

Prof. i.R. Dr. Dr. habil. Georg Jakob Erhardt

Wissenschaftliche Veröffentlichungen

1. Senft, B., Meyer, F., Erhardt, G. (1980): Untersuchungen über Zusammenhänge zwischen Lactoferrin, Lysozym, β -Lactoglobulintypen und Sekretionsstörungen des Euters. BMTW **93**, 27-29
2. Erhardt, G., Senft, B., Altland, F. (1980): Darstellung des Lactoferrins und anderer basischer Milchproteine des Rindes durch PAG-Gradientenelektrophorese. Elektrophorese Forum **80**, 2, 374-380
3. Senft, B., Meyer, F., Erhardt, G. (1980): Genetic aspects of the bacteriostatic acting whey proteins lactoferrin and lysozyme. Proc.: Conference on resistance factors and genetic aspects of mastitis control **1**, 340-357, Jablonna, Polen
4. Senft, B., Meyer, F., Erhardt, G. (1980): Lysozym ein brauchbarer Resistenzparameter in der Rinderzucht. Tierzüchter **4**, 132-134
5. Erhardt, G., Meyer, F., Senft, B. (1981): Growth inhibition of *Staphylococcus aureus* after experimental infection of the udder by high and low concentrations of lactoferrin and lysozyme. Acta Microbiol. Pol. **30**, 239-246
6. Meyer, F., Erhardt, G., Senft, B. (1981): Umweltbedingte und genetische Aspekte des Lysozyms in der Kuhmilch. Züchtungskunde **53**, 17-27
7. Senft, B., Wilhelm, H., Erhardt, G., Meyer, F. (1981): Reaktion der Abwehrmechanismen in der Milchdrüse von Kühen nach künstlicher Infektion. Proceedings of IV. International Symposium on Mastitis Control, **1**, 358-374, Bydgoszcz/Polen
8. Erhardt, G. (1981): Zusammenhänge zwischen Zitrat und Lactoferrin in der Milch laktierender und nicht laktierender Kühe sowie nach experimenteller Infektion der Milchdrüse mit *Staphylococcus aureus*. Gießener Schriftenreihe Tierzucht und Haustiergenetik, Band, 44, Verlag Paul Parey, Hamburg und Berlin
9. Erhardt, G., Senft, B. (1982): Peripartale, laktationsbedingte und nach experimenteller Infektion der Milchdrüse des Rindes auftretende Veränderungen im Citratgehalt der Milch sowie Zusammenhänge mit Milch Inhaltsstoffen. Milchwissenschaft **37**, 20-24
10. Erhardt, G., Meyer, F., Senft, B. (1982): Umweltbedingte und genetische Aspekte der Mastitits. Ein Beitrag zu Fragen der Mastitisbekämpfung unter besonderer Berücksichtigung der Immunprophylaxe und der Züchtung auf Mastitisresistenz. Züchtungskunde **54**, 86-105

11. Erhardt, G., Senft, B. (1982): Veränderungen in der bakteriziden Aktivität des Lactoferrins während der Laktation sowie nach experimenteller Infektion der Milchdrüse mit *Staphylococcus aureus*. Zentralblatt Vet. Med. A, **29**, 405-419
12. Meyer, F., Erhardt, G., Senft, B. (1983): Umweltbedingte und genetische Aspekte der Lysozymkonzentration im Blutserum von Schweinen. Züchtungskunde **55**, 114-121
13. Erhardt, G., Senft, B., Altland, K. (1983): Demonstration of cationic proteins in milk and polymorphonuclear granulocytes by polyacrylamidgel (PAG) gradient electrophoresis. Milchwissenschaft **38**, 406-409
14. Senft, G., Erhardt, G., Meyer, F. (1983): Möglichkeiten der Mastitisbekämpfung. Zbornik Biotehniške fakultete Univerze Edvarda Kardelja v Ljubljani. Suplem. **8**, 165-172
15. Senft, B., Meyer, F., Erhardt, G. (1984): Die Bedeutung der Lymphozytenantigene für die Mastitisbekämpfung. Milchwissenschaft **39**, 25-26
16. Elliot, J.I., Senft, B., Erhardt, G., Fraser, D. (1984): Isolation of lactoferrin and its concentration in sow's colostrum and milk during a 21-day lactation. J. Anim. Sci. **59**, 1080-1084
17. Meyer, F., Cwik, S., Erhardt, G., Schmid, D.O., Senft, B. (1984): Zum Nachweis von Lymphozytenantigenen des BoLA-Systems bei Rindern mit Sekretionsstörungen der Milchdrüse. Züchtungskunde **56**, 108-114
18. Erhardt, G., Senft, B. (1985): Separation of sheep transferrin variants by PAG-electrophoresis and PAG-electrofocusing. Anim. Blood Groups Biochem. Gen. **16**, Suppl. 1, 47-48
19. Seibert, B., Erhardt, G., Senft, B. (1985): Procedure for simultaneous phenotyping of genetic variants in cow's milk by isoelectric focusing. Anim. Blood Groups Biochem. Gen. **16**, 183-191
20. Erhardt, G. (1986): Transferrin variants in sheep: Separation and characterization by polyacrylamide gel electrophoresis and isoelectric focusing. Anim. Genet. **17**, 343-352
21. Erhardt, G. (1986): Darstellung von genetisch bedingten Varianten des Transferrins bei Schafen durch ultradünnschicht-isoelektrische Fokussierung. Elektrophorese Forum **86**, **8**, 184-189
22. Seibert, B., Erhardt, G., Senft, B. (1987): Detection of a new κ -casein allele in cow's milk. Anim. Genet. **18**, 269-272
23. Erhardt, G., Senft, B. (1987): Protein polymorphisms in porcine milk. Anim. Genet. **18**, 56-57

24. Erhardt, G. (1987): Kostenminimierung beim Einsatz der isoelektrischen Fokussierung in genetischen Studien zur Charakterisierung von Rinderrassen. Ergebnisse der fünfjährigen wissenschaftlichen Partnerschaft, Justus-Liebig-Universität Gießen/BR Deutschland, Agrarwissenschaftliche Universität Gödöllő/VR Ungarn, Hrg.: F. Kuhlmann, J. Antal, Gießen
25. Erhardt, G. (1987): Darstellung von genetisch bedingten Varianten des Hämoglobins und der Carboanhydrase bei Schaf, Rind und Pferd durch ultradünnschicht-iselektrische Fokussierung. *Elektrophorese Forum* **87**, **9**, 315-320
26. Meyer, F., Erhardt, G., Senft, B. (1988): Zusammenhänge zwischen Parametern des Abwehrsystems, Sekretionsstörungen und der Milchleistung bei Rindern. *Dtsch. tierärztl. Wschr.* **95**, 137-192
27. Senft, B., Erhardt, G., Bährecke, G., Baginski, M. (1988): Der Einfluß von Flavomycin auf die Milchleistung von Milchkühen. *Kraftfutter* **71**, 1-4
28. Erhardt, G., Brem, G. (1989): Genetische Charakterisierung von experimentell erstellten Rinderchimären. *J. Anim. Breed. Genet.* **106**, 67-76
29. Meyer, F., Gloger-Höck, S., Cwik, S., Erhardt, G., Schmid, D.O., Senft, B. (1989): Bovine Lymphozyten-Antigene (BoLA) und ihre Beziehungen zur Eutergesundheit und Leistung. *Züchtungskunde* **61**, 28-40
30. Erhardt, G. (1989a): Isolierung und Charakterisierung von Caseinfraktionen sowie deren genetische Varianten in Schweinemilch. *Milchwissenschaft* **44**, 17-20
31. Erhardt, G. (1989b): Isolierung und Charakterisierung der Molkenproteine sowie deren genetische Varianten in Schweinemilch. *Milchwissenschaft* **44**, 145-149
32. Erhardt, G. (1989c): Evidence for a third allele at the β -lactoglobulin (β -Lg) locus of sheep milk and its occurrence in different breeds. *Anim. Genet.* **20**, 197-204
33. Erhardt, G. (1989d): κ -Kaseine in Rindermilch - Nachweis eines weiteren Allels (κ -Kn^F) in verschiedenen Rinderrassen. *J. Anim. Breed. Genet.* **106**, 225-231
34. Erhardt, G., Godovac-Zimmermann, J., Conti, A. (1989): Isolation and complete primary sequence of a new ovine wild-type β -lactoglobulin C. *Biol. Chem. Hoppe-Seyler* **370**, 757-762
35. Meyer, F., Erhardt, G., Failing, K., Senft, B. (1990a): Untersuchungen über Zusammenhänge zwischen Milchleistung, Eutergesundheit, Milchprotein- und Blutproteinpolymorphismen bei Rindern. *Züchtungskunde* **62**, 3-14

36. Meyer, F., Erhardt, G., Failing, K., Senft, B. (1990b): Untersuchungen über Zusammenhänge zwischen Milchproteinpolymorphismen und Milchinhaltsstoffen bei Rindern. *Züchtungskunde* **62**, 243-253
37. Wenzlaff, O., Erhardt, G. (1990): Einfluß parenteraler Eisengaben auf Meßgrößen des roten Blutbildes und auf die Gewichtsentwicklung bei Schaflämmern unterschiedlicher Rassen. *Berl. Münch. Tierärztl. Wschr.* **103**, 239-244
38. Presnell, B., Conti, A., Erhardt, G., Krause, I., Godovac-Zimmermann, J. (1990): A rapid microbore HPLC method for determination of primary structure of β -lactoglobulin genetic variants. *J. Biochem. Biophys. Methods* **20**, 325-333
39. Erhardt, G., Eggen, A. (1990): Untersuchungsmöglichkeiten der Milchproteine mittels Protein- und DNS-Analyse und deren Bedeutung bei züchterischen Fragestellungen. *Landwirtschaft Schweiz* **3**, 181-186
40. Laloux, J., Erhardt, G. (1990): Les variants génétiques des lactoprotéines dans les races bovines belges. *Réflexions sur le taux protéique. Landbouwtijdschrift-Revue de l'Agriculture* **43**, 781-794
41. Erhardt, G., Senft, B. (1991): Nutzungsmöglichkeiten der genetisch bedingten Varianten der Rindermilch im Rahmen der Milchleistungsprüfung. „Performance recording of animals: State of the art, 1990“ Eds: P. Gaillon, Y. Chabert, Pudoc, Wageningen 1991, 20-22
42. Schlieben, S., Erhardt, G., Senft, B. (1991): Genotyping of bovine kappa-casein (κ -CN^A, κ -CN^B, κ -CN^C, κ -CN^E) following DNA sequence amplification and direct sequencing of κ -CN^E PCR-product. *Anim. Genet.* **22**, 333-342
43. Erhardt, G. (1991): Anwendungsmöglichkeiten hochauflösender elektrophoretischer Trennverfahren bei tierzüchterischen Fragestellungen. *Habilitationschrift des Fachbereichs Agrarwissenschaften*
44. Hiendleder, S., Erhardt, G., Lewalski, H., Herlinger, D., Glahn-Luft, B., Wassmuth, R. (1991): Biochemical, molecular genetic and cytogenetic methods employed to characterize F-gene carriers and non carriers. In: „Major Genes for Reproduction in Sheep“ Eds: I.M. Elsen, L. Bodin, J. Thimonier, INRA, France, 281-287
45. Erhardt, G., Panicke, L. (1991): Proteinpolymorphismen in schwarzbunten Teilpopulationen. In: „Genetische Probleme in der Tierzucht“ Eds: L. Panicke, G. Freyer, Heft **29**, 76-77
46. Miranda, G., Anglade, P., Mahé, M.F., Erhardt, G. (1992): Biochemical characterisation of the C and the E genetic variants of bovine kappa casein. *Anim. Genet.* **24**, 27-31

47. Weyermann, F., Erhardt, G. (1992): Züchtungsproblematik bedrohter Schafrassen am Beispiel des Rohwolligen Pommerschen Landschafes. Dt. Schafzucht **12**, 272-273
48. Erhardt, G. (1993): A new α_{s1} -casein allele in bovine milk and its occurrence in different breeds. Anim. Genet. **24**, 65-66
49. Erhardt, G. (1993): Allele frequencies of milk proteins in German Cattle breeds and demonstration of α_{s2} -casein variants by isoelectric focusing. Arch. Tierz. **36**, 145-152
50. Erhardt, G., Simianer, H. (1993): Linkage between the loci for serum albumin and vitamin D binding protein (GC) in sheep. Anim. Genet. **24**, 301-303
51. Mohr, U., Koczan, D., Lindner, D., Hobom, G., Erhardt, G. (1994): A single point mutation results in A allele specific exon skipping in the bovine α_{s1} -casein mRNA. Gene **143**, 187-192
52. Erhardt, G., Seibert, B. (1994): Isoelektrische Fokussierung zur Darstellung von Proteinvarianten in Rindermilch. CLB Chemie in Labor und Technik **45**, 195-199
53. Prinzenberg, E.M., Erhardt, G. (1994): Characterization of bovine α_{s1} -casein A by PCR-RFLP. Anim. Genet. **25**, 30-31
54. Freyer, G., Liu, Z., Panicke, L., Erhardt, G. (1995): Untersuchung der genetischen Kopplung zwischen möglichen QTL für Milchleistungseigenschaften und Milchproteinmarkern mittels markergestützter komplexer Segregationsanalyse. Arch. Tierz. **38**, 379-393
55. Hartwig, A., Prinzenberg, E.-M., Erhardt, G. (1995): Methodische Ansätze zur Charakterisierung der züchterischen und physiologischen Bedeutung boviner Milchproteinvarianten. 4. Werkstattberichte aus der Experimentellen Biologie und der Experimentellen Medizin- Methoden und Informationsbörse - JLU-Giessen, 49-50
56. Hiendleder, S., Weimann, C., Leyhe, B., Müller-Schlösser, F., Erhardt, G. (1996): A *Pst*I RFLP at the bovine *INHBA* locus. Anim. Genet. **27**, 212
57. Prinzenberg, E.-M., Hiendleder, S., Ikonen, T., Erhardt, G. (1996): Molecular genetic characterization of new bovine kappa-casein alleles CSN3^F and CSN3^G and genotyping by PCR-RFLP. Anim. Genet. **27**, 347-349
58. Erhardt, G. (1996): Detection of a new κ -casein variant in milk of Pinzgauer cattle. Anim. Genet. **27**, 105-107
59. Ikonen, T., Ruottinen, O., Erhardt, G., Ojala, M. (1996): Allele frequencies of the major milk proteins in the Finnish Ayrshire and detection of a new κ -casein variant. Anim. Genet. **27**,

179-181

60. Anastassiadis, C., Leyhe, B., Olsaker, I., Friedl, R., Rottmann, D., Hiendleder, S., Erhardt, G. (1996): Three polymorphic microsatellites for bovine chromosomes 7, 12 and 19. *Anim. Genet.* **27**, 125-126
61. Hiendleder, S., Lewalski, H., Jäger, C., Pracht, P., Erhardt, G. (1996): Nucleotide sequences of ovine α -inhibin (INHA) genes and evaluation of RFLP marker effects on reproductive performance. *Anim. Genet.* **27**, 91
62. Panicke, L., Freyer, G., Erhardt, G., Schlettwein, K. (1996): Milchproteingentypen und ihr Einfluß auf die Milchleistungsmerkmale. *Arch. Tierz.* **39**, 3-16
63. Erhardt, G., Krick-Saleck, H., Juszcak, J., Panicke, L. (1996): Zusammenhänge zwischen dem Vorkommen von genetischen Varianten in den Milchproteinen und der Verwandtschaft von Rinderrassen. In: Schriftenreihe des Forschungsinstitutes für die Biologie landwirtschaftlicher Nutztiere (FBN), Eds.: Panicke, I., Fischer, E., Heft **8**, 3-9
64. Panicke, L., Freyer, G., Erhardt, G. (1996): Effekte der Milchproteinpolymorphismen auf die Leistung. In: Schriftenreihe des Forschungsinstitutes für die Biologie landwirtschaftlicher Nutztiere (FBN), Eds.: Panicke, I., Fischer, E., Heft **8**, 20-30
65. Freyer, G., Liu, Z., Panicke, L., Erhardt, G. (1996): Schätzung von QTL-Effekten für Milchleistungsmerkmale und deren genetische Kopplung zu Proteinmarkern. In: Schriftenreihe des Forschungsinstitutes für die Biologie landwirtschaftlicher Nutztiere (FBN), Eds.: Panicke, I., Fischer, E., Heft **8**, 31-40
66. Godovac-Zimmermann, J., Krause, I., Baranyi, M., Fischer-Frühholz, S., Erhardt, G. (1996): Isolation and Rapid Sequencing by Mass Spectrometry of Two Novel Bovine β -Lactoglobulins I and J from Local European Breeds. *J. Protein Chemistry* **15**, 743-750
67. Freyer, G., Zengting, L., Erhardt, G., Panicke, L. (1996): Schätzung von QTL-Effekten für Milchleistungseigenschaften und Untersuchung der genetischen Kopplung mit Caseinmarkern unter Anwendung der Multipointanalyse. *Arch. Tierz.* **39**, 369-385
68. Erhardt, G. (1996): Voraussetzungen für die Sicherstellung einer langfristigen Gentechnikfreiheit in der Nutztierzüchtung - Stand der Anwendung von Gentechnik in der Tierzucht. In: Gentechnikfreie Lebensmittelerzeugung, Eds., Schmidtke, K., Hirn, G., Lünzer, I., SÖL-Sonderausgabe Nr. **70**, 31-42
69. Hiendleder, S., Leyhe, B., Jaeger, C., Erhardt, G., Wassmuth, R. (1996): Molecular characterization of ovine α - β_a - and β_b -inhibin/activin alleles. *Anim. Breed.Genet.* **113**, 363-

70. Prinzenberg, E.-M., Hiendleder, S., Ruottinen, O., Erhardt, G. (1996): Genotyping of six bovine κ -casein alleles including the two alleles F and G. *Anim. Genet.* **27**,17-42
71. Erhardt, G. (1996): Möglichkeiten der Züchtung auf Eiweiß hinsichtlich Zusammensetzung und Eigenschaften von Milchproteinen. *DGFZ-Schriftenreihe* **6**, 147-155
72. Erhardt, G. (1996): Gentechnik in der tierischen Produktion: Stand, Entwicklungsperspektiven und Auswirkungen auf die deutsche Tierzucht. *Gentechnik - Fortschritt für die deutsche Landwirtschaft? Grüne Reihe*, Bd. **1**, 127-136
73. Prinzenberg, E.-M., Hiendleder, S., Ruottinen, O., Erhardt, G. (1996): Genotyping of six bovine κ -casein alleles including the two new alleles F and G. *Anim. Genet.* **27** (Suppl.2), 24
74. Ferretti, L., Urquhart B.G.D., Eggen, A., Olsaker, I., Harlizius, B., Castighioni, B., Mezzelani, A., Solinas, S., Toldo, S., Thieven, U., Zhangl, Y., Morgan, A.I.G., Teres, V., Schwerin, M., Martin-Burriel, I., Chowdary, B., Erhardt, G., Nijman, I.J., Cribin, E.P., Barendse, W., Leveziel, H., Fries, R., Williams, J.L. (1997): Cosmid-derived markers anchoring the bovine genetic map to the physical map. *Mamm. Genome* **8**, 29-36
75. Barendse, W., Vaiman, D., Kemp, S., Sugimoto, Y., Armitage, S., Williams, J., Sun, S., Eggen, A., Agaba, M., Aleyasin, A., Band, M., Bishop, M., Buitkamp, J., Byrne, K., Collins, F., Cooper, L., Coupettiers, W., Denis, B., Drinkwater, R., Easterday, K., Ennis, S., Erhardt, G., Ferretti, L., Hao, Q., Georges, M., Gurung, R., Harlizius, B., Hawkins, G., Hetzel, J., Hirano, T., Joergens, C., Kessler, M., Kirkpatrick, B., Konfortov, B., Kuhn, C., Lenstra, H., Leveziel, H., Lewin, H., Leyhe, B., Li, L., Martin Burriel, I., McGraw, R., Miller, R., Moody, D., Moore, S., Nakane, S., Nijman, I., Ilsaker, I., Pomp, D., Rando, A., Ron, M., Shalom, A., Soller, M., Teale, A., Tieven, U., Vage, D., Varvio, S., Velmalla, R., Vilki, J., Weikard, R., Woodside, C., Womack, J., Zanotti, M., Zaragoza, P. (1997): A medium-density genetic linkage map of the bovine genome. *Mamm. Genome* **8**, 21- 28
76. Erhardt, G., Hiendleder, S. (1997): Möglichkeiten der Genomanalyse für eine artgemäße und umweltgerechte Tierhaltung. *Ergebnisse landwirtschaftlicher Forschung an der Justus-Liebig-Universität*, Heft **XXIII**, 81-91
77. Freyer, G., Liu, Z., Panicke, L., Erhardt, G. (1997): The evidence of genetic linkage between milk fat content and κ -casein in Black and White Cattle - one step towards marker assisted selection? *Arch. Tierz., Dummerdorf* **40**, 189
78. Hoffmann, K., Gauly, M., Mathiak, H., Lange, K., Dzapo, V., Erhardt, G. (1997): Influence of exogenous oxytocin post inseminationem on the litter size in rabbits. *Reprod. Domest. Anim.*

32, 112

79. Prinzenberg, E.-M., Hiendleder, S., Erhardt, G. (1997): A trinucleotide repeat polymorphism is present in bovine *CSN1S1*. *Anim. Genet.* **28**, 379-380
80. Prinzenberg, E.-M., Erhardt, G. (1997): Bovine β -lactoglobulin I is identified by amplification created restriction site using *Sma* I. *Anim. Genet.* **28**, 379
81. Erhardt, G., Prinzenberg, E.-M., Buchberger, J., Krick-Saleck, H., Krause, I., Müller, M. (1997): Bovine κ -casein G: detection, occurrence, molecular genetic characterisation, genotyping and coagulation properties. Proc. IDF Seminar Milk Protein Polymorphism Palmerston North, New Zealand, 1997, 328-329
82. Hartwig, A., Teschemacher, H., Lehmann, W., Gauly, M., Erhardt, G. (1997): Influence of genetic polymorphism in bovine milk on the occurrence of bioactive peptides. Proc. IDF Seminar Milk Protein Polymorphism Palmerston North, New Zealand, 1997, 459-460
83. Waßmuth, R., Erhardt, G., Beuing, R. (1997): Auf Leistungsprüfungen kann nicht verzichtet werden. *Dt. Schafzucht* **19**, 454-457
84. Gauly, M., Schmidt, N., Erhardt, G. (1997): Modellvorhaben Betriebsgemeinschaft Winkshausen - „Unterstand“ in Blockbauweise. In: Stallbauten für die extensive Tierhaltung, Arbeitspapier **245** des KTBL, 33-46
85. Prinzenberg, E.-M., Erhardt, G. (1997): Single strand conformation polymorphism identifies bovine *CSN1S1^D*. *Anim. Genet.* **28**, 460
86. Erhardt, G., Juszcak, J., Panicke, L., Krick-Saleck, H. (1998): Genetic polymorphism of milk proteins in Polish Red Cattle: a new genetic variant of β -lactoglobulin. *J. Anim. Breed. Genet.* **115**, 63-71
87. Switonski, M., Kovacs, B., Erhardt, G., Stranzinger, G. (1998): Meiotic chromosome studies in a ram carrying a reciprocal translocation. *J. Anim. Breed. Genet.* **115**, 79-85
88. Prinzenberg, E.-M., Anglade, P., Ribadeau-Dumas, B., Erhardt, G. (1998): Biochemical characterization of bovine α_{S1} -casein F and genotyping with sequence specific primers. *J. Dairy Res.* **65**, 223-231
89. Engel, P., Seibert, B., Beuing, R., Senft, B., Erhardt, G. (1998): Vorkommen von *Escherichia coli* F4-Rezeptoren in bundesdeutschen Schweinrassen und Zusammenhänge zu Merkmalen der Reproduktions-, Aufzucht- und Mastleistung. *Arch. Tierz.* **41**, 75-87

90. Kraus, M., Beuing, R., Gauly, M., Erhardt, G. (1998): Untersuchungen zum Zuchtziel beim Rhönschaf in Hinblick auf Mutterschafgewicht und Fruchtbarkeit unter dem Aspekt extensiver und intensiver Haltung. Arch. Tierz. **41**, 99-109
91. Panicke, L., Freyer, G., Erhardt, G. (1998): Effekte von Milchproteingenvarianten auf Fruchtbarkeitseigenschaften beim Schwarzbunten Rind. Arch. Tierz. **41**, 447-454
92. Freyer, G., Panicke, L., Liu, Z., Erhardt, G. (1998) Examination of genetic linkage of QTL for milk production traits to milk protein loci in a family analysis compared with results of a population analysis. Arch. Tierz. **41**, 545-552
93. Panicke, L., Freyer, G., Erhardt, G. (1998): Suitability of Casein loci for genetic markers - effects of casein genotypes on milk production and fertility. J. Anim. Sci. **76**, 82
94. Freyer, G., Liu, Z., Erhardt, G., Panicke, L. (1998): Results of linkage analysis between QTL for milk production traits and casein markers using multipoint analysis. J. Anim. Sci. **76**, 76
95. Reinsch, N., Xu, N., Thomsen, H., Looft, C., Kalm, E., Grupe, E., Kühn, C., Schwerin, M., Leyhe, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reents, R., Averdunk, G. (1998): First results on somatic cell count loci from the ADR bovine mapping project. Proc. 6. WCG LAP **26**, 426-428
96. Russell, G.A., Sandberg, K., Barre-Dirie, A., Basedow, M., Blott, S.C., Dolf, G., Dunner, S., Erhardt, G., Eythorsdottir, E., Goudarzi, K., Holm, L.E., Kantanen, J., Laloe, D., Looft, C., Martin-Burriel, I., Mommens, G., Olsaker, I., Zaragoza, P., Zanotti, M., Williams, J.L. (1998): CaDBase - a cattle diversity database. Anim. Genet. **29**, 8
97. Prinzenberg, E.-M., Erhardt, G. (1998): High-resolution SSCP analysis reveals new alleles at the κ -casein (*CSN3*) locus in *Bos taurus* and *Bos indicus* cattle. Anim. Genet. **29**, 11-12
98. Hiendleder, S., Schmutz, S.M., Erhardt, G., Green, R.D., Plante, Y. (1998): Heteroplasmy in cloned cattle. Anim. Genet. **29**, 51
99. Kalm, E., Reinsch, N., Xu, N., Thomsen, H., Looft, C., Grupe, S., Brockmann, G., Kuehn, C., Schwerin, M., Leyhe, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reinhard, F., Reents, R., Averdunk, G. (1998): Mapping quantitative trait loci on cattle chromosome 2,5,10,16,18 and 23. Anim. Genet. **29**, 62
100. Döring, C., Hiendleder, S., Kraus, M., Erhardt, G. (1998): Effects of mitochondrial DNA control region polymorphism on milk production traits of Holstein cows. Anim. Genet. **29**, 63

101. Prinzenberg, E.-M., Erhardt, G. (1999): A new CSN3 allele in *Bos indicus* cattle is characterized by *MspI* PCR-RFLP. *Anim. Genet.* **30**, 164
102. Prinzenberg, E.-M., Erhardt, G. (1999): Molecular genetic characterisation of ovine β -lactoglobulin C allele and detection by PCR-RFLP. *J. Anim. Breed. Genet.* **116**, 9-14
103. Freyer, G., Liu, Z., Erhardt, G., Panicke, L. (1999): Casein polymorphism and relation between milk production traits. *J. Anim. Breed. Genet.* **116**, 87-97
104. Mathiak, H., Gauly, M., Hoffmann, K., Erhardt, G. (1999): Vergleich der Produktionsleistung von Schafrassen auf einem extensiv bewirtschafteten Mittelgebirgsstandort. *Zeitschrift für Kulturtechnik und Landentwicklung* **40**, 1-6
105. Prinzenberg, E.-M., Krause, I., Erhardt, G. (1999): SSCP analysis at the bovine CSN3 locus discriminates six alleles corresponding to known protein variants (A, B, C, E, F, G) and three new DNA Polymorphisms (H, I, A₁). *Anim. Biotechnol.* **10**, 49-62
106. Hiendleder, S., Döring, C., Weimann, C., Erhardt, G. (1999): Rapid Communication: Human Melanocortin Receptor Sequences Reveal a *SacI* Restriction Fragment Length Polymorphism at the Porcine Adrenocorticotrophic Hormone Receptor (MC2R) Locus. *J. Anim. Sci.* **77**, 2313-2314
107. Müller-Eckert, A., Cholewinski, G., Beuing, R., Erhardt, G. (1999): Charakterisierung der verwandtschaftlichen Beziehungen von Schweren Warmblutpopulationen auf oldenburgisch-ostfriesischer Grundlage und Deutschen Reitpferdepopulationen anhand von polymorphen Genorten. *Züchtungskunde* **71**, 359-370
108. Ottaviani, E., Franchini, A., Prinzenberg, E.-M., Erhardt, G., Jollés, P. (1999): Detection of casein fragments in an invertebrate and in a vertebrate using *in situ* hybridization. *Life Sci.* **65**, 1707-1714
109. Reinsch, N., Thomsen, H., Xu, N., Brink, M., Looft, C., Kalm, E., Brockmann, G.A., Gruppe, S., Kühn, C., Schwerin, M., Leyhe, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Reents, R., Averdunk, G. (1999): A QTL for the degree of spotting in cattle shows synteny with the *KIT* locus on Chromosome 6. *J. Hered.* **90**, 629-634.
110. Casa, E., Barendse, W., Beever, J.E., Burns, B.M., Davis, S.K., Erhardt, G., Förster, M., Gomelz-Raya, L., Kalm, E., Kappes, S.M., Klungland, H., Lewin, H.A., Lien, S., Olsaker, I., Reinsch, N., Schwerin, M., Song, Y., Taylor, J.F., Thomsen, H., Vage, D.I., Wu, X., Xu, N., Yeh, C.C. (1999): Bovine chromosome 4 workshop: consensus and comprehensive linkage maps. *Anim. Genet.* **30**, 375-377

111. Hiendleder, S., Schmutz, S.M., Erhardt, G., Green, R.D., Plante, Y. (1999): Transmitochondrial differences and varying levels of heteroplasmy in nuclear transfer cloned cattle. *Mol. Reprod. Dev.* **54**, 24-31
112. Lühken, G., Hiendleder, S., Erhardt, G. (1999): Molecular characterization of the ovine *Interleukin 2 (IL-2)* gene. *Arch. Tierz.* **42**, 106-108
113. Gu, Z., Gomez-Raya, L., Vage, D.I., Elo, K., Barendse, W., Davis, G., Grosz, M., Erhardt, G., Kalm, E., Reinsch, N., Kappes, S.M., Stone, R.T., Davis, S.K., Taylor, J.F., Kirkpatrick, B.W. (2000): Consensus and comprehensive linkage maps of bovine chromosome 7 (BTA7). *Anim. Genet.* **31**, 206-209
114. Freyer, G., Erhardt, G. (2000): First Results of a MAS Study in Dairy Cattle with Respect to Longevity (short communication). *Arch. Tierz.* **43**, 241-247
115. Weimann, C., Hiendleder, S., Vaiman, D., Erhardt, G. (2000): Rapid communication: Genetic linkage mapping of a caprine microsatellite derived from a genomic clone containing the *INHA* gene. *J. Anim. Sci.* **78**, 2481-2482
116. Lühken, G., Hiendleder, S., Prinzenberg, E.-M., Erhardt, G. (2000): A Single Strand Conformation Polymorphism in the Ovine *Interleukin 2 (IL-2)* Gene. *J. Anim. Sci.* **78**, 2754-2755
117. Beuing, R., Mues, Ch., Tellhelm, B., Erhardt, G. (2000): Prevalence and Inheritance of Canine Elbow Dysplasia in German Rottweiler. *J. Anim. Breed. Genet.* **117**, 375-383
118. Mathiak, H., Gauly, M., Hoffmann, K., Beuing, R., Erhardt, G. (2000): Genetic parameters for behavioral traits related to the temperament in German Angus and Simmental cattle. *J. Anim. Sci.* **78**, 33
119. Thomsen, H., Reinsch, N., Xu, N., Looft, C., Gruppe, S., Kühn, C., Brockmann, G.A., Schwerin, M., Leyhe-Horn, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reinhardt, F., Reents, R., Blümel, J., Averdunk, G., Kalm, E. (2000): A male bovine linkage map for the ADR granddaughter design. *J. Anim. Breed. Genet.* **117**, 289-306
120. Thomsen, H., Reinsch, N., Xu, N., Bennewitz, J., Looft, C., Gruppe, S., Kühn, C., Brockmann, G.A., Schwerin, M., Leyhe-Horn, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reinhardt, F., Reents, R., Blümel, J., Averdunk, G., Kalm, E. (2001): A whole genome scan for differences in recombination rates among three *Bos taurus* breeds. *Mamm. Genome* **12**, 724-728
121. Thomsen, H., Reinsch, N., Schwerin, M., Erhardt, G., Kalm, E. (2001): Detection of quantitative trait loci for functional and conformation traits in a whole genome scan in dairy

- cattle. *J. Anim. Sci.* **79**, 192-193.
122. Gauly, M., Bauer, C., Mertens, C., Erhardt, G. (2001): Effect and repeatability of *Ascaridia galli* egg output in cockerels following a single low dose infection. *Vet. Parasitol.* **96**, 301-307
123. Gauly, M., Mathiak, H., Kraus, M., Hofmann, K., Erhardt, G. (2001): Rasse- und Geschlechtsunterschiede im Temperament von Kälbern in Mutterkuhhaltung. *Dtsch. tierärztl. Wschr.* **108**, 206-210
124. Juszczak, J., Erhardt, G., Kuczaj, M., Zimieski, R., Panicke, L. (2001): Zusammenhang zwischen κ -Casein und β -Lactoglobulin-Varianten mit der Milchleistung und der Nutzungsdauer von Schwarzbunten und dem Polnischen Rotvieh. *Arch. Tierz.* **44**, 239-249
125. Kraus, M., Freudenreich, P., Krick, H., Beuing, R., Gauly, M., Quanz, G., Branscheid, W., Erhardt, G. (2001): Genetische und umweltbedingte Einflüsse auf die Verfettung und Fettqualität bei Merinolandschafflämmern. *Züchtungskunde* **73**, 149-160
126. Leyhe-Horn, B., Ziron, C., Prinzenberg, E.-M., Barendse, W., Hiendleder, S., Erhardt, G. (2001): Rapid Communication: Mapping of Oxytocin (*OXT*) to the Central Region of Bovine Chromosome 13 by Linkage Analysis using SSCP. *J. Anim. Sci.* **79**, 777-778
127. Panicke, L., Citek, J., Schmidt, M., Rehout, V., Erhardt, G., Staufenbiel, R. (2001): Enzyme activities and milk performance by clusters of growth hormone gene (*GH*) and β -casein (β -CN) in German Holsteins. *Czech. J. Anim. Sci.* **46**, 202-208
128. Weimann, C., Leyhe-Horn, B., Gauly, M., Erhardt, G. (2001): Suitability of microsatellites BM1329 and OarAE101 as markers for the introgression of the *Fec^B* locus into different sheep breeds. *Arch. Tierz.* **44**, 435-440
129. Gauly, M., Mathiak, H., Hoffmann, K., Kraus, M., Erhardt, G. (2001): Estimating genetic variability in temperamental traits in German Angus and Simmental cattle. *Appl. Anim. Behav. Sci.* **74**, 109-119
130. Wassmuth, R., Hiendleder, S., Mendel, C., Erhardt, G. (2001): Biochemische Polymorphismen und Haupt-mtDNA-Haplotypen bei Bergschafzassen und Waldschafen als Beitrag zur Abstammung der Hausschafe. *J. Anim. Breed. Genet.* **118**, 327-340
131. Caroli, A., Jann, O., Budelli, E., Bolla, P., Jäger, S., Erhardt, G. (2001): Genetic polymorphism of goat κ -casein (*CSN3*) in different breeds and characterization at DNA level. *Anim. Genet.* **32**, 226-230
132. Thomsen, H., Reinsch, N., Xu, N., Looft, C., Grupe, S., Kühn, C., Brockmann, G.A., Schwerin, M., Leyhe-Horn, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B.,

- Reinhardt, F., Reents, R., Blümel, J., Averdunk, G., Kalm, E. (2001): Comparison of estimated breeding values, daughter yield deviations and de-regressed proofs within a whole genome scan for QTL. *J. Anim. Breed. Genet.* **118**, 357-370
133. Gauly, M., Bauer, C., Erhardt, G. (2001): Heritability of *Ascaridia galli* egg output in laying hens. *J. Anim. Sci.* **79**, Suppl. 1, 336
134. Gauly, M., Krauthahn, C., Bauer, C., Bürger, H.-J., Erhardt, G. (2001): Pattern of *Eimeria* oocyst output and repeatability in naturally infected suckling Rhön lambs. *J. Vet. Med. B* **48**, 665-673
135. Gauly, M., Erhardt, G. (2001): Genetic resistance to gastrointestinal nematode parasites in Rhön sheep following natural infection. *Vet. Parasitol.* **102**, 253-259
136. Gauly, M., Bauer, C., Preisinger, R., Erhardt, G. (2001): Genetic differences of *Ascaridia galli* egg output in laying hens following a single dose infection. *Vet. Parasitol.* **103**, 99-107
137. Erhardt, G., Brandt, H., Breyhahn, R., Fürst zu Solms-Hohensolms-Lich, P. R., Groneveld, E., Groschup, M., Lühken, G., Nitter, G., Roessler, H.-J., Schulte-Coerne, H., Thiel, H.-J., Weiss, E. (2002): Stellungnahme einer gemeinsamen Projektgruppe der Deutschen Gesellschaft für Züchtungskunde e.V. (DGfZ) und der Deutschen Veterinärmedizinischen Gesellschaft e.V. (DVG) zur Genotypisierung von Schafen auf Scrapie-Resistenz. *Züchtungskunde* **74**, 3-5
138. Erhardt, G., Brandt, H., Breyhahn, R., Fürst zu Solms-Hohensolms-Lich, P. R., Groneveld, E., Groschup, M., Lühken, G., Nitter, G., Roessler, H.-J., Schulte-Coerne, H., Thiel, H.-J., Weiss, E. (2002): Voraussetzungen und Möglichkeiten für die Genotypisierung von Schafen auf Scrapie-Resistenz im Rahmen von Zuchtprogrammen. *Züchtungskunde* **74**, 6-31
139. Erhardt, G., Jäger, S., Budelli, E., Caroli, A. (2002): Genetic polymorphism of goat α_{s2} -casein (*CSN1S2*) and evidence for a further allele. *Milchwissenschaft* **57**, 137-140
140. Opitz von Boberfeld, W., Wöhler, K., Erhardt, G., Gauly, M., Urban, C., Seufert, H., Wagner, A. (2002): Nutzungsperspektiven für Grünland peripherer Regionen. *Berichte über Landwirtschaft* **80**, 419-445
141. Gauly M., Erhardt G. (2002): Changes in faecal trichostrongyle egg count and haematocrit in naturally infected Rhön sheep over two grazing periods and associations with biochemical polymorphism. *Small Ruminant Res.* **44**, 103-108
142. Gauly M., Kraus M., Vervelde L., van Leeuwen M.A.W., Erhardt G. (2002): Estimating genetic differences in natural resistance in Rhön and Merinoland sheep following

experimental *Haemonchus contortus* infection. *Vet. Parasitol.* **106**, 55-67

143. Gauly M., Mathiak H., Erhardt G. (2002): Genetic background of behavioural response to repeated short term separation and tehtering of beef calves. *J. Anim. Breed. Genet.* **119**, 379-384
144. Thomsen, H., Reinsch, N., Xu, N., Looft, C., Grupe, S., Kühn, C., Brockmann, G.A., Schwerin, M., Leyhe, B., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reinhardt, F., Reents, R., Blümel, J., Averdunk, G., Kalm, E. (2002): Mapping of the bovine blood group systems J, N', R', and Z show evidence for oligo-genetic inheritance. *Anim. Genet.* **33**, 107-117
145. Horstick, A., Hamann, H., Erhardt, G., Distl, O. (2002): Genotypeneffekte der Milch- und Blutproteinpolymorphismen auf die Milchleistung beim ostfriesischen und schwarz-braunen Milchschaaf. *Züchtungskunde* **74**, 135-143
146. Jann, O., Prinzenberg, E.-M., Brandt, H., Williams, J.L., Ajmone-Marsan, P., Zaragoza, P., Özbeyaz, C., Erhardt, G. (2002): Intragenic haplotypes at the bovine *CSN1S1* locus. *Arch. Tierz. Dummerstorf* **45**, 13-21
147. Jann, O., Ceriotti, G., Caroli, A., Erhardt, G. (2002): A new variant in exon VII of bovine β -casein gene (*CSN2*) and its distribution among European cattle breeds. *J. Anim. Breed. Genet.* **119**, 65-68
148. Lühken, G., Weimann, C., Kraus, M., Goldammer, T., Womack, J.E., Erhardt, G. (2002): Genetic and physical mapping of the ovine interleukin-2 gene (*IL-2*) *Anim. Genet.* **33**, 245-247
149. Nijman, I.J., Hogendoorn, M., Gruys, E., Luikart, G., Ortugrul, O., Zagdsuren, Y., Ngere, L.O. Hasima, N., Erhardt, G., Ajmone-Marsan, P., Lenstra, J.A. (2002): Detection of sheep-goat interspecies hybridization by analysis of satellite DNA. *J. Vet. Res.* **7**, 1-6
150. Weimann, C., Kraus, M., Gauly, M., Erhardt, G. (2002): Amplification and Linkage mapping of the ovine microsatellite DYMS1 in German Angus cattle. (Rapid communication). *J. Anim. Sci.* **80**, 1382-1383
151. Döring, C., Hiendleder, S., Kraus, M., Brandt, H., Erhardt, G. (2002): The effect of adenin/guanin-transition at nucleotide position 169 of the mitochondrial genome on milk production traits in German Holsteins. 7th World Congress on Genetics Applied to Livestock Production, 19.-23.08.2002 in Montpellier, Frankreich, Session 09, Communication-No. 9-14
152. Gauly, M., Bauer, C., Preisinger, R., Erhardt, G. (2002): Genetic differences of *Ascaridia Galli* egg output in laying hens. 7th World Congress on Genetics Applied to Livestock Production,

19.-23.08.2002 in Montpellier, Frankreich, Session 13, Communication-No.13-18

153. Janßen, M., Weimann, C., Gauly, M., Erhardt, G. (2002): Associations between infections with *Haemonchus Contortus* and genetic markers on ovine chromosome 20. 7th World Congress on Genetics Applied to Livestock Production, 19.-23.08.2002 in Montpellier, Frankreich, Session 13, Communication-No. 13-11
154. Prinzenberg, E.-M., Brandt, H., Bennewitz, J., Kalm, E., Erhardt, G. (2002): Effect of polymorphism in the *CSN1S1* gene on milk production traits in German Holsteins. 7th World Congress on Genetics Applied to Livestock Production, 19.-23.08.2002 in Montpellier, Frankreich. Session 09, Communication-No. 09-16
155. Beuing, G., Erhardt, G. (2002): Häufigkeit positiver Befunde für Collie Eye Anomalie (CEA) bei Collies und Shelties unter verschiedenen diagnostischen Rahmenbedingungen. Kleintierpraxis **47**, 389-452
156. Beja-Pereira, A., Erhardt, G., Matos, C., Gama, L., Ferrand, N. (2002): Evidence for a geographical cline of casein haplotypes in Portuguese Cattle Breeds. Anim. Genet. **33**, 295-300
157. Kühn, Ch., Bennewitz, J., Reinsch, N., Xu, N., Thomsen, H., Looft, C., Brockmann, G.A., Schwerin, M., Weimann, C., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reinhardt, F., Reents, R., Averdunk, G., Blümel, J., Kalm, E. (2003): Quantitative Trait Loci Mapping of Functional Traits in the German Holstein Cattle Population. J. Dairy Sci. **86**, 360-368
158. Bennewitz, J., Reinsch, N., Thomsen, H., Grohs, C., Leveziel, H., Xu, N., Looft, C., Kühn, C., Brockmann, G., Schwerin, M., Weimann, C., Hiendleder, S., Erhardt, G., Medjugorac, I., Russ, I., Förster, M., Brenig, B., Reinhardt, F., Reents, R., Averdunk, G., Blümel, J., Boichard, D., Kalm, E. (2003): Combined Analysis of Data from two Granddaughter Designs: A simple Strategy for QTL Confirmation and increasing experimental Power in Dairy Cattle. Genet. Sel. Evol. **35**, 319-338
159. Gauly, M., Preisinger, R., Erhardt, G. (2003): Möglichkeiten der Zucht auf Krankheitsresistenz bei Legehennen am Beispiel des Hühnerspulwurms (*Ascaridia galli*). Lohmann-Information, Heft **2**, 25-27
160. Weimann, C., Kraus, M., Gauly, M., Erhardt, G. (2003): Differences in recombination rates on Chromosom 23 between German Angus and German Simmental and breed specific linkage mapping. Anim. Genet. **34**, 229-231

161. Chessa, S., Ceriotti, G., Dario, C., Erhardt, G., Caroli, A. (2003): Genetic polymorphisms of α_{S1} -, α_{S2} - and κ -casein in Maltese goat breed. *Ital. J. Anim. Sci.* **2**, 58-60
162. Thaller, G., Krämer, W., Winter, A., Kaupe, B., Erhardt, G., Fries, R. (2003): Effects of *DGAT1* variants on milk production traits in German cattle breeds. *J. Anim. Sci.* **81**, 1911-1918
163. Prinzenberg, E.-M., Weimann, C., Brandt, H., Bennewitz, J., Kalm, E., Schwerin, M., Erhardt, G. (2003): Polymorphism of the bovine *CSN1S1* Promoter: Linkage mapping, intragenic haplotypes and effects on milk production traits. *J. Dairy Sci.* **86**, 2696-2705
164. Gauly, M., Pouillion, C., Erhardt, G. (2003): Saug- und Säugeverhalten von Lamas (*Lama glama*). *Dtsch. tierärztl. Wschr.* **110**, 401-403
165. Chessa, S., Budelli, E., Gutscher, K., Caroli, A., Erhardt, G. (2003): Short Communication: Simultaneous Identification of Five β -casein (*CSN3*) Alleles in Domestic Goat by PCR-SSCP. *J. Dairy Sci.* **86**, 3726-3729
166. Hiendleder, S., Thomsen, H., Reinsch, N., Bennewitz, J., Leyhe-Horn, B., Looft, C., Xu, N., Medjugorac, I., Russ, I., Kühn, C., Brockmann, G.A., Blümel, J., Brenig, B., Reinhardt, F., Reents, R., Averdunk, G., Schwerin, M., Förster, M., Kalm, E., Erhardt, G. (2003): Mapping of QTL for body conformation and behavior in cattle. *J. Hered.* **94**, 496-506
167. Beja-Pereira, A., Luikart, G., England, P.R., Bradley, D.G., Jann, O.C., Bertorelle, G., Chamberlain, A.T., Nunes, T.P., Metodiev, S., Ferrand, N., Erhardt, G. (2003): Milk Drinkers: Gene-culture coevolution between cattle milk protein genes and human lactase genes. *Nat. Genet.* **35**, 311 – 313
168. Jann, O.C., Ibeagha, E.M., Ozbeyaz, C., Zaragoza, P., Williams, J.L., Ajmone-Marsan, P., Lenstra, J.A., Moazami-Goudarzi, K., Erhardt, G. (2004): Geographic effects on haplotype diversity of the bovine casein locus. *Genet. Sel. Evol.* **36**, 243-257
169. Bennewitz, J., Reinsch, N., Pauls, S., Looft, C., Kaupe, B., Weimann, C., Erhardt, G., Thaller, G., Kühn, Ch., Schwerin, M., Thomsen, H., Reinhardt, F., Reents, R., Kalm, E. (2004): The *DGAT1* K232A Mutation Is Not Solely Responsible for the Milk Production Quantitative Trait Locus on the Bovine Chromosome 14. *J. Dairy Sci.* **87**, 431-442
170. Schwerin, M., Kühn, C., Brunner, R., Goldammer, T., Bennewitz, J., Reinsch, N., Xu, N., Looft, C., Weimann, C., Hiendleder, S., Erhardt, G., Medjugorac, I., Förster, M., Brenig, B., Reinhardt, F., Reents, R., Russ, I., Averdunk, G., Blümel, J., Kalm, E. (2004): QTL mapping and mining functional candidate genes affecting health – the German ADR QTL Dairy Cattle Project. *Anim. Sci. Pap. Rep.* **22**, 95-100

171. Buschmann, A., Biacabe, A.-G., Ziegler, U., Bencsik, A., Madec, J.-Y., Erhardt, G., Lühken, G., Baron, T., Groschup, M.H. (2004): Atypical scrapie cases in Germany and France are identified by discrepant reaction patterns in BSE rapid tests. *J. Virol. Methods* **117**, 27-36
172. Kaupe, B., Winter, A., Fries, R., Erhardt, G. (2004): *DGAT1* polymorphism in *Bos indicus* and *Bos taurus* cattle breeds and effect of breeding. *J. Dairy Res.* **71**, 182-187
173. Jann, O.C., Prinzenberg, E.-M., Luikart, G., Caroli, A., Erhardt, G. (2004): High polymorphism in the κ -casein (*CSN3*) gene from wild and domestic caprine species revealed by DNA sequencing. *J. Dairy Res.* **71**, 188-195
174. Ibeagha, E.M., Jäger, S., Erhardt, G. (2004): Polymorphisms in blood proteins of *Bos indicus* and *Bos taurus* cattle breeds of Cameroon and Nigeria, and description of new albumin variants. *Biochem. Genet.* **42**, 181-197
175. Lühken, G., Buschmann, A., Groschup, M.H., Erhardt, G. (2004): Prion protein allele A₁₃₆H₁₅₄Q₁₇₁ is associated with high susceptibility to scrapie in purebred and crossbred German Merinoland Sheep. *Arch. Virology* **149**, 1571-1580
176. Ibeagha, E.M., Erhardt, G. (2004): Genetic variations between African and German sheep breeds, and description of a new variant of vitamin D-binding protein. *Small Rum. Res.* **55**, 33-43
177. Wessels, G., Hamann, H., Erhardt, G., Distl, O. (2004): Genotypeneffekte von Milchprotein-Polymorphismen auf die Milchleistung beim Ostfriesischen Milchschaaf. *BMTW* **117**, 414-419
178. Brandt, H., Lühken, G., Lipsky, S., Erhardt, G. (2004): Der Einfluss von Polymorphismen im Prionprotein-Gen bei Merinoland- und Rhönschafen auf Fruchtbarkeitsmerkmale bei Mutterschafen und Gewichte bei Lämmern. *Züchtungskunde* **76**, 344-353
179. Kühn, C., Thaller, G., Winter, A., Bininda-Emonds, O.R.P., Kaupe, B., Erhardt, G., Bennewitz, J., Schwerin, M., Fries, R. (2004): Evidence for multiple alleles at *DGAT1* locus better explains a QTL with major effect on milk fat content in cattle. *Genetics* **167**, 1873-1881
180. Buschmann, A., Lühken, G., Schultz, J., Erhardt, G., Groschup, M.H. (2004): Neuronal accumulation of abnormal prion protein in sheep carrying a scrapie resistant genotype (PrP^{ARR/ARR}). *J. Gen. Virol.* **85**, 2727-2733
181. Gauly, M., Reeg, J., Bauer, C., Erhardt, G. (2004): Influence of production systems in lambs on the *Eimeria* oocyst output and weight gain. *Small Rum. Res.* **55**, 159-167
182. Ibeagha-Awemu, E.M., Jann, O.C., Weimann, C., Erhardt, G. (2004): Genetic diversity, introgression and relationships among West/Central African cattle breeds. *Genet. Sel. Evol.*

36, 673-690

183. Erhardt, G., Plachta, C., Gauly, M. (2004): Möglichkeiten und Voraussetzungen der Zucht auf Temperament bei Fleischrindern. *Fleischrinderjournal*, 9-12
184. Janßen, M., Weimann, C., Brandt, H., Gauly, M., Erhardt, G. (2004): Parasitological parameters after artificial infections with *Haemonchus contortus* in Merinoland sheep and its association to genetic markers on chromosome 20. *Arch. Tierz.* **47** (Special Issue), 36-42
185. Mroczkowski, S., Korman, K., Erhardt, G., Piwczynski, D., Borys, B. (2004): Sheep milk protein polymorphism and its effect on milk performance of Polish Merino. *Arch. Tierz.* **47** (Special Issue), 114-121
186. Seibert, B., Gauly, M., Erhardt, G. (2004): Productivity of different sheep breeds in extensive pasture management. *Arch. Tierz.* **47** (Special Issue), 142-152
187. Gauly, M., Schackert, M., Erhardt, G. (2004): Nutzung des FAMACHA®-Scoring-Systems als diagnostisches Hilfsmittel zur Merkmalerfassung in Zuchtprogrammen bei Schaflämmern nach experimenteller Infektion mit *Haemonchus contortus*. *DTW* **111**, 430-433
188. Gauly, M., Reeg, K.J., Bauer, C., Brandt, H., Mertens, C., Zahner, H., Erhardt, G. (2004): Genetic resistance to *Eimeria* infections in Merinoland sheep and relationships among oocyst count, *E. ovinoivalis* antibody level and live weight. *J. Anim. Sci.* **82**, 227
189. Ceriotti, G., Marletta, D., Caroli, A., Erhardt, G. (2004): Milk protein loci polymorphism in taurine (*Bos taurus*) and zebu (*Bos indicus*) populations bred in hot climate). *J. Anim. Breed. Gen.* **121**, 404-415
190. Kaupe, B., Kollers, S., Fries, R., Erhardt, G. (2004): Mapping of *CYP11B* and a putative *CYHR1* paralogous gene to bovine chromosome 14 by FISH. *Anim. Gen.* **35**, 462-463
191. Bennewitz, J., Reinsch, N., Guiard, V., Fritz, S., Thomsen, H., Looft, C., Kühn, C., Schwerin M., Weimann, C., Erhardt, G., Reinhardt, F., Reents, R., Boichard, D., Kalm, E. (2004): Multiple Quantitative Trait Loci Mapping With Cofactors and Application of Alternative Variants of the False Discovery Rate in an Enlarged Granddaughter Design. *Genetics* **168**, 1019-1027
192. Reeg, K. J., Gauly, M., Bauer, C., Mertens, C., Erhardt, G., Zahner, H. (2005): Coccidial infections in housed lambs: oocyst excretion, antibody levels and genetic influences on the infection. *Vet. Parasitol.* **127**, 209-219
193. Ibeagha-Awemu, E.M., Erhardt, G. (2005): Genetic structure and differentiation of 12 African *Bos indicus* and *Bos taurus* cattle breeds, inferred from protein and microsatellite

polymorphisms. *J. Anim. Breed. Genet.* **122**, 12-20

194. Peter, Ch., Prinzenberg, E.-M., Erhardt, G. and the ECONOGENE Consortium (2004): Null allele at the *OarAe129* locus and corresponding allele frequencies in German sheep breeds (Brief Note). *Anim. Gen.* **36**, 92-93
195. Ibeagha-Awemu, E.M., Prinzenberg, E.-M., Erhardt, G. (2005): High variability of milk protein genes in *Bos indicus* cattle breeds of Cameroon and Nigeria and characterization of a new α_{S1} -casein promoter allele. *J. Dairy Res.* **72**, 1-9
196. Gretzschel, A., Buschmann, A., Eiden, M. Ziegler, U., Lühken, G., Erhardt, G., Groschup, M.H. (2005): Strain typing of German Transmissible Spongiform Encephalopathies Field Cases in Small Ruminants by Biochemical Methods. *J. Vet. Med. B* **52**, 55-63
197. Prinzenberg, E.-M., Gutscher, K., Chessa, S., Caroli, A., Erhardt, G. (2004): Caprine κ -casein (*CSN3*) polymorphism: new developments of the molecular knowledge. *J. Dairy Sci.* **88**, 1490-1498
198. Gauly, M., Homann, T., Erhardt, G. (2005): Aga-related differences of *Ascaridia galli* egg output and worm burden in chickens following a single dose infection. *Vet. Parasitol.* **128**, 141-148
199. Li, M.H., Nogovitsina, E., Ivanova, Z., Erhardt, G., Vilkki, J., Popov, R., Ammosov, I., Kiselyova, T., Kantanen, J. (2005): Genetic Contribution of Indigenous Yakutian Cattle to Two Hybrid Populations, Revealed by Microsatellite Variation. *Asian-Aust. J. Anim. Sci.* **18**, 613-619
200. Jäger, M., Gauly, M., Bauer, C., Failing, K., Erhardt, G., Zahner, H. (2005): Endoparasites in calves of beef cattle herds: management systems dependent and genetic influences. *Vet. Parasitol.* **131**, 173-191
201. Ibeagha-Awemu, E.M., Nwakalor, L.N., Bemji, M.N., Erhardt, G. (2005): Genetic Variability of the milk protein Genes of three Cameroonian Zebu Breeds. *Proceedings of the 30th Annual Conference of the Nigerian Society for Animal Production* **30**, 9-13
202. Wagner, H., Peter, C., Brandt, H., Erhardt, G. (2005): Genetische Diversitätsbestimmung beim Bentheimer Landschaf mittels Mikrosatelliten als Basis für züchterische Entscheidungen. *Züchtungskunde* **77**, 291-302
203. Lühken, G., Stamm, I., Menge, C., Erhardt, G. (2005): Functional analysis of a single nucleotide polymorphism in a potential binding site for GATA transcription factors in the ovine interleukin 2 gene. *Vet. Immun. Immunopath.* **107**, 51-56

204. Prinzenberg, E.-M., Brandt, H., Bennewitz, J., Kalm, E., Erhardt, G. (2005): Allele frequencies for SNPs in the *α_{S1}-casein* gene (*CSN1S1*) 5'flanking region in European cattle and association with economic traits in German Holstein. *Livest. Prod. Sci.* **98**, 155-160
205. Erhardt, G. (2005): Molekulare Gendiagnostik bei Nutztieren. In: Geldermann, H. (Hrsg): *Tier-Biotechnologie*, Verlag Eugen Ulmer, Stuttgart, UTB 8283. Buchbeitrag, 485-494
206. Erhardt, G. (2005): Nutzung von DNA-Markern zur Kontrolle von Tieren und tierischen Produkten. In: Geldermann, H. (Hrsg): *Tier-Biotechnologie*, Eugen Ulmer, Stuttgart, UTB 8283. Buchbeitrag, 508-516
207. Buschmann, A., Lühken, G., Erhardt, G., Groschup, M.H. (2005): Klassische und atypische Erscheinungsformen von Scrapie – Diagnostik und Übertragungs-versuche. DGfZ-Schriftenreihe "Aktuelle Aspekte in der Schafzucht, TSE-Resistenzzucht und Erhaltung tiergenetischer Ressourcen" **39**, 5-16
208. Gauly, M., Vaughan, J., Hogreve, S.K. and Erhardt, G. (2005): Brainstem auditory-evoked potential assessment of auditory function and congenital deafness in llamas (*Lama glama*) and alpacas (*L. pacos*). *J. Vet. Intern. Med.* **19**, 756-60
209. Lühken, G., Buschmann, A., Groschup, M.H., Erhardt, G. (2005): Klassische und atypische Erscheinungsformen von Scrapie – Genetische Grundlagen. DGfZ-Schriftenreihe "Aktuelle Aspekte in der Schafzucht, TSE-Resistenzzucht und Erhaltung tiergenetischer Ressourcen" **39**, 17-23
210. Pariset, L., Cappucio, I., D'Andrea, M.S., Marletta, D., Ajmone Marsan, P., Valentini, A. and ECONOGENE Consortium (**..Georg Erhardt..**) (2006): Short Communication: Characterization of single nucleotide polymorphisms in sheep and their variation as evidence of selection. *Anim. Genet.* **37**, 290-292
211. Cañón, J., Garcia, D., Garcia-Atance, M.A., Obexer-Ruff, G., Lentra, J.A., Ajmone-Marsan, P., Dunner, S., ECONOGENE Consortium (2006): Geographical partitioning of goat diversity in Europe and the Middle East. *Anim. Genet.* **37**, 327-334
212. Harder, B., Bennewitz, J., Reinsch, N., Thaller, G., Thomsen, H., Kühn, C., Schwerin, M., Erhardt, G., Förster, M., Reinhardt, F., Kalm, E. (2006): Mapping of quantitative trait loci for lactation persistency traits in German Holstein dairy cattle. *J. Anim. Breed. Genet.* **123**, 89-96
213. Xu, N., Paul, S., Bennewitz, J., Reinsch, N., Thaller, G., Reinhardt, F., Kühn, C., Schwerin, M., Erhardt, G., Weimann, C., Thomsen, H., Mishra, S., Kalm, E. (2006): Confirmation of quantitative trait loci for somatic cell score on bovine chromosome 18 in the German Holstein. *Arch. Tierz. Dummerstorf* **49**, 111-119

214. Beja-Pereira, A., Caramelli, D., Lalueza-Fox, C., Vernes, C., Ferrand, N., Caroli, A., Goyache, F., Royo, L., Conti, S., Lari, M., Martini, A., Ouragh, L., Magid, A., Atash, A., Zsolnai, A., Boscato, P., Triantaphylidis, C., Ploumi, K., Sineo, L., Mallegni, F., Taberlet, C., Erhardt, G., Sampietro, L., Bertranpetit, J., Barbujani, G., Luikart, G., Bertorelle, G. (2006): The origin of European cattle: new evidence from modern and ancient DNA. *PNAS* **103**, 8113-8118
215. Gauly, M., Schackert, M., Hoffmann, B., Erhardt, G. (2006): Influence of sex on the resistance of sheep lambs to an experimental *Haemonchus contortus* infection. *Dtsch. tierärztl. Wschr.* **113**, 178-181
216. Pariset, L., Cappuccio, I., Ajmone Marsan, P., Dunner, S., Luikart, G., England, P.R., Obexer-Ruff, G., Peter, C., Marletta, D., Pilla, F., Valentini, A. and the ECONOGENE Consortium (2006): Assessment of population structure by single nucleotide polymorphisms (SNPs) in goat breeds. *J. Chromatogr. B.* **833**, 117-120
217. Lühken, G., Brandt, H.R., Buschmann, A., Groschup, M.H., Erhardt, G. (2006): Microsatellite CTSBJ12 is located distal to the ovine prion protein gene on OAR13 and is not associated with scrapie susceptibility. *Anim. Gen.* **37**, 426-427
218. Ibeagha, E.M., Erhardt, G. (2006): An evaluation of genetic diversity indices of the Red Bororo and White Fulcani cattle breeds with different molecular markers and their implications on current and future improvement options. *Trop. Anim. Health Prod.* **38**, 431-441
219. Hielscher, A., Brandt, H., Erhardt, G., Gauly, M. (2006): Heterosis analysis of *Haemonchus contortus* resistance and production traits in Rhoen sheep, Merino Land sheep and crossbred lambs. *Vet. Parasit.* **141**, 279-284
220. Niznikowski, R., Lühken, G., Strzelec, E., Lipsky, S., Popielarczyk, D., Erhardt, G. and the ECONOGENE Consortium (2006): PRNP gene polymorphism in 136, 154 and 171 codons in Polish sheep breeds. *Medycyna Wet.* **62**, 938-941
221. European Cattle Genetic Diversity Consortium (**..Georg Erhardt..**) (2006): Marker-assisted conservation of European cattle breeds: an evaluation. *Anim. Genet.* **37**, 475-481
222. Pariset, L., Cappuccio, I., Ajmone-Marsan, P., Bruford, M., Dunner, S., Cortes, O., Erhardt, G., Prinzenberg, E.-M., Gutscher, K., Joost, S., Pinto-Juma, G., Nijman, I.J., Lenstra, J.A., Perez, T., Valentini, A. and Econogene Consortium (2006): Characterization of 37 Breed-Specific Single-Nucleotide Polymorphisms in Sheep: *J. Heredity* **97**, 531-534
223. Ron, M., Cohen-Zinder, M., Peter, C., Weller, J.I., Erhardt, G. (2006): Short Communication: A Polymorphism in *ABCG2* in *Bos indicus* and *Bos taurus* Cattle Breeds. *J. Dairy Sci.* **89**, 4921-

4923

224. European Cattle Genetic Diversity Consortium (**..Georg Erhardt..**) (ECONOGENE), (2006): Marker-assisted conservation of European cattle breeds: an evaluation. *Anim. Gen.* **37**, 475-481
225. Peter, C., Erhardt, G. (2006): Ein Schaf gleicht dem anderen!? *Spiegel der Forschung* **23**, 77-82
226. Wisniewska, E., Lühken, G., Mroczkowski, S., Erhardt, G. (2006): Prion protein (PrP) gene polymorphisms and breeding for resistance to scrapie in Polish Merino sheep. *Arch. Tierz., Dummerstorf* **49** (Special Issue), 365-371
227. Xu, N., Paul, S., Bennewitz, J., Reinsch, N., Thaller, G., Reinhardt, F., Kühn, C., Schwerin, M., Erhardt, G., Weimann, C., Thomsen, H., Mishra, S., Kalm, E. (2006): Confirmation of quantitative trait loci for somatic cell score on bovine chromosome 18 in the German Holstein. *Arch. Tierz. Dummerstorf* **49**, 111-119
228. Cappuccio, I., Pariset, L, Ajmone-Marsan, P., Dunner, S., Cortes, O., Erhardt, G., Lühken, G., Gutscher, K., Joost, S., Nijman, J., Lenstra, J.A., England, P.R., Zundel, S., Obexer-Ruff, G., Beja-Pereira, A., Valentinie, A. and the Econogene-Consortium (2006): Allele frequencies and diversity parameters of 27 single nucleotide polymorphisms within and across goat breeds. *Molec. Ecol. Notes* **6**, 992-997
229. Lühken, G., Buschmann, A., Brandt, H., Groschup, M.H., Erhardt, G. (2007): Epidemiological and genetically differences between classical and atypical scrapie cases in Germany. *Vet. Res.* **38**, 65-80
230. Lühken, G., Zieleniewicz, D., Brandt, H.R., Buschmann, A., Groschup, M.H., Erhardt, G. (2007): Brief notes: Microsatellites *MCMA53* and *MCMA16* on OAR15 are associated with susceptibility to atypical scrapie. *Anim. Gen.* **38**, 88-89
231. Peter, C., Bruford, M., Perez, T., Dalamitra, S., Hewitt, G., Erhardt, G. and the ECONOGENE Consortium (2007): Genetic diversity and subdivision of 57 European and Middle-Eastern sheep breeds. *Anim. Gen.* **38**, 37-44
232. Negrini, R., Nijman, I.J., Milanesi, E., Moazami-Goudarzi, K., Williams, J.L., Erhardt, G., Dunner, S., Rodellar, C., Valentini, A., Bradley, D.G., Ajmone Marsan, P., Lenstra, J.A. and the European Cattle Genetic Diversity Consortium (2007): Differentiation of European cattle by AFLP fingerprinting. *Anim. Gen.* **38**, 60-66
233. Kaupe, B., Brandt, H., Prinzenberg, E.-M., Erhardt, G. (2007): Joint analysis of CYP11B and DGAT1 genetic variation on milk production, somatic cell score, conformation, reproduction

and productive life span in German Holstein cattle. *J. Anim. Sci.* **85**, 11-21

234. Hinger, M., Brandt, H., Horner, S., Erhardt, G. (2007): Short Communication: Association Analysis of Microsatellites and *Mycobacterium avium* spp. *paratuberculosis* Antibody Response in German Holstein. *J. Dairy Sci.* **90**, 1957-1961
235. Gauly, M., Duss, C., Erhardt, G. (2007): Influence of *Ascaridia galli* infections and anthelmintic treatments on the behaviour and social ranks of laying hens (*Gallus gallus domesticus*). *Vet. Parasit.* **146**, 271-280
236. Schwalm, A., Gauly, M., Erhardt, G., Bergmann, M. (2007): Changes in testicular histology, apoptosis, spermatogonia proliferation and sperm quality in Llamas (*Lama glama*), following exposure to high ambient temperature. *Theriogenology* **67**, 1316-1323
237. Caroli, A., Chiatti, F., Chessa, S., Rignanese, D., Ibeagha-Awemu, E.-M., Erhardt, G. (2007): Characterization of the casein gene complex in West African goats and description of a new α_{S1} -casein polymorphism. *J. Dairy Sci.* **90**, 2989-2996
238. Reckzeh, C., Hoffmann, C., Buschmann, A., Buda, S., Budras, K.-D., Reckling, K.-F., Bellmann, S., Knobloch, H., Erhardt, G., Fries, R., Groschup, M.H. (2007): Rapid testing leads to the underestimation of the scrapie prevalence in an affected sheep and goat flock. *Veter. Microbiol.* **123**, 320-327
239. Ibeagha-Awemu, E.M., Prinzenberg, E.-M., Jann, O.C., Lühken, G., Ibeagha, A.E., Zhao, X., Erhardt, G. (2007): Molecular characterisation of bovine *CSN1S2^B* and extensive distribution of Zebu specific milk protein alleles in European cattle. *J. Dairy Sci.* **90**, 3522-3529
240. Erhardt, G., Lipsky, S, Lühken, G. (2007): Prionprotein-Polymorphismen in europäischen Schafzrassen unter dem Aspekt der Scrapiebekämpfung. *DGFZ-Schriftenreihe* **47**, 346-354
241. Gauly, M., Hielscher, A., Erhardt, G. (2007): Effekte der Kreuzungszucht beim Schaf auf die Parasitenresistenz und Produktionsleistung. *DGFZ-Schriftenreihe* **47**, 54-60
242. Joost, S., Bonin, A., Bruford, M.W., Després, L., Conord, C., Erhardt, G., Taberlet, P. (2007): A Spatial Analysis Method (SAM) to detected candidate loci for selection: towards a landscape genomics approach of adaptation. *Mol. Ecol.* **16**, 3955-3969
243. Dalrymple, B.P., Kirkness, E.F., Nefedoy, M., McWilliam, S., Ratnakumar, A., Barris, W., Zhao, S., Shetty, J., Maddox, J.F., O'Grady, M., Nicholas, F., Crawford, A.M., Smith, T., de Jong, P.J., McEwan, J., Oddy, V.H., Cockett, N.E., International Sheep Genomics Consortium (**..Georg Erhardt..**), (2007): Using comparative genomics to reorder the human genome sequence into a virtual sheep genome. *Genome Biol.* **8**, R152

244. Lipsky, S., Brandt, H., Lühken, G., Erhardt, G. (2008): Analysis of prion protein genotypes in relation to reproduction traits in local and cosmopolitan German sheep breeds. *Anim. Reprod. Sci.* **103**, 69-77
245. Lühken, G., Lipsky, S., Peter, C., Erhardt, G. (2008): Prion protein polymorphism in autochthonous European sheep breeds in respect to scrapie eradication in affected flocks. *Small Rum. Res.* **75**, 43-47
246. Schwalm, A., Erhardt, G., Gerken, M., Moors, E., Gauly, M. (2008): Einfluss von Hitzebelastung auf Thermoregulation und Fruchtbarkeitsleistung bei geschorenen und ungeschorenen männlichen Lamas (*Lama glama*). *Tierärztliche Praxis Großtiere* **36**, 324-328
247. Groschup, H.M., Lacroux, C., Buschmann, A., Lühken, G., Mathey, J., Eiden, M., Lugan, S., Hoffmann, C., Espinosa, J.C., Baron, T., Torres, J.M., Erhardt, G., Andreolètti, O. (2007): Classic scrapie in sheep with the ARR/ARR prion genotype in Germany and France. *Emerging Infect. Dis.* **13**, 1201-1207
248. Prinzenberg, E.-M., H. Jianlin, G. Erhardt (2008): Genetic Variation in the κ -Casein Gene (*CSN3*) of Chinese Yak (*Bos grunniens*) and Phylogenetic Analysis of *CSN3* Sequences in the Genus *Bos*. *J. Dairy Sci.* **91**, 1198-1203
249. Reiner, G., Hecht, W., Burkhardt, S., Köhler, K., Haushahn, P., Reinacher, M., Erhardt, G. (2008): A complex malformation in a pig: case report and review of the literature. *Dtsch. tierärztl. Wschr.* **115**, 194-197
250. Gauly, M., Kanan, A., Brandt, H., Weigend, S., Moors, E., Erhardt, G. (2008): Genetic resistance to *Heterakis gallinarum* in two chicken layer lines following a single dose infection. *Vet. Parasit.* **155**, 74-79
251. Hinger, M., Brandt, H., Erhardt, G. (2008): Heritability Estimates for Antibody Response to *Mycobacterium avium* ssp. *Paratuberculosis* in German Holstein Cattle. *J. Dairy Sci.* **91**, 3237-3244
252. Chen, S., Costa, V., Azevedo, M., Baig, M., Mamalkov, N., Luikart, G., Erhardt, G., Beja-Pereira, A. (2008): Short Communication: New Alleles of the Bovine Kappa-Casein Gene Revealed by Re-sequencing and Haplotype Inference Analysis. *J. Dairy Sci.* **91**, 3682-3686
253. Küpper, J., Erhardt, G., Chessa, S., Rignanese, D., Caroli, A. (2008): Milchproteinvarianten bei Thüringer Waldziegen. *Arche Nova* **5**, 6-8
254. Chessa, S., Chiatti, F., Rignanese, D., Ibeagha-Awemu, E.M., Özbeyaz, C., Hassan, Y.A., Baig, M.M., Erhardt, G., Caroli, A. (2007): The casein genes in goat breeds from different Continents: analysis by Polymerase Chain Reaction – Single Strand Conformation

Polymorphism (PCR-SSCP). *Ital. J. Anim. Sci.* **6**, 73-75

255. Caroli, A., Chessa, S., Rignanese, D., Ceriotti, G., Bolla, P., Gigliotti, C., Erhardt, G. (2008): Le Caseine Caprine e ovine: Variabilita' Genetica ed Effetti Sulla Qualita' del Latte. *Scienza e Tecnica Lattiero-Casearia* **59**, 163-173
256. Hoppe, S., Brandt, H., Erhardt, G., Gauly, M. (2008): Maternal behaviour of German Angus and Simmental cows after parturition and its relation to production traits. *Appl. Anim. Behav.* **114**, 297-306
257. Chessa, S., Rignanese, D., Küpper, J., Pagnacco, G., Erhardt, G., Caroli, A. (2008): Short Communication: The β -Casein (CSN2) Silent Allele C1 is Highly Spread in Goat Breeds. *J. Dairy Sci.* **91**, 4433-4436
258. Lühken, G., Erhardt, G. (2008): Genetisch bedingte Scrapierresistenz beim Schaf? *Züchtungskunde* **80**, 25-34
259. Kijas, J., Townley, D., Dalrymple, B., Heaton, M., Maddox J.F., McGrath, A., Wilson, P., Ingersoll, R.G., McCulloch, R., McWilliam, S., Tang, D., McEwan, J., Cocket, N., Oddy, V.H., Nicholas, F.W., Raadsma, H. for the International Sheep Genomics Consortium (**..Georg Erhardt..**), (2009): A Genome Wide Survey of SNP Variation Reveals the Genetic Structure of Sheep Breeds. *PLoS One* **4**, e4668
260. Achukwi, M.D., Ibeagha-Awemu, E.M., Musongong, G.A., Erhardt, G. (2009): Doayo (Namchi) *Bos taurus* cattle with low zebu attributes are trypanotolerant under natural vector challenge. *Online J. Vet. Res.* **13**, 94-105
261. Weimann, C., Meisel, H., Erhardt, G. (2009): Bovine κ -casein variants result in different ACE inhibitory peptides. *J. Dairy Sci.* **92**, 1885-1888
262. Pariset, L., Joost, S., Ajmone Marsan, P., Valentini, A. and Econogene Consortium (EC) (**..Georg Erhardt..**), (2009): Landscape genomics and biased FST approaches reveal single nucleotide polymorphisms under selection in goat breeds of North-East Mediterranean. *BMC Genet.* **10**, 7
263. Ligda, Ch., Altarayrah, J., Goeorgoudis, A. and the Econogene Consortium (**..Georg Erhardt..**), (2009): Genetic analysis of Greek sheep breeds using microsatellite markers for setting conservation priorities. *Small Rum. Res.* **83**, 42-48
264. Lühken, G., Caroli, A., Ibeagha-Awemu, E.M., Erhardt, G. (2009): Characterization and genetic analysis of bovine α_{s1} -casein I variant. *Anim. Gen.* **40**, 479-485
265. Görtz, I., Baes, C., Weimann, C., Reinsch, N., Erhardt, G. (2009): Association between single nucleotide polymorphisms in the *CXCR1* gene and somatic cell score in Holstein dairy cattle.

J. Dairy Sci. **92**, 4018-4022

266. Lühken, G., Wagner, H.W., Seichter, D., Hecht, W., Erhardt, G. (2009): Genetic Characterization of a Sheep-Dwarf Goat Hybrid. *Cytogenet. Genome Res.* **125**, 158-161
267. Caroli, A.M., Chessa, S., Erhardt, G. (2009): *Invited review*: Milk protein polymorphisms in cattle: Effect of animal breeding and human nutrition. *J. Dairy Sci.* **92**, 5335-5352
268. Pariset, L., Cuteri, A., Ligda, C., Ajmone-Marsan, P., Valentini, A., ECONOGENE Consortium (**..Georg Erhardt..**), (2009): Geographical patterning of sixteen goat breeds from Italy, Albania and Greece assessed by Single Nucleotide Polymorphisms. *BMC Ecol.* **9**, 20
269. Pereira, F., Queirós, S., Gusmão, L., Nijman, I.J., Cuppen, E., Lenstra, J.A., ECONOGENE Consortium (**..Georg Erhardt..**), Davis, S.J., Nejmeddine, F., Amorim, A. (2009): Tracing the history of goat pastoralism: new clues from mitochondrial and Y chromosome DNA in North Africa. *Mol. Biol. Evol.* **26**, 2765-2773
270. Baes, C., Goertz, I., Mayer, M., Weimann, C., Liu, Z., Reinhardt, F., Erhardt, G., Reinsch, N. (2010): Refined Mapping of Quantitative Trait Loci for Somatic Cell Score on BTA02 in the German Holstein. *J. Anim. Breed. Gen.* **127**, 180-188
271. Giambra, I.J., Chianese, L., Ferranti, P., Erhardt, G. (2010): Genomics and proteomics of deleted ovine *CSN1S1**I. *Intern. Dairy J.* **20**, 195-202
272. Brandt, H., Müllenhoff, A., Lambertz, C., Erhardt, G., Gauly, M. (2010): Estimation of genetic and crossbreeding parameters for preweaning traits in German Angus and Simmental beef cattle and the reciprocal crosses. *J. Anim. Sci.* **88**, 80-86
273. Giambra, I.J., Chianese, L., Ferranti, P., Erhardt, G. (2010): Short communication: Molecular genetic characterization of ovine α_{S1} -casein allele H caused by alternative splicing. *J. Dairy Sci.* **93**, 792-795
274. Caroli, A., Rizzi, R., Lühken, G., Erhardt, G. (2010): Short communication: Milk protein genetic variation and casein haplotype structure in the Original Pinzgauer cattle. *J. Dairy Sci.* **93**, 1260-1265
275. Giambra, I.J., Jäger, S., Erhardt, G. (2010): Isoelectric focusing reveals additional casein variants in German sheep breeds. *Small Rum. Res.* **90**, 11-17
276. Küpper, J., Chessa, S., Rignanese, D., Caroli, A., Erhardt, G. (2010): Divergence at the casein haplotypes in dairy and meat goat breeds. *J. Dairy Res.* **77**, 56-62

277. Hoppe, S., Brandt, H., König, S., Erhardt, G., Gauly, M. (2010): Temperament traits of beef calves measured under field conditions and their relationships to performance. *J. Anim. Sci.* **88**, 1982-1989
278. Laloë, D., Moazami-Goudarzi, K., Lenstra, J.A., Ajmone Marsan, P., Azor, P., Baumung, R., Bradley, D.G., Bruford, M.W., Canon, J., Dolf, G., Dunner, S., Erhardt, G., Hewitt, G., Kantanen, J., Obexer-Ruff, G., Olsaker, I., Rodellar, C., Valentini, A., Wiener, P. (2010): European Cattle Genetic Diversity Consortium and Econogene Consortium: Spatial Trends of Genetic Variation of Domestic Ruminants in Europe. *Diversity* **2**, 932-945
279. Glenske K., Brandt H., Prinzenberg, E.-M., Gauly, M., Erhardt, G. (2010): Verification of a QTL on BTA1 for temperament in German Simmental and German Angus calves (Short communication). *Arch. Tierz.* **53**, 388-392
280. Caspari D.K., Balkema-Buschmann A., Brandt H., Groschup M.H., Erhardt G., Lühken G. (2010): Polymorphisms in genes *CTSB*, *CTSD*, *CAPN2*, *KLK1* and *TGFB1* not associated with susceptibility to atypical or classical ovine scrapie. *Arch. Tierz.* **53**, 457-464
281. Glenske K., Brandt H., Gauly, M., Erhardt, G. (2010): Analysis of association of two SNP in cholecystokinin B receptor gene with behavior scores in German Angus and German Simmental cattle (Brief Report). *Arch. Tierz.* **53**, 494-496
282. Giambra, I.J., Stam, E., Atema, F., Schuiling, E., Brandt, H., Erhardt, G. (2010): Association Study Between Milk Protein Variants And Milk Performance Traits In East Friesian Dairy Sheep. German Society for Animal Science (Hrsg.). Proceedings 9th World Congress on Genetics Applied to Livestock Production, 1.-6.08-2010 in Leipzig, Deutschland. 0143
283. Weimann, C., Brandt, H., Erhardt, G. (2010): Chymosin Variants In Different Cattle Breeds And Their Influence On Growth Traits In Consideration Of κ -casein Variants. German Society for Animal Science (Hrsg.). Proceedings 9th World Congress on Genetics Applied to Livestock Production, 1.-6.08-2010 in Leipzig, Deutschland. 0417
284. Caroli, A.M., Chessa, S., Erhardt, G. (2010): Milk Protein Polymorphisms In Cattle: Effect On Animal Breeding And Human Nutrition. German Society for Animal Science (Hrsg.). Proceedings 9th World Congress on Genetics Applied to Livestock Production, 1.-6.08-2010 in Leipzig, Deutschland. 0030
285. Lühken, G., Glenske, K., Brandt, H., Erhardt, G. (2010): Genetic variation in monoamine oxidase A and analysis of association with behaviour traits in beef cattle. *J. Anim. Breed. Genet.* **127**, 411-418
286. Glenske, K., Prinzenberg, E.-M., Brandt, H., Gauly, M., Erhardt, G. (2010): A chromosome wide QTL-study on BTA29 affecting temperament traits in German Angus beef cattle and

mapping of DRD4. *Animal* **5**, 195-197

287. Gornas, N., Weimann, C., Hussien A El., Erhardt, G. (2011): Genetic Characterization of Local Sudanese Sheep Breeds Using DNA Markers. *Small Rum. Res.* **95**, 27-33
288. Becker, D., Tetens, J., Brunner, A., Bürstel, D., Ganzter, M., Kijas, J., International Sheep Genomics Consortium (**..Georg Erhardt..**), Drögemüller, C. (2010): Microphthalmia in Texel sheep is associated with a missense mutation in the paired-like homeodomain 3 (PITX3) gene. *PLoS One* **5**(1): e8689
289. Magee, D.A., Park, S.D., Scraggs, E., Murphy, A.M., Doherty, M.L., Kijas, J.W., International Sheep Genomics Consortium (**..Georg Erhardt..**), MacHugh, D.E. (2010): Technical note: High fidelity of whole-genome amplified sheep (*Ovis aries*) deoxyribonucleic acid using a high-density single nucleotide polymorphism array-based genotyping platform. *J. Anim. Sci.* **88**, 3183-3186
290. International Sheep Genomics Consortium (**..Georg Erhardt..**), Archibald, A.L., Cockett, N.E., Dalrymple, B.P., Faraut, T., Kijas, J.W., Maddox, J.F., McEwan, J.C., Hutton Oddy, V., Raadsma, H.W., Wade, C., Wang, J., Wang, W., Xun, X. (2010): The sheep genome reference sequence: a work in progress. *Anim. Genet.* **41**, 449-453
291. Glenske, K., Brandt, H., Erhardt, G. (2011): Association of the Ile-442-Met substitution in NCAPG with birth weight in German Angus and German Simmental cattle. *Arch. Tierz.* **54**, 104-106
292. Giambra, I., Erhardt, G. (2011): Molecular genetic characterisation of ovine *CSN1S2* variants C and D revealed further important variability within *CSN1S2*. *Anim. Genet.* **43**, 642-645
293. Ajmone-Marsan, P., Garcia, J.F., Lenstra, J.A., The Globaldiv Consortium(**..Georg Erhardt..**) (2010): On the Origin of Cattle: How Aurochs Became Cattle and Colonized the World. *Evol. Anthropol.* **19**, 148-157
294. Edwards, C.J., Ginja, C., Kantanen, J., Pèrez-Pardal, L., Tresset, A., Stock, F., European Cattle Genetic Diversity Consortium (**..Georg Erhardt..**), Gama, L.T., Penedo, M.C. T., Bradley, D.G., Lenstra, J.A., Nijman, I.J. (2011): Dual Origins of Dairy Cattle Farming – Evidence from a Comprehensive Survey of European Y-Chromosomal Variation. *PLoS ONE*, **6** (1): e15922. doi:10.1371/journal.pone.0015922
295. Idris, A., Moors, E., Budnick, C., Herrmann, A., Erhardt, G., Gauly, M. (2011): Is the establishment rate and fecundity of *Haemonchus contortus* related to body or abomasal measurements in sheep? *Animal* **5**, 1276-1282

296. Schmitt, A, Brandt, H., Erhardt, G. (2011): Die Einflüsse des Mutterschafgewichts auf die Gewichtsentwicklung bei Lämmern der Rasse Merinolandschaf. *Züchtungskunde* **83**, 129-141
297. Withen, K.B., Brüniche-Olsen, A., Pedersen, B.V, European Cattle Genetic Diversity Consortium (**..Georg Erhardt..**), Gravlund, P. (2011): The Agersoe cattle: the last remnants of the Danish island cattle (*Bos taurus*)? *J. Anim. Breed. Genet.* **128**, 141-152
298. Lisson, M., Erhardt, G. (2011): Milchproteinvarianten und menschliche Ernährung. *Ernährungsumschau* **58**, 602-607
299. Lühken, G., Gauly, M., Kaufmann, F., Erhardt, G. (2011): Association study in naturally helminth infected layers shows evidence for influence of interferon-gamma variants on *Ascaridia galli* worm burdens. *Vet. Res.* **42**:84
<http://www.veterinaryresearch.org/content/42/1/84>
300. Hall, S.J.J., Lenstra, J.A., Deeming, D.C. and the European Cattle Genetic Diversity Consortium (**..Georg Erhardt..**) (2011): Prioritization based on neutral genetic diversity may fail to converse important characteristics in cattle breeds. *J. Anim. Breed. Genet.* **129**, 218-225
301. Miller, J.M., Poissant, J., Kijas, J.W., Coltman, D.W., International Sheep Genomics Consortium (**..Georg Erhardt..**) (2011) A genome-wide set of SNPs detects population substructure and long range linkage disequilibrium in wild sheep. *Mol. Ecol. Resour.* **11**, 314-322
302. García-Gámez, E., Reverter, A., Whan, V., McWilliam, S.M., Arranz, J.J., International Sheep Genomics Consortium (**..Georg Erhardt..**), Kijas, J.W. (2011): Using regulatory and epistatic networks to extend the findings of a genome scan: Identifying the gene drivers of pigmentation in merino sheep. *PLoS One* **6**:e21158
303. Zerabruk, M., Li, M.-H., Kantanen, J., Olsaker, I., Ibeagha-Awemu, E.M., Erhardt, G., Vangen, O. (2012): Genetic diversity and admixture of indigenous cattle from North Ethiopia: implications of historical introgressions in the gateway region to Africa. *Anim. Genet.* **43**, 257–266
304. Küpper, J., Brandt, H., Donat, K., Erhardt, G. (2012): Heritability estimates for *Mycobacterium avium* ssp. *Paratuberculosis* status of German Holstein cows tested by fecal culture. *J. Dairy Sci.* **95**, 2734 – 2739
305. Gauly, M., Erhardt, G. (2012): Verhaltensparameter in der Rinderzucht. *DGFZ-Schriftenreihe Heft* **60**, 67-73

306. Lühken, G., Erhardt, G. (2012): Volkswirtschaftliche Konsequenzen der Anwendung/Unterlassung der Genanalyse am Beispiel der Zucht auf TSE-Resistenz beim Schaf. *Nova Acta Leopodina NF 113*, Nr. **388**, 293-310
307. Giambra, I., Erhardt, G. (2011): Milchproteine, Milchproteinvarianten und deren Bedeutung für die Schafzucht. *Züchtungskunde* **84**, 52-73
308. Siebert, F., Lühken, G., Pallauf, J., Erhardt, G. (2012): Mutation in porcine Zip4-like zinc transporter is associated with pancreatic zinc concentration and apparent zinc absorption. *Br. J. Nutr.* **109**, 969-976.
309. Rosenbaum, S., Ringseis, R., Hillen, S., Lange, S., Erhardt, G., Reiner, G., Eder, K. (2012): Genome-wide transcript profiling indicates induction of energy-generating pathways and an adaptive immune response in the liver of sows during lactation. *Comp. Biochem. Phys. Part D: Genomics and Proteomics*, <http://dx.doi.org/10.1016/j.cbd.2012.09.001>
310. Giambra, I.J., Erhardt, G. (2012) Molecular genetic characterization of ovine *CSN1S2* variants *C* and *D* reveal further important variability within *CSN1S2*. *Anim. Genet.* **43**, 642-645
311. Pauciullo, A., Shuiep, E.T.S., Cosenza, Ramunno, L., Erhardt, G. (2012): Molecular characterization and genetic variability at κ -casein gene (*CSN3*) in camels. *Gene* **513**, 22-30
312. Rosenbaum, S., Ringseis, R., Hillen, S., Becker, S., Erhardt, G., Reiner, G., Eder, K. (2012): The stress signaling pathway nuclear factor E2-related factor 2 is activated in the liver of sows during lactation. *Act. Vet. Scand.* **54**:59, <http://www.actavetscand.com/content/54/1759>
313. Shuiep, E.T.S., Giambra, I. J., El Zubeir, I., Erhardt, G. (2012): Biochemical and molecular characterization of polymorphisms at α_{s1} -casein in Sudanese camel (*Camelus dromedarius*) *Intern. Dairy J.* **28**, 88-93
314. Lühken, G., Fett, K. Pauciullo, A., Huisinga, M., Erhardt, G. (2012): Familiar Hypopigmentation Syndrome in Sheep Associated with Homozygous Deletion of the Entire Endothelin Type-B Receptor Gene. *PLoS ONE*, published online, 10.1371/journal.pone.0053020
315. Gandolfi, B., Gruffydd-Jones, T.J., Malik, R., Cortes, A., Jones, B.R., Helps, C.R., Prinzenberg, E.-M., Erhardt, G., Lyons, L.A. (2012): First *WNK4* - Hypokalemia Animal Model Identified by Genome-wide Association in Burmese Cats. *PLoS ONE* **7**:e53173
316. Kijas, J.W., Lenstra, J.A., Hayes, B., Boitard, S., Porto Neto, L.R., San Cristobal, M., Servin, B., McCulloch, R., Whan, V., Gietzen, K., Paiva, S., Barendse, W., Ciani, E., Raadsma, H., McEwan,

- J., Dalrymple, B., International Sheep Genomics Consortium (**..Georg Erhardt..**) (2012): Genome-wide analysis of the world's sheep breeds reveals high levels of historic mixture and strong recent selection. *PLoS Biol.* **10**:e1001258
317. Lisson, M., Lochnit, G., Erhardt, G., (2013): In vitro gastrointestinal digestion of bovine α_{s1} - and α_{s2} -casein variants gives rise to different IgE-binding epitopes. *Internat. Dairy J.* **34**, 47-55
318. Donat, K., Schlotter., K., Erhardt, G., Brandt, H. (2013): Prevalence and control measures within the herd influence the performance of ELISA tests. *Vet. Rec.* Published Online First: 8 January 2014 doi:10.1136/vr.101533
319. Küpper, J., Brandt, H., Erhardt, G. (2013): Genetic association between *NOD2* polymorphism and infection status by *Mycobacterium avium* ssp. *paratuberculosis* in German Holstein cattle. *Anim. Genet.* **45**, 114-116
320. Lambertz, C., Friedrich, C., Moors, E., Brandt, H., Erhardt, G., Gauly, M. (2014): A comparison of claw conformation and claw horn structure of two sheep breeds, and their relationship to footrot incidence *Small Rum. Res.* **117**, 103-107
321. Lisson, M., Lochnit, G., Erhardt, G. (2013): Genetic variants of bovine β - and κ -casein result in different IgE-binding epitopes after in vitro gastrointestinal digestion. *J. Dairy Sci.* **96**, 5532-5543
322. Paucullo, A., Fleck, K., Lühken, G., Di Berardino, D., Erhardt, G. (2013): Dual color high resolution fiber-FISH analysis on Lethal White Syndrome carriers in sheep. *Cytogenet. Genome Res.* **140**, 46-54
323. Rosenbaum, S., Ringseis, R., Most, E., Hillen. S., Becker, S., Erhardt, G., Reiner, G., Eder, K. (2013): Genes involved in carnitine synthesis and carnitine uptake are up-regulated in the liver of sows during lactation. *Act. Vet. Scand.* **55**:24
324. Heaton, M.P., Kalbfleisch, T.S., Petrik, D.T., Simpson, B., Kijas, J.W., Clawson, M.L., Chitko. McKown, C.G., Harhay, G.P., Leymaster, K.A., International Sheep Genomics Consortium (**..Georg Erhardt..**) (2013): Genetic testing for TMEM154 mutations associated with lentivirus susceptibility in sheep. *PLoS One* **8**:e55490
325. Kijas, J.W., Serrano, M., McCulloch, R., Li Y., Salces Ortiz, J., Calvo, J.H., Pérez-Guzmán, M.D., International Sheep Genomics Consortium (**..Georg Erhardt..**) (2013): Genomewide association for a dominant pigmentation gene in sheep. *J. Anim. Breed. Genet.* **130**, 468-475
326. Lisson, M., Novak., N., Erhardt, G. (2014): Immunoglobulin E epitope mapping by microarray immunoassay reveals differences in immune response to genetic variants of caseins from

different ruminant species. J. Dairy Sci. **97**, 1939-1954

327. Donat, K., Soschinka, A., Erhardt, G., Brandt, H. (2014): Paratuberculosis: Decrease in milk production of German Holstein dairy cows shedding *Mycobacterium avium* ssp. *paratuberculosis* depends on within-herd prevalence. *Animal* **8**, 852-858
328. Donat, K., Brandt, H., Soschinka, A., Erhardt, G. (2014): Decreased serum protein associated with *Mycobacterium avium* ssp. *paratuberculosis* shedding in German Holstein cows. *Vet. Rec.* **174** :408 doi:10.1136/vr.101957
329. Küpper, J., Brandt, H., Donat, K., Erhardt, G. (2014): Phenotype definition is a main point in genome-wide association studies for bovine *Mycobacterium avium* ssp. *paratuberculosis* infection status. *Animal*, published online, DOI:
<http://dx.doi.org/10.1017/S1751731114001232>
330. Pauciuolo, A., Giambra, I., Iannuzzi, L., Erhardt, G. (2014): The β -casein in camels: molecular characterization of the *CSN2* gene, promoter analysis und genetic variability. *Gene* **547**, 159-168
331. Utsunomiya, Y.T., Bomba, L., Lucente, G., Colli, L., Negrini, R., Lenstra, J.A., Erhardt, G., European Cattle Genetic Diversity Consortium, Garcia, J.F., Ajmone-Marsan, P. (2014): Revisiting AFLP fingerprinting for an unbiased assessment of genetic structure and differentiation of taurine and indicine cattle. *BMC Genet.* **15**, 47
332. Korn, A., Gross, M., Usleber, E., Thom, N., Köhler, K., Erhardt, G. (2014): Dietary ergot alkaloids as a possible cause of tail necrosis in rabbits. *Mycotox. Res.* **30**, 241-250
333. Giambra, I., Brandt, H., Erhardt, G. (2014): Milk protein variants are highly associated with milk performance traits in East Friesian Dairy and Lacaune sheep. *Small Rum. Res.* **121**, 382-394
334. Giambra, I., Erhardt, G. (2014): Short Communication: Polymorphisms within ovine *CSN3* identified by DNA- and mRNA-sequence analyses. *Anim. Genet.* **45**, 908
335. Colli, L, Joost, S., Negrini, R., Nicoloso, L., Crepalti, P., Ajmone-Marsan, P., ECONOGENE Consortium (**..Georg Erhardt..**) (2014): Assessing the spatial dependence of adaptive loci in 43 European and Western Asian goat breeds using AFLP markers. *PLoS One* **9**:e86668
336. Heaton, M.P., Leymaster, K.A., Kalbfleisch, T.S., Kijas, J.W., Clarke, S.M., McEwan, J., Maddox, J.F., Basnayaka, V., Petrik, D.T., Simpson, B., Smith, T.P., Chitko-McKown, C.G., International Sheep Genomics Consortium (**..Georg Erhardt..**) (2014): SNPs for parentage testing and traceability in globally diverse breeds of sheep. *PLoS One* **9**:e94851

337. Kijas, J.W., Porto-Neto, L., Dominik, S., Reverter, A., Bunch, R., McCulloch, R., Hayes, B.J., Brauning, R., McEwan, J., International Sheep Genomics Consortium (**..Georg Erhardt..**) (2014): Linkage disequilibrium over short physical distances measured in sheep using a high-density SNP chip. *Anim. Genet.* **45**, 754-757
338. Fariello, M.I., Servin, B., Tosser-Kloppt, G., Rupp, R., Moreno, C. International Sheep Genomics Consortium (**..Georg Erhardt..**), San Cristobal, M., Boitard, S. (2014): Selection signatures in worldwide sheep populations. *PLoS One* **9**:e103813
339. Gessner, D.K., Gröne, B., Rosenbaum, S., Most, E., Hillen, S., Becker, S., Erhardt, G., Reinsner, G., Eder, K. (2015): Treatment of lactating sows with clofibrate as a synthetic agonist of PPAR α does not influence mild fat content and gains of litters. *BMC Vet. Res.* **11**, DOI 10.1186/s12917-015-0368-y
340. Gessner, D.K., Gröne, B., Rosenbaum, S., Most, E., Hillen, S., Becker, S., Erhardt, G., Reiner, G., Eder, K. (2015): Effect of dietary fish oil on the expression of genes involved in lipid metabolism in liver and skeletal muscle of lactating sows. *J. Anim. Phys. Anim. Nut.*, DOI 10.1111/jpn.12324
341. Pauciullo, A., Erhardt, G. (2015): Molecular characterization of the llamas (*Lama glama*) casein cluster genes transcripts (CSN1S1, CSN2, CSN1S2, CSN3) and regulatory regions. *PLoS One* **10**:e0124963
342. Pauciullo, A., Küpper, J., Brandt, H., Donat, K., Iannuzzi, L., Erhardt, G. (2015): Wingless-type MMTV integration site family member 2 (*WNT2*) gene is associated with resistance to MAP in faecal culture and antibody response in Hostein cattle. *Anim. Genet.* **46**, 122-132
343. Gessner, D., Gröne, B., Rosenbaum, S., Most, E., Hillen, S., Becker, S., Erhardt, G., Reiner, G., Eder, K. (2015): Effect of a negative energy balance induced by feed restriction in lactating sows on hepatic lipid metabolism, milk production and development of litters. *Arch. Anim. Nut.* **69**, 399-410
344. Gessner, D., Gröne, B., Rosenbaum, S., Most, E., Hillen, S., Becker, S., Erhardt, G., Reiner, G., Ringseis, R., Eder, K. (2015): Effect of a negative energy balance induced by feed restriction on pro-inflammatory and stress signalling pathways in the liver and skeletal muscle of lactating sows. *Arch. Anim. Nut.* **69**, 411-423
345. Gessner, D., Gröne, B., Couturier, A., Rosenbaum, S., Hillen, S., Becker, S., Erhardt, G., Reiner, G., Ringseis, R., Eder, K. (2015): Dietary Fish Oil inhibits pro-inflammatory and ER stress signalling Pathways in the Liver of Sows during Lactation. *PLoS One* **10**: e0137684
346. Lisson, M., Erhardt, G. (2015): Mapping of epitopes occurring in Bovine α_{s1} -casein variants by peptide microarray immunoassay. In: Cretich, M., Chiari, M., "Peptide Microarrays:

Methods and Protocols, Second Edition", Springer 2015

347. Lambertz, C., Bowen, P.R., Erhardt, G., Gauly, M. (2015): Effects of weaning beef cattle in two stages or by abrupt separation on nasal abrasions, behaviour, and weight gain. *Anim. Prod. Sci.* **55**, 786-792
348. Erhardt, G., Shuiep, E.T.S., Lisson, M., Weimann, C., Wang, Z., El Zubeir, I.E.Y.M., Paucullo, A. (2016): Alpha S1-casein polymorphisms in camel (*Camelus dromedarius*) and descriptions of biological active peptides and allergenic epitopes. *Trop. Anim. Health Prod.*, DOI 10.1007/s11250-016-0997-6
349. Weimann, C., Eltayeb, N.M., Brandt, H., Yousif, I.A.S., Abdel Hamid, M.M., Erhardt, G. (2016): Genetic diversity of domesticated and wild Sudanese guinea fowl (*Numinia meleagris*) based on microsatellite markers. *Arch. Tierz.* **59**, 59-64
350. Korn, A.K., Brandt, H., Erhardt, G. (2016): Genetic and environmental factors influencing tooth and jaw malformations in rabbits. *Veterinary Record* DOI 10.1136/vr.103293
351. Paucullo, A.; Knorr, C.; Perucatti, A.; Stölzl, A.; Pieper, D.; Iannuzzi, A.; Iannuzzi, L.; Erhardt, G. (2016): Characterization of a very rare case of living ewe-buck hybrid using classical and molecular genetics. *Scientific Reports* **6**:34781, DOI:10.1038/srep34781
352. Fleck, K.; Erhardt, G.; Lühken, G. (2016): From single nucleotide substitutions up to chromosomal deletions: genetic cause of leucism-associated disorders in animals. *Berl. Münch. Tierärztl. Wochenschr.* **129**, 269-281
353. Paucullo, A.; Gauly, M.; Consenza, G.; Wagner, H.; Erhardt, G. (2017) *Lama glama* α 1-casein: identification of new polymorphisms at the *CSN1S1* gene. *J. Dairy Sci.* **100**, 1282-1289
354. Chessa, S.; Giambra, I. J.; Brandt, H.; Caroli, A. M.; Gootwine, E.; Erhardt, G. (2017): Genetic diversity within economically important loci in European, Middle Eastern, and African sheep breeds: An insight into their development. *Small Rum. Res.* **155**, 72-80
355. Schmitz, W.; Kramer, M.; Erhardt, G.; Gauly, M.; Driancourt M.-A.; Holtz W. (2017): Pregnancy rate after fixed-time artificial insemination of suckled beef cows subjected to cosynch protocol with either busserelin or hCG as ovulation inducing agent. *Livestock Sci.* **206**, 141-147
356. Gödert, M.; Brandt, H.; Erhardt, G.; (2017): Beta-Casein A2 in Rindermilch - Hintergründe, züchterische und milchwirtschaftliche Strategien und Begrenzungen im Hinblick auf eine mögliche neue Nachfragesituation. *Züchtungskunde* **89**, 451-474

357. Pauciuillo, A.; Ogah, D. M.; Iannaccone, M.; Erhardt, G.; Di Stasio, L.; Cosenza, G.; (2018): Genetic characterization of the oxytocin-neurophysin I gene (*OXT*) and its regulatory regions analysis in domestic Old and New World camelids PlosOne
doi.org/10.1371/journal.pone.0195407
358. Korn, A. K.; Bauer, N.; Moritz, A.; Erhardt, G. (2018): An update on biochemical reference intervals of rabbits under special consideration of age, sex, and breed values. Vet. Clin. Pathol. **47**, 233-244
359. Sames, L.; Weimann, C.; Erhardt, G. (2018) Stutenmilch als Quelle ACE-inhibitorischer Peptide für die menschliche Ernährung. Züchtungskunde **90**,168-178
360. Pauciuillo, A.; Shuiep, E.T.S.; Ogah, D. M.; Cosenza, G.; Di Stasio, L.; Erhardt, G.(2019): Casein Gene Cluster in Camelids: Comparative Genome Analysis and New Findings on Haplotype Variability and Physical Mapping Front. Genet., 10: August 2019 Article 748| <https://doi.org/10.3389/fgene.2019.00748>
361. Erhardt, G. (2019): Sind die deutschen Schaf- und Ziegenzuchtziele noch up to date? DGfZ-Schriftenreihe "Zucht und Haltung von Schaf und Ziege in Deutschland" **78**, 39-47
362. Elena Ciani, Salvatore Mastrangelo, Anne Da Silva, Fabio Marroni, Maja Ferencaković,Paolo AjmoneMarsan, Hayley Baird, Mario Barbato, Licia Colli, Chiara Delvento, Toni Dovenski Gregor Gorjanc, Stephen J. G. Hall, Anila Hoda, MengHua Li, Božidarka Marković, John McEwan, Mohammad H. Moradi, Otsanda RuizLarrañaga, Dragana RužićMuslić, Dragica Šalamon Mojca Simčič ,Ondrej Stepanek, Econogene Consortium (**..Georg Erhardt..**), Sheephapmap Consortium (**..Georg Erhardt..**), Ino Curik, Vlatka CubricCurik and Johannes A. Lenstra (2020): On the origin of European sheep as revealed by the diversity of the Balkan breeds and by optimizing population-genetic analysis tools. Genet Sel Evol **52**, 25
<https://doi.org/10.1186/s12711-020-0054>
363. Xin Li, Ji Yang, Min Shen, Xing-Long Xie, Guangjian Liu, Yaxi Xu, Feng-Hua Lv, Hua Yang, Yong-Lin Yang, Chang-Bin Liu, Ping Zhou, Peng-Cheng Wan, Yun-Sheng Zhang, Lei Gao, Jing-Quan Yang, Wen-Hui Pi, Yan-Ling Ren, Zhi-Qiang Shen, Feng Wang, Juan Deng, Song-Song Xu, Hosein Salehian-Dehkordi, Eer Hehua, Ali Esmailzadeh, Mostafa Dehghani-Qanatqestani, Ondrej Stepanek, Christina Weimann, **Georg Erhardt**, Agraw Amane, Joram Mwacharo, Jian-Lin Han, Olivier Hanotte, Johannes Lenstra, Juha Kantanen, David Coltman, James Kijas, Michael Bruford, Kathiravan Periasamy, Xin-Hua Wang, and Meng-Hua Li (2020): Whole-genome resequencing of wild and domestic sheep identifies genes associated with morphological and agronomic traits. Nature Communications **11**, 2815
<https://doi.org/10.1038/s41467-020-16485-1>
364. Juan Deng; Xinglong Xie; Dongfeng Wang; Chao Zhao; Fenghua Lv; Xin Li; Ji Yang; Jialin Yu; Min Shen; Lei Gao; Jingquan Yang; Mingjun Liu; Wenrong Li; Yutao Wang; Feng Wang;

Jinquan Li; EEr Hehua; Yonggang Liu; Zhiqiang Shen; Yanling Ren; Guangjian Liu; Zehui Chen; Neena A. Gorkhali; Hossam E. Rushdi; Hosein Salehian Dehkordi; Ali Esmailzadeh; Maryam Nosrati; Samuel R. Paiva; Alexandre R. Caetano; Ondřej Štěpánek; Ingrid Olsaker; Christina Weimann; **Georg Erhardt**; Ino Curik; Juha Kantanen; Joram M. Mwacharo; Olivier Hanotte; Michael Bruford; Elena Ciani; Kathiravan Periasamy; Marcelo Amills; Johannes A Lenstra; Jianlin Han; Hongping Zhang; Li Li; Menghua Li (2020): Paternal origins and migratory episodes of domestic sheep. *Current Biology* **30**, 4085-4095 doi.org/10.1016/j.cub.2020.07.

365. L.G. Hohmann, C. Weimann, C. Scheper, G. Erhardt, S. König (2020): Associations between maternal milk protein genotypes with pre-weaning calf growth traits in beef cattle. *Journal of Animal Science* **98**, 1-10 DOI:10.1093/jas/skaa280.

366. Hohmann, L.G., Weimann, C., Scheper, C., Erhardt, G., König, S. (2021): Genetic diversity and population structure in divergent German cattle selection lines on the basis of milk protein polymorphisms. *Archives Animal Breeding* **64**, 91-102, doi.org/10.5194/aab-64-91-2021

367. Yin-Hong Cao, Song-Song Xu, Min Shen, Ze-Hui hen, Lei Gao, Feng-Hua Lv, Xing-Long Xie, Xin-Hua Wang, Hua Yang, Chang-Bin Liu, Ping Zhou, Peng-Cheng Wan, Yun-Sheng Zhang, Jing-Quan Yang, Wen-Hui Pi, Hehua EEr, Donagh P. Berry, Mario Barbato, Ali Esmailzadeh, Maryam Nosrati, Hosein Salehian-Dehkordi, Mostafa Dehghani-Qanatqestani, Arsen V. Dotsev, Tatiana E. Deniskova, Natalia A. Zinovieva, Gottfried Brem, Ondřej Štěpánek, Elena Ciani, Christina Weimann, **Georg Erhardt**, Joram M. Mwacharo, Abulgasim Ahbara, Jian Lin Han, Olivier Hanotte, Joshua M. Miller, Zijian Sim, David Coltman, Juha Kantanen, Michael W Bruford, Johannes A Lenstra, James Kijas, Menghua Li (2021): Historical introgression from wild relatives enhanced climatic adaptation and resistance to pneumonia in sheep. *Molecular Biology and Evolution* **38**, 838-855 DOI: [10.1093/molbev/msaa236](https://doi.org/10.1093/molbev/msaa236)

368. Feng-Hua Lv, Yin-Hong Cao, Guang-Jian Liu, Ling-Yun Luo, Ran Lu, Ming-Jun Liu, Wen-Rong Li, Ping Zhou, Xin-Hua Wang, Min Shen, Lei Gao, Jing-Quan Yang, Hua Yang, Yong-Lin Yang, Chang-Bin Liu, Peng-Cheng Wan, Yun-Sheng Zhang, Wen-Hui Pi, Yan-Ling Ren, Zhi-Qiang Shen, Feng Wang, Yu-Tao Wang, Jin-Quan Li, Hosein Salehian-Dehkordi, Eer Hehua, Yong-Gang Liu, Jian-Fei Chen, Jian-Kui Wang, Xue-Mei Deng, Ali Esmailzadeh, Mostafa Dehghani-Qanatqestani, Hadi Charati, Maryam Nosrati, Ondřej Štěpánek, Hossam E. Rushdi, Ingrid Olsaker, Ino Curik, Neena A. Gorkhali, Samuel R. Paiva, Alexandre R. Caetano, Elena Ciani, Marcel Amills, Christina Weimann, **Georg Erhardt**, Agraw Amane, Joram M Mwacharo, Jian-Lin Han, Olivier Hanotte, Kathiravan Periasamy, Anna Johansson, Jón H. Hallsson, Juha Kantanen, David W Coltman, Michael W Bruford, Johannes A Lenstra, Meng-Hua Li (2021): Whole-genome resequencing of worldwide wild and domestic sheep elucidates genetic diversity, introgression and agronomically important loci. *Molecular Biology and Evolution* **39**, Issue 2, February 2022, msab353, <https://doi.org/10.1093/molbev/msab353>