## OIE Reference Laboratory Reports Activities

**Activities in 2013**

This report has been submitted: 2014-01-31 11:04:33

<table>
<thead>
<tr>
<th><strong>Name of disease (or topic) for which you are a designated OIE Reference Laboratory:</strong></th>
<th>Marek's disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address of laboratory:</strong></td>
<td>The Pirbright Institute Compton Laboratory High Street Compton Newbury Berkshire RG20 7NN UNITED KINGDOM</td>
</tr>
<tr>
<td><strong>Tel.:</strong></td>
<td>+44-1635 57 84 11</td>
</tr>
<tr>
<td><strong>Fax:</strong></td>
<td>+44-1635 57 72 63</td>
</tr>
<tr>
<td><strong>e-mail address:</strong></td>
<td><a href="mailto:animal.health@pirbright.ac.uk">animal.health@pirbright.ac.uk</a></td>
</tr>
<tr>
<td><strong>website:</strong></td>
<td><a href="http://www.pirbright.ac.uk">www.pirbright.ac.uk</a></td>
</tr>
<tr>
<td><strong>Name (including Title) of Head of Laboratory (Responsible Official):</strong></td>
<td>Prof John Fazakerley, Director, Pirbright Institute</td>
</tr>
<tr>
<td><strong>Name (including Title and Position) of OIE Reference Expert:</strong></td>
<td>Professor Venugopal Nair</td>
</tr>
<tr>
<td><strong>Which of the following defines your laboratory? Check all that apply:</strong></td>
<td>Academic</td>
</tr>
</tbody>
</table>
**ToR: 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>0</td>
<td>0</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td>qPCR</td>
<td>26</td>
</tr>
</tbody>
</table>

**ToR: 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?
   
   No

4. Did your laboratory produce vaccines?
   
   No

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

Yes

<table>
<thead>
<tr>
<th>Name of the new test or diagnostic method or vaccine developed</th>
<th>Description and References (Publication, website, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herpesvirus vector encoding modified miRNAs to be used as vaccines</td>
<td>Patent application number 1 PCT/GB2009/001471 US patent No: US8501466 B2 dated 6th August 2013 Herpesvirus vector encoding modified miRNAs to be used as vaccines/vectors.</td>
</tr>
</tbody>
</table>

ToR: 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?

No

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

No

ToR: 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?

No

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

No

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: 3

b) International conferences: 2
   V. Nair visited India for participating in ‘Accelerating Biology – the next Wave’ at C-DAC Pune India, where he gave a talk on ‘New Trends in the study of avian viral diseases’. He also attended VH group to discuss progress in control of avian diseases as part of the consultancy agreement between VH group and Pirbright Institute.
   18th World Veterinary Poultry Association Congress. Nantes, France. V. Nair gave keynote lecture “Oncogenic avian viruses: Models for viral evolution, microRNA function and cancer”. S. Baigent gave oral presentation “Real-time PCR for differential quantification of CVI988 vaccine virus and virulent strains of Marek’s disease virus”.

c) National conferences: 1
   S. Baigent organised meeting of UK Poultry Diseases Group at offices of British Egg Industry Council London. V. Nair also attended. Topics covered included: Disease reports – UK & Europe; Newcastle Disease and Avian Influenza; Salmonella research updates; AHVLA National Control Programme & Surveillance for Salmonella; Marek’s disease PCR monitoring.”Marek’s disease: PCR for monitoring for vaccine take, and for disease diagnosis”.

d) Other: (Provide website address or link to appropriate information) 5
   S. Baigent gave lecture on the Royal Veterinary College MSc course ‘Control of infectious disease in animals’. Lecture title: “Marek’s disease pathology and pathogenesis, diagnosis and control”.
   S. Baigent lectured on MSc course in Veterinary Microbiology at University of Surrey in the module multi-systemic diseases of animals. Lecture title: ‘Marek’s disease’.
   V. Nair, N. Ciccone & A. Brown visited Babraham Institute for scientific discussions. V Nair gave a talk ‘Marek’s disease: an excellent model of studying cancer’

Book: AVIAN IMMUNOLOGY SECOND EDITION
Chapter: Tumors of the Avian Immune System – V. Nair

V. Nair, L. Kgosana and S. Baigent attended EMIDA Madisprad meeting at Freie University of Berlin to discuss project with collaborators. L. Kgosana gave a presentation on her part of the project: “Marek’s disease virus spread: In and out of chickens”.

ToR: 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?

Yes

a) Technical visits: 1
b) Seminars: 0
c) Hands-on training courses: 0
d) Internships (>1 month): 0

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical training</td>
<td>China</td>
<td>1</td>
</tr>
</tbody>
</table>

ToR: 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?

No

Explain Quality Management System in adoption process or currently in place

The Pirbright Institute endeavors to enable high quality science to be conducted in accordance with funders’ requirements, and regulatory and statutory legislation. With this in mind, the Institute has operated a Management System since 2001. All science undertaken at the Institute is expected to comply with the requirements of the Funders’ Joint Code of Practice for Research.

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

No

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 2012, Chapter 1.1.3 or Manual of Diagnostic Tests for Aquatic Animals 2012, Chapter 1.1.1)

ToR: 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: 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?
No

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: 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?
No

*Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at:*
http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3

**ToR: To place expert consultants at the disposal of the OIE**

24. Did your laboratory place expert consultants at the disposal of the OIE?
25. Additional comments regarding your report:

No