

This reference list in pdf format is intended to provide the scientific community with research data and political issues concerning TSEs in goats. It tries to be complete, it will be expanded with time to become more and more complete. Questions or new missing papers are welcome at the following address: jan.langeveld@wur.nl. An Endnote-library file can be sent upon request.

Interested people that wish to have an electronic copy of one of these papers have to download these from official sites of the journals or other ways. Members of the NeuroPrion Association can find most of these items on the documents site of NeuroPrion <https://project.neuroprion.org/>.

31 January 2016

(1-244)(245-267)

1. **Acutis PL, Bossers A, Priem J, Riina MV, Peletto S, Mazza M, Casalone C, Forloni G, Ru G, Caramelli M.** 2006. Identification of prion protein gene polymorphisms in goats from Italian scrapie outbreaks. *The Journal of general virology* **87**:1029-1033.
2. **Acutis PL, Colussi S, Santagada G, Laurenza C, Maniaci MG, Riina MV, Peletto S, Goldmann W, Bossers A, Caramelli M, Cristoferi I, Maione S, Sacchi P, Rasero R.** 2008. Genetic variability of the PRNP gene in goat breeds from Northern and Southern Italy. *Journal of applied microbiology* **104**:1782-1789.
3. **Acutis PL, Martucci F, D'Angelo A, Peletto S, Colussi S, Maurella C, Porcario C, Iulini B, Mazza M, Dell'atti L, Zuccon F, Corona C, Martinelli N, Casalone C, Caramelli M, Lombardi G.** 2012. Resistance to classical scrapie in experimentally challenged goats carrying mutation K222 of the prion protein gene. *Veterinary research* **43**:8.
4. **Acutis PL, Martucci F, Mazza M, Nodari S, Maurella C, Ru G, Casalone C, Caramelli M.** 2006. Molecular typing of transmissible spongiform encephalopathy from Italian disease outbreaks in small ruminants. *The Veterinary record* **159**:746-747.
5. **Adjou KT, Allix S, Ouidja MO, Backer S, Couquet C, Cornuejols MJ, Deslys JP, Brugere H, Brugere-Picoux J, El-Hachimi KH.** 2007. Alpha-synuclein accumulates in the brain of scrapie-affected sheep and goats. *Journal of comparative pathology* **137**:78-81.
6. **Agrimi U, Conte M, Morelli L, Di Bari MA, Di Guardo G, Ligios C, Antonucci G, Aufiero GM, Pozzato N, Mutinelli F, Nonno R, Vaccari G.** 2003. Animal transmissible spongiform encephalopathies and genetics. *Veterinary research communications* **27 Suppl 1**:31-38.
7. **Agrimi U, Ru G, Cardone F, Pocchiarri M, Caramelli M.** 1999. Epidemic of transmissible spongiform encephalopathy in sheep and goats in Italy. *Lancet* **353**:560-561.
8. **Aguilar-Calvo P, Espinosa JC, Pintado B, Gutierrez-Adan A, Alamillo E, Miranda A, Prieto I, Bossers A, Andreoletti O, Torres JM.** 2014. Role of the goat K222-PrP(C) polymorphic variant in prion infection resistance. *Journal of virology* **88**:2670-2676.
9. **Aguilar-Calvo P, Fast C, Tauscher K, Espinosa JC, Groschup MH, Nadeem M, Goldmann W, Langeveld J, Bossers A, Andreoletti O, Torres JM.** 2015. Effect of Q211 and K222 PRNP Polymorphic Variants in the Susceptibility of Goats to Oral Infection With Goat Bovine Spongiform Encephalopathy. *The Journal of infectious diseases* **212**:664-672.
10. **Arrizubieta MJ, Kanata E, Keklikoglou I, Papisavva-Stylianou P, Toumazos P, Panagiotidis CH, Sklaviadis T.** 2009. Design and validation of a high-throughput assay to detect codon 146 polymorphisms in the caprine prion protein gene. *Analytical biochemistry* **393**:229-233.
11. **Arsac JN, Andreoletti O, Bilheude JM, Lacroux C, Benestad SL, Baron T.** 2007. Similar biochemical signatures and prion protein genotypes in atypical scrapie and Nor98 cases, France and Norway. *Emerging infectious diseases* **13**:58-65.
12. **Arsac JN, Betemps D, Morignat E, Feraudet C, Bencsik A, Aubert D, Grassi J, Baron T.** 2009. Transmissibility of atypical scrapie in ovine transgenic mice: major effects of host prion protein expression and donor prion genotype. *PLoS one* **4**:e7300.
13. **Arsenos G, Fortomaris P, Papadopoulou E, Sotiraki S, Stamataris C, Zygoiannis D.** 2009. Growth and meat quality of kids of indigenous Greek goats (*Capra prisca*) as influenced by dietary protein and gastrointestinal nematode challenge. *Meat science*.
14. **Authority) EEFS.** 2012. Scientific and technical assistance on the provisional results of the study on genetic resistance to Classical scrapie in goats in Cyprus. *EFSA Journal* **10**:2972.
15. **Babar ME, Abdullah M, Nadeem A, Haq AU.** 2009. Prion protein gene polymorphisms in four goat breeds of Pakistan. *Molecular biology reports* **36**:141-144.
16. **Barillet F, Mariat D, Amigues Y, Faugeras R, Caillat H, Mozami-Goudarzi K, Rupp R, Babilliot JM, Lacroux C, Lugan S, Schelcher F, Chartier C, Corbiere F, Andreoletti O, Perrin-Chauvineau C.** 2009. Identification of seven haplotypes of the caprine PrP gene at codons 127, 142,

- 154, 211, 222 and 240 in French Alpine and Saanen breeds and their association with classical scrapie. *The Journal of general virology* **90**:769-776.
17. **Baron T, Bencsik A, Vulin J, Biacabe AG, Morignat E, Verchere J, Betemps D.** 2008. A C-terminal protease-resistant prion fragment distinguishes ovine "CH1641-like" scrapie from bovine classical and L-Type BSE in ovine transgenic mice. *PLoS pathogens* **4**:e1000137.
 18. **Baron T, Biacabe AG.** 2006. Origin of bovine spongiform encephalopathy. *Lancet* **367**:297-298; author reply 298-299.
 19. **Baron T, Biacabe AG, Arsac JN, Benestad S, Groschup MH.** 2007. Atypical transmissible spongiform encephalopathies (TSEs) in ruminants. *Vaccine* **25**:5625-5630.
 20. **Bastian FO, Sanders DE, Forbes WA, Hagius SD, Walker JV, Henk WG, Enright FM, Elzer PH.** 2007. *Spiroplasma* spp. from transmissible spongiform encephalopathy brains or ticks induce spongiform encephalopathy in ruminants. *Journal of medical microbiology* **56**:1235-1242.
 21. **Baylis M, Goldmann W.** 2004. The genetics of scrapie in sheep and goats. *Current molecular medicine* **4**:385-396.
 22. **Beck JA, Campbell TA, Adamson G, Poulter M, Uphill JB, Molou E, Collinge J, Mead S.** 2008. Association of a null allele of SPRN with variant Creutzfeldt-Jakob disease. *Journal of medical genetics* **45**:813-817.
 23. **Bellagamba F, Comincini S, Ferretti L, Valfre F, Moretti VM.** 2006. Application of quantitative real-time PCR in the detection of prion-protein gene species-specific DNA sequences in animal meals and feedstuffs. *Journal of food protection* **69**:891-896.
 24. **Benestad S, Austbø S, Tranulis MA, Espenes A, Olsaker I.** 2012. Healthy goats naturally devoid of prion protein. *Vet. Res.* **43**:87.
 25. **Benestad SL, Arsac JN, Goldmann W, Noremark M.** 2008. Atypical/Nor98 scrapie: properties of the agent, genetics, and epidemiology. *Veterinary research* **39**:19.
 26. **Benestad SL, Sarradin P, Thu B, Schonheit J, Tranulis MA, Bratberg B.** 2003. Cases of scrapie with unusual features in Norway and designation of a new type, Nor98. *The Veterinary record* **153**:202-208.
 27. **Beringue V, Vilotte JL, Laude H.** 2008. Prion agent diversity and species barrier. *Veterinary research* **39**:47.
 28. **Billinis C, Panagiotidis CH, Psychas V, Argyroudis S, Nicolaou A, Leontides S, Papadopoulos O, Sklaviadis T.** 2002. Prion protein gene polymorphisms in natural goat scrapie. *The Journal of general virology* **83**:713-721.
 29. **Bossers A, Androletti O, Goldmann W, Torres J-M, Acin C, Groschup MH, Acutis P, Agrimi U, Sklaviadis T, Grassi J.** 2006. GoatBSE: Proposal for improvement of goat TSE discriminative diagnosis and susceptibility based assessment of BSE infectivity in goat milk and meat. GoatBSE STREP project EU FOOD-CT-2006-36353.
 30. **Bossers A, de Vries R, Smits MA.** 2000. Susceptibility of sheep for scrapie as assessed by in vitro conversion of nine naturally occurring variants of PrP. *Journal of virology* **74**:1407-1414.
 31. **Bouzalas IG, Dovas CI, Banos G, Papanastassopoulou M, Kritas S, Oevermann A, Papakostaki D, Evangelia C, Papadopoulos O, Seuberlich T, Koptopoulos G.** 2010. Caprine PRNP polymorphisms at codons 171, 211, 222 and 240 in a Greek herd and their association with classical scrapie. *The Journal of general virology* **91**:1629-1634.
 32. **Bouzalas IG, Lortscher F, Dovas CI, Oevermann A, Langeveld JP, Papanastassopoulou M, Papadopoulos O, Zurbriggen A, Seuberlich T.** 2011. A Distinct Proteinase K Resistant Prion Protein Fragment in Goats with No Signs of Disease in a Classical Scrapie Outbreak. *Journal of clinical microbiology*.
 33. **Bozzetta E, Acutis PL, Martucci F, Nappi R, Casalone C, Mazza M, Caramelli M.** 2004. Evaluation of rapid tests for the diagnosis of transmissible spongiform encephalopathies in sheep and goats. *Acta neuropathologica* **107**:559-562.
 34. **Brotherston JG, Renwick CC, Stamp JT, Zlotnik I, Pattison IH.** 1968. Spread and scrapie by contact to goats and sheep. *Journal of comparative pathology* **78**:9-17.
 35. **Bruce M, Chree A, McConnell I, Foster J, Pearson G, Fraser H.** 1994. Transmission of bovine spongiform encephalopathy and scrapie to mice: strain variation and the species barrier. *Philosophical transactions of the Royal Society of London* **343**:405-411.
 36. **Bruce ME, Nonno R, Foster J, Goldmann W, Di Bari M, Esposito E, Benestad SL, Hunter N, Agrimi U.** 2007. Nor98-like sheep scrapie in the United Kingdom in 1989. *The Veterinary record* **160**:665-666.
 37. **Brugere-Picoux J, Adjou K, Brugere H.** 2005. [Update on transmissible spongiform subacute encephalopathies (TSSE)]. *Bulletin de l'Academie nationale de medecine* **189**:389-398.
 38. **Brugere-Picoux J, Brugere H.** 1994. [Transmissible animal spongiform encephalopathies. Epidemiologic aspects]. *Transfus Clin Biol* **1**:363-371.
 39. **Brugere-Picoux J, Chatelain J.** 1995. [Scrapie in sheep and transmissible encephalopathy of the mink]. *Pathologie-biologie* **43**:81-90.
 40. **Brun A, Castilla J, Parra B, Rodriguez F, Torres JM.** 2003. [Involvement of the immunological system in the pathogenesis of transmissible spongiform encephalopathies]. *Revista de neurologia* **37**:648-653.
 41. **Buschmann A, Biacabe AG, Ziegler U, Bencsik A, Madec JY, Erhardt G, Luhken G, Baron T, Groschup MH.** 2004. Atypical scrapie cases in Germany and France are identified by discrepant reaction patterns in BSE rapid tests. *Journal of virological methods* **117**:27-36.
 42. **Capucchio MT, Guarda F, Isaia MC, Caracappa S, Di Marco V.** 1998. Natural occurrence of scrapie in goats in Italy. *The Veterinary record* **143**:452-453.

43. **Capucchio MT, Guarda F, Pozzato N, Coppolino S, Caracappa S, Di Marco V.** 2001. Clinical signs and diagnosis of scrapie in Italy: a comparative study in sheep and goats. *J Vet Med A Physiol Pathol Clin Med* **48**:23-31.
44. **Caramelli M, Ru G, Casalone C, Bozzetta E, Acutis PL, Calella A, Forloni G.** 2001. Evidence for the transmission of scrapie to sheep and goats from a vaccine against *Mycoplasma agalactiae*. *The Veterinary record* **148**:531-536.
45. **Cartoni C, Schinina ME, Maras B, Nonno R, Vaccari G, Di Baria MA, Conte M, Liu QG, Lu M, Cardone F, Windl O, Pocchiari M, Agrimi U.** 2005. Identification of the pathological prion protein allotypes in scrapie-infected heterozygous bank voles (*Clethrionomys glareolus*) by high-performance liquid chromatography-mass spectrometry. *Journal of chromatography* **1081**:122-126.
46. **Castel JM, Mena Y, Delgado-Petrifíez M, Camúñez J, Basulto J, Caravaca F, al. e.** 2003. Characterisation of semi-extensive goat production systems in southern Spain. *Small Ruminant Res* **47**:133-143.
47. **Chelle PLP.** 1942. Un cas de tremblante chez la chèvre. *Bull Acad Vét Française* **15**:294-295.
48. **Colussi S, Vaccari G, Maurella C, Bona C, Lorenzetti R, Troiano P, Casalnuovo F, Di Sarno A, Maniaci MG, Zuccon F, Nonno R, Casalone C, Mazza M, Ru G, Caramelli M, Agrimi U, Acutis PL.** 2008. Histidine at codon 154 of the prion protein gene is a risk factor for Nor98 scrapie in goats. *The Journal of general virology* **89**:3173-3176.
49. **Corbier F, Perrin-Chauvineau C, Lacroux C, Costes P, Thomas M, Bremaud I, Martin S, Lugan S, Chartier C, Schelcher F, Barillet F, Andreoletti O.** 2012. PrP associated resistance to Scrapie in five highly infected goat herds. *The Journal of general virology*.
50. **Cuillé J, Chelle PL.** 1939. La maladie dite tremblante du mouton est-elle inoculable? *C R Acad Sci Paris* **208**:1058-1060.
51. **Cuillé J, Chelle PL.** 1939. Transmission de la tremblante à la chèvre. *C R Acad Sci Paris* **207**:1058-1060.
52. **Curcio L, Sebastiani C, Di Lorenzo P, Lasagna E, Biagetti M.** 2016. Review: A review on classical and atypical scrapie in caprine: Prion protein gene polymorphisms and their role in the disease. *Animal : an international journal of animal bioscience*:1-9.
53. **DAD-WWL.** 2000. 3, Domestic animal diversity world watch list. 3rd ed. Part 2.13.
54. **Dassanayake RP, Orru CD, Hughson AG, Caughey B, Graca T, Zhuang D, Madsen-Bouterse SA, Knowles DP, Schneider DA.** 2016. Sensitive and specific detection of classical scrapie prions in the brains of goats by real-time quaking-induced conversion. *The Journal of general virology* **97**:803-812.
55. **Dassanayake RP, Schneider DA, Herrmann-Hoesing LM, Truscott TC, Davis WC, O'Rourke KI.** 2012. Cell-surface expression of PrPC and the presence of scrapie prions in the blood of goats. *The Journal of general virology* **93**:1127-1131.
56. **Dassanayake RP, White SN, Madsen-Bouterse SA, Schneider DA, O'Rourke KI.** 2015. Role of the PRNP S127 allele in experimental infection of goats with classical caprine scrapie. *Animal genetics* **46**:341.
57. **Dawson M, Moore RC, Bishop SC.** 2008. Progress and limits of PrP gene selection policy. *Veterinary research* **39**:25.
58. **de Groot SJ.** 2005. [European Union decides to expand TSE testing in goats]. *Tijdschrift voor diergeneeskunde* **130**:151.
59. **De Rancourt M, Fois N, Lavin MP, Tchakérian E, Vallerand F.** 2006. Progress and limits of PrP gene selection policy. *Vet. Res.* **39**:25.
60. **Deslys JP.** 2003. [Prions and risks for blood transfusion: the situation in 2003]. *Transfus Clin Biol* **10**:113-125.
61. **Deslys JP, Grassi J.** 2005. [Screening tests for animal TSE: present and future]. *Pathologie-biologie* **53**:221-228.
62. **Detwiler LA, Baylis M.** 2003. The epidemiology of scrapie. *Revue scientifique et technique (International Office of Epizootics)* **22**:121-143.
63. **Di Bari MA, Chianini F, Vaccari G, Esposito E, Conte M, Eaton SL, Hamilton S, Finlayson J, Steele PJ, Dagleish MP, Reid HW, Bruce M, Jeffrey M, Agrimi U, Nonno R.** 2008. The bank vole (*Myodes glareolus*) as a sensitive bioassay for sheep scrapie. *The Journal of general virology* **89**:2975-2985.
64. **Dickinson AG.** 1976. Scrapie in sheep and goats. *Frontiers of biology* **44**:209-241.
65. **Dickinson AG.** 1996. Scrapie in sheep and goats. In *Slow Virus Diseases of Animals and Man*. Ed. RH Kimberlin. Amsterdam: North-Holland Publishing Company:209-241.
66. **Dobly A, Renard C, DeSloovere J, Geeroms R, Durand S, Debrauwère D, Vanopdenbosch E, Roels S.** 2009. PRNP gene sequencing in Belgian goats: codon frequency. Poster 7.9 at Prion2009 conference at Porto Carras, Greece, Oct. 23-25.
67. **Dominguez Carmona M.** 2001. [Epidemiology of the animal prion diseases]. *Anales de la Real Academia Nacional de Medicina* **118**:233-245; discussion 245-258.
68. **Dormont D.** 1998. [Biology of non-conventional transmissible agents or prions]. *Revue neurologique* **154**:142-151.
69. **Dustan BH, Spencer YI, Casalone C, Brownlie J, Simmons MM.** 2008. A histopathologic and immunohistochemical review of archived UK caprine scrapie cases. *Veterinary pathology* **45**:443-454.
70. **Eiden M, Soto EO, Mettenleiter TC, Groschup MH.** 2011. Effects of polymorphisms in ovine and caprine prion protein alleles on cell-free conversion. *Veterinary research* **42**:30.
71. **Eloit M, Adjou K, Couplier M, Fontaine JJ, Hamel R, Lilin T, Messiaen S, Andreoletti O, Baron T, Bencsik A, Biacabe AG, Beringue V, Laude H, Le Dur A, Vilotte JL, Comoy E, Deslys JP,**

- Grassi J, Simon S, Lantier F, Sarradin P.** 2005. BSE agent signatures in a goat. *The Veterinary record* **156**:523-524.
72. **EU-Anonymous.** 2001. Regulation (ec) no 999/2001 of the european parliament and of the council of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies. *Official Journal of the European Communities* **L 147/1**: L 147/141.
73. **European Commission EC.** 2010. A Strategy paper on Transmissible Spongiform Encephalopathies for 2010-2015 (The TSE road-map 2).
74. **Eurostat.** 2008. From farm to fork statistics, European Commission, Luxembourg.
75. **Fast C, Groschup MH.** 2013. Classical and Atypical Scrapie in Sheep and Goats. Book: Prions and Diseases. Chapter 2. **Animals, humans and the environment**:14-44.
76. **Fediaevsky A, Tongue SC, Noremark M, Calavas D, Ru G, Hopp P.** 2008. A descriptive study of the prevalence of atypical and classical scrapie in sheep in 20 European countries. *BMC veterinary research* **4**:19.
77. **Foster J, Goldmann W, Parnham D, Chong A, Hunter N.** 2001. Partial dissociation of PrP(Sc) deposition and vacuolation in the brains of scrapie and BSE experimentally affected goats. *The Journal of general virology* **82**:267-273.
78. **Foster J, McKelvey W, Fraser H, Chong A, Ross A, Parnham D, Goldmann W, Hunter N.** 1999. Experimentally induced bovine spongiform encephalopathy did not transmit via goat embryos. *The Journal of general virology* **80 (Pt 2)**:517-524.
79. **Foster JD, Dickinson AG.** 1988. The unusual properties of CH1641, a sheep-passaged isolate of scrapie. *The Veterinary record* **123**:5-8.
80. **Foster JD, Hope J, Fraser H.** 1993. Transmission of bovine spongiform encephalopathy to sheep and goats. *The Veterinary record* **133**:339-341.
81. **Foster JD, Parnham D, Chong A, Goldmann W, Hunter N.** 2001. Clinical signs, histopathology and genetics of experimental transmission of BSE and natural scrapie to sheep and goats. *The Veterinary record* **148**:165-171.
82. **Fragkiadaki EG, Vaccari G, Ekateriniadou LV, Agrimi U, Giadinis ND, Chiappini B, Esposito E, Conte M, Nonno R.** 2011. PRNP genetic variability and molecular typing of natural goat scrapie isolates in a high number of infected flocks. *Veterinary research* **42**:104.
83. **Fuzi M.** 1999. Is the pathogen of prion disease a microbial protein? *Medical hypotheses* **53**:91-102.
84. **García de Jalón JA, De las Heras M, Balagues L, Badiola JJ.** 1987. Enfermedad del prurigo lumbar (scrapie) en la oveja: diagnóstico en 5 rebaños. *Medicina Veterinaria*:5-6.
85. **Godon KA, Honstead J.** 1998. Transmissible spongiform encephalopathies in food animals. Human food safety and animal feed safety concerns for veterinarians. *The Veterinary clinics of North America* **14**:49-70.
86. **Golding MC, Long CR, Carmell MA, Hannon GJ, Westhusin ME.** 2006. Suppression of prion protein in livestock by RNA interference. *Proceedings of the National Academy of Sciences of the United States of America* **103**:5285-5290.
87. **Goldmann W.** 2008. PrP genetics in ruminant transmissible spongiform encephalopathies. *Veterinary research* **39**:30.
88. **Goldmann W, Chong A, Foster J, Hope J, Hunter N.** 1998. The shortest known prion protein gene allele occurs in goats, has only three octapeptide repeats and is non-pathogenic. *The Journal of general virology* **79 (Pt 12)**:3173-3176.
89. **Goldmann W, Houston F, Stewart P, Perucchini M, Foster J, Hunter N.** 2006. Ovine prion protein variant A(136)R(154)L(168)Q(171) increases resistance to experimental challenge with bovine spongiform encephalopathy agent. *The Journal of general virology* **87**:3741-3745.
90. **Goldmann W, Marier E, Stewart P, Konold T, Street S, Langeveld J, Windl O, Ortiz-Pelaez A.** 2016. Prion protein genotype survey confirms low frequency of scrapie-resistant K222 allele in British goat herds. *The Veterinary record* **178**:168.
91. **Goldmann W, Martin T, Foster J, Hughes S, Smith G, Hughes K, Dawson M, Hunter N.** 1996. Novel polymorphisms in the caprine PrP gene: a codon 142 mutation associated with scrapie incubation period. *The Journal of general virology* **77 (Pt 11)**:2885-2891.
92. **Goldmann W, Ryan K, Stewart P, Parnham D, Xicohtencatl R, Fernandez N, Saunders G, Windl O, Gonzalez L, Bossers A, Foster J.** 2011. Caprine prion gene polymorphisms are associated with decreased incidence of classical scrapie in goat herds in the United Kingdom. *Veterinary research* **42**:110.
93. **Gonzalez L, Martin S, Hawkins SA, Goldmann W, Jeffrey M, Siso S.** Pathogenesis of natural goat scrapie: modulation by host PRNP genotype and effect of co-existent conditions. *Veterinary research* **41**:48.
94. **Gonzalez L, Martin S, Siso S, Konold T, Ortiz-Pelaez A, Phelan L, Goldmann W, Stewart P, Saunders G, Windl O, Jeffrey M, Hawkins SA, Dawson M, Hope J.** 2009. High prevalence of scrapie in a dairy goat herd: tissue distribution of disease-associated PrP and effect of PRNP genotype and age. *Veterinary research* **40**:65.
95. **Gotte DR, Benestad SL, Laude H, Zurbriggen A, Oevermann A, Seuberlich T.** 2011. Atypical scrapie isolates involve a uniform prion species with a complex molecular signature. *PLoS one* **6**:e27510.
96. **Gough KC, Bishop K, Maddison BC.** 2014. Highly sensitive detection of small ruminant bovine spongiform encephalopathy within transmissible spongiform encephalopathy mixes by serial protein misfolding cyclic amplification. *Journal of clinical microbiology* **52**:3863-3868.
97. **Grassi J.** 2003. Pre-clinical diagnosis of transmissible spongiform encephalopathies using rapid tests. *Transfus Clin Biol* **10**:19-22.

98. **Gravenor MB, Papasozomenos P, McLean AR, Neophytou G.** 2004. A scrapie epidemic in Cyprus. *Epidemiology and Infection* **132**:751-760.
99. **Greenlee JJ, Greenlee MH.** 2015. The transmissible spongiform encephalopathies of livestock. *ILAR Journal / National Research Council, Institute of Laboratory Animal Resources* **56**:7-25.
100. **Gretzschel A, Buschmann A, Eiden M, Ziegler U, Luhken G, Erhardt G, Groschup MH.** 2005. Strain typing of German transmissible spongiform encephalopathies field cases in small ruminants by biochemical methods. *Journal of veterinary medicine* **52**:55-63.
101. **Groschup MH, Buschmann A.** 2008. Rodent models for prion diseases. *Veterinary research* **39**:32.
102. **Groschup MH, Harmeyer S, Pfaff E.** 1997. Antigenic features of prion proteins of sheep and of other mammalian species. *Journal of immunological methods* **207**:89-101.
103. **Groschup MH, Lacroux C, Buschmann A, Luhken G, Mathey J, Eiden M, Lugan S, Hoffmann C, Espinosa JC, Baron T, Torres JM, Erhardt G, Andreoletti O.** 2007. Classic scrapie in sheep with the ARR/ARR prion genotype in Germany and France. *Emerging infectious diseases* **13**:1201-1207.
104. **Groschup MH, Langeveld J, Pfaff E.** 1994. The major species specific epitope in prion proteins of ruminants. *Archives of virology* **136**:423-431.
105. **Groschup MH, Pfaff E.** 1993. Studies on a species-specific epitope in murine, ovine and bovine prion protein. *The Journal of general virology* **74 (Pt 7)**:1451-1456.
106. **Guignot F, Perreau C, Cavarroc C, Touze JL, Pougard JL, Dupont F, Beckers JF, Remy B, Babilliot JM, Bed'hom B, Lamoriniere J, Mermillod P, Baril G.** 2011. Sex and PRNP Genotype Determination in Preimplantation Caprine Embryos. *Reprod Domest Anim* **46**:656-663.
107. **Guignot F, Perreau C, Cavarroc C, Touze JL, Pougard JL, Dupont F, Beckers JF, Remy B, Babilliot JM, Bed'Hom B, Lamoriniere JM, Mermillod P, Baril G.** 2011. Sex and PRNP genotype determination in preimplantation caprine embryos. *Reprod Domest Anim* **46**:656-663.
108. **Hadlow WJ.** 1968. Scrapie - a virus induced chronic encephalopathy of sheep. *Proceedings of the Association* **44**:281-2306.
109. **Hadlow WJ, Eklund CM, Kennedy RC, Jackson TA, Whitford HW, Boyle CC.** 1974. Course of experimental scrapie virus infection in the goat. *The Journal of infectious diseases* **129**:559-567.
110. **Hadlow WJ, Kennedy RC, Race RE.** 1982. Natural infection of Suffolk sheep with scrapie virus. *The Journal of infectious diseases* **146**:657-664.
111. **Hadlow WJ, Kennedy RC, Race RE, Eklund CM.** 1980. Virologic and neurohistologic findings in dairy goats affected with natural scrapie. *Veterinary pathology* **17**:187-199.
112. **Hagenaars TJ, Melchior MB, Bossers A, Davidse A, Engel B, van Zijderveld FG.** 2010. Scrapie prevalence in sheep of susceptible genotype is declining in a population subject to breeding for resistance. *BMC veterinary research* **6**:25.
113. **Halliez S, Passet B, Martin-Lannere S, Hernandez-Rapp J, Laude H, Mouillet-Richard S, Vilotte JL, Beringue V.** 2014. To develop with or without the prion protein. *Frontiers in cell and developmental biology* **2**:58.
114. **Harmeyer S, Pfaff E, Groschup MH.** 1998. Synthetic peptide vaccines yield monoclonal antibodies to cellular and pathological prion proteins of ruminants. *The Journal of general virology* **79 (Pt 4)**:937-945.
115. **Hausermann C, Schwermer H, Oevermann A, Nentwig A, Zurbriggen A, Heim D, Seuberlich T.** Surveillance and simulation of bovine spongiform encephalopathy and scrapie in small ruminants in Switzerland. *BMC veterinary research* **6**:20.
116. **Hawkins SA, Simmons HA, Gough KC, Maddison BC.** 2015. Persistence of ovine scrapie infectivity in a farm environment following cleaning and decontamination. *The Veterinary record* **176**:99.
117. **Heim D, Maurer E, Doherr MG.** 2002. [Transmissible spongiform encephalopathies in sheep and goats]. *Schweizer Archiv fur Tierheilkunde* **144**:675-683.
118. **Hopp P, Omer MK, Heier BT.** 2006. A case-control study of scrapie Nor98 in Norwegian sheep flocks. *The Journal of general virology* **87**:3729-3736.
119. **Hourrigan JL, Klingsporn AL, McDaniel HA, Riemenschneider MN.** 1969. Natural scrapie in a goat. *Journal of the American Veterinary Medical Association* **154**:538-539.
120. **Hussain A, Babar ME, Imran M, Haq IU, Javed MM.** 2011. Detection of four novel polymorphisms in PrP gene of Pakistani sheep (Damani and Hashtnagri) and goats (Kamori and Local Hairy) breeds. *Virology* **8**:246.
121. **Iannuzzi L, Palomba R, Di Meo GP, Perucatti A, Ferrara L.** 1998. Comparative FISH-mapping of the prion protein gene (PRNP) on cattle, river buffalo, sheep and goat chromosomes. *Cytogenetics and cell genetics* **81**:202-204.
122. **Jacobs JG, Sauer M, van Keulen LJ, Tang Y, Bossers A, Langeveld JP.** 2011. Differentiation of ruminant transmissible spongiform encephalopathy isolate types, including bovine spongiform encephalopathy and CH1641 scrapie. *The Journal of general virology* **92**:222-232.
123. **Jeffrey M, Martin S, Gonzalez L, Foster J, Langeveld JP, van Zijderveld FG, Grassi J, Hunter N.** 2006. Immunohistochemical features of PrP(d) accumulation in natural and experimental goat transmissible spongiform encephalopathies. *Journal of comparative pathology* **134**:171-181.
124. **Jeffrey M, Martin S, Thomson JR, Dingwall WS, Begara-McGorum I, Gonzalez L.** 2001. Onset and distribution of tissue prp accumulation in scrapie-affected suffolk sheep as demonstrated by sequential necropsies and tonsillar biopsies. *Journal of comparative pathology* **125**:48-57.
125. **Jeffrey M, Ryder S, Martin S, Hawkins SA, Terry L, Berthelin-Baker C, Bellworthy SJ.** 2001. Oral inoculation of sheep with the agent of bovine spongiform encephalopathy (BSE). 1. Onset and distribution of disease-specific PrP accumulation in brain and viscera. *Journal of comparative pathology* **124**:280-289.
126. **Jovanovic M.** 1998. [Spongiform encephalopathies in animals and humans]. *Medicinski preglod* **51 Suppl 1**:35-42.

127. **Kaaden OR.** 1994. [Unconventional disease agents--a danger for humans and animals?]. *Berliner und Munchener tierarztliche Wochenschrift* **107**:44-48.
128. **Kanata E, Arsenakis M, Sklaviadis T.** 2016. Caprine PrP variants harboring Asp-146, His-154 and Gln-211 alleles display reduced convertibility upon interaction with pathogenic murine prion protein in scrapie infected cells. *Prion*:0.
129. **Kanata E, Humphreys-Panagiotidis C, Giadinis ND, Papaioannou N, Arsenakis M, Sklaviadis T.** 2014. Perspectives of a scrapie resistance breeding scheme targeting Q211, S146 and K222 caprine PRNP alleles in Greek goats. *Veterinary research* **45**:43.
130. **Kao RR, Green DM, Johnson J, Kiss IZ.** 2007. Disease dynamics over very different time-scales: foot-and-mouth disease and scrapie on the network of livestock movements in the UK. *Journal of the Royal Society, Interface / the Royal Society* **4**:907-916.
131. **Karmysheva V, Pogodina VV, Roikhel VM.** 2003. [Cytopathological changes in human and animal brain in prion diseases]. *Morfologija (Saint Petersburg, Russia)* **123**:24-27.
132. **Kellar JA, Lees VW.** 2003. Risk management of the transmissible spongiform encephalopathies in North America. *Revue scientifique et technique (International Office of Epizootics)* **22**:201-225.
133. **Kipanyula MJ, Chuma IS, Brundtland E, Bardsen K, Msalya G, Kifaro GC, Ulvund MJ.** 2014. Prion protein (PrP) gene polymorphisms in Small East African and Norwegian white goats. *Small Ruminant Research* **121**:200-206.
134. **Kocer A, Gallozzi M, Renault L, Tilly G, Pinheiro I, Le Provost F, Pailhoux E, Vilotte JL.** 2007. Goat PRNP expression pattern suggests its involvement in early sex differentiation. *Dev Dyn* **236**:836-842.
135. **Konold T, Bone G, Simmons MM, Dexter G, Moore SJ, Pettitt RG.** 2007. Scrapie in goats. *The Veterinary record* **161**:395-396.
136. **Konold T, Bone GE, Phelan LJ, Simmons MM, Gonzalez L, Siso S, Goldmann W, Cawthraw S, Hawkins SA.** Monitoring of clinical signs in goats with transmissible spongiform encephalopathies. *BMC veterinary research* **6**:13.
137. **Kurosaki Y, Ishiguro N, Horiuchi M, Shinagawa M.** 2005. Polymorphisms of caprine PrP gene detected in Japan. *The Journal of veterinary medical science / the Japanese Society of Veterinary Science* **67**:321-323.
138. **Lacroux C, Perrin-Chauvineau C, Corbiere F, Aron N, Aguilar-Calvo P, Torres JM, Costes P, Bremaud I, Lugan S, Schelcher F, Barillet F, Andreoletti O.** 2014. Genetic resistance to scrapie infection in experimentally challenged goats. *Journal of virology* **88**:2406-2413.
139. **Lacroux C, Simon S, Benestad SL, Maillet S, Mathey J, Lugan S, Corbiere F, Cassard H, Costes P, Bergonier D, Weisbecker JL, Moldal T, Simmons H, Lantier F, Feraudet-Tarisse C, Morel N, Schelcher F, Grassi J, Andreoletti O.** 2008. Prions in milk from ewes incubating natural scrapie. *PLoS pathogens* **4**:e1000238.
140. **Lampo E, Van Poucke M, Vandesompele J, Erkens T, Van Zeveren A, Peelman LJ.** 2009. Positive correlation between relative mRNA expression of PRNP and SPRN in cerebral and cerebellar cortex of sheep. *Molecular and cellular probes* **23**:60-64.
141. **Lan XY, Zhao HY, Li ZJ, Li AM, Lei CZ, Chen H, Pan CY.** 2012. A novel 28-bp insertion-deletion polymorphism within goat PRNP gene and its association with production traits in Chinese native breeds. *Genome / National Research Council Canada = Genome / Conseil national de recherches Canada* **55**:547-552.
142. **Langeveld JP, Jacobs JG, Erkens JH, Bossers A, van Zijderveld FG, van Keulen LJ.** 2006. Rapid and discriminatory diagnosis of scrapie and BSE in retro-pharyngeal lymph nodes of sheep. *BMC veterinary research* **2**:19.
143. **Le Dur A, Beringue V, Andreoletti O, Reine F, Lai TL, Baron T, Bratberg B, Vilotte JL, Sarradin P, Benestad SL, Laude H.** 2005. A newly identified type of scrapie agent can naturally infect sheep with resistant PrP genotypes. *Proceedings of the National Academy of Sciences of the United States of America* **102**:16031-16036.
144. **Leontides S, Psychas V, Argyroudou S, Giannati-Stefanou A, Paschaleri-Papadopoulou E, Manousis T, Sklaviadis T.** 2000. A survey of more than 11 years of neurologic diseases of ruminants with special reference to transmissible spongiform encephalopathies (TSEs) in Greece. *Journal of veterinary medicine* **47**:303-309.
145. **Li Z, XinSheng H, Rong J, ChunHui H, XiuPing Y, Tao H.** 2009. Establishment of bovine prion peptide-based monoclonal antibodies for identifying bovine prion. *Sci China Ser C-Life Sci*, **52**:754-760.
146. **Liberski PP.** 1993. Subacute spongiform encephalopathies--the transmissible brain amyloidoses: a comparison with the non-transmissible brain amyloidoses of Alzheimer type. *Journal of comparative pathology* **109**:103-127.
147. **Liberski PP.** 2012. Historical overview of prion diseases: a view from afar. *Folia neuropathologica / Association of Polish Neuropathologists and Medical Research Centre, Polish Academy of Sciences* **50**:1-12.
148. **Liberski PP, Bratosiewicz-Zapart J.** 1997. Is the prion structure solved? *Archivum immunologiae et therapiae experimentalis* **45**:121-140.
149. **Liu R, Weng Y.** 2009. [From the Scrapie syndrome of sheep and goat to the mad cow disease - the history of the discovery of prion]. *Zhonghua Yi Shi Za Zhi* **39**:175-177.
150. **Luhken G, Buschmann A, Brandt H, Eiden M, Groschup MH, Erhardt G.** 2007. Epidemiological and genetical differences between classical and atypical scrapie cases. *Veterinary research* **38**:65-80.
151. **Madsen-Bouterse SA, Schneider DA, Dassanayake RP, Truscott TC, Zhuang D, Kumpula-McWhirter N, O'Rourke KI.** 2015. PRNP variants in goats reduce sensitivity of detection of PrP(Sc) by immunoassay. *J Vet Diagn Invest* **27**:332-343.

152. **Madsen-Bouterse SA, Schneider DA, Zhuang D, Dassanayake RP, Balachandran A, Mitchell GB, O'Rourke KI.** 2016. Primary transmission of CWD versus scrapie prions from small ruminants to ovine and cervid PrP transgenic mice. *The Journal of general virology.*
153. **Madsen-Bouterse SA, Zhuang D, O'Rourke KI, Schneider DA.** 2012. Differential immunoreactivity of goat derived scrapie following in vitro misfolding versus mouse bioassay. *Biochemical and biophysical research communications* **423**:770-774.
154. **Maestrale C, Cancedda MG, Pintus D, Masia M, Nonno R, Ru G, Carta A, Demontis F, Santucci C, Ligios C.** 2015. Genetic and Pathological Follow-Up Study of Goats Experimentally and Naturally Exposed to a Sheep Scrapie Isolate. *Journal of virology* **89**:10044-10052.
155. **Marsh RF, Bessen RA.** 1993. Epidemiologic and experimental studies on transmissible mink encephalopathy. *Developments in biological standardization* **80**:111-118.
156. **Martin S, Jeffrey M, Gonzalez L, Siso S, Reid HW, Steele P, Dagleish MP, Stack MJ, Chaplin MJ, Balachandran A.** 2009. Immunohistochemical and biochemical characteristics of BSE and CWD in experimentally infected European red deer (*Cervus elaphus elaphus*). *BMC veterinary research* **5**:26.
157. **Martucci F, Acutis P, Mazza M, Nodari S, Colussi S, Corona C, Barocci S, Gabrielli A, Caramelli M, Casalone C, Moroncini G.** 2009. Detection of typical and atypical bovine spongiform encephalopathy and scrapie prion strains by prion protein motif-grafted antibodies. *The Journal of general virology* **90**:1048-1053.
158. **Mata X, Besnard N, Le Roux K, Tilly G, Andreoletti O, Hudrisier M, Costa Da Silva J, Laude H, Vilotte JL.** 2003. Unexpected high testis-specific transcriptional activity of the cyclin T1 promoter in transgenic mice. *FEBS letters* **549**:163-166.
159. **Maurer E, Botteron C, Zurbriggen A, Doherr MG.** 2005. [Swiss scrapie surveillance. II. Epidemiologic aspects of the detection of neurological diseases in sheep and goats]. *Schweizer Archiv fur Tierheilkunde* **147**:435-443.
160. **Mazza M, Guglielmetti C, Pagano M, Sciuto S, Ingravalle F, Martucci F, Caramelli M, Acutis PL.** 2012. Lysine at position 222 of the goat prion protein inhibits the binding of monoclonal antibody F99/97.6.1. *J Vet Diagn Invest* **24**:971-975.
161. **Melchior MB, Hagenaars TJ, Davidse A, van Keulen LJ, Bossers A, van Zijderveld FG.** 2011. [Active surveillance for scrapie in the Netherlands: effect of a breeding programme on the prevalence of scrapie in sheep (2002-2010)?]. *Tijdschrift voor diergeneeskunde* **136**:84-93.
162. **Melchior MB, Windig JJ, Hagenaars TJ, Bossers A, Davidse A, van Zijderveld FG.** 2010. Eradication of scrapie with selective breeding: are we nearly there? *BMC veterinary research* **6**:24.
163. **Meloni D, Bozzetta E, Langeveld JP, Groschup MH, Goldmann W, Andreoletti O, Lantier I, Van Keulen L, Bossers A, Pitardi D, Nonno R, Sklaviadis T, Ingravalle F, Peletto S, Colussi S, Acutis PL.** 2017. EU-approved rapid tests might underestimate bovine spongiform encephalopathy infection in goats. *J Vet Diagn Invest*:1040638716688045.
164. **Monleon E, Garza MC, Sarasa R, Alvarez-Rodriguez J, Bolea R, Monzon M, Vargas MA, Badiola JJ, Acin C.** 2011. An assessment of the efficiency of PrPsc detection in rectal mucosa and third-eyelid biopsies from animals infected with scrapie. *Veterinary microbiology* **147**:237-243.
165. **Moreno CR, Moazami-Goudarzi K, Laurent P, Cazeau G, Andreoletti O, Chadi S, Elsen JM, Calavas D.** 2007. Which PrP haplotypes in a French sheep population are the most susceptible to atypical scrapie? *Archives of virology* **152**:1229-1232.
166. **Morignat E, Cazeau G, Biacabe AG, Vinard JL, Bencsik A, Madec JY, Ducrot C, Baron T, Calavas D.** 2006. Estimates of the prevalence of transmissible spongiform encephalopathies in sheep and goats in France in 2002. *The Veterinary record* **158**:683-687.
167. **Mould DL, Dawson AM.** 1970. The unsuccessful dialysis of scrapie agent from goat brain and spleen. *Research in veterinary science* **11**:304-305.
168. **Mould DL, Smith W.** 1962. The causal agent of scrapie. II. Extraction of the agent from infected goat tissue. *Journal of comparative pathology* **72**:106-112.
169. **Moum T, Olsaker I, Hopp P, Moldal T, Valheim M, Moum T, Benestad SL.** 2005. Polymorphisms at codons 141 and 154 in the ovine prion protein gene are associated with scrapie Nor98 cases. *The Journal of general virology* **86**:231-235.
170. **Nadeem M, Spitzbarth I, Haist V, Rohn K, Tauscher K, Rohn K, Bossers A, Langeveld J, Papisavva-Stylianou P, Groschup MH, Baumgartner W, Gerhauser I, Fast C.** 2016. Immunolabelling of non-phosphorylated neurofilament indicates damage of spinal cord axons in TSE-infected goats. *The Veterinary record* **178**:141.
171. **Nentwig A, Oevermann A, Heim D, Botteron C, Zellweger K, Drogemuller C, Zurbriggen A, Seuberlich T.** 2007. Diversity in neuroanatomical distribution of abnormal prion protein in atypical scrapie. *PLoS pathogens* **3**:e82.
172. **Niedermeier S, Eiden M, Toumazos P, Papisavva-Stylianou P, Ioannou I, Sklaviadis T, Panagiotidis C, Langeveld J, Bossers A, Kuczius T, Kaatz M, Groschup MH, Fast C.** 2016. Genetic, histochemical and biochemical studies on goat TSE cases from Cyprus. *Veterinary research* **47**:99.
173. **Noinville S, Chich JF, Rezaei H.** 2008. Misfolding of the prion protein: linking biophysical and biological approaches. *Veterinary research* **39**:48.
174. **Nwankiti OO, Ikeh EI, Arowolo OA, Nwankiti AJ, Odugbo MO, Seuberlich T.** 2013. A Targeted Survey for Scrapie in Jos Plateau State, Nigeria. *J Vet Med* **2013**:841978.
175. **Nwankiti OO, Ikeh EI, Asala O, Seuberlich T.** 2013. A pilot study for targeted surveillance of bovine spongiform encephalopathy in Nigeria. *Transboundary and emerging diseases* **60**:279-283.
176. **Obermaier G, Kretzschmar HA, Hafner A, Heubeck D, Dahme E.** 1995. Spongiform central nervous system myelinopathy in African dwarf goats. *Journal of comparative pathology* **113**:357-372.

177. **Oevermann A, Botteron C, Seuberlich T, Nicolier A, Friess M, Doherr MG, Heim D, Hilbe M, Zimmer K, Zurbriggen A, Vandeveld M.** 2008. Neuropathological survey of fallen stock: active surveillance reveals high prevalence of encephalitic listeriosis in small ruminants. *Veterinary microbiology* **130**:320-329.
178. **Organisation) EEFS.** 2005. Opinion on classification of atypical transmissible spongiform encephalopathy (TSE) cases in small ruminants. *The EFSA Journal* **276**:1-30.
179. **Organisation) EEFS.** 2009. Statement on a protocol for additional data collection based on the EFSA recommendations about resistance to scrapie in goats in Cyprus. *EFSA Journal* 2009 **1203**:1-22.
180. **Organisation) EEFS.** 2009. Scientific Opinion on genetic TSE resistance in goats in all European Union Member States. *EFSA Journal* **7**:42.
181. **Organisation) EEFS.** 2010. Scientific Opinion on Analytical sensitivity of approved TSE rapid tests1. *The EFSA Journal* **7**:1436.
182. **Organisation) EEFS.** 2015. Scientific Opinion on a request for a review of a scientific publication concerning the zoonotic potential of ovine scrapie prions. *EFSA Journal* **13**:4197.
183. **Organisation) EEFS.** 2014. Scientific Opinion on the scrapie situation in the EU after 10 years of monitoring and control in sheep and goats. *EFSA Journal* **12**:3781.
184. **Orge L, Oliveira A, Machado C, Lima C, Ochoa C, Silva J, Carvalho R, Tavares P, Almeida P, Ramos M, Pinto MJ, Simas JP.** Putative emergence of classical scrapie in a background of enzootic atypical scrapie. *The Journal of general virology* **91**:1646-1650.
185. **O'Rourke KI, Schneider DA, Spraker TR, Dassanayake RP, Highland MA, Zhuang D, Truscott TC.** 2012. Transmissibility of caprine scrapie in ovine transgenic mice. *BMC veterinary research* **8**:42.
186. **O'Rourke KI, Zhuang D, Truscott TC, Yan H, Schneider DA.** 2011. Sparse PrP(Sc) accumulation in the placentas of goats with naturally acquired scrapie. *BMC veterinary research* **7**:7.
187. **Ortiz-Pelaez A, Georgiadou S, Simmons MM, Windl O, Dawson M, Arnold ME, Neocleous P, Papasavva-Stylianou P.** 2015. Allelic variants at codon 146 in the PRNP gene show significant differences in the risk for natural scrapie in Cypriot goats. *Epidemiology and infection* **143**:1304-1310.
188. **Ortiz-Pelaez A, Kelly L, Adkin A.** 2012. The risk of introducing scrapie from restocking goats in Great Britain. *Prev Vet Med.*
189. **Padilla D, Beringue V, Espinosa JC, Andreoletti O, Jaumain E, Reine F, Herzog L, Gutierrez-Adan A, Pintado B, Laude H, Torres JM.** 2011. Sheep and goat BSE propagate more efficiently than cattle BSE in human PrP transgenic mice. *PLoS pathogens* **7**:e1001319.
190. **Papachristoforou C, Markou M.** 2006. Overview of the economical and social importance of the livestock sector in Cyprus with particular reference to sheep and goats. *Small Ruminant Res* **62**:39-48.
191. **Papasavva-Stylianou P, Kleanthous M, Toumazos P, Mavrikiou P, Loucaides P.** 2007. Novel polymorphisms at codons 146 and 151 in the prion protein gene of Cyprus goats, and their association with natural scrapie. *Vet J* **173**:459-462.
192. **Papasavva-Stylianou P, Windl O, Saunders G, Mavrikiou P, Toumazos P, Kakoyiannis C.** 2010. PrP gene polymorphisms in Cyprus goats and their association with resistance or susceptibility to natural scrapie. *Vet J.*
193. **Papasavva-Stylianou P, Windl O, Saunders G, Mavrikiou P, Toumazos P, Kakoyiannis C.** 2011. PrP gene polymorphisms in Cyprus goats and their association with resistance or susceptibility to natural scrapie. *Veterinary journal* **187**:245-250.
194. **Pattison IH.** 1966. The relative susceptibility of sheep, goats and mice to two types of the goat scrapie agent. *Research in veterinary science* **7**:207-212.
195. **Pattison IH, Gordon WS, Millson GC.** 1959. Experimental production of scrapie in goats. *Journal of comparative pathology* **69**:300-312.
196. **Pattison IH, Hoare MN, Jebbett JN, Watson WA.** 1972. Spread of scrapie to sheep and goats by oral dosing with foetal membranes from scrapie-affected sheep. *The Veterinary record* **90**:465-468.
197. **Pattison IH, Millson GC.** 1960. Further observations on the experimental production of scrapie in goats and sheep. *Journal of comparative pathology* **70**:182-193.
198. **Pattison IH, Millson GC.** 1961. Scrapie produced experimentally in goats with special reference to the clinical syndrome. *Journal of comparative pathology* **71**:101-109.
199. **Pattison IH, Millson GC.** 1962. Distribution of the scrapie agent in the tissues of experimentally inoculated goats. *Journal of comparative pathology* **72**:233-244.
200. **Pattison IH, Smith K.** 1963. Experimental Scrapie in Goats: a Modification of Incubation Period and Clinical Response Following Pre-Treatment with Normal Goat Brain. *Nature* **200**:1342-1343.
201. **Peletto S, Bertolini S, Maniaci MG, Colussi S, Modesto P, Biolatti C, Bertuzzi S, Caramelli M, Maurella C, Acutis PL.** 2012. Association of an indel polymorphism in the 3'UTR of the caprine SPRN gene with scrapie positivity in the central nervous system. *The Journal of general virology* **93**:1620-1623.
202. **Pirisinu L, Migliore S, Di Bari MA, Esposito E, Baron T, D'Agostino C, De Grossi L, Vaccari G, Agrimi U, Nonno R.** 2011. Molecular discrimination of sheep bovine spongiform encephalopathy from scrapie. *Emerging infectious diseases* **17**:695-698.
203. **Plinston C, Hart P, Hunter N, Manson JC, Barron RM.** 2014. Increased susceptibility of transgenic mice expressing human PrP to experimental sheep bovine spongiform encephalopathy is not due to increased agent titre in sheep brain tissue. *The Journal of general virology* **95**:1855-1859.
204. **Polak MP, Larska M, Langeveld JP, Buschmann A, Groschup MH, Zmudzinski JF.** 2009. Diagnosis of the first cases of scrapie in Poland. *Vet J.*
205. **Premzi M, Sangiorgio L, Strumbo B, Marshall Graves JA, Simonc T, Gready JE.** 2003. Shadoo, a new protein highly conserved from fish to mammals and with similarity to prion protein. *Gene* **314**:89-102.
206. **Prusiner SB.** 1993. Genetic and infectious prion diseases. *Archives of neurology* **50**:1129-1153.

207. **Prusiner SB.** 1993. Prion encephalopathies of animals and humans. *Developments in biological standardization* **80**:31-44.
208. **Prusiner SB.** 1998. Prions. *Proceedings of the National Academy of Sciences of the United States of America* **95**:13363-13383.
209. **Prusiner SB, DeArmond SJ.** 1991. Molecular biology and pathology of scrapie and the prion diseases of humans. *Brain pathology (Zurich, Switzerland)* **1**:297-310.
210. **Rapoport E, Shimshony A.** 1997. Health hazards to the small ruminant population of the Middle East posed by the trade of sheep and goat meat. *Revue scientifique et technique (International Office of Epizootics)* **16**:57-64.
211. **Reckzeh C, Hoffmann C, Buschmann A, Buda S, Budras KD, Reckling KF, Bellmann S, Knobloch H, Erhardt G, Fries R, Groschup MH.** 2007. Rapid testing leads to the underestimation of the scrapie prevalence in an affected sheep and goat flock. *Veterinary microbiology* **123**:320-327.
212. **Rodriguez F, Macalintal Rodriguez N.** 2000. The risk of transfusion-transmitted prion infections. *MLO: medical laboratory observer* **32**:24-28, 30-21.
213. **Saunders GC, Cawthraw S, Mountjoy SJ, Hope J, Windl O.** 2006. PrP genotypes of atypical scrapie cases in Great Britain. *The Journal of general virology* **87**:3141-3149.
214. **Schmerr MJ, Goodwin KR, Cutlip RC.** 1994. Capillary electrophoresis of the scrapie prion protein from sheep brain. *Journal of chromatography* **680**:447-453.
215. **Schneider DA, Madsen-Bouterse SA, Zhuang D, Truscott TC, Dassanayake RP, O'Rourke KI.** 2015. The placenta shed from goats with classical scrapie is infectious to goat kids and lambs. *The Journal of general virology* **96**:2464-2469.
216. **Seuberlich T, Botteron C, Benestad SL, Brunisholz H, Wyss R, Kihm U, Schwermer H, Friess M, Nicolier A, Heim D, Zurbriggen A.** 2007. Atypical scrapie in a Swiss goat and implications for transmissible spongiform encephalopathy surveillance. *J Vet Diagn Invest* **19**:2-8.
217. **Seuberlich T, Doherr MG, Botteron C, Nicolier A, Schwermer H, Brunisholz H, Heim D, Zurbriggen A.** 2009. Field performance of two rapid screening tests in active surveillance of transmissible spongiform encephalopathies in small ruminants. *J Vet Diagn Invest* **21**:97-101.
218. **Simmons HA, Simmons MM, Spencer YI, Chaplin MJ, Povey G, Davis A, Ortiz-Pelaez A, Hunter N, Matthews D, Wrathall AE.** 2009. Atypical scrapie in sheep from a UK research flock which is free from classical scrapie. *BMC veterinary research* **5**:8.
219. **Simon S, Nugier J, Morel N, Boutal H, Creminon C, Benestad SL, Andreoletti O, Lantier F, Bilheude JM, Feysaguet M, Biacabe AG, Baron T, Grassi J.** 2008. Rapid typing of transmissible spongiform encephalopathy strains with differential ELISA. *Emerging infectious diseases* **14**:608-616.
220. **Sofianidis G, Psychas V, Billinis C, Spyrou V, Argyroudis S, Papaioannou N, Vlemmas I.** 2006. Histopathological and immunohistochemical features of natural goat scrapie. *Journal of comparative pathology* **135**:116-129.
221. **Sofianidis G, Psychas V, Billinis C, Spyrou V, Argyroudis S, Vlemmas I.** 2008. Atypical PrPsc distribution in goats naturally affected with scrapie. *Journal of comparative pathology* **138**:90-101.
222. **Spiropoulos J, Lockey R, Sallis RE, Terry LA, Thorne L, Holder TM, Beck KE, Simmons MM.** 2011. Isolation of prion with BSE properties from farmed goat. *Emerging infectious diseases* **17**:2253-2261.
223. **Srithayakumar V, Mitchell GB, White BN.** 2016. Identification of amino acid variation in the prion protein associated with classical scrapie in Canadian dairy goats. *BMC veterinary research* **12**:59.
224. **Stemshorn BW.** 1975. [Case of scrapie in a goat]. *The Canadian veterinary journal* **16**:84-86.
225. **Stewart P, Shen C, Zhao D, Goldmann W.** 2009. Genetic analysis of the SPRN gene in ruminants reveals polymorphisms in the alanine-rich segment of shadoo protein. *The Journal of general virology* **90**:2575-2580.
226. **Tang Y, Gielbert A, Jacobs JG, Baron T, Andreoletti O, Yokoyama T, Langeveld JP, Sauer MJ.** 2012. All major prion types recognised by a multiplex immunofluorometric assay for disease screening and confirmation in sheep. *Journal of immunological methods* **380**:30-39.
227. **Thuring CM, Erkens JH, Jacobs JG, Bossers A, Van Keulen LJ, Garssen GJ, Van Zijderveld FG, Ryder SJ, Groschup MH, Sweeney T, Langeveld JP.** 2004. Discrimination between scrapie and bovine spongiform encephalopathy in sheep by molecular size, immunoreactivity, and glycoprofile of prion protein. *Journal of clinical microbiology* **42**:972-980.
228. **Toumazos P.** 1988. First report of ovine scrapie in Cyprus. *The British veterinary journal* **144**:98-100.
229. **Toumazos P.** 1991. Scrapie in Cyprus. *The British veterinary journal* **147**:147-154.
230. **Toumazos P, Alley MR.** 1989. Scrapie in goats in Cyprus. *New Zealand veterinary journal* **37**:160-162.
231. **Uboldi C, Del Vecchio I, Foti MG, Azzalin A, Paulis M, Raimondi E, Vaccari G, Agrimi U, Di Guardo G, Comincini S, Ferretti L.** 2005. Prion-like Doppel gene (PRND) in the goat: genomic structure, cDNA, and polymorphisms. *Mamm Genome* **16**:963-971.
232. **Vaccari G, D'Agostino C, Nonno R, Rosone F, Conte M, Di Bari MA, Chiappini B, Esposito E, De Grossi L, Giordani F, Marcon S, Morelli L, Borroni R, Agrimi U.** 2007. Prion protein alleles showing a protective effect on the susceptibility of sheep to scrapie and bovine spongiform encephalopathy. *Journal of virology* **81**:7306-7309.
233. **Vaccari G, Di Bari MA, Morelli L, Nonno R, Chiappini B, Antonucci G, Marcon S, Esposito E, Fazzi P, Palazzini N, Troiano P, Petrella A, Di Guardo G, Agrimi U.** 2006. Identification of an allelic variant of the goat PrP gene associated with resistance to scrapie. *The Journal of general virology* **87**:1395-1402.
234. **Vaccari G, Panagiotidis CH, Acin C, Peletto S, Barillet F, Acutis P, Bossers A, Langeveld J, van Keulen L, Sklaviadis T, Badiola JJ, Andreoletti O, Groschup MH, Agrimi U, Foster J,**

- Goldmann W.** 2009. State-of-the-art review of goat TSE in the European Union, with special emphasis on PRNP genetics and epidemiology. *Veterinary research* **40**:48.
235. **Valdez RA, Rock MJ, Anderson AK, O'Rourke KI.** 2003. Immunohistochemical detection and distribution of prion protein in a goat with natural scrapie. *J Vet Diagn Invest* **15**:157-162.
236. **van der Lugt JJ, Olivier J, Jordaan P.** 1996. Status spongiosis, optic neuropathy, and retinal degeneration in *Helichrysum argyrosphaerum* poisoning in sheep and a goat. *Veterinary pathology* **33**:495-502.
237. **Van Poucke M, Willemarck N, Hugot K, Van Zeveren A, Peelman LJ.** 2009. Complete genomic sequence of the goat prion protein gene (PRNP). *Virus genes* **38**:189-192.
238. **Vitale M, Migliore S, La Giglia M, Alberti P, Di Marco Lo Presti V, Langeveld JP.** 2016. Scrapie incidence and PRNP polymorphisms: rare small ruminant breeds of Sicily with TSE protecting genetic reservoirs. *BMC veterinary research* **12**:141.
239. **Vorberg I, Buschmann A, Harmeyer S, Saalmuller A, Pfaff E, Groschup MH.** 1999. A novel epitope for the specific detection of exogenous prion proteins in transgenic mice and transfected murine cell lines. *Virology* **255**:26-31.
240. **Vulin J, Biacabe AG, Cazeau G, Calavas D, Baron T.** 2011. Molecular typing of protease-resistant prion protein in transmissible spongiform encephalopathies of small ruminants, France, 2002-2009. *Emerging infectious diseases* **17**:55-63.
241. **Webb PR, Powell L, Denyer M, Marsh S, Weaver C, Simmons MM, Johns E, Sheehan J, Horsfield P, Lyth C, Wilson C, Long A, Cawthraw S, Saunders GC, Spencer YI.** 2009. A retrospective immunohistochemical study reveals atypical scrapie has existed in the United Kingdom since at least 1987. *J Vet Diagn Invest* **21**:826-829.
242. **Wells GA.** 1993. Pathology of nonhuman spongiform encephalopathies: variations and their implications for pathogenesis. *Developments in biological standardization* **80**:61-69.
243. **Wells GA, Wilesmith JW, McGill IS.** 1991. Bovine spongiform encephalopathy: a neuropathological perspective. *Brain pathology (Zurich, Switzerland)* **1**:69-78.
244. **Westaway D, Prusiner SB.** 1986. Conservation of the cellular gene encoding the scrapie prion protein. *Nucleic acids research* **14**:2035-2044.
245. **White S, Herrmann-Hoesing L, O'Rourke K, Waldron D, Rowe J, Alverson J.** 2008. Prion gene (PRNP) haplotype variation in United States goat breeds (Open Access publication). *Genet Sel Evol* **40**:553-561.
246. **White SN, Reynolds JO, Waldron DF, Schneider DA, O'Rourke KI.** 2012. Extended scrapie incubation time in goats singly heterozygous for PRNP S146 or K222. *Gene* **501**:49-51.
247. **Windig JJ, Hoving RA, Priem J, Bossers A, van Keulen LJ, Langeveld JP.** 2016. Variation in the prion protein sequence in Dutch goat breeds. *Journal of animal breeding and genetics = Zeitschrift fur Tierzucht und Zuchtungsbiologie* **133**:366-374.
248. **Wood JL, Done SH.** 1992. Natural scrapie in goats: neuropathology. *The Veterinary record* **131**:93-96.
249. **Wood JL, Done SH, Pritchard GC, Wooldridge MJ.** 1992. Natural scrapie in goats: case histories and clinical signs. *The Veterinary record* **131**:66-68.
250. **Wood JL, McGill IS, Done SH, Bradley R.** 1997. Neuropathology of scrapie: a study of the distribution patterns of brain lesions in 222 cases of natural scrapie in sheep. *The Veterinary record* **140**:167-174.
251. **Wopfner F, Weidenhofer G, Schneider R, von Brunn A, Gilch S, Schwarz TF, Werner T, Schatzl HM.** 1999. Analysis of 27 mammalian and 9 avian PrPs reveals high conservation of flexible regions of the prion protein. *Journal of molecular biology* **289**:1163-1178.
252. **Wrathall AE, Holyoak GR, Parsonson IM, Simmons HA.** 2008. Risks of transmitting ruminant spongiform encephalopathies (prion diseases) by semen and embryo transfer techniques. *Theriogenology* **70**:725-745.
253. **Yokoyama T.** 1999. The immunodetection of the abnormal isoform of prion protein. *The Histochemical journal* **31**:209-212.
254. **Yu G, Chen J, Yu H, Liu S, Chen J, Xu X, Sha H, Zhang X, Wu G, Xu S, Cheng G.** 2006. Functional disruption of the prion protein gene in cloned goats. *The Journal of general virology* **87**:1019-1027.
255. **Zanusso G, Casalone C, Acutis P, Bozzetta E, Farinazzo A, Gelati M, Fiorini M, Forloni G, Sy MS, Monaco S, Caramelli M.** 2003. Molecular analysis of iatrogenic scrapie in Italy. *The Journal of general virology* **84**:1047-1052.
256. **Zhang L, Li N, Fan B, Fang M, Xu W.** 2004. PRNP polymorphisms in Chinese ovine, caprine and bovine breeds. *Animal genetics* **35**:457-461.
257. **Zhou R, Li X, Zheng H, Li L, Quan W, Shen Z, Tong J, Yang Q, Fu Q.** 2010. Molecular characterization of the full-length coding sequence of the caprine laminin receptor gene (RPSA). *Biochem Genet* **48**:962-969.
258. **Zhou RY, Li XL, Li LH, Wang HY, Lu JG.** 2008. Polymorphism of the PRNP gene in the main breeds of indigenous Chinese goats. *Archives of virology* **153**:979-982.
259. **Zhu C, Li B, Yu G, Chen J, Yu H, Chen J, Xu X, Wu Y, Zhang A, Cheng G.** 2009. Production of Prnp^{-/-} goats by gene targeting in adult fibroblasts. *Transgenic research* **18**:163-171.
260. **Ziomek CA.** 1996. Minimization of viral contamination in human pharmaceuticals produced in the milk of transgenic goats. *Developments in biological standardization* **88**:265-268.
261. **Zlotnik I.** 1961. The histopathology of the brain of goats affected with scrapie. *Journal of comparative pathology* **71**:444-448.
262. **Zlotnik I.** 1962. The pathology of scrapie: a comparative study of lesions in the brain of sheep and goats. *Acta neuropathologica* **7**:61-70.

263. **Zlotnik I, Barlow RM.** 1967. The transmission of a specific encephalopathy of mink to the goat. The Veterinary record **81**:55-56.
264. **Zlotnik I, Katiyar RD.** 1961. The occurrence of scrapie disease in sheep of the remote Himalayan foot hills. The Veterinary record **73**:543-544.
265. **Zlotnik I, Rennie JC.** 1963. Further observations on the experimental transmission of scrapie from sheep and goats to laboratory mice. Journal of comparative pathology **73**:150-162.
266. **Zlotnik I, Rennie JC.** 1965. Experimental Transmission of Mouse Passaged Scrapie to Goats, Sheep, Rats and Hamsters. Journal of comparative pathology **75**:147-157.
267. **Zygyiannis D, Katsaounis N.** 1986. Milk yield and milk composition of indigenous gotas (*Capra prisca*) in Greece. Anim Products **42**:365-374.