: 10.1016/j.ijpara.2024.01.003.
22. Scherrer P, Ryser-Degiorgis MP, **Frey CF**, Basso W (2024). *Toxoplasma gondii* Infection in the Eurasian Beaver (*Castor fiber*) in Switzerland: Seroprevalence, Genetic Characterization, and Clinicopathologic Relevance. *J Wildl Dis.* 60(1):126-138. doi: 10.7589/JWD-D-23-00077.
  23. Fereig RM, Mazeed AM, El Tawab AAA, El-Diasty M, Elsayed A, Shaapan RM, Abdelbaset AE, **Frey CF**, Alawfi BS, Altwaim SA, Alharbi AS, Wareth G (2024). Exposure to *Brucella* Species, *Coxiella burnetii*, and *Trichinella* Species in Recently Imported Camels from Sudan to Egypt: Possible Threats to Animal and Human Health. *Pathogens.* 13(2):179. doi: 10.3390/pathogens13020179.
  24. Rubiola S, Moré G, Civera T, Hemphill A, **Frey CF**, Basso W, Colasanto I, Vercellino D, Fidelio M, Lovisone M, Chiesa F. Detection of *Sarcocystis hominis*, *Sarcocystis bovifelis*, *Sarcocystis cruzi*, *Sarcocystis hirsuta* and *Sarcocystis sigmaideus* sp. nov. in carcasses affected by bovine eosinophilic myositis (2024). *Food Waterborne Parasitol.* 34:e00220. doi: 10.1016/j.fawpar.2024.e00220.
  25. Galat M, Moré G, **Frey CF**, Kovalenko G, Maliuk I, Halka I, Sytiuk M, Bezymennyi M, Galat V, Jokelainen P (2023). Seroprevalence of *Toxoplasma gondii* in wild boars (*Sus scrofa*) hunted in Ukraine. *Int J Parasitol Parasites Wildl.* 23:100901. doi: 10.1016/j.ijppaw.2023.100901.
  26. Cigler P, Moré G, Bize P, Meier CM, **Frey CF**, Basso W, Keller S. Trypanosomiasis: An emerging disease in Alpine swift (*Tachymarptis melba*) nestlings in Switzerland (2023)? *Int J Parasitol Parasites Wildl.* 23:100895. doi: 10.1016/j.ijppaw.2023.100895.
  27. Fereig RM, El-Alfy ES, Abdelbaky HH, Abdel-Hamid NH, Mazeed AM, Menshawy AMS, Kelany MA, El-Diasty M, Alawfi BS, **Frey CF** (2023). Seroprevalence of *Toxoplasma gondii*, *Neospora caninum* and *Trichinella* spp. in Pigs from Cairo, Egypt. *Vet Sci.* 10(12):675. doi: 10.3390/vetsci10120675.
  28. Furtado Jost R, Müller N, Marreros N, Moré G, Antoine L, Basso W, **Frey CF** (2023). What is the role of Swiss domestic cats in environmental contamination with *Echinococcus multilocularis* eggs? *Parasit Vectors.* 16(1):353. doi: 10.1186/s13071-023-05983-y.
  29. Lüthin S, Zollinger A, Basso W, Bisig M, Caspari N, Eng V, **Frey CF**, Grimm F, Igel P, Lüthi S, Regli W, Roelfstra L, Roskopf M, Steiner B, Stöckli M, Waidyasekera D, Waldmeier P, Schnyder M, Torgerson PR, Hertzberg H (2023). Strongyle faecal egg counts in Swiss horses: A retrospective analysis after the introduction of a selective treatment strategy. *Vet Parasitol.* 323:110027. doi: 10.1016/j.vetpar.2023.110027.
  30. Fereig RM, Jirapattharasate C, **Frey CF** (2023). Editorial: Recent trends in infection biology and control of protozoan parasites. *Front Cell Infect Microbiol.* 13:1292591. doi: 10.3389/fcimb.2023.1292591.
  31. Scherrer P, Ryser-Degiorgis MP, Marti IA, Borel S, **Frey CF**, Mueller N, Ruetten M, Basso W (2023). Exploring the epidemiological role of the Eurasian lynx (*Lynx lynx*) in the life cycle of *Toxoplasma gondii*. *Int J Parasitol Parasites Wildl.* 21:1-10. doi: 10.1016/j.ijppaw.2023.03.005.
  32. Jenkins EJ, Kolapo TU, Jarque MP, Ruschkowski C, **Frey C** (2023). Intestinal infection with *Echinococcus multilocularis* in a dog. *J Am Vet Med Assoc.* 261(9):1-3. doi: 10.2460/javma.23.02.0099.

33. Wolfer LA, Basso WU, **Frey CF**, Schuller S, Amphimaque B, Jankovic J, Howard J, Peters LM (2023). Biliary *Enterocytozoon bieneusi* infection in a dog under immunomodulatory therapy. *J Small Anim Pract.* 64(8):535-538. doi: 10.1111/jsap.13612.
34. Fereig RM, Ibrahim RM, Khalil AM, **Frey CF**, Khalifa FA (2023). Evaluation of Clinical and Biochemical Traits in Egyptian Barki Sheep with Different Growth Performances. *Animals (Basel).* 13(6):962. doi: 10.3390/ani13060962.
35. Metwally S, Hamada R, Sobhy K, **Frey CF**, Fereig RM (2023). Seroprevalence and risk factors analysis of *Neospora caninum* and *Toxoplasma gondii* in cattle of Beheira, Egypt. *Front Vet Sci.* 10:1122092. doi: 10.3389/fvets.2023.1122092.
36. Pardo Gil M, Hegglin D, Briner T, Ruetten M, Müller N, Moré G, **Frey CF**, Deplazes P, Basso W (2023). High prevalence rates of *Toxoplasma gondii* in cat-hunted small mammals - Evidence for parasite induced behavioural manipulation in the natural environment? *Int J Parasitol Parasites Wildl.* 20:108-116. doi: 10.1016/j.ijppaw.2023.01.007.
37. Salama DB, Fereig RM, Abdelbaky HH, Shahat MS, Arafa WM, Aboelhadid SM, Mohamed AEA, Metwally S, Abas O, Suo X, Gupta N, **Frey CF** (2022). *Toxoplasma gondii* and *Neospora caninum* antibodies in dogs and cats from Egypt and risk factor analysis. *Pathogens.* 11(12):1464. doi: 10.3390/pathogens11121464.
38. Fereig RM, Wareth G, Abdelbaky HH, Mazeed AM, El-Diasty M, Abdelkhalek A, Mahmoud HYAH, Ali AO, El-Tayeb A, Alsayeqh AF, **Frey CF** (2022). Seroprevalence of specific antibodies to *Toxoplasma gondii*, *Neospora caninum*, and *Brucella spp.* in sheep and goats in Egypt. *Animals (Basel).* 12(23):3327. doi: 10.3390/ani12233327.
39. Gliga DS, Basso W, Ardüser F, Moore-Jones G, Schares G, Zanolari P, **Frey CF** (2022). Switzerland-wide *Neospora caninum* seroprevalence in female cattle and identification of risk factors for infection. *Front Vet Sci.* 9:1059697. doi: 10.3389/fvets.2022.1059697.
40. Fereig RM, Abdelbaky HH, El-Alfy ES, El-Diasty M, Elsayed A, Mahmoud HYAH, Ali AO, Ahmed A, Mossaad E, Alsayeqh AF, **Frey CF** (2022). Seroprevalence of *Toxoplasma gondii* and *Neospora caninum* in camels recently imported to Egypt from Sudan and a global systematic review. *Front Cell Infect Microbiol.* 12:1042279. doi: 10.3389/fcimb.2022.1042279.
41. Rodenbücher AL, Walkenhorst M, Holinger M, Perler E, Amsler-Kepalaite Z, **Frey CF**, Mevissen M, Maurer V (2022). Pumpkin seeds, lemongrass essential oil and ripleaf leaves as feed additives for *Ascaridia galli* infected laying hens. *Vet Res Commun.* doi: 10.1007/s11259-022-10042-5.
42. Fereig RM, Abdelbaky HH, Mazeed AM, El-Alfy ES, Saleh S, Omar MA, Alsayeqh AF, **Frey CF** (2022). Prevalence of *Neospora caninum* and *Toxoplasma gondii* antibodies and DNA in raw milk of various ruminants in Egypt. *Pathogens.* 11(11):1305. doi: 10.3390/pathogens11111305.
43. Basso W, Holenweger F, Schares G, Müller N, Campero LM, Ardüser F, Moore-Jones G, **Frey CF**, Zanolari P (2022). *Toxoplasma gondii* and *Neospora caninum* infections in sheep and goats in Switzerland: Seroprevalence and occurrence in aborted fetuses. *Food Waterborne Parasitol.* 28:e00176. doi: 10.1016/j.fawpar.2022.e00176
44. **Frey CF**, Basso WU, Zürcher-Giovannini S, Marti I, Borel S, Guthruf S, Gliga D, Lundström-Stadelmann B, Origi FC, Ryser-Degiorgis MP (2022). The golden jackal (*Canis aureus*): A

new host for *Echinococcus multilocularis* and *Trichinella britovi* in Switzerland. *Schweiz Arch Tierheilkd.* 164(1):71-78. doi: 10.17236/sat00338.

45. Basso W, Marreros N, Hofmann L, Salvisberg C, Lundström-Stadelmann B, **Frey CF** (2022.) Evaluation of the PrioCHECK™ *Trichinella* AAD kit to detect *Trichinella spiralis*, *T. britovi*, and *T. pseudospiralis* larvae in pork using the automated digestion method Trichomatic-35. *Parasitol Int.* 86:102449. doi: 10.1016/j.parint.2021.102449.
46. Knapp J, Meyer A, Courquet S, Million L, Raoul F, Gottstein B, **Frey CF** (2021). *Echinococcus multilocularis* genetic diversity in Swiss domestic pigs assessed by EmsB microsatellite analyzes. *Vet Parasitol.* 293:109429.
47. Meyer A, Olias P, Schüpbach G, Henzi M, Barmettler T, Hentrich B, Gottstein B, **Frey CF** (2020). Combined cross-sectional and case-control study on *Echinococcus multilocularis* infection in pigs in Switzerland. *Vet Parasitol.* doi: 10.1016/j.vpoa.2020.100031
48. Dąbrowska J, Keller I, Karamon J, Kochanowski M, Gottstein B, Cencek T, **Frey CF**, Müller N (2020). Whole genome sequencing of a feline strain of *Tritrichomonas foetus* reveals massive genetic differences to bovine and porcine isolates. *Int J Parasitol.* S0020-7519(20)30029-1.
49. **Frey CF**, Oakley JR, Lobanov VA, Marreros N, Schurer JM, Lalonde LF (2019). A novel protocol to isolate, detect and differentiate taeniid eggs in leafy greens and berries using real-time PCR with melting curve analysis. *Parasit Vectors.* 12:590.
50. **Frey CF**, Jenkins E, Lundström-Stadelmann B (2019). Editorial overview: From farms and forests to forks? A review of diagnosis and management of globally important zoonotic *Echinococcus* spp. cestodes. *Food Waterborne Parasitol.* 16:e00061. doi: 10.1016/j.fawpar.2019.e00061.
51. Dąbrowska J, Karamon J, Kochanowski M, Gottstein B, Cencek T, **Frey CF**, Müller N (2019). Development and comparative evaluation of different LAMP and PCR assays for coprological diagnosis of feline tritrichomonosis. *Vet Parasitol.* 3:17-23.
52. Vidal S, Brandt BW, Dettwiler M, Abril C, Bressan J, Greub G, **Frey CF**, Perreten V, Rodriguez-Campos S (2018). Limited added value of fungal ITS amplicon sequencing in the study of bovine abortion. *Heliyon.* 4(11):e00915.
53. Akdesir E, Origgi FC, Wimmershoff J, Frey J, **Frey CF**, Ryser-Degiorgis MP (2018). Causes of mortality and morbidity in free-ranging mustelids in Switzerland: necropsy data from over 50 years of general health surveillance. *BMC Vet Res.* 14:195.
54. Christen G, Gerber V, van der Kolk JH, **Frey CF**, Fouché N (2018). Fecal strongyle egg counts in horses with suspected pre-clinical pituitary pars intermedia dysfunction before and after treatment with pergolide. *Vet J.* 2018 5:60-62.
55. **Frey CF**, Eicher R, Raue K, Strube C, Bodmer M, Hentrich B, Gottstein B, Marreros N (2018). Apparent prevalence of and risk factors for infection with *Ostertagia ostertagi*, *Fasciola hepatica* and *Dictyocaulus viviparus* in Swiss dairy herds. *Vet Parasitol.* 250:52-59.
56. **Frey CF**, Marreros N, Renneker S, Schmidt L, Sager H, Hentrich B, Milesi S, Gottstein B (2017). Dogs as victims of their own worms: Serodiagnosis of canine alveolar echinococcosis. *Parasit Vectors.* 10:422.

57. **Frey CF**, Müller N, Stäuber N, Marreros N, Hofmann L, Hentrich B, Hirsbrunner G (2017). *Simplicimonas*-like DNA in vaginal swabs of cows and heifers cross-reacting in the real-time PCR for *T. foetus*. *Vet. Parasitol.* In press.
58. Veiga IB, Schediwy M, Hentrich B, **Frey CF**, Marreros N, Stokar-Regenscheit N (2017). Serratospiculosis in a captive peregrine falcon (*Falco peregrinus*) in Switzerland with subsequent treatment and surveillance of the parasites in the group. *J. Av. Med. Surg.* In press.
59. Casteriano A, Molini U, Kandjumbwa K, Khaiseb S, **Frey CF**, Šlapeta J (2016). Novel genotype of *Tritrichomonas foetus* from cattle in Southern Africa. *Parasitol.* 9:1-6.
60. **Frey CF**, Regidor-Cerrillo J, Marreros N, García-Lunar P, Gutiérrez-Expósito D, Schares G, Dubey JP, Gentile A, Jacquiet P, Shkap V, Cortes H, Ortega-Mora LM, Álvarez-García G (2016). *Besnoitia besnoiti* lytic cycle in vitro and differences in invasion and intracellular proliferation among isolates. *Parasit Vectors.* 9:115.
61. Corsini M, Geissbühler U, Howard J, Gottstein B, Spreng D, **Frey CF** (2015). Clinical presentation, diagnosis, therapy and outcome of alveolar echinococcosis in dogs. *Vet Rec.* 177: 569
62. Müller N, Hentrich B, **Frey CF**, Welle M (2015). Quantitative PCR for the diagnosis of cutaneous leishmaniasis from formalin-fixed and paraffin-embedded skin sections. *Mol Cell Probes.* 29: 507-510.
63. Gendron K, Goepfert C, Linon E, Posthaus H, **Frey CF** (2015). Pulmonary *Echinococcus multilocularis* metastasis in a dog. *Can Vet J.* 56: 267-271.
64. Chaignat V, Boujon P, Frey CF, Hentrich B, Müller N, Gottstein B (2015). The brown hare (*Lepus europaeus*) as a novel intermediate host for *Echinococcus multilocularis* in Europe. *Parasitol Res.* 114: 3167-3169.
65. Bernasconi Ch, Bodmer M, Doherr MG, Janett F, Thomann A, Spycher C, Iten, C, Hentrich B, Gottstein B, Müller N, **Frey CF** (2014). *Tritrichomonas foetus*: prevalence study in naturally mating bulls in Switzerland. *Vet. Parasitol.* 200: 289-294.
66. Gottstein B, **Frey CF**, Campbell-Palmer R, Pizzi R, Barlow A, Hentrich B, Posautz A, Ryser-Degiorgis MP (2014). Immunoblotting for the serodiagnosis of alveolar echinococcosis in alive and dead Eurasian beavers (*Castor fiber*). *Vet. Parasitol.* 205: 113-118.
67. Berset-Istratescu CM, Glardon OJ, Magouras I, **Frey CF**, Gobeli S, Burgener IA (2014). Follow-up of 100 dogs with acute diarrhoea in a primary care practice. *Vet. J.* 199: 188-190.
68. Maksimov P, Zerweck J, Dubey JP, Pantchev N, **Frey CF**, Maksimov A, Reimer U, Schutkowski M, Hosseininejad M, Ziller M, Conraths FJ, Schares G (2013). Serotyping of *Toxoplasma gondii* in cats (*Felis domesticus*) reveals predominance of type II infections in Germany. *PLoS One.* 8(11):e80213.
69. Hertzberg H, Schwarzwald CC, Grimm F, **Frey CF**, Gottstein B, Gerber V (2014). Helminthenmanagement beim adulten Pferd: Notwendigkeit einer Neuorientierung. *Schweiz. Arch. Tierheilkd.* 156: 61-70.
70. **Frey CF**, Gutiérrez-Expósito D, Ortega-Mora LM, Benavides J, Marcén JM, Castillo JA, Casasús I, Sanz A, García-Lunar P, Esteban-Gil A, Alvarez-García G (2013). Chronic bovine besnoitiosis: Intra-organ parasite distribution, parasite loads and parasite-associated lesions in subclinical cases. *Vet. Parasitol.* 197: 95-103.

71. Schaarschmidt D, Gilli U, Gottstein B, Marreros N, Kuhnert P, Daeppen JA, Rosenberg G, Hirt D, **Frey CF** (2013). Questing *Dermacentor reticulatus* harbouring *Babesia canis* DNA associated with outbreaks of canine babesiosis in the Swiss Midlands. *Ticks Tick Borne Dis.* 4: 334-340.
72. Meisser M, Deleglise C, **Frey CF**, Mosimann E (2013). Mixed cattle and sheep grazing in mid-altitude farms: three-year trial in the Swiss Jura. *Fourrages* 216: 305-311.
73. Slapeta J, Müller N, Stack CM, Walker G, Lew-Tabor A, Tachezy J, **Frey CF** (2012). Comparative analysis of *Tritrichomonas foetus* (Riedmüller, 1928) cat genotype, *T. foetus* (Riedmüller, 1928) cattle genotype and *Tritrichomonas suis* (Davaine, 1875) at 10 DNA loci. *Int. J. Parasitol.* 42: 1143-1149.
74. García-Lunar P, Ortega-Mora LM, Schares G, Gollnick NS, Jacquiet P, Grisez C, Prevot F, **Frey CF**, Gottstein B, Alvarez-García G (2012). An inter-laboratory comparative study of serological tools employed in the diagnosis of *Besnoitia besnoiti* infection in bovines. *Transbound Emerg Dis.* 60: 59-68.
75. Reinmann K, Müller N, Kuhnert P, Campero CM, Leitsch D, Hess M, Henning K, Fort M, Müller J, Gottstein B, **Frey CF** (2012). *Tritrichomonas foetus* isolates from cats and cattle show minor genetic differences in unrelated loci ITS-2 and EF-1 $\alpha$ . *Vet. Parasitol.* 185: 138-144.
76. Eichhorn L, Zimmermann W, Gottstein B, **Frey CF**, Doherr MG, Zeeh F (2012). Erstmaliger Nachweis von Lungenwürmern bei Freiland Schweinen in der Schweiz. *Schweiz. Arch. Tierheilkd.* 154: 159 – 161.
77. **Frey CF**, Berger-Schoch AE, Hermann DC, Schares G, Müller N, Bernet D, Doherr MG, Gottstein B (2012). Vorkommen und Genotypen von *Toxoplasma gondii* in der Muskulatur von Schaf, Rind und Schwein sowie im Katzenkot in der Schweiz. *Schweiz. Arch. Tierheilkd.* 154: 251-255.
78. Lobsiger L, **Frey CF**, Müller N, Rosenberg G, Schweizer T, Gottstein B (2012). Breitet sich die bovine kutane Leishmaniose in der Schweiz aus? *Schweiz. Arch. Tierheilkd.* 154: 199-207.
79. Marreros N, **Frey CF**, Willisich CS, Signer C, Ryser-Degiorgis MP (2012). Baseline coprological data in apparently healthy Alpine ibex (*Capra ibex ibex*) from two Swiss colonies. *Vet. Parasitol.* 186: 382–389.
80. Berger-Schoch AE, Bernet D, Doherr MG, Gottstein B, **Frey CF** (2011). *Toxoplasma gondii* in Switzerland: A serosurvey based on meat juice analysis of slaughter pigs, wild boar, sheep and cattle. *Zoonoses Public Health.* 58: 472-478.
81. Berger-Schoch AE, Herrmann DC, Schares G, Müller N, Bernet D, Gottstein B, **Frey CF** (2011). Prevalence and genotypes of *Toxoplasma gondii* in feline faeces (oocysts) and meat from sheep, cattle and pigs in Switzerland. *Vet. Parasitol.* 177: 290-297.
82. Marreros N, Hüsey D, Albini S, **Frey CF**, Abril C, Vogt HR, Holzwarth N, Wirz-Dittus S, Friess M, Engels M, Borel N, Willisich CS, Signer C, Hoelzle LE, Ryser-Degiorgis MP (2011). Epizootiologic investigations of selected abortive agents in free-ranging Alpine Ibex (*Capra l. Ibex*) in Switzerland. *J. Wildlife Dis.* 47: 530-543.
83. Bründler P, **Frey CF**, Gottstein B, Nussbaumer P, Neuhaus S, Gerber V (2011). Lower shedding of strongylid eggs by Warmblood horses with recurrent airway obstruction compared to unrelated healthy horses. *Vet. J.* 190: e12-e15.
84. Spycher A, Geigy C, Howard J, Posthaus H, Gendron K, Gottstein B, Debache K, Herrmann DC, Schares G, **Frey CF** (2011). Isolation and genotyping of *Toxoplasma gondii* causing fatal systemic toxoplasmosis in an immunocompetent 10-year-old cat. *J. Vet. Diagn. Invest.* 23: 104-108.

85. **Frey CF**, Regotz J, Rosenberg G, Gottstein B, Kohler S (2010). A survey on intestinal parasites of livestock guardian dogs and herding dogs in Switzerland (German), (Überblick über intestinale Parasiten bei Herdenschutzhunden und Hütehunden in der Schweiz). *Schweiz. Archiv Tierheilk.* 152: 569-573.
86. Sigg L, Gerber V, Gottstein B, Doherr MG, **Frey CF** (2010). Seroprevalence of *Babesia caballi* and *Theileria equi* in the Swiss horse population. *Parasitol. Int.* 59: 313-317.
87. Schuppers ME, Rosenberg G, Graf R, Eidam V, Wittwer C, Zimmermann W, Gottstein B, **Frey CF** (2010). A study to demonstrate freedom of *Trichinella* spp. in domestic pigs in Switzerland. *Zoonoses Public Health.* 57: e130-e135.
88. Schrey Ch, Weiss ATa, Olias Ph, Henning K, Schein E, **Frey CF** (2010). *Trichomonas*-assoziierte Enteritis bei einem Welpen mit Parvovirose. *Tierärztliche Praxis Kleintiere* 38: 325-327.
89. Schuppers ME, **Frey CF**, Gottstein B, Stärk KDC, Kihm U, Regula G (2010). Comparing the demonstration of freedom from *Trichinella* infection of domestic pigs by traditional and risk based surveillance. *Epidemiol. Infect.* 138: 1242-1251.
90. Lobsiger L, Müller N, Schweizer T, **Frey CF**, Wiederkehr D, Zumkehr B, Gottstein B (2010). An autochthonous case of cutaneous bovine leishmaniasis in Switzerland. *Vet. Parasitol.* 169: 408-414.
91. Neuhaus S, Bruendler P, **Frey CF**, Gottstein B, Doherr M, Gerber V (2010). Increased parasite resistance associated with recurrent airway obstruction in horses of a high-prevalence family. *J. Vet. Intern. Med.* 24: 407-413.
92. Hamza E, Torsteinsdottir S, Eydal M, **Frey CF**, Mirkovitch J, Brcic M, Wagner B, Wilson D, Jungi TW, Marti E (2010). Increased IL-4 and decreased regulatory cytokine production following relocation of Icelandic horses from a high to low endoparasite environment. *Vet. Immunol. Immunopath.* 133: 40-50.
93. Müller N, Welle M, Lobsiger L, Stoffel MH, Kühni Boghenbor K, Hilbe M, Gottstein B, **Frey CF**, Geyer C, von Bomhard W (2009). Occurrence of *Leishmania* sp. in cutaneous lesions of horses in Central Europe. *Vet Parasitol.* 166: 346-351.
94. Gomez-Morales MA, Ludovisi A, Pezzotti P, Amati M, Cherchi S, Lalle M, Pecoraro F, Pozio E, the ring trial participants (a.o. **Frey C**) (2009). International ring trial to detect anti-*Trichinella* IgG by ELISA on pig sera. *Vet. Parasitol.* 166: 241-248.
95. **Frey CF**, Schuppers ME, Eidam V, Boujon P, Waldvogel A, Gottstein B (2009). The occurrence of *Trichinella* spp. in wild boar in Switzerland (German), (Vorkommen von *Trichinella* spp. beim Wildschwein in der Schweiz). *Schweiz. Arch. Tierheilk.* 151: 485-489.
96. **Frey CF**, Buholzer P, Beck R, Marinculic A, Ræber AJ, Gottstein B, Schuppers ME (2009). Validation of a newly developed commercial ELISA for the detection of porcine antibodies against *Trichinella* spp.. *J. Vet. Diagn Invest.* 21: 692-697.
97. Burgener IA, **Frey CF**, Kook PH, Gottstein B (2009). *Tritrichomonas foetus* – a novel intestinal parasite of cats in Switzerland (German), (*Tritrichomonas foetus* – ein neuer Parasit im Darm von Schweizer Katzen). *Schweiz. Arch. Tierheilk.* 151: 383-389.
98. **Frey CF**, Schuppers ME, Nöckler K, Marinculic A, Pozio E, Kihm U, Gottstein B (2009). Validation of a Western Blot for the detection of anti-*Trichinella* spp. antibodies in domestic pigs. *Parasitol. Res.* 104: 1269-1277.
99. **Frey CF**, Schild M, Hemphill A, Stünzi P, Müller N, Gottstein B, Burgener IA (2009). Intestinal *Tritrichomonas foetus* infection in cats in Switzerland detected by in vitro cultivation and PCR. *Parasitol. Res.* 104: 783-788.

100. Schrey Ch, Mundhenk L, Gruber A, Henning K, **Frey C** (2009). *Tritrichomonas foetus* als Durchfallerreger bei drei Katzen. *Kleintierpraxis*. 54: 93-96.
101. **Frey CF**, Schuppers ME, Müller N, Ryser-Degiorgis MP, Gottstein B (2009). Assessment of the prevalence of *Trichinella* spp. in red foxes and Eurasian lynxes from Switzerland. *Vet. Parasitol.* 159: 295-299.
102. Imhasly A, **Frey CF**, Mathis A, Straub R, Gerber V (2009). Cryptosporidiose (*C. parvum*) in a foal with diarrhea (German), (Cryptosporidiose (*C. parvum*) bei einem Fohlen mit ungenügendem passiven Immuntransfer). *Schweiz. Arch. Tierheilk.* 151: 21-26.
103. Porchet MJ, Sager H, Muggli L, Oppliger A, Müller N, **Frey C**, Gottstein B (2007). A descriptive epidemiological study on canine babesiosis in the Lake Geneva region. *Schweiz. Arch. Tierheilk.* 149: 457-465.
104. **Frey CF**, Bauhofer O, Ruggli N, Summerfield A, Hofmann MA, Tratschin JD (2006). Classical swine fever virus replicon particles lacking the E<sup>ms</sup> gene: a potent marker vaccine for intradermal application. *Vet. Res.* 37: 655-670.

## Reviews in peer-reviewed journals

1. Jenkins E, Volappi T, Malone CJ, Germitsch N, Virtanen JP, Oksanen A, Bessell E, Lundström-Stadelmann B, **Frey CF** (2025). Changing distribution, diversity, and health impact of *Echinococcus multilocularis* in Europe and North America: Comparison, connections, and opportunities. Review. *Adv Parasitol.* 128:159-253. doi: 10.1016/bs.apar.2025.07.003.
2. Rostami A, Lundström-Stadelmann B, **Frey CF**, Beldi G, Lachenmayer A, Chang BCH, Norouzian MM, Hemphill A, Gasser RB (2025). Human Alveolar Echinococcosis-A Neglected Zoonotic Disease Requiring Urgent Attention. Review. *Int J Mol Sci.* 26(6):2784. doi: 10.3390/ijms26062784.
3. Lundström-Stadelmann B, Rostami A, **Frey CF**, Torgerson PR, Riahi SM, Bagheri K, Kaethner M, Lachenmayer A, Beldi G, Gasser RB, Hemphill A (2025). Human alveolar echinococcosis-global, regional, and national annual incidence and prevalence rates. Review. *Clin Microbiol Infect.* S1198-743X(25)00099-0. doi: 10.1016/j.cmi.2025.01.034.
4. Borel N, **Frey CF**, Gottstein B, Hilbe M, Pospischil A, Franzoso FD, Waldvogel A (2014). Laboratory diagnosis of ruminant abortion in Europe. Review. *Vet. J.* 200: 218-229.
5. Alvarez-Garcia G, **Frey CF**, Ortega-Mora LM, Schares G. (2013). A century of bovine besnoitiosis: an unknown disease re-emerging in Europe. Review. *Trends Parasitol.* 29: 407-415.
6. **Frey CF**, Müller N. (2012). *Tritrichomonas* - systematics of an enigmatic genus. Review. *Molecular and Cellular Probes* 26: 132-136.

## Invited publications without peer-review

1. **Frey CF** (2025): Von Katzen, Kindern und Parasiten. *Schweizer Katzen Magazin* 5/25.
2. **Frey CF** (2025): Goldhamster und Co. und ihre Parasiten. *Welt der Tiere* 6/25.
3. **Frey CF** (2024). Die häufigsten Parasiten bei Kleinsäugetern. *Welt der Tiere* 5/24.

4. **Frey CF** (2024). Toxoplasmose bei der Katze – was ist das und wie kann man die Katze davor schützen? *Schweizer Katzen Magazin* 3/24.
5. **Frey CF** (2023). Winteraktive Ektoparasiten. *Schweizer Hundemagazin* 8/23.
6. **Frey CF** (2023). Vorsicht vor Parasiten Einige Parasiten können von Hund und Katze auf den Menschen übergehen! *Welt der Tiere* 5/23.
7. Probst J, **Frey CF**, Hentrich B (2020). Parasiten in den Sandkästen in der Stadt Bern mit besonderem Augenmerk auf *Toxocara* spp. *Tierärztliche Umschau*.
8. **Frey CF** et al. (2016). Opfer des Fuchsbandwurmes. Alveoläre Echinokokkose bei Hunden. *hundkatzepferd Vet* 06/2016. Pages 8-11.
9. Corsini M, Geissbühler U, Howard J, Gottstein B, Spreng D, **Frey CF** (2016). Klinische Präsentation, Diagnose, Therapie und Verlauf der alveolären Echinococcose bei Hunden. *KompaktVET*, 02/2016. Page 13.
10. **Frey CF**, Berger-Schoch AE, Gottstein B (2010). *Toxoplasma gondii*. *BVET Schweizer Zoonosebericht* 2009, pages 2-5.
11. Zanolari P, **Frey CF** (2010). Kryptosporidien im Stall – ein häufiger Erreger von Jungtierdurchfällen. *Kleinwiederkäuer-Forum*, Nummer 11, pages 14-19.
12. **Frey C** und Schuppers M (2009). Trichinellen. *BVET Schweizer Zoonosebericht* 2008, pages 55-56.
13. **Frey CF**, Schuppers ME, Müller N, Ryser-Degiorgis MP, Zimmermann W, Kihm U, Gottstein B, Nöckler K, Marinculic A, Pozio E (2009). Überblick über *Trichinella*-Infektionen bei Haus- und Wildtieren in der Schweiz. *Vet-MedReport June*, 33: 2.
14. Gottstein B, **Frey C**, Müller N, Burgener I (2008). Auch Parasiten überschreiten Landesgrenzen. *UniPress*, page 138.
15. Gottstein B, **Frey C**, Schuppers M (2008). Trichinellen. *BVET Schweizer Zoonosebericht* 2007, pages 50-51.
16. **Frey CF**, Schild M, Hemphill A, Stünzi P, Müller N, Gottstein B, Burgener IA (2008). Intestinale Infektionen mit *Tritrichomonas foetus* bei Katzen in der Schweiz. *Vet-MedReport June*, 32: 8.
17. Gottstein B, **Frey C** (2008). *Trichinella*: Ein Parasit bei Fuchs, Luchs und anderen Fleischfressern. *Jagd & Natur*, page 5.
18. Schuppers M, **Frey C** (2007). Neue Ansätze für die Trichinellenüberwachung in der Schweiz. *BVET Magazin* 3/2007, *Schweizer Zoonosebericht* 2006, pages 10-11.