

# CONTRIBUTORS

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## CONTRIBUTORS AND PROFESSIONAL ADDRESS AT TIME OF WRITING

The chapters in the Terrestrial Manual are prepared by invited contributors (WOAH Reference Experts, where possible). In accordance with WOAHS standard procedure, all chapters are circulated to WOAHS Members for comment. The WOAHS Biological Standards Commission and the Consultant Editor then modify the text to take account of comments received, and the text is circulated a second time as the final version that will be presented for adoption by the World Assembly of Delegates to WOAHS at the General Session in May of each year. The Terrestrial Manual is thus deemed to be a WOAHS Standard that has come into being by international agreement. For this reason, the names of the contributors are not shown on individual chapters but are listed below. The Biological Standards Commission greatly appreciates the work of the following contributors (address at the time of writing):

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1.1.2. Collection, submission and storage of diagnostic specimens	<b>WOAH <i>ad hoc</i> Group on Biosafety and Biosecurity in Veterinary Laboratories</b>
1.1.3. Transport of biological materials	<b>WOAH <i>ad hoc</i> Group on Transport of Biological Materials</b>
1.1.4. Biosafety and biosecurity: standard for managing biological risk in the veterinary laboratory and animal facilities	<b>WOAH <i>ad hoc</i> Group on Biosafety and Biosecurity in Veterinary Laboratories</b>
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1 This chapter was updated by consensus of the WOAHS *ad hoc* Group on High Throughput Sequencing, Bioinformatics and Computational Genomics.

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- 2.2.4. Measurement uncertainty
- 2.2.5. Statistical approaches to validation
- 2.2.6. Selection and use of reference samples and panels
- 2.2.7\*. Validation of diagnostic tests for infectious diseases applicable to wildlife
- 2.2.8. Comparability of assays after changes in a validated test method
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2 This chapter was updated by consensus of an Expert Consultation

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3 This chapter was updated by consensus of all WOA Reference Laboratories for bluetongue.

4 This chapter was updated by consensus of all WOA Reference Laboratories for brucellosis.

5 This chapter was updated by consensus of all WOA Reference Laboratories for foot and mouth disease.

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- 3.1.11. *Leishmaniosis*  
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- 3.1.17. *Paratuberculosis (Johne's disease)*<sup>8</sup>  
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6 This chapter was updated by consensus of all WOA Reference Laboratories for leptospirosis.

7 This chapter was updated by consensus of the following WOA experts on trypanosomes: Dr L. Touratier (deceased), Prof. N. Inoue, Prof. Ph. Büscher, Dr K. Suganuma, Dr M. Gonzatti.

8 This chapter was updated by consensus of all WOA Reference Laboratories for paratuberculosis.

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- 3.1.19. Rabies (infection with rabies virus and other lyssaviruses)<sup>9</sup>
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- 3.1.20. Rift Valley fever (infection with Rift Valley fever virus)<sup>10</sup>
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- 3.1.21. Rinderpest (infection with rinderpest virus)
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- 3.1.22. Surra in all species (Trypanosoma evansi infection)<sup>11</sup>
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<sup>9</sup> This chapter was updated by consensus of all WOA Reference Laboratories for rabies.

<sup>10</sup> This chapter was updated by consensus of the WOA *ad hoc* Group on Rift Valley fever.

<sup>11</sup> This chapter was updated by consensus of the WOA *ad hoc* Group on Diagnostic Tests for Trypanosomoses.

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3.2.2. American foulbrood of honey bees (infection of honey bees with *Paenibacillus larvae*)**Dr K. Sidi-Boumedine**

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- 3.3.5. *Avian mycoplasmosis (Mycoplasma gallisepticum, M. synoviae)*
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- 3.3.6. *Duck virus hepatitis*
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- 3.3.7. *Fowl typhoid and Pullorum disease*
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- 3.3.8. *Infectious bursal disease (Gumboro disease)*
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<sup>12</sup> This chapter was updated by consensus of all WOA Reference Laboratories for avian influenza.

<sup>13</sup> This chapter was updated by consensus of all WOA Reference Laboratories for Newcastle disease.

- 3.3.11. *Turkey rhinotracheitis (avian metapneumovirus)*
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- 3.4.3. *Bovine cysticercosis*
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- 3.4.4. *Bovine genital campylobacteriosis*
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- 3.4.5. *Bovine spongiform encephalopathy*<sup>14</sup>
- Prof. T. Seuberlich**  
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- 3.4.6. *Bovine tuberculosis*
- See Chapter 3.1.13. Mammalian tuberculosis (infection with *Mycobacterium tuberculosis* complex)
- 3.4.7. *Bovine viral diarrhoea*<sup>15</sup>
- Dr P. Kirkland**  
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- 3.4.8. *Contagious bovine pleuropneumonia (infection with *Mycoplasma mycoides subsp. mycoides*)*<sup>16</sup>
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<sup>14</sup> This chapter was updated by consensus of all WOA Reference Laboratories for bovine spongiform encephalopathy.

<sup>15</sup> This chapter was updated by consensus of all WOA Reference Laboratories for bovine viral diarrhoea.

<sup>16</sup> This chapter was updated by consensus of all WOA Reference Laboratories for contagious bovine pleuropneumonia.



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- 3.6.3. *Dourine in horses* (*Trypanosoma equiperdum*  
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- 3.6.4. *Equine encephalomyelitis*  
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- 3.6.5. *Equine infectious anaemia*
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- 3.6.7. *Equine piroplasmiasis*
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- 3.6.8. *Equine rhinopneumonitis*  
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17 This chapter was updated by consensus of the following WOA experts on trypanosomes: Dr M.I. Gonzatti, Dr I. Pascucci, Dr L. Touratier (deceased), Dr M. Desquesnes, Dr A. Schnauffer, Dr K. Suganuma, Dr N. Inoue, Dr N. Van Reet, Dr N. Ledesma, Dr L. Hébert.

18 This chapter was updated by consensus of all WOA Reference Laboratories for equine influenza.

19 This chapter was updated by consensus of all WOA Reference Laboratories for equine rhinopneumonitis.

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- 3.7.2. *Rabbit haemorrhagic disease*
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- 3.8.2. *Caprine arthritis/encephalitis & Maedi-visna*
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- 3.8.5. *Enzootic abortion of ewes (ovine chlamydiosis)  
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- 3.8.6. *Nairobi sheep disease*
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- 3.8.7. *Ovine epididymitis* (*Brucella ovis*)<sup>20</sup> **Dr B. Garin-Bastuji (retired)**  
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- 3.8.8. *Peste des petits ruminants* (infection with small  
ruminant morbillivirus)<sup>21</sup> **Dr M. Baron (retired)**  
UK.
- 3.8.9. *Salmonellosis* (*S. abortusovis*) *See chapter 3.10.3.*
- 3.8.10. *Scrapie*<sup>22</sup> **Dr J. Spiropoulos**  
APHA Weybridge, New Haw, Addlestone,  
Surrey, UK.
- 3.8.11. *Sheep pox and goat pox*<sup>23</sup> **Dr B.A. Lubisi**  
Onderstepoort Veterinary Institute, Agricultural  
Research Council, Onderstepoort, South Africa.
- 3.8.12. *Theileriosis in sheep and goats* (infection with  
*Theileria lestoquardi*, *T. luwenshuni* and  
*T. uilenbergi*) **Dr A. Torina (retired)**  
Italy.
- 3.9.1. *African swine fever* **Dr C.A.L. Oura (formerly)**  
The Pirbright Institute, Ash Road, Woking,  
Surrey, UK.
- Dr M. Arias**  
Centro de Investigación en Sanidad Animal (CISA-  
INIA), Madrid, Spain.
- 3.9.2. *Classical swine fever* (infection with classical  
swine fever virus)<sup>24</sup> **Prof. P. Becher**  
Department of Infectious Diseases, Institute of  
Virology, University of Veterinary Medicine of  
Hannover, Hannover, Germany.
- 3.9.3. *Influenza A viruses of swine*<sup>25</sup> **Prof. I. Brown**  
APHA Weybridge, New Haw, Addlestone,  
Surrey, Weybridge, UK.
- 3.9.4. *Nipah virus encephalitis* *See chapter 3.1.16.*
- 3.9.5. *Porcine cysticercosis*  
(infection with *Taenia solium*) *See chapter 3.10.2.*

20 This chapter was updated by consensus of all WOA Reference Laboratories for brucellosis and other experts.

21 This chapter was updated by consensus of all WOA Reference Laboratories for peste des petits ruminants.

22 This chapter was updated by consensus of all WOA Reference Laboratories for scrapie.

23 This chapter was updated by consensus of all WOA Reference Laboratories for sheep pox and goat pox.

24 This chapter was updated by consensus of the WOA *ad hoc* Group on Classical Swine Fever (vaccine section) and of all WOA Reference Laboratories for classical swine fever (diagnostic section).

25 This chapter was updated by consensus of all WOA Reference Laboratories for swine influenza.

- 3.9.6. *Porcine reproductive and respiratory syndrome*<sup>26</sup>
- Prof. Z. Pejsak & Dr K. Podgórska**  
National Veterinary Research Institute, Pulawy, Poland.
- Dr K. Tian**  
Veterinary Diagnostic Laboratory, China Animal Disease Control Center, Beijing, China (People's Rep. of).
- 3.9.7. *Swine vesicular disease*
- Dr D. King**  
The Pirbright Institute, Ash Road, Woking, Surrey, UK.
- Dr E. Brocchi,**  
Istituto Zooprofilattico Sperimentale della e dell'Emilia Romagna (IZSLER), Brescia, Italy.
- 3.9.8. *Transmissible gastroenteritis*
- Dr L.J. Saif**  
The Ohio State University, Ohio Agricultural Research and Development Center, Food Animal Health Research Program, Wooster, Ohio, USA.
- 3.10.1. *Bunyaviral diseases of animals (excluding Rift Valley fever and Crimean–Congo haemorrhagic fever)*
- Dr B.A. Lubisi**  
Onderstepoort Veterinary Institute, Agricultural Research Council, Onderstepoort, South Africa.
- Dr M. Beer & K. Wernike**  
Institute of Diagnostic Virology, Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Insel Riems, Germany.
- Dr M. Baron (retired)**  
UK.
- Dr P. Kirkland**  
Elizabeth Macarthur Agriculture Institute (EMAI), Virology Laboratory, Menangle, Camden, New South Wales, Australia.
- 3.10.2. *Cysticercosis*
- Prof. P. Dorny & Prof. S. Gabriël**  
Department of Veterinary Public Health and Food Safety, Faculty of Veterinary Medicine, Ghent University, Merelbeke, Belgium
- 3.10.3. *Salmonellosis*<sup>27</sup>
- Dr R. Davies (retired)**  
UK.
- 3.10.4. *Verocytotoxigenic Escherichia coli*
- Dr F.A. Clifton-Hadley**  
APHA Weybridge, New Haw, Addlestone, Surrey, UK.
- 3.10.5. *Zoonoses transmissible from non-human primates*
- Dr S. Edwards (retired)**  
UK.
- Dr T. Brooks**  
Rare & Imported Pathogens Laboratory, Public Health England, Porton Down, Salisbury, UK

26 This chapter was updated with help from: Nicolas Ruggli (The Institute of Virology and Immunology, Mittelhäusern, Switzerland); Tomasz Stajejek (Warsaw University of Life Sciences, Warsaw, Poland).

27 This chapter was updated by consensus of all WOA Reference Laboratories for salmonellosis.

