Name of disease (or topic) for which you are a designated OIE Reference Laboratory: | Leptospirosis  
---|---  
Address of laboratory: | 39 Kessels Road Coopers Plains P.O. Box 594 Archefield, Queensland 4108 AUSTRALIA  
Tel.: | +61-7 30 96 28 18  
Fax: | +61-7 30 96 2 73  
E-mail address: | scott.craig@health.qld.gov.au  
Website: |  
Name (including Title) of Head of Laboratory (Responsible Official): | Scott Craig  
Name (including Title and Position) of OIE Reference Expert: | Scott Craig  
Which of the following defines your laboratory? Check all that apply: | Governmental
ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)

Yes

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in OIE Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nationally</td>
</tr>
<tr>
<td>Indirect diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nil</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microscopic Agglutination Test</td>
<td>Yes</td>
<td>37048</td>
</tr>
<tr>
<td>Leptospial Culture</td>
<td>Yes</td>
<td>616</td>
</tr>
<tr>
<td>Real Time PCR rrs</td>
<td>No</td>
<td>581</td>
</tr>
</tbody>
</table>

ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards. To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by the OIE?

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes
<table>
<thead>
<tr>
<th>Type of reagent available</th>
<th>Related diagnostic test</th>
<th>Produced/provide</th>
<th>Amount supplied nationally (ml, mg)</th>
<th>Amount supplied internationally (ml, mg)</th>
<th>No. of recipient OIE Member Countries</th>
<th>Region of recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture reagent</td>
<td>Leptospiral culture</td>
<td>Produced</td>
<td>&gt;500mL</td>
<td>0</td>
<td>1</td>
<td>Africa Americas Asia and Pacific Europe Middle East</td>
</tr>
<tr>
<td>Leptospiral Antigen</td>
<td>Microscopic Agglutination Test</td>
<td>Produced</td>
<td>100-500mL</td>
<td>0</td>
<td>1</td>
<td>Africa Americas Asia and Pacific Europe Middle East</td>
</tr>
</tbody>
</table>

4. Did your laboratory produce vaccines?
No

5. Did your laboratory supply vaccines to OIE Member Countries?
No

**ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases**

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?
No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?
No

**ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries**

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?
9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

No

ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

Yes
<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>Purpose of the study</th>
<th>Partners (Institutions)</th>
<th>OIE Member Countries involved other than your country</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Large Leptospirosis Outbreak following Successive Severe Floods in Fiji, 2012.</td>
<td>18 months</td>
<td>Epidemiology</td>
<td>1 Department of Epidemiology of Microbial Diseases, Yale School of Public Health, New Haven, Connecticut. 2 Center for Communicable Disease Control, Ministry of Health, Suva, Fiji. 3 Leptospirosis Unit, Institut Pasteur in New Caledonia, Noumea, New Caledonia. 4 Forensic and Scientific Service, WHO Leptospirosis Laboratory, Brisbane, Australia. 5 School of Biomedical Sciences, Queensland University of Technology, Brisbane, Australia. 6 Research School of Population Health, Australia National University, Canberra, Australia. 7 Infectious Diseases Pathology Branch, Division of High Consequence Pathogens and Pathology, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia. 8 School of Biomedical Sciences, Faculty of Health and Medical Sciences, University of Western Australia, Perth, Australia. 9 Division of Pacific Technical Support, World Health Organization, Suva, Fiji.</td>
<td>FIJI NEW CALEDONIA</td>
</tr>
<tr>
<td>Determinants of clinical leptospirosis in Nepal.</td>
<td>18 months</td>
<td>Epidemiology</td>
<td>1 School of Veterinary Science, Massey University, Palmerston North, New Zealand. 2 Study of Zoonotic Risks for Human Leptospirosis Nepal Project, Child Health and Environment Save Society (CHESS), Pokhara, Nepal. 3 Ministry of Health, Kathmandu, Nepal. 4 Regional Veterinary Laboratory, Pokhara, Nepal. 5 Central Veterinary Laboratory, Kathmandu, Nepal. 6 Department of Health Services, Kathmandu, Nepal. 7 Tufts University School of Medicine, Boston, Massachusetts. 8 School of Biomedical Science, Queensland University of Technology, Brisbane, Queensland, Australia. 9 WHO Leptospirosis Laboratory, Forensic and Scientific Service, Brisbane, Queensland, Australia. 10 Walter Reed/AFRIMS Research Unit Nepal (WARUN), Kathmandu, Nepal.</td>
<td>NEPAL NEW ZEALAND</td>
</tr>
<tr>
<td>Study</td>
<td>Duration</td>
<td>Disease Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Prospective Hospital Study to Evaluate the Diagnostic Accuracy of Rapid Diagnostic Tests for the Early Detection of Leptospirosis in Laos</td>
<td>18 months</td>
<td>Disease Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A comparison of two molecular methods for diagnosing leptospirosis from three different sample types in patients presenting with fever in Laos</td>
<td>18 months</td>
<td>Disease Diagnosis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Nuffield Department of Medicine, Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, United Kingdom. 2 Microbiology Laboratory, Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit, Mahosot Hospital, Vientiane, Laos. 3 Queensland Health Forensic and Scientific Service, WHO Collaborating Centre for Reference and Research on Leptospirosis, Brisbane, Australia. 4 Faculty of Science Health, Education and Engineering, University of the Sunshine Coast, Sippy Downs, Australia. 5 Section for Global Health, Department of Public Health, Copenhagen Centre for Disaster Research, University of Copenhagen, Copenhagen, Denmark. 6 Faculty of Health, Queensland University of Technology, Brisbane, Australia. 7 Faculty of Tropical and Infectious Diseases, London School of Hygiene and Tropical Medicine, London, United Kingdom. 8 Faculty of Postgraduate Studies, University of Health Sciences, Vientiane, Laos. 9 National Infection Service (NIS), Public Health England (PHE), London, United Kingdom.

1 National Infection Service, Public Health England, London, UK; Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit, Microbiology Laboratory, Mahosot Hospital, Vientiane, Laos. 2 Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit, Microbiology Laboratory, Mahosot Hospital, Vientiane, Laos; Bart's Health Division of Infection, Pathology and Pharmacy Department, Royal London Hospital, London, UK. 3 National Infection Service, Public Health England, London, UK. 4 Lao-Oxford-Mahosot Hospital-Wellcome Trust Research Unit, Microbiology Laboratory, Mahosot Hospital, Vientiane, Laos. 5 Mahidol-Oxford-Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand. 6 Queensland Health Forensic and Scientific Service, WHO Collaborating Centre for Reference and Research on Leptospirosis, Brisbane, Qld, Australia. 7 Queensland Health Forensic and Scientific Service, WHO Collaborating Centre for Reference and Research on Leptospirosis, Brisbane, Qld, Australia; University of the Sunshine Coast, Faculty of Science Health, Education and Engineering, Sippy Downs, Qld, Australia; Faculty of Health, Queensland University of Technology, Brisbane, Qld, Australia. 8 Faculty of Health, Queensland University of Technology, Brisbane, Qld, Australia. 9 Mahidol-Oxford-Research Unit, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand; Centre for Tropical Medicine and Global Heal...
ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

Yes

13. What method of dissemination of information is most often used by your laboratory?
(Indicate in the appropriate box the number by category)

a) Articles published in peer-reviewed journals: 5


b) International conferences: 0

c) National conferences: 1
1. Royal College of Pathologists of Australasia: 2018 Pathology Update.

d) Other:
(Provide website address or link to appropriate information) 0
**ToR 7: To provide scientific and technical training for personnel from OIE Member Countries**

**To recommend the prescribed and alternative tests or vaccines as OIE Standards**

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

No

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**ToR 8: To maintain a system of quality assurance, biosafety and biosecurity relevant for the pathogen and the disease concerned**

15. Does your laboratory have a Quality Management System certified according to an International Standard?

Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO/IEC17025</td>
<td>17025.pdf</td>
</tr>
<tr>
<td>Medical</td>
<td>Medical.pdf</td>
</tr>
<tr>
<td>Biological</td>
<td>Biological.pdf</td>
</tr>
</tbody>
</table>

16. Is your laboratory accredited by an international accreditation body?

Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microscopic Agglutination Test</td>
<td>NATA</td>
</tr>
<tr>
<td>Leptospiral Culture</td>
<td>NATA</td>
</tr>
<tr>
<td>Leptospiral Real Time PCR</td>
<td>NATA</td>
</tr>
</tbody>
</table>

17. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?

Yes

*(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)*
**ToR 9: To organise and participate in scientific meetings on behalf of the OIE**

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

No

**ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results**

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

No

22. Did your laboratory collaborate with other OIE Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

**ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results**

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

*Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: [http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing](http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing) see point 1.3*
### Purpose for inter-laboratory test comparisons

<table>
<thead>
<tr>
<th>Purpose</th>
<th>No. participating laboratories</th>
<th>Region(s) of participating OIE Member Countries</th>
</tr>
</thead>
</table>
| Result conformation | 2 | ✔️Africa  
 ✔️Americas  
 ✔️Asia and Pacific  
 ✔️Europe  
 ✔️Middle East |

### ToR 12: To place expert consultants at the disposal of the OIE

24. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

<table>
<thead>
<tr>
<th>Kind of consultancy</th>
<th>Location</th>
<th>Subject (facultative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad hoc group meeting.</td>
<td>Sydney &amp; Brisbane</td>
<td>Outbreak control.</td>
</tr>
<tr>
<td>Provision of Diagnostic advice for outbreak control.</td>
<td>Sydney &amp; Brisbane</td>
<td>Outbreak control.</td>
</tr>
</tbody>
</table>

25. Additional comments regarding your report: