

Publikationsliste

Kategorie: Journal articles (peer reviewed)

1. Wieland, R., Kuhls, K., Lentz, H.K., Conraths, F., Kampen, H., Werner, D. *Combined climate and regional mosquito habitat model based on machine learning.* Ecological Modelling, **2020** (submitted)
2. Kuhls, K., Moskalenko, O., Sukiasyan, A., Manukyan, D., Melik-Andreasyan, G., Atshemyan, L., Apresyan, H., Strelkova, M., Jaeschke, A., Wieland, R., Frohme, M., Cortes, S., Keshishyan, A. *Microsatellite based molecular epidemiology of Leishmania infantum from emerging foci of visceral leishmaniasis in Armenia and pilot risk assessment by ecological niche modeling.* PLoS Negl Trop Dis. **2021** Apr 19;15(4):e0009288. doi: 10.1371/journal.pntd.0009288. PMID: 33872307.
3. Strelkova, M.V., Baranova, A., Kuhls, K. *History of the E. I. Martsinovsky Institute of Medical Parasitology and Tropical Medicine: Research on Malaria and Leishmaniasis.* Hist Cienc Saude Manguinhos. **2020** Oct-Dec;27(4):1097-1124. doi: 10.1590/S0104-59702020000500005. PMID: 33338179.
4. Kniha, E., Dvořák, V., Halada, P., Milchram, M., Obwaller, A.G., Kuhls, K., Schlegel, S., Köhsler, M., Poepll, W., Bakran-Lebl, K., Fuehrer, H.P., Volfová, V., Mooseder, G., Iovicic, V., Volf, P., Walochnik, J. *Integrative Approach to Phlebotomus mascittii Grassi, 1908: First Record in Vienna with New Morphological and Molecular Insights.* Pathogens, **2020** Dec 9;9(12):E1032. doi: 10.3390/pathogens9121032. PMID: 33317097.
5. Sukiasyan, A., Keshishyan, A., Manukyan, D., Melik-Andreasyan, G., Atshemyan, L., Hripsime Apresyan, M. Strelkova, Frohme, M., Cortes, S., Kuhls, K. *Emerging and re-emerging foci of visceral leishmaniasis in Armenia – first molecular diagnostics of clinical samples.* Parasitology. **2019** Feb 13:1-8. doi: 10.1017/S0031182019000064.
6. Banu, S.S., Meyer, W., Ferreira-Paim, K., Wang, Q., Kuhls, K., Cupolillo, E., Schönian, G., Lee, R. *Multilocus sequence typing to identify genetic diversity of Bangladeshi Leishmania.* Int J Parasitol **2019** May 18. pii: S0020-7519(19)30126-2. doi: 10.1016/j.ijpara.2019.02.010.
7. Amro, A., Al-Dwibe, H., Gashout, A., Moskalenko, O., Galafin, M., Hamarsheh, O., Jaeschke, A., Frohme, M., Schönian, G., Kuhls, K. *Spatiotemporal and molecular epidemiology of cutaneous leishmaniasis in Libya.* PLOS Negl Trop Dis. **2017** Sep 7;11(9):e0005873. doi: 10.1371/journal.pntd.0005873. eCollection 2017 Sep. PMID:28880944
8. Hornemann, A., Sinning, D., Cortes, S., Campino, L., Emmer, P., Kuhls, K., Ulm, G., Frohme, M., Beckhoff, B. *A pilot study on fingerprinting Leishmania species from the Old World using Fourier transform infrared spectroscopy.* Anal Bioanal Chem **2017** Nov; 409(29):6907-6923. DOI 10.1007/s00216-017-0655-5. Epub 2017 Oct 28. PMID:29080902
9. Karakus, M., Nasereddin, A., Onay, H., Karaca, E., Özkeklikçi, A., Jaffe, C.L., Kuhls, K., Özbilgin, A., Ertabaklar, H., Demir, S., Özböl, Y., Töz, S. *Epidemiological Analysis of Leishmania tropica Strains and Slide Samples from Syrian and Turkish Leishmaniasis Patients using Multilocus Microsatellite Typing (MLMT).* **2017.** PLoS Negl Trop Dis.11(4): e0005538. <https://doi.org/10.1371/journal.pntd.0005538>
10. Akhouni, M., Downing, T., Votýpka, J., Kuhls, K., Lukeš, J., Cannet, A., Ravel, C., Marty, P., Delaunay, P., Kasbari, M., Granouillac, B., Gradoni, L., Sereno, D. *Leishmania infections:Molecular targets and diagnosis.* Mol Aspects Med. **2017** Jan 31. pii: S0098-2997(16)30045-0. doi: 10.1016/j.mam.2016.11.012
11. Karamian, M., Kuhls, K., Hemmati M., Ghatei, M. *Phylogenetic structure of Leishmania tropica populations in East Iran in relevance to other Iranian endemic regions strains based on rDNA ITS sequence analysis.* **2016,** Acta Trop. 2016 Feb 17;158:68-76.

12. Akhoudi, M., Kuhls, K., Cannet, A., Votýpka, A., Marty, P., Delaunay, P., Sereno, D. *A historical overview of the literature on the classification, evolution and dispersion of Leishmania and sandflies*. **2016**, PLoS Negl Trop Dis. 2016 Mar 3;10(3):e0004349. Review
13. Baleela R, Llewellyn MS, Fitzpatrick S, Kuhls, K., Schönian G, Miles MA, Mauricio IL. *Leishmania donovani* populations in Eastern Sudan: temporal structuring and a link between human and canine transmission. Parasit Vectors. **2014** Nov 20;7(1):496.
14. Cortes, S., Mauricio, I., Kuhls, K., Nunes, M., Lopes, C., Marcos, M., Cardoso, L., Schönian, G., Campino, L. *Genetic diversity evaluation on Portuguese Leishmania infantum strains by Multilocus Microsatellite typing*. Inf Gen Evol **2014** Aug;26:20-31. Epub 2014 May 9
15. Ghatei, M., Sharifi, I., Kuhls, K., Kanannejad, Z., Harandi, M.F., Haatam, G., Mirhendi, H. *Heterogeneity of the Internal Transcribed Spacer region in Leishmania tropica isolates from Southern Iran*. Exper Parasitol **2014** Sep;144:44-51. Epub 2014 Jun 14.
16. Kuhls, K., Cupolillo, E., Silva, S.O., Schweiynoch, C., Boité, M., Mello, M.N., Mauricio, I., Miles, M., Wirth, T., Schönian, G. *Population structure and evidence for both clonality and recombination among Brazilian strains of the subgenus Leishmania (Viannia)*. PLoS Negl Trop Dis **2013**. Oct 31;7(10):e2490. doi: 10.1371/journal.pntd.0002490.
17. Gouzelou, E., Haralambous, C., Amro, A., Mentis, A., Pratlong, F., Dedet, J.P., Volf, P., Ozenoy, S., Kuhls, K., Schönian, G., Soteriadou, K., *Multilocus microsatellite typing (MLMT) of strains from Turkey and Cyprus reveals a novel monophyletic L. donovani s.l. group*. PLoS Negl Trop Dis, **2012**. Feb; 6 (2): e1507. Epub Feb 14.
18. Subba Raju B.V., Gurumurthy, S., Kuhls, K., Bhandari, V., Negi, N.S., Ramesh, V., Schönian, G., Salotra, P., *Genetic typing reveals monomorphism between antimony sensitive and resistant Leishmania isolates from visceral leishmaniasis or Post Kala-azar leishmaniasis cases in India*. Parasitol Res. **2012** Oct;111(4):1559-68. Epub 2012 Jul 1.
19. Adaui, V., Maes, I., Huyse, T., Van den Broeck, F., Talledo, M., Kuhls, K., de Doncker, S., Maes, L., Llanos-Cuentas, A., Schönian, G., Arevalo, J., Dujardin, J.-C., *Multilocus genotyping reveals a polyphyletic pattern among naturally antimony-resistant L. braziliensis isolates from Peru*. Infect Genet Evol **2011** Dec;11(8):1873-80. doi: 10.1016/j.meegid.2011.08.008 (Aug 17, Epub)
20. Tashakori, M., Al-Jawabreh, A., Kuhls, K., Schönian, G., *Multilocus microsatellite typing shows three different genetic clusters of Leishmania major in Iran*. Microb Infec **2011**. 13(11): 937-942. Epub May 30.
21. Gelanew, T., Cruz, I., Kuhls, K., Alvar, J., Canavate, C., Hailu, A., Schönian, G., *Multilocus microsatellite typing revealed high genetic variability of Leishmania donovani strains isolated during and after a Kala Azar epidemic in Libo Kemkem District, Ethiopia*. Microbes Infect **2011**. Jun; 13(6): p. 595-601. Epub March 5.
22. Gelanew, T., Hurissa, Z., Diro, E., Kassahun, A., Kuhls, K., Schönian, G., Hailu, A., *Dissiminated cutaneous leishmaniasis resembling post-kala-azar leishmaniasis caused by Leishmania donovani in three patients co-infected with visceral leishmaniasis and human immunodeficiency virus/acquired immunodeficiency syndrome in Ethiopia*. Am J Trop Med Hyg **2011**. Jun;84(6): p. 906-912.
23. Kuhls, K., Alam, M.Z., Cupolillo, E., Ferreira, G.E.M., Mauricio, I., Oddone, R., Feliciangeli, M.D., Wirth, T., Miles, M., Schönian, G., *Comparative multilocus microsatellite typing of New World Leishmania infantum (syn. L. chagasi) reveals low heterogeneity among populations and its recent Old World origins*. PLoS Negl Trop Dis, **2011**. Jun; 5(6): e1155. Epub Jun 7.
24. Leblois, R., Kuhls, K., François, O., Schönian, G., Wirth, T., *Guns, germs and dogs: On the origin of Leishmania chagasi*. Infec Gen Evol, **2011**. Jul;11(5): p. 1091-1095. Epub Apr 12
25. Santos-Oliveira, J.R., Da-Cruz, A.M., Pires, L.H.S., Cupolillo, E., Kuhls, K., Giacoia-Gripp, C.B.W., Oliveira-Neto, M.P., *Atypical lesions as signs of cutaneous dissemination of visceral leishmaniasis in a HIV-positive patient simultaneously infected by two viscerotropic Leishmania species: a case report*. Am J Trop Med Hyg **2011**. Jul;85(1): p. 55-59.

26. Gelanew, T., Kuhls, K., Hurissa, Z., Weldegebreal, T., Hailu, W., Kassahun, A., Abebe, T., Hailu, A., Schönian, G., *Inference of population structure of Leishmania donovani strains isolated from different Ethiopian visceral leishmaniasis endemic areas*. PLoS Negl Trop Dis. **2010**. Nov 16; **4**(11): e889
27. Schönian, G., Kuhls, K., Mauricio, I., *Molecular approaches for a better understanding of the epidemiology and population genetics of Leishmania*. Parasitology, **2010**. Nov **16**: p. 1-21.
28. Gelanew T, Amogne W, Abebe T, Kuhls K, Hailu A, Schönian G., *A clinical isolate of Leishmania donovani with ITS-1 sequence polymorphism as a cause of para-kala-azar dermal leishmaniasis in an Ethiopian human immunodeficiency virus-positive patient on highly active antiretroviral therapy*. Br J Dermatol, **2010**. **163** (4): p.870-874.
29. Oddone, R., Schweynoch, C., Schonian, G., Dos Santos de Sousa, C., Cupolillo, E., Espinosa, D., Arevalo, J., Noyes, H., Mauricio, I., Kuhls, K., *Development of a multilocus microsatellite typing approach for discriminating strains of the Leishmania subgenus (L.) Vannia*. J Clin Microbiol, **2009**. **47** (9): p. 2818-25.
30. Chargui, N., Amro, A., Haouas, N., Schonian, G., Babba, H., Schmidt, S., Ravel, C., Lefebvre, M., Bastien, P, Chaker, E., Aoun, K., Zribi, M., Kuhls, K., *Population structure of Tunisian Leishmania infantum and evidence for the existence of hybrids and gene flow between genetically different populations*. Int J Parasitol, **2009**. **39**(7): p. 801-11.
31. Amro, A., Schonian, G., Al-Sharabati, M. B., Azmi, K., Nasreddin, A., Abdeen, Z., Schnur, L. F., Baneth, G., Jaffe, C. L., Kuhls, K., *Population genetics of Leishmania infantum in Israel and the Palestinian Authority through microsatellite analysis*. Microbes Infect, **2009**. **11**(4): p. 484-92.
32. Alam, M.Z., Shamsuzzaman, A. K., Kuhls, K., Schonian, G., *PCR diagnosis of visceral leishmaniasis in an endemic region, Mymensingh district, Bangladesh*. Trop Med Int Health, **2009**. **14**: p. 1-5.
33. Alam, M.Z., Kuhls, K., Schweynoch, C., Sundar, S., Rijal, S., Shamsuzzaman, A. K., Raju, B. V., Salotra, P., Dujardin, J. C., Schonian, G., *Multilocus microsatellite typing (MLMT) reveals genetic homogeneity of Leishmania donovani strains in the Indian subcontinent*. Infect Genet Evol, **2009**. **9**(1): p. 24-31.
34. Alam, M.Z., Kovalenko, D. A., Kuhls, K., Nasyrova, R. M., Ponomareva, V. I., Fatullaeva, A. A., Razakov, S. A., Schnur, L. F., Schonian, G., *Identification of the agent causing visceral leishmaniasis in Uzbeki and Tajiki foci by analysing parasite DNA extracted from patients' Giemsa-stained tissue preparations*. Parasitology, **2009**. **136**(9): p. 981-6.
35. Alam, M.Z., Haralambous, C., Kuhls, K., Gouzelou, E., Sgouras, D., Soteriadou, K., Schnur, L., Pratlong, F., Schonian, G., *The paraphyletic composition of Leishmania donovani zymodeme MON-37 revealed by multilocus microsatellite typing*. Microbes Infect, **2009**. **11**(6-7): p. 707-15.
36. Seridi, N., Amro, A., Kuhls, K., Belkaid, M., Zidane, C., Al-Jawabreh, A., Schonian, G., *Genetic polymorphism of Algerian Leishmania infantum strains revealed by multilocus microsatellite analysis*. Microbes Infect, **2008**. **10**(12-13): p. 1309-15.
37. Kuhls, K., Chicharro, C., Canavate, C., Cortes, S., Campino, L., Haralambous, C., Soteriadou, K., Pratlong, F., Dedet, J. P., Mauricio, I., Miles, M., Schaar, M., Ochsenreither, S., Radtke, O. A., Schonian, G., *Differentiation and Gene Flow among European Populations of Leishmania infantum MON-1*. PLoS Negl Trop Dis, **2008**. **2**(7): p. e261.
38. Al-Jawabreh, A., Diezmann, S., Muller, M., Wirth, T., Schnur, L. F., Strelkova, M. V., Kovalenko, D. A., Razakov, S. A., Schwenkenbecher, J., Kuhls, K., Schonian, G., *Identification of geographically distributed sub-populations of Leishmania (Leishmania) major by microsatellite analysis*. BMC Evol Biol, **2008**. **8**: p. 183.

39. Lukes, J., Mauricio, I. L., Schonian, G., Dujardin, J. C., Soteriadou, K., Dedet, J. P., Kuhls, K., Tintaya, K. W., Jirku, M., Chocholova, E., Haralambous, C., Pratlong, F., Obornik, M., Horak, A., Ayala, F. J., Miles, M. A., *Evolutionary and geographical history of the Leishmania donovani complex with a revision of current taxonomy*. Proc Natl Acad Sci U S A, **2007**. **104**(22): p. 9375-80.
40. Laurent, T., Rijal, S., Yardley, V., Croft, S., De Doncker, S., Decuypere, S., Khanal, B., Singh, R., Schonian, G., Kuhls, K., Chappuis, F., Dujardin, J. C., *Epidemiological dynamics of antimonial resistance in Leishmania donovani: genotyping reveals a polyclonal population structure among naturally-resistant clinical isolates from Nepal*. Infect Genet Evol, **2007**. **7**(2): p. 206-12.
41. Kuhls, K., Schwenkenbecher, J., Schönian, G., *Analysis of DNA microsatellite sequence variation as a useful tool for studying the epidemiology of Old World leishmaniases*. Science and Culture, **2007**. **73**(5-6): p. 120-128.
42. Kuhls, K., Keilonat, L., Ochsenreither, S., Schaer, M., Schweynoch, C., Presber, W., Schonian, G., *Multilocus microsatellite typing (MLMT) reveals genetically isolated populations between and within the main endemic regions of visceral leishmaniasis*. Microbes Infect, **2007**. **9**(3): p. 334-43.
43. Tashakori, M., Kuhls, K., Al-Jawabreh, A., Mauricio, I., Schoenian, G., Farajnia, S., Alimohammadian, M.H., *Leishmania major: genetic heterogeneity of Iranian isolates by single-strand conformation polymorphism and sequence analysis of ribosomal DNA internal transcribed spacer*. Acta Trop, **2006**. **98**(1): p. 52-8.
44. Ochsenreither, S., Kuhls, K., Schaer, M., Presber, W., Schonian, G., *Multilocus microsatellite typing as a new tool for discrimination of Leishmania infantum MON-1 strains*. J Clin Microbiol, **2006**. **44**(2): p. 495-503.
45. Botilde, Y., Laurent, T., Quispe Tintaya, W., Chicharro, C., Canavate, C., Cruz, I., Kuhls, K., Schonian, G., Dujardin, J. C., *Comparison of molecular markers for strain typing of Leishmania infantum*. Infect Genet Evol, **2006**. **6**(6): p. 440-6.
46. Kuhls, K., Mauricio, I. L., Pratlong, F., Presber, W., Schonian, G., *Analysis of ribosomal DNA internal transcribed spacer sequences of the Leishmania donovani complex*. Microbes Infect, **2005**. **7**(11-12): p. 1224-34.
47. Kuhls, K., Lieckfeldt, E., Borner, T., Gueho, E., *Molecular reidentification of human pathogenic Trichoderma isolates as Trichoderma longibrachiatum and Trichoderma citrinoviride*. Med Mycol, **1999**. **37**(1): p. 25-33.
48. Samuels, G.J., Petrini, O., Kuhls, K., Lieckfeldt, E., Kubicek, C.P., *The Hypocreah Schweinitzii complex and Trichoderma sect. Longibrachiatum*. Studies in Mycology **1998**. **41**: p. 1-54.
49. Lieckfeldt, E., Kuhls, K. & Muthumeenkshi, M., *Molecular taxonomy of Trichoderma and Gliocladium and their teleomorphs*, in *Trichoderma and Gliocladium*, G.K. Harman, C.P. Kubicek, Editors. **1998**, Taylor & Francis. UK: London. p. 35-56.
50. Turner, D., Kovacs, W., Kuhls, K., Lieckfeldt, E., Peter, B., Arisan-Atac, I., Strauss, J., Samuels, G. J., Börner, T., Kubicek, C. P., *RAPD-analysis of world-wide distribution and genetic variation of Trichoderma spp. and Hypocreah Schweinitzii belonging to Trichoderma section Longibrachiatum*. Mycological Research **1997**. **101**: p. 449-459.
51. Kuhls, K., Lieckfeldt, E., Samuels, G. J., Meyer, W., Kubicek, C. P., Börner, T., *Revision of Trichoderma sect. Longibrachiatum including related teleomorphs based on analysis of ribosomal DNA internal transcribed spacer sequences*. Mycologia, **1997**. **89**: p. 442-460.
52. Kuhls, K., Lieckfeldt, E., Samuels, G. J., Kovacs, W., Meyer, W., Petrini, O., Gams, W., Borner, T., Kubicek, C. P., *Molecular evidence that the asexual industrial fungus Trichoderma reesei is a clonal derivative of the ascomycete Hypocreah jecorina*. Proc Natl Acad Sci U S A, **1996**. **93**(15): p. 7755-60.

53. Kubicek, C.P., Bolzlbauer, U. M., Kovacs, W., Mach, R. L., Kuhls, K., Lieckfeldt, E., Borner, T., Samuels, G. J., *Cellulase formation by species of Trichoderma sect. Longibrachiatum and of Hypocreales spp. with anamorphs referable to Trichoderma sect. Longibrachiatum*. Fungal Genet Biol, **1996**. **20**(2): p. 105-14.
54. Kuhls, K., E. Lieckfeldt, T. Borner, *PCR-fingerprinting used for comparison of ex type strains of Trichoderma species deposited in different culture collections*. Microbiol Res, **1995**. **150**(4): p. 363-71.
55. Schlick, A., Kuhls, K., Meyer, W., Lieckfeldt, E., Borner, T., Messner, K., *Fingerprinting reveals gamma-ray induced mutations in fungal DNA: implications for identification of patent strains of Trichoderma harzianum*. Curr Genet, **1994**. **26**(1): p. 74-8.
56. Lieckfeldt, E., Meyer, W., Kuhls, K., Börner, T., *Characterization of Filamentous Fungi and Yeasts by DNA Fingerprinting and Random Amplified Polymorphic DNA*. Belg. Journ. Bot., **1992**. **125**(2): p. 226-233.

Kategorie: Journal articles (others)

57. Sinning, D., Köhler, K., Litzke, L.-F., Schönian, G., Kuhls, K. *Leishmania siamensis als Erreger von autochthoner kutaner Leishmaniose bei Pferden in Deutschland – eine neue Infektionskrankheit in Mitteleuropa?* Wissenschaftliche Beiträge. Technische Hochschule Wildau. **2014**
58. Feiler, U., Lieckfeldt, E.; Kuhls, K. *Einsatz der PCR-Technik in der Landwirtschaft zur Unterscheidung von phytopathogenen Pilzstämmen*. CLB-Journal (Chemie in Labor und Biotechnik), **1994**. **4**: p. 200-208.

Kategorie: Book chapters

59. Kuhls, K. & Mauricio, I. *Phylogenetic studies*. In: *Methods in Molecular Biology – Leishmaniasis* Joachim Clos, Editor **2019**. Springer, US, 1971:9-68. doi: 10.1007/978-1-4939-9210-2_2. [Buchkapitel]
60. Meyer, W., Lieckfeldt, E., Kuhls, K., Freedman, E. Z., Borner, T., Mitchell, T. G., *DNA- and PCR-fingerprinting in fungi*. In: *DNA Fingerprinting: State of the Science*. S. D. J. Pena, R. Chakraborty , J. T. Epplen, Alec J. Jeffreys , Editors **1993**. Birkhäuser Basel. Book Part III p. 311-20. [Buchkapitel]

Kategorie: Monograph

61. Kuhls, K., *Anwendung und Bewertung DNA-analytischer Methoden zur Lösung taxonomisch-phylogenetischer Fragestellungen bei filamentösen Pilzen am Beispiel der Gattung Trichoderma*. Dissertation. Humboldt-Universität zu Berlin. Mathematisch-Naturwissenschaftliche Fakultät I. Institut für Biologie (Genetik). VWF Verlag für Wissenschaft und Forschung GmbH, Berlin, **1997**.