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Pathobiology and Poultry Science
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Education and Training

2013	Habilitation	Poultry Diseases	Freie Universität Berlin
2004	Ph.D.	Veterinary Medicine	Freie Universität Berlin
2002	DVM		Freie Universität Berlin

Research and Professional Experience

Positions

- 2023 to present Associate Professor at Auburn University with a shared appointment at the Department of Pathobiology and the Department of Poultry Science
- 2017 to 2023 Assistant Professor at Auburn University with a shared appointment at the Department of Pathobiology and the Department of Poultry Science
- 2015 – 2017 Postdoctoral scholar at the School of Veterinary Medicine, University of California, Davis
- 2013 – 2015 Member of the team “Antimicrobial Resistance” at the Federal Office for Consumer Protection and Food Safety
- 2008 – 2013 Postdoctoral scholar at the Institute of Poultry Diseases, Department of Veterinary Medicine, Freie Universität Berlin
- 2007 – 2008 Postdoctoral scholar at the Poultry Diagnostic and Research Center, University of Georgia
- 2006 – 2007 Postdoctoral scholar at the Department of Poultry Science, University of Georgia

Professional Activities

- 2022 - present Chair of the Credentials Committee of the European College of Poultry Veterinary Science
- 2022 - present Chair-elect of the Enteric Diseases Committee of American Association of Avian Pathologists
- 2019 - 2022 Member of the Credentials Committee of the European College of Poultry Veterinary Science
- 2022 – present Member of the Poultry Science Association
- 2017 - present Member of the American Veterinary Medical Association
- 2014 - present Member of the Reviewers Board of Avian Diseases
- 2011 - present Diplomate of the European College of Poultry Veterinary Science
- 2008 - present Member of the American Association of Avian Pathologists
- 2004 - present Member of the World Veterinary Poultry Association
- 2004 – 2017 Member of the German Veterinary Society

Honors and Awards

- 2021 Bayer-Snoeyenbos New Investigator Award (American Association of Avian Pathologists)
- 2014 Karl-Fritzsche Award of the German Veterinary Society (DVG) for excellent research on infectious diseases of poultry

Grants Received

- 2023 – 2028: PI, USDA-ARS - Systems Biology Approaches to Develop Medical Countermeasures to Detect, Prevent, and Control Poultry Production Viral Diseases.
- 2023 – 2025: Co-I, USDA-NIFA - Developing Wolbachia Biocontrol for Litter Beetle Eradication.
- 2023 – 2025: Co-I, USDA-NIFA - Determining Pre-Harvest Strategies to Control Salmonella in Poultry to Secure the Safety of the Food Supply System and to Provide Best Management Practices to Poultry Producers.
- 2023: PI, Zoetis - HVT-IBD China Bursal Disease Short Term Field Efficacy in Boiler Birds – Subcutaneous at Hatch.
- 2022: PI, Pacific GeneTech - Comparing protection by a recombinant inactivated coccidia vaccine with anticoccidial feed additive.
- 2021 –2024: Co-I, USDA-ARS - Reducing the Impact of Subclinical Enteric Infections on Performance and Gastrointestinal Function of Broilers.
- 2021 –2026: PI, USDA-ARS - Intervention Strategies to Predict, Prevent, and Control Emerging Strains of Virulent Newcastle Disease Viruses.
- 2020 –2023: Co-I, USDA-ARS - Salmonella testing with poultry.
- 2020 –2022: PI, Purina Animal Nutrition LLC - Testing products for the prevention of Necrotic Enteritis in broiler chickens.
- 2018 –2019: Co-I, Merial Limited - Novozymes/AU hatcher probiotic control trial.
- 2021: PI, Alabama Agricultural Experimental Station - Egg incubators for the Poultry Health Building
- 2020 –2022: PI, Alabama Agricultural Experimental Station - Identifying Invertebrate Vectors of Cecal Worms in and around Broiler Breeder Flocks.
- 2018 –2020: PI. Animal Health & Disease Research Funds - Development and application of a multi locus sequence typing (MLST) scheme for *Eimeria maxima* and development of a precocious *E. maxima* strain.
- 2019 –2021: PI, Intramural Grants Program, Interdisciplinary Team Research Grant - Chicken gut microbiota dynamics after infection with parasitic coccidia: Influence of dose and species composition.
- 2019 –2020: PI, Alabama Agricultural Experimental Station - Interaction between vaccinations against coccidia and salmonella.

Publications

Peer-Reviewed Publications

1. Barua S, Bailey M., Zhong K, Iduu Nneka, Dormitorio T, Macklin KS, Bourassa D, Price S, Hauck R, Krehling JT, Kitchens S, Kyriakis C, Buhr RH, Wang C (2023): Research Note: Role of darkling beetles (*Alphitobius diaperinus*) and litter in spreading and maintaining *Salmonella Enteritidis* and *Campylobacter jejuni* in chicken flocks. *Poultry Science*: accepted.

2. Alvarez Narvaez S, Harrell TL, Oluwayinka O, Sellers HS, Khalid Z, Hauck R, Chowdhury EU, Conrad SJ (2023): Optimizing the conditions for whole genome sequencing of avian reoviruses. *Viruses*: accepted.
3. Terra MT, Macklin KS, Burleson M, Jeon A, Beckmann JF, Hauck, R (2023): Mapping the poultry insectome in and around broiler breeder pullet farms identifies new potential Dipteran vectors of *Histomonas meleagridis*. *Parasites & Vectors*: accepted.
4. Pietruska A, Bortoluzzi C, Hauck R (2023): A meta-analysis of the effect of *Eimeria* and/or *Clostridium perfringens* infection on the microbiota of broiler chickens. *Poultry Science*: accepted.
5. Munoz LR, Paul MA, Bailey MA, Krehling JT, Hauck R, Pacheco WJ, Chasteen KS, Talorico AA, Escobar C, Pietruska A, Bourassa DV, Macklin KS (2023): Effect of yeast cell wall on performance, pathogen colonization, innate immune response, histomorphology, and slaughter characteristics of broiler chickens inoculated with *Campylobacter jejuni* at day 21. *Poultry Science*: accepted.
6. Riggs MR, Hauck R, Baker-Cook BI, Osborne RC, Pal AJ, Bethonico Terra MT, Sims G, Urruita A, Orellana-Galindo L, Reina M, Bourassa DV (2022): Meat quality of broiler chickens processed using electrical and controlled atmosphere stunning systems. *Poultry Science* 102: 102422.
7. Carrisosa M, Terra-Long MT, Cline J, Macklin KS, Dormitorio T, Wang C, Hauck R (2022): Multi-locus sequence typing of *Eimeria maxima* in commercial broiler flocks. *Avian Dis* 66: 389-395.
8. Hauck R, Eckert J, Hunter C (2022): Meta-analysis of the use of *Eimeria* lesion scores and oocyst counts in floor pen studies. *Avian Dis* 66: 381-388.
9. Terra MTB, Pietruska A, McCrea BA, Hauck R (2022): Infection with *Ascaridia galli* does not significantly alter intestinal microbiota and is cleared after changes in the expression of cytokines. *Avian Dis* 66: 186-192.
10. Nguyen V, Mete A, Armien A, da Silva AP, Montine P, Corsiglia C, Sadagopa Ramanujam VM, Anderson KE, Hauck R, Gallardo RA (2022): Porphyrin accumulation and biliary lithiasis causing diffusely black livers in broiler chickens. *Avian Dis* 66: 225-229.
11. Smith R, Hauck R, Macklin KS, Price S, Dormitorio T, Wang C (2022): A review of the lesser mealworm beetle (*Alphitobius diaperinus*) as a reservoir for zoonotic bacterial pathogens and antimicrobial resistance. *World's Poultry Science Journal* 78: 197-214
12. Hauck R, Pacheco WJ (2021): Detection of coccidia oocysts in litter and feces of broilers in a floor pen trial. *Journal of Parasitology* 107: 878-881.
13. Pietruska A, Hauck R, McCrea BA, Stewart S (2021): Analysis of information for backyard flock owners provided by extension websites. *Avian Diseases* 65: 540–545.
14. Beckmann JF, Dormitorio T, Oladipupo SO, Bethonico Terra MT, Lawrence K, Macklin KS, Hauck R (2021): *Heterakis gallinarum* and *Histomonas meleagridis* DNA persists in chicken houses years after depopulation. *Veterinary Parasitology* 2021 Oct; 298:109536.
15. da Silva AP, Hauck R, Nociti SRC, Kern C, Shivaprasad HL, Zhou H, Gallardo RA (2021): Molecular biology and pathological process of an infectious bronchitis virus with enteric tropism in commercial broilers. *Viruses* 13: 1477.
16. Carrisosa M, Jin S, McCrea BA, Macklin KS, Dormitorio T, Hauck R (2021): Prevalence of select intestinal parasites in Alabama backyard poultry flocks. *Animals*: 11: 939.
17. Bethonico Terra MT, Pacheco WJ, Harrison M, McCrea BA, Hauck R (2021): A survey of coccidia and nematodes in pastured poultry in the state of Georgia. *Avian Dis* 65: 250-256.

18. da Silva AP, Stoute S, Hauck R, Shivaprasad HL, Jerry C (2021): A Case Report of Avian Malaria (*Plasmodium* spp.) in a Small Flock of Pigeons (*Columba livia*). *Avian Dis*: accepted.
19. Eckert J, Carrisosa M, Hauck R (2021): Network meta-analysis comparing the effectiveness of anticoccidial drugs and anticoccidial vaccination in broiler chickens. *Vet Parasitol* 2021 Mar; 291:109387.
20. Munoz Romero L, Pacheco WJ, Hauck R, Macklin KS (2021): Evaluation of commercially manufactured animal feeds to determine presence of *Salmonella*, *Escherichia coli* and *Clostridium perfringens*. *J Appl Poult Sci* 30: 100142.
21. Ovi FK, Morey A, Hauck R, Grueber J, Pacheco WJ (2021): Effects of pre-pelleting whole corn inclusion on feed particle size, pellet quality, growth performance, carcass yield, and digestive organ development of broilers between 14 to 42 day of age. *J Appl Poult Sci* 30: 100113.
22. Chowdhury E, Roberts J, Walz H, Hauck R, Morey A, Morgan S, Joiner K, Cattley R, Sengupta S, Wilson F, Hoerr F (2021): Hepatic peri-sinusoidal myofibroblast proliferation and systemic inflammatory response precedes sep/tox hepatitis in broilers. *Avian Dis* 65:10-17.
23. Rodning S, Hauck R, Walz P H, Macklin K S, Norton R A (2020): The role of the veterinary profession in the COVID-19 pandemic. *Journal Am Vet Ass* 256: 1318-1319. [non-peer reviewed letter to the editor]
24. Hauck R, Stoute S, Sentíes-Cué C G, Guy J S, Shivaprasad H L (2020): A Retrospective Study of Transmissible Viral Proventriculitis in Broiler Chickens in California: 2000-2018. *Avian Diseases* 64: 525-531.
25. Hauck R, Mays J, Dunn J, Shivaprasad H L (2020): Two Cases of Marek's Disease in Backyard Turkeys. *Avian Diseases* 64: 347-351.
26. Hamilton M, Ma X, McCrea B A, Carrisosa M, Macklin K S, Zhang C, Wang X, Hauck R (2020): Influence of *Eimeria* spp. infection on chicken jejunal microbiota and the efficacy of two alternative products against the infection. *Avian Dis* 64: 123-129.
27. Hauck R, Cray C, França M (2019): Spotlight on avian pathology: aspergillosis. *Avian Pathol* 49: 115-118.
28. Hauck R, Carrisosa M, McCrea B A, Dormitorio T, Macklin K S (2019): Evaluation of next generation amplicon sequencing to identify *Eimeria* spp. of chickens. *Avian Dis*: 63: 577-583.
29. Egaña-Labrin S, Hauck R, Figueroa A, Stoute S, Shivaprasad H L, Crispó M, Corsiglia C, Zhou H, Kern C, Crossley B, Gallardo R A (2019): Genotypic characterization of emerging avian reovirus molecular variants in California. *Sci Rep* 9: 9351.
30. Crispó M, Stoute S, Hauck R, Egaña-Labrin S, Sentíes-Cué C G, Cooper G L, Bickford A A, Corsiglia C, Shivaprasad H L, Crossley B, Gallardo R A (2019): Partial Molecular Characterization and Pathogenicity Study of an Avian Reovirus Causing Tenosynovitis in Commercial Broilers. *Avian Dis* 63: 452-460.
31. Hauck R, Stoute S, Savaris T, Shivaprasad H L (2019): Typhlohepatitis and amyloidosis associated with high mortality in Chukar partridges (*Alectoris chukar*). *Avian Dis* 63: 446-451.
32. da Silva A P, Hauck R, Kern C, Wang Y, Zhou H, Gallardo RA (2019): Effects of Chicken MHC Haplotype on Resistance to Distantly-Related Infectious Bronchitis Viruses. *Avian Dis* 63: 310-317.

33. Hauck R, Stoute S, Chin R P, Sentíes-Cué C G, Shivaprasad H L (2018): Retrospective study of histomoniasis (blackhead) in California turkey flocks, 2000-2014. *Avian Dis* 62: 94-100.
34. Derksen T, Lampron R, Hauck R, Pitesky M, Gallardo R A (2018): Biosecurity assessment and seroprevalence of respiratory diseases in backyard poultry flocks located close and far from commercial premises. *Avian Dis* 62: 1-5.
35. Hauck R (2017): Interactions between parasites and the bacterial microbiota of chickens. *Avian Dis* 61: 428-436.
36. Da Silva A P, Hauck R, Zhou H, Gallardo R A (2017): Understanding immune resistance to Infectious Bronchitis using major histocompatibility complex chicken lines. *Avian Dis* 61: 358-365.
37. Figueroa A, Hauck R, Saldias-Rodriguez J, Gallardo RA (2017): Combination of Quaternary ammonia and glutaraldehyde as a disinfectant against enveloped and non-enveloped viruses. *J Appl Poult Sci* 26: 491-497.
38. Hauck R, Sentíes-Cué G, Wang Y, Kern C, Shivaprasad H L, Zhou H, Gallardo R A (2017): Evolution of Avian Encephalomyelitis Virus during embryo-adaptation. *Vet Microbiol* 204: 1-7.
39. Abdnabi A, Hauck R, Corbeil L B, Gallardo R A (2017): The effect of diatomaceous earth in live attenuated infectious bronchitis vaccine, immune responses and protection against challenge. *Poult Sci* 96: 2623-2629.
40. Hauck R, Crossley B, Rejmanek D, Zhou H, Gallardo R A (2017): Persistence of high and low pathogenic avian influenza viruses in footbaths and poultry manure. *Avian Dis* 61: 64-69.
41. Abdnabi A, Hauck R, Davis A, Hildebrand M, Corbeil L B, Gallardo R A (2017): Diatoms and diatomaceous earth as novel poultry vaccine adjuvants. *Poult Sci* 96: 288-294.
42. Yugo D M, Hauck R, Shivaprasad H L, Meng X-J (2016): Hepatitis virus infections in poultry. *Avian Dis* 60: 576-588.
43. Hauck R, Gallardo R A, Woolcock P, Shivaprasad H L (2016): A coronavirus associated with runting stunting syndrome in broiler chickens. *Avian Dis* 60: 528-534.
44. Gallardo R A, Aleuy O A, Pitesky M, Sentíes-Cué G, Abdnabi A, Woolcock P, Hauck R, Toro H (2016): Variability assessment of California infectious bronchitis virus variants. *Avian Dis* 60: 424 – 429.
45. Voget M, Lorenz D, Lieber-Tenorio E, Hauck R, Meyer M, Cieslicki M (2015): Is transmission electron microscopy (TEM) a promising approach for qualitative and quantitative investigations of polymyxin B and miconazole interactions with cellular and subcellular structures of *Staphylococcus pseudintermedius*, *Escherichia coli*, *Pseudomonas aeruginosa* and *Malassezia pachydermatis*? *Vet Microbiol* 181: 261–70.
46. Zischka M, Künne C T, Blom J, Wobser D, Sakunç T, Schmidt-Hohagen K, Dabrowski P W, Nitsche A, Hübner J, Hain T, Chakraborty T, Linke B, Goesmann A, Voget S, Daniel R, Schomburg D, Hauck R, Hafez H M, Tielen P, Jahn D, Solheim M, Sadowy E, Larsen J, Jensen L B, Ruiz-Garbajosa P, Pérez D Q, Mikalsen T, Bender J, Steglich M, Nübel U, Witte W, Werner G (2015): Comprehensive molecular, genomic and phenotypic analysis of a major clone of *Enterococcus faecalis* MLST ST40. *BMC Genomics* 1: 175.
47. Wallmann J, Hauck R, Schwarz C, Klee S, Kaspar H, Heberer T (2015): Antibiotika: Gesetzgebung und Datenerfassung in Deutschland [Antibiotics: legislation and collection of data in Germany]. *J Verbrauch Lebensm*: DOI 10.1007/s00003-015-0954-8. (not peer-reviewed)

48. Noiva R, Guy J S, Hauck R, Shivaprasad H L (2015): Runting stunting syndrome associated with transmissible viral proventriculitis in broiler chickens. *Avian Dis* 59: 384-387.
49. Hauck R, Chin R P, Shivaprasad H L (2015): Retrospective study on the isolation of *Ornithobacterium rhinotracheale* from chickens and turkeys in Central California: 294 cases (2000 – 2012). *Avian Dis* 59: 130-137.
50. Popp C, Hauck R, Vahlenkamp T W, Lüschor D, Kershaw O, Hoferer M, Hafez H M (2014): Liver pathology associated with increased mortality in turkey breeder and meat turkey flocks. *Avian Dis* 58: 474-481.
51. Lotfi A, Hauck R, Olias P, Hafez H M (2014): Pathogenesis of histomonosis in experimentally infected specific pathogen free (SPF) layer type chickens and SPF meat type chickens. *Avian Dis* 58: 427-432.
52. Hauck R, Wallmann J, Heberer T (2014): Antibakterielle Resistzenzen in Deutschland: Lage, Ursachen und Gegenmaßnahmen [Antibacterial resistances in Germany: situation, causes and counter measures]. *J Verbrauch Lebensm* 9: 71-79. (not peer-reviewed)
53. Hauck R, Römer A, Reimer I, Bender A, Haas C, Heberer T, Wallmann J (2014): Analysis of the distribution of veterinary antimicrobial products to veterinarians in Germany in 2011 and 2012. *Berl Münch Tierärztl Wschr* 127: 359-365.
54. Hauck R, Chin R P, Sentíes-Cué G, Charlton B, Shivaprasad H L (2014): Retrospective study of Turkey Viral Hepatitis in California turkey flocks, 2000-2012. *Avian Dis* 58: 205-210.
55. Taghavian O, Spiegel H, Hauck R, Hafez H M, Fischer R, Schillberg S (2013): Protective Oral Vaccination against Infectious bursal disease virus Using the Major Viral Antigenic Protein VP2 Produced in *Pichia pastoris*. *PLoS One* 8: e83210.
56. Hauck R, Hafez H M (2013): Experimental infections with the protozoan parasite *Histomonas meleagrididis*: a review. *Parasitol Res* 112: 19-34.
57. Schoneville E, Nesse L L, Hauck R, Windhorst D, Hafez H M, Vestby L K (2012): Biofilm building capacity of *Salmonella enterica* strains from the poultry farm environment. *FEMS Immunol Med Microbiol* 65: 360–365.
58. Popp C, Hauck R, Gad W, Hafez H M (2012): Type C botulism in a commercial turkey farm: A case report. *Avian Dis* 56: 760-763.
59. Popp C, Hauck R, Blazey B, Hänel A, Hafez H M (2012): An unusual outbreak of histomonosis in a commercial turkey flock. *Berl Münch Tierärztl Wschr* 125: 153–158.
60. Numee S, Hauck R, Hafez H M (2012): Influence of different storage media, temperatures and time duration on susceptibility of *Ornithobacterium rhinotracheale*. *Pak Vet J* 32: 438–442.
61. Numee S, Hauck R, Hafez H M (2012): Detection and typing of *Ornithobacterium rhinotracheale* (ORT) from German poultry flocks. *Avian Dis* 56: 654-658.
62. Hauck R, Hafez H M (2012): Pigeons are not susceptible to intracloacal infection with *Histomonas meleagrididis*. *Pak Vet* 32: 589-592.
63. Hauck R, Hafez H M (2012): Description of *Eimeria pavonina* (Coccidia) of Peafowl in Germany. *Avian Dis* 56: 238–242.
64. Gad W, Hauck R, Krueger M, Hafez H M (2012): In vitro determination of antibiotic sensitivities of *Clostridium perfringens* isolates from layer flocks in Germany. *Arch Geflugelkd* 76: 234-238
65. Popp C, Hauck R, Balczulat S, Hafez H M (2011): Recurring histomonosis on an organic farm. *Avian Dis* 55: 328–330.

66. Gad W, Hauck R, Krueger M, Hafez H M (2011): Prevalence of Clostridium perfringens in commercial turkey and layer flocks. *Arch Geflugelkd* 75: 74–79.
67. Gad W, Hauck R, Krueger M, Hafez H M (2011): Determination of antibiotic sensitivities of Clostridium perfringens isolates from commercial turkeys in Germany in vitro. *Arch Geflugelkd* 75: 80–83.
68. Aka J, Hauck R, Blankenstein P, Balczulat S, Hafez H M (2011): Wiederauftreten von Histomonose auf einer Putenelterntierfarm [Reoccurrence of histomonosis in turkey breeder farm]. *Berl Münch Tierärztl Wschr* 124: 2–7.
69. Olias P, Hauck R, Windhaus H, van der Grinten E, Gruber A D, Hafez H M (2010): Articular aspergillosis of hip joints in turkeys. *Avian Dis* 54: 1098–1101.
70. Hauck R, Lotfi A, Hafez H M (2010): Factors influencing the activity of tiamulin against *Histomonas meleagridis* in vitro. *Avian Diseases* 54: 936–938.
71. Hauck R, Hafez H M (2010): Systematic position of *Histomonas meleagridis* based on four protein genes. *J Parasitol* 96: 396–400.
72. Hauck R, Fuller A L, Greif G, McDougald L R (2010): Evaluation of nifurtimox for potential use in control of histomoniasis in turkeys. *Avian Dis* 54: 28–32.
73. Hauck R, Balczulat S, Hafez H M (2010): Detection of DNA of *Histomonas meleagridis* and *Tetratrichomonas gallinarum* in German poultry flocks between 2004 and 2008. *Avian Dis* 54: 1021–1025.
74. Hauck R, Armstrong P L, McDougald L R (2010): *Histomonas meleagridis* (Protozoa: Trichomonadidae): Analysis of growth requirements in vitro. *J Parasitol* 96: 1–7.
75. Hafez H M, Hauck R, Gad W, De Gussem K, Lotfi A (2010): Pilot study on the efficacy of paromomycin as a histomonostatic feed additive in turkey pouls experimentally infected with *Histomonas meleagridis*. *Arch Anim Nutr* 64: 77–84.
76. Dlugolenski D, Hauck R, Hogan R J, Michel F, Mundt E (2010): Production of H5-Specific Monoclonal Antibodies and the Development of a Competitive Enzyme-Linked Immunosorbent Assay for Detection of H5 Antibodies in Multiple Species. *Avian Dis* 54: 644–649.
77. Lierz M, Hafez H M, Honkavuori K S, Gruber A D, Olias P, Abdelwhab E M, Kohls A, Lipkin W I, Briese T, Hauck R (2009): Anatomical distribution of avian bornavirus in parrots, its occurrence in clinically healthy birds and ABV-antibody detection. *Avian Pathol* 38: 491–496.
78. Hauck R, Prusas C, Hafez H M, Lüschow D (2009): Serologic response against fowl poxvirus and reticuloendotheliosis virus after experimental and natural infections of chickens with fowl poxvirus. *Avian Dis* 53: 205–210.
79. Hauck R, Prusas C, Hafez H M, Lüschow D (2009): Quantitative PCR as a tool to determine the reticuloendotheliosis virus-proviral load of fowl poxvirus. *Avian Dis* 53: 211–215.
80. Hauck R, Hafez H M (2009): Partial sequence of the beta-tubulin of *Histomonas meleagridis* and the activity of benzimidazoles against *H. meleagridis* in vitro. *Parasitol Res* 104: 1183–1189.
81. Hauck R, Hafez H M (2007): Effect of coated plant extracts on *Histomonas meleagridis* and growth of bacteria in vitro. *Avian Dis* 51: 880–883.
82. Hauck R, Lüschow D, Hafez H M (2006): Detection of *Histomonas meleagridis* DNA in different organs after natural and experimental infections of meat turkeys. *Avian Dis* 50: 35–38.

83. Hafez H M, Hauck R (2006): Efficacy of a herbal product against *Histomonas meleagridis* after experimental infection of turkey poult. *Arch Anim Nutr* 60: 436–442.
84. Hafez H M, Hauck R, Lüschow D, McDougald L (2005): Comparison of the specificity and sensitivity of PCR, nested PCR, and real-time PCR for the diagnosis of histomoniasis. *Avian Dis* 49: 366–370.

Book chapters and book

1. Hauck R (2023): Avian Encephalomyelitis. <https://www.merckvetmanual.com/poultry/avian-encephalomyelitis/avian-encephalomyelitis>
2. Hauck R (2023): Turkey Viral Hepatitis. <https://www.merckvetmanual.com/poultry/turkey-viral-hepatitis>
3. Hafez H M, Hauck R (2022): Zoonoses transmitted by poultry: Risks related to poultry rearing and eating poultry products. In: *Zoonoses - Infections Affecting Humans and Animals*, 2nd ed. Sing A (Ed). Springer Cham. Print ISBN 978-3-030-85877-3, online ISBN978-3-030-85877-3, DOI https://doi.org/10.1007/978-3-030-85877-3_4-1.
4. Hafez H M, Hauck R (2021): Histomoniasis (Blackhead Disease). In: *Poultry Health – A Guide for Professionals*. Barrow P, Venugopal N, Baignent S, Atterbury R, Clark M (eds). CABI, Oxfordshire, UK. pp. 243-248.
5. Hauck R, Hafez H M (2020): Mikrobiologie des Geflügels. In: *Mikrobiologie der Lebensmittel Fleisch-Fisch- Feinkost*. 2nd edition. Strahlendorf J, Weber H (eds). Behr's Verlag, Hamburg, Germany. ISBN: 978-3-95468-673-5. pp. 621-737.
6. Macklin K S, Hauck R (2019): Helminthiasis in Poultry. Merck Veterinary Manual. <https://www.merckvetmanual.com/poultry/helminthiasis/helminthiasis-in-poultry>
7. Hauck R, Bielke L, Yu Z (2019): The interaction between gut microbiota and pathogens in poultry. In: *Improving Gut Function in Poultry*. Ricke S (ed). Burleigh Dodds, Cambridge, UK. 43 pages.
8. Hauck R (2017): Histomoniasis. In: *Diagnosis of Major Poultry Diseases*. Saif Y M, Toro H (eds). Servet, Zaragoza, Spain. ISBN: 978-84-17225-05-6. pp. 96-99.
9. Hauck R (2017): Coccidiosis. In: *Diagnosis of Major Poultry Diseases*. Saif Y M, Toro H (eds). Servet, Zaragoza, Spain. ISBN: 978-84-17225-05-6. pp. 93-95.
10. Hafez H M, Hauck R (2016): Main diseases in poultry farming – Bacterial infections. Servet Zaragoza , Spain. ISBN: 978-84-16818-39-6.
11. Hafez H M, Hauck R (2015): Zoonoses with Public Health Relevance in Poultry. In: *Zoonoses - Infections Affecting Humans and Animals*. Sing A (Ed). Springer Netherlands. ISBN 978-94-017-9456-5 (Print) 978-94-017-9457-2 (Online). pp. 103-123.
12. Hauck R (2014): Vacunación en enfermedades parasitarias. In: *Vacunación en avicultura*. Servet, Zaragoza, Spain. ISBN: 978-84-942976-0-1. pp. 151-176. (English version: Vaccination in Poultry, ISBN: 978-84-942-9765-6; French version: La vaccination en aviculture, ISBN: 978-84-942976-0-1)
13. Hafez H M, Hauck R (2009): Reticuloendoteliose. In: *Patologia Aviária*, 1th ed. Revolloedo, L. and A. J. Piantino (eds). Ferreira Manole Ltda., Barueri, Brazil. ISBN 978-85-204-2058-4. pp. 296–299.