

Ackermann M, Lachmann N, Hartung S, Eggenschwiler R, Pfaff N, Happle C, Mucci A, Göhring G, Niemann H, Hansen G, Schambach A, Cantz T, Zweigerdt R, Moritz T: Promoter and lineage independent anti-silencing activity of the A2 ubiquitous chromatin opening element for optimized human pluripotent stem cell-based gene therapy. *Biomaterials* **35**:1531-1542.

Alexa R, Stochmalova A, Kadasi A, Grossmann R, Kolearova A, Sirotkin AV: The effect of soy Phytoestrogen daidzein and FSH on porcine ovarian cell proliferation and steroidogenesis. *Anim Physiol* 2014;12-17.

Al-Qamashoui B, Simianer H, Kadim I, Weigend S: Assessment of genetic diversity and conservation priority of Omani local chickens using microsatellite markers. *Trop Anim Health Prod* **46**:747-752.

Bergonier D, Sobral D, Feßler AT, Jacquet E, Gilbert FB, Schwarz S, Treilles M, Bouloc P, Pourcel C, Vergnaud G: *Staphylococcus aureus* from 152 cases of bovine, ovine and caprine mastitis investigated by Multiple-locus variable number of tandem repeat analysis (MLVA). *Vet Res* **45**:97.

Bernal SM, Heinzmann J, Herrmann D, Timmermann B, Baulain U, Großfeld R, Diederich M, Lucas-Hahn A, Niemann H: Effects of different oocyte retrieval and in vitro maturation systems on bovine embryo development and quality. *Zygote* 0050.R1:1-11. (<http://dx.doi.org/10.1017/S0967199413000658>).

Borchert D, Köhler P, Jäger T, Diederich M, Hüther L, Berk A, Lamadé W: Prolonged capnoperitoneum does not cause postoperative ileus in pigs: safety of prolonged capnoperitoneum. *Minim Invasiv Ther* **23**:157-164.

Buß M, Feßler AT, Turnidge J, Peters T, Schwarz S: Quality control ranges for tylosin 30 µg and 15 µg discs applicable to *Staphylococcus aureus* ATCC® 25923. *J Antimicrob Chemother* **69**:277-280.

Butaye P, van Duijkeren E, Prescott JF, Schwarz S: Antimicrobial resistance in bacteria from animals and the environment. *Vet Microbiol* **171**:269-272.

Chattaway MA, Jenkins C, Ciesielczuk H, Day M, DoNascimento V, Day M, Rodríguez I, van Essen-Zandbergen A, Schink AK, Wu G, Threlfall J, Woodward MJ, Coldham N, Kadlec K, Schwarz S, Dierikx C, Guerra B, Helmuth R, Mevius D, Woodford N, Wain J: Evidence of evolving extraintestinal enteroaggregative *Escherichia coli* ST38 clone. *Emerg Infect Dis* **20**:1935-1937.

Ebrahem M, Kersten S, Ehling C, Valenta H, Taylor U, Baulain U, Breves G, Beineke A, Hermeyer K, Dänicke S: Effect of *Fusarium* toxin contaminated wheat on health, nutrient digestibility and semen quality of adult cockerels. *Europ Poult Sci* **78**:1-17.

Entorf M, Feßler AT, Kadlec K, Kaspar H, Mankertz J, Peters T, Schwarz S: Tylosin susceptibility of staphylococci from bovine mastitis. *Vet Microbiol* **171**:368-373.

Feßler AT, Calvo N, Gutiérrez N, Muñoz Bellido JL, Fajardo M, Garduño E, Monecke S, Ehricht R, Kadlec K, Schwarz S: Cfr-mediated linezolid resistance in methicillin-resistant *Staphylococcus aureus* and *Staphylococcus haemolyticus* associated with clinical infections in humans: two case reports. *J Antimicrob Chemother* **69**:268-270.

Feßler AT, Turnidge J, Schwarz S: Quality control ranges for cefoperazone 30 µg disks for *Staphylococcus aureus* ATCC® 25923 and *Escherichia coli* ATCC® 25922: *Vet Microbiol* **171**:284-289.

Fu W, Duan Y, Wang S, Ni Y, Grossmann R: Comparative proteomics of the breast muscle reponse to chronic corticosterone administration in broiler chickens showing long or short tonic immobility. *Poultry Science* **93**:784-793.

Garrels W, Holler S, Taylor U, Herrmann D, Niemann H, Ivics Z, Kues WA: Assessment of fetal cell chimerism in transgenic pig lines generated by Sleeping Beauty transposition. *PloS One* **9**:e96673.

Gholami M, Erbe M, Gärke C, Preisinger R, Weigend A, Weigend S, Simianer H: Population genomic analyses based on 1 million SNPs in commercial egg layers. *PLoS One* **9**:e94509. doi: 10.1371/journal.pone.0094509.

Granevitze Z, David L, Twito T, Weigend S, Feldman M, Hillel J: Phylogenetic resolution power of microsatellites and various single-nucleotide polymorphism types assessed in 10 divergent chicken populations. *Anim Genet* **45**:87-95.

Gün G, Kues WA: Current progress of genetically engineered pig models for biomedical research. *Bioresearch Open Access* **3**:255-265.

He T, Wang Y, Schwarz S, Zhao Q, Shen J, Wu C: Genetic environment of the multi-resistance gene *cfr* in methicillin-resistant coagulase-negative staphylococci from chickens, ducks, and pigs in China. *Int J Med Microbiol* **304**:257-261.

Hille K, Fischer J, Falgenhauer L, Sharp H, Michael GB, Kadlec K, Friese A, Schwarz S, Imirzalioglu C, Kietzmann M, von Münchhausen C, Kreienbrock L: Zum Vorkommen von Extended-Spektrum- und AmpC-Beta-Laktamase-produzierenden *Escherichia coli* in Nutztierbeständen: Ergebnisse ausgewählter europäischer Studien. *Berl Münch Tierärztl Wo-chenschr* **127**:403-411.

Hinkel R, Trenkwalder T, Petersen B, Husada W, Gesenhues F, Lee S, Hannappel E, Bock-Marquette I, Theisen D, Leitner L, Boekstegers P, Cierniewski C, Muller O.J, le Noble F, Adams R.H, Weinl C, Nordheim A, Reichart B, Weber C, Olson E, Posern G, Deindl E, Niemann H, Kupatt C: 2014. MRTF-A controls vessel growth and maturation by increasing the expression of CCN1 and CCN2. *Nat Commun* **5**:3970.

Hochberger J, Koehler P, Wedi E, Gluer S, Rothstein RI, Niemann H, Hilfiker A, Gonzalez S, Kruse E: Transplantation of mucosa from stomach to esophagus to prevent stricture after circumferential endoscopic submucosal dissection of early squamous cell. *Gastroenterology* **146**:906-909.

Huang Y, Michael GB, Becker R, Kaspar H, Mankertz J, Schwarz S, Runge M, Steinhagen D: Pheno- and genotypic analysis of antimicrobial resistance properties of *Yersinia ruckeri* from fish. *Vet Microbiol* **171**:406-412.

Ivics Z, Mates L, Yau T.Y, Landa V, Zidek V, Bashir S, Hoffmann O.I, Hiripi L, Garrels W, Kues WA, Bosze Z, Geurts A, Pravenec M, Rulicke T, Izsvak Z: Germline transgenesis in rodents by pronuclear microinjection of Sleeping Beauty transposons. *Nat Protoc* **9**:773-793.

Ivics Z, Garrels W, Mates L, Yau TY, Bashir S, Zidek V, Landa V, Geurts A, Pravenec M, Rulicke T, Kues WA, Izsvak Z: 2014. Germline transgenesis in pigs by cytoplasmic microinjection of Sleeping Beauty transposons. *Nat Protoc* **9**:810-827.

Kadasi A, Kolesarova A, Maruniakova N, Grossmann R, Stochmalova A, Alexa R, Sirotkin AV: Green tea polyphenols effect on porcine ovarian cells. *Anim Physiol* 2014:100-105.

Kadasi A, Kolesarova A, Maruniakova N, Grossmann R, Stochmalova A, Alexa R, Sirotkin AV: The effect of green tea extract-epigallocatechin gallate (EGGG) on porcine ovarian granulose cell function. *J Microbiol Biotech Food Sci* **3** (Suppl 2):107-109.

Keller M, Petersen B, Niemann H, Denner J: Lack of antibody response in pigs immunized with the transmembrane envelope protein of porcine endogenous retroviruses (PERV). *J Gen Virol* **95**:1827-1831.

Köck R, Ballhausen B, Bischoff M, Cuny C, Eckmanns T, Fetsch A, Harmsen D, Goerge T, Oberheitmann B, Schwarz S, Selhorst T, Tenhagen BA, Walther B, Witte W, Ziebuhr W, Becker K: The impact of zoonotic MRSA colonization and infection in Germany. *Berl Münch Tierärztl Wochenschr* **127**:384-398

Li J, Li B, Wendlandt S, Schwarz S, Wang Y, Wu C, Ma Z, Shen J: Identification of a novel *vga(E)* gene variant that confers resistance to pleuromutilins, lincosamides and streptogramin A antibiotics in staphylococci of porcine origin. *J Antimicrob Chemother* **69**: 919-923.

Li J, Gao Y, Petkov S, Purup S, Hyttel P, Callesen H: Passage number of porcine embryonic germ cells affects epigenetic status and blastocyst rate following somatic cell nuclear transfer. *Anim Reprod Sci* **147**:39-46.

Liu Y, Wang Y, Schwarz S, Wang S, Chen L, Wu C, Shen J: Investigation of a multiresistance gene *cfr* that fails to mediate resistance to phenicols and oxazolidinones in *Enterococcus faecalis*. *J Antimicrob Chemother* **69**:892-898.

Lopes GV, Michael GB, Cardoso M, Schwarz S: Identification and characterization of *Salmonella enterica* subsp. *enterica* serovar Derby isolates carrying a new *aadA26* gene cassette in a class 1 integron obtained at pig slaughterhouses. *FEMS Microbiol Lett* **356**:71-78.

Lyimo CM, Weigend A, Mssoffe PL, Eding H, Simianer H, Weigend S: Global diversity and genetic contributions of chicken populations from African, Asian and European regions. *Anim Genet* **45**:836-848.

Małyszko I, Schwarz S, Hauschild T: Detection of a new *mecC* allotype, *mecC2*, in methicillin-resistant *Staphylococcus saprophyticus*. *J Antimicrob Chemother* **69**:2003-2005.

Michael GB, Freitag C, Feßler AT, Wendlandt S, Eidam C, Entorf M, Volz GL, Riesenberg A, Blodkamp S, Schwarz S, Kadlec K: Antimikrobielle Resistenz, ESBL- und MRSA – Definitionen und Labordiagnose. *Berl Münch Tierärztl Wochenschr* **127**:339-348.

Nemeghaire S, Argudín MA, Feßler AT, Hauschild T, Schwarz S, Butaye P: The ecological importance of the *Staphylococcus sciuri* species group as a reservoir for resistance and virulence genes. *Vet Microbiol* **171**:342-356.

Pedrosa VB, Groeneveld E, Eler JP, Ferraz JBS: Comparison of bivariate and multivariate joint analyses on the selection loss of beef cattle. *Genet Mol Res* **13**:4036-4045.

Pedrosa VB, Eler JP, Ferraz JBS, Groeneveld E: Use of weaning management group as a random effect for a more robust estimation of genetic parameters for post-weaning traits in Nellore cattle. *Genet Mol Res* **13**:7013-7021.

Petkov SG, Hyttel P, Niemann H: The small molecule inhibitors PD0325091 and CHIR99021 reduce expression of pluripotency-related genes in putative porcine induced pluripotent stem cells. *Cell Reprogram* **16**:235-240.

Qanbari S, Strom TM, Haberer G, Weigend S, Gheyas AA, Turner F, Burt DW, Preisinger R, Gianola D, Simianer H: A high resolution genome-wide scan for significant selective sweeps: an application to pooled sequence data in laying chickens. *PLoS One* **7**:1-12, e49525.

Rehbock C, Jakobi J, Gamrad L, van der Meer S, Tiedemann D, Taylor U, Kues W, Rath D, Barcikowski S: Current state of laser synthesis of metal and alloy nanoparticles as ligand-free reference materials for nano-toxicological assays. *Beilstein J Nanotechnol* **5**:1523-1541.

Riesenber A, Feßler AT, Erol E, Prenger-Berninghoff E, Stamm I, Böse R, Heusinger A, Klarmann D, Werckenthin C, Schwarz S: MICs of 32 antimicrobial agents for *Rhodococcus equi* isolates of animal origin. *J Antimicrob Chemother* **69**:1045-1049.

Rodríguez I, Thomas K, Van Essen A, Schink AK, Day M, Chattaway M, Wu G, Mevius D, Helmuth R, Guerra B; SAFEFOODERA-ESBL consortium: Chromosomal location of *bla_{CTX-M}* genes in clinical isolates of *Escherichia coli* from Germany, The Netherlands and the UK. *Int J Antimicrob Agents* **43**:553-557.

Ruddat I, Kadlec K, Schwarz S, Kreienbrock L: Statistische Verfahren zur Beschreibung von phänotypischen Empfindlichkeitsdaten. Statistical methods for description of phenotypic susceptibility data. *Berl Münch Tierärztl Wochenschr* **127**:349–358.

Schwarz S, Shen J, Wendlandt S, Feßler AT, Wang Y, Kadlec K, Wu C: Plasmid-mediated antimicrobial resistance in staphylococci and other firmicutes. *Microbiol Spectrum* **2**:PLAS-0020-2014.

Sirotkin AV, Kisova G, Brenaut P, Ovcharenko D, Grossmann R, Mlyncek M: Involvement of micro RNA Mir15a in control of human ovarian granulosa cell proliferation, apoptosis, steroidogenesis and response to FSH. *Micro RNA* **3**:29-36.

Stochmalova A, Kadasi A, Alexa R, Grossmann R, Sirotkin AV: The effect of yucca on proliferation, apoptosis and steroidogenesis of porcine ovarian granulosa cells. *Potravinarstvo* **8**:87-91.

Talluri TR, Kumar D, Glage S, Garrels W, Ivies Z, Debowski K, Behr R, Kues WA: Non-viral reprogramming of murine fibroblasts into induced pluripotent stem cells by Sleeping Beauty and piggyBac transposons. *Biochem Biophys Res Commun* **450**:581-587.

Taylor U, Barchanski A, Petersen S, Kues WA, Baulain U, Gamrad L, Sajti L, Barcikowski S, Rath D: Gold nanoparticles interfere with sperm functionality by membrane adsorption without penetration. *Nanotoxicology* **8**:118-127.

Taylor U, Garrels W, Barchanski A, Peterson S, Sajti L, Lucas-Hahn A, Gamrad L, Baulain U, Klein S, Kues WA, Barcikowski S, Rath D: Injection of ligand-free gold and silver nanoparticles into murine embryos does not impact pre-implantation development. *Beilstein J Nanotechnol* **5**:677-688.

Taylor U, Rehbock C, Streich C, Rath D, Barcikowski S: Rational design of gold nanoparticle toxicology assays: a question of exposure scenario, dose and experimental setup. *Nanomedicine (Lond)* **9**:1971-1989.

Tiedemann D, Taylor U, Rehbock C, Jakobi J, Klein S, Kues WA, Barcikowski S, Rath D: Reprotoxicity of gold, silver, and gold-silver alloy nanoparticles on mammalian gametes. *Analyst* **139**:931-942.

Urrego R, Rodriguez-Osorio N, Niemann H: Epigenetic disorders and altered gene expression after use of Assisted Reproductive Technologies in domestic cattle. *Epigenetics* **9**:803-815.

Valentin L, Sharp H, Hille K, Seibt U, Fischer J, Pfeifer Y, Michael GB, Nickel S, Schmiedel J, Falgenhauer L, Friese A, Bauerfeind R, Roesler U, Imirzalioglu C, Chakraborty T, Helmuth R, Valenza G, Werner G, Schwarz S, Guerra B, Appel B, Kreienbrock L, Käsbohrer A: Subgrouping of ESBL-producing *Escherichia coli* from animal and human sources:

An approach to quantify the distribution of ESBL types between different reservoirs. Int J Med Microbiol **304**:805-815.

Velazquez MA, Kues WA, Niemann H: Biomedical applications of ovarian transvaginal ultrasonography in cattle. Anim Biotechnol **25**:266-293.

Wang Y, Wang X, Schwarz S, Zhang R, Lei L, Liu X, Lin D, Shen J: IMP-45-producing multidrug-resistant *Pseudomonas aeruginosa* of canine origin. J Antimicrob Chemother **69**:2579-2581.

Weigend S, Janßen-Tapken U, Erbe M, Ober U, Weigend A, Preisinger R, Simianer H: Biodiversität beim Huhn - Potenziale für die Praxis. Züchtungskunde **86**:25-41.

Weiβ S, Kadlec K, Feßler AT, Schwarz S: Complete sequence of a multiresistance plasmid from a methicillin-resistant *Staphylococcus epidermidis* ST5 isolated in a small animal clinic. J Antimicrob Chemother **69**:847-859.

Wendlandt S, Li J, Ho J, Porta MA, Feßler AT, Wang Y, Kadlec K, Monecke S, Ehricht R, Boost M, Schwarz S: Enterococcal multiresistance gene cluster in methicillin-resistant *Staphylococcus aureus* from various origins and geographical locations. J Antimicrob Chemother **69**:2573-2575.

Wendlandt S, Feßler AT, Kadlec K, van Duijkeren E, Schwarz S: Identification of the novel spectinomycin resistance gene *spd* in a different plasmid background among methicillin-resistant *Staphylococcus aureus* CC398 and methicillin-susceptible *S. aureus* ST433. J Antimicrob Chemother **69**:2000-2003.

Wendlandt S, Kadlec K, Feßler AT, van Duijkeren E, Schwarz S: Two different *erm(C)*-carrying plasmids in the same methicillin-resistant *Staphylococcus aureus* CC398 isolate from a broiler farm. Vet Microbiol **171**:382-387.

Zhang WJ, Xu XR, Schwarz S, Wang XM, Dai L, Zheng HJ, Liu S: Characterization of the IncA/C plasmid pSCEC2 from *Escherichia coli* of swine origin that harbours the multiresistance gene *cfr*. J Antimicrob Chemother **69**:385-389.

Zhao Q, Wendlandt S, Li H, Li J, Wu C, Shen J, Schwarz S, Wang Y: Identification of the novel lincosamide resistance gene *lnu(E)* truncated by *ISEnfa5-cfr-ISEnfa5* insertion in *Streptococcus suis*: de-novo synthesis and confirmation of functional activity in *Staphylococcus aureus*. Antimicrob Agents Chemother **58**:1785-1788.