Twinning Programme Update

Hualan Chen

Vice-President of
OIE Biological Standards Commission
OIE Reference Laboratories or Collaborating Centres

• Designated to pursue all of the scientific and technical problems relating to surveillance and control of a named disease on the OIE list or a specific topic
OIE Reference Laboratories or Collaborating Centres

- Designated to pursue all of the scientific and technical problems relating to surveillance and control of a named disease on the OIE list or a specific topic

- The OIE Reference Laboratories or Collaborating Centres mainly located in the developed countries in the northern hemisphere
The Twinning Programme was launched at the First OIE Centres meeting in 2006

• To create a more even geographical distribution of expertise and to improve compliance with OIE Standards worldwide

• Expects sustainable enhancement of capacity and expertise by supporting a link between a national laboratory and an OIE Reference Laboratory or Collaborating Centre
Aims and objectives - expertise

- To build scientific communities and improve compliance with OIE standards
Aims and objectives - expertise

• To build scientific communities and improve compliance with OIE standards

• To improve the access to high quality diagnostics and provide technical assistance for more OIE Member Countries
Aims and objectives - expertise

- To build scientific communities and improve compliance with OIE standards
- To improve the access to high quality diagnostics and provide technical assistance for more OIE Member
- To help countries to enter scientific debate on an equal footing with others
Aims and objectives - expertise

• To build scientific communities and improve compliance with OIE standards

• To improve the access to high quality diagnostics and provide technical assistance for more OIE Member

• To help countries to enter scientific debate on an equal footing with others

• Eventually for some candidates to apply for ‘reference’ status
Aims and objectives - networking

• To extend the OIE network of expertise to reach a better global geographical coverage for priority diseases in priority areas
Aims and objectives - networking

• To extend the OIE network of expertise to reach a better global geographical coverage for priority diseases in priority areas

• To form long lasting links between different institutes
Aims and objectives - networking

• To extend the OIE network of expertise to reach a better global geographical coverage for priority diseases in priority areas

• To form long lasting links between different institutes

• To further strengthen global disease surveillance networks and international scientific networks
Twinning

**Candidate lab:**
a national lab needs to be improved

**Host lab:**
an existing OIE Reference Lab or Collaborating Centre

Application should be submitted to and evaluated by OIE, and the final approval will be made by the Director General of OIE
Duration and scope

- The duration of the twinning project was set for 1-3 years
- Only for OIE listed diseases or topics
Monitoring and evaluation

- Annual reports from parent institutes
- Final report from parent institutes
- Global twinning feedback workshop (March 2011)
- Twinning survey among involved laboratories
Total 66 twinning projects have been approved since 2007
Twenty of them have been completed

<table>
<thead>
<tr>
<th>Disease</th>
<th>Country/Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>African horse sickness and Bluetongue:</td>
<td>UK with Morocco</td>
</tr>
<tr>
<td>African swine fever:</td>
<td>Spain with Russia</td>
</tr>
<tr>
<td>Avian influenza and Newcastle disease:</td>
<td>Italy with Cuba</td>
</tr>
<tr>
<td>Avian influenza and Newcastle disease:</td>
<td>Italy with Russia</td>
</tr>
<tr>
<td>Avian influenza and Newcastle disease:</td>
<td>USA with Brazil</td>
</tr>
<tr>
<td>Avian influenza and Newcastle disease:</td>
<td>Australia with Malaysia</td>
</tr>
<tr>
<td>Avian influenza and Newcastle disease:</td>
<td>Germany with Egypt</td>
</tr>
<tr>
<td>Brucellosis:</td>
<td>Italy with Eritrea</td>
</tr>
<tr>
<td>Brucellosis:</td>
<td>UK with Turkey</td>
</tr>
<tr>
<td>Brucellosis:</td>
<td>France with Thailand</td>
</tr>
<tr>
<td>Classical swine fever:</td>
<td>Germany with Cuba</td>
</tr>
<tr>
<td>Classical swine fever and rabies:</td>
<td>UK with China</td>
</tr>
<tr>
<td>Contagious Bovine Pleuropneumonia (CBPP):</td>
<td>Italy with Botswana</td>
</tr>
<tr>
<td>CBPP and Epidemiology:</td>
<td>Italy with Cuba</td>
</tr>
<tr>
<td>Equine piroplasmosis:</td>
<td>Japan with India</td>
</tr>
<tr>
<td>Food safety:</td>
<td>Italy with Namibia</td>
</tr>
<tr>
<td>Improved diagnostic capacity:</td>
<td>UK with Uganda</td>
</tr>
<tr>
<td>Infectious salmon anaemia:</td>
<td>Canada with Chile</td>
</tr>
<tr>
<td>Rabies:</td>
<td>South Africa with Nigeria</td>
</tr>
<tr>
<td>Veterinary Medicinal Products:</td>
<td>France with Senegal</td>
</tr>
</tbody>
</table>
Thirty-three of them are ongoing

- African swine fever: Spain with Kenya
- African Trypanosomiasis: France with Burkina Faso
- Animal welfare: Australia with Malaysia
- Avian influenza and Newcastle disease: Canada with Colombia
- Avian influenza and Newcastle disease: Italy with Iran*
- Avian influenza and Newcastle disease: UK with Botswana
- Avian influenza and Newcastle disease: UK with South Africa
- Avian influenza and Newcastle disease: USA with Chile
- Bluetongue: Italy with Tunisia
- Brucellosis: Germany with United Arab Emirates*
- Brucellosis: UK with Sudan
- Brucellosis: UK with Afghanistan
- Brucellosis: Italy with Zimbabwe
- Brucellosis: Italy - USA with Kazakhstan
- Epidemiology: USA with China
- Equine influenza: Ireland with China
- Equine influenza: UK with India
- Food safety: Italy with Tunisia
- Foot and mouth disease: Argentina with Paraguay
- Foot and mouth disease: Belgium with Nigeria
- Geographic information system for disease surveillance: Italy with China
- Glanders: Germany with India
- Infectious bursal disease: France with China
- Infectious haematopoietic necrosis: USA with China
- Infectious salmon anaemia: Norway with Brazil*
- Leptospirosis: Northern Ireland with India
- Ovine chlamydiosis: Switzerland with Namibia
- Peste des petits ruminants: France with Morocco
- Rabies: Germany with Turkey
- Salmonellosis: Italy with Vietnam
- Surveillance linkages in African swine fever and FMD: Sweden with Uganda
- Trichinella: Italy with Tanzania
- West Nile virus: Italy with Turkey
Thirty-three of them are ongoing

- African swine fever: Spain with Kenya
- African Trypanosomiasis: France with Burkina Faso
- Animal welfare: Australia with Malaysia
- Avian influenza and Newcastle disease: Canada with Colombia
  - Italy with Iran*
- Avian influenza and Newcastle disease: UK with Botswana
- Avian influenza and Newcastle disease: USA with South Africa
- Avian influenza and Newcastle disease: USA with Chile
- Avian influenza and Newcastle disease: Italy with Tunisia
- Bluetongue: Germany with United Arab Emirates*
  - Korea with Sudan
- Brucellosis: UK with Afghanistan
- Brucellosis: Italy with Zimbabwe
- Brucellosis: Italy - USA with Kazakhstan
- Brucellosis and mycoplasma: USA with China
- Equine influenza: Ireland with China
- Equine influenza: UK with India
- Food safety: Italy with Tunisia
- Foot and mouth disease: Argentina with Paraguay
- Foot and mouth disease: Belgium with Nigeria
- Geographic information system for disease surveillance: USA with China
- Glanders: Italy with China
- Glanders: Germany with India
  - France with China
  - USA with China
- Infectious bursal disease: Norway with Brazil*
- Infectious haematopoietic necrosis: Northern Ireland with India
- Infectious salmon anaemia: Switzerland with Namibia
- Leptospirosis: France with Morocco
  - Germany with Turkey
- Ovine chlamydiosis: Italy with Vietnam
- Peste des petits ruminants: Sweden with Uganda
- Rabies: Italy with Tanzania
- Salmonellosis: Italy with Turkey
- Surveillance linkages in African swine fever and FMD
- Trichinella:
- West Nile virus:
Thirteen of them are newly approved

- Bovine spongiform encephalopathy: Canada with Cuba
- CBPP: Italy with Turkey
- Emerging infectious diseases: Australia with Thailand
- Epizootic ulcerative syndrome: Thailand with Zambia
- Equine infectious anaemia: USA with Argentina
- Foot and mouth disease: Brazil with Panama
- Koi Herpesvirus: Japan with Indonesia
- Peste des petits ruminants: UK with Tanzania
- Rabies/Transmissible spongiform encephalopathies: Canada with Peru
- Rabies: South Africa with Oman*
- Rabies: USA with India
- Rift valley fever: South Africa-France with Yemen
- Shrimp disease (crustacean): USA with Indonesia
Most popular topics

Total 35 diseases or topics have been covered by these projects, and the most popular three are:

- Avian influenza and Newcastle disease (10)
- Brucellosis (8)
- Rabies (6)
## Geographical distribution of twinning projects

<table>
<thead>
<tr>
<th>OIE region</th>
<th>Total number of projects in each region</th>
<th>Ratio of total projects in region to number of countries in region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>24</td>
<td>0.4</td>
</tr>
<tr>
<td>Asia, Far East and Oceania</td>
<td>9</td>
<td>0.5</td>
</tr>
<tr>
<td>Americas</td>
<td>13</td>
<td>0.4</td>
</tr>
<tr>
<td>Middle East</td>
<td>11</td>
<td>0.5</td>
</tr>
<tr>
<td>Europe</td>
<td>8</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Steps after twinning

• Engaging with the international scientific community
• Joining disease networks
• Joint research opportunities
• Applying for OIE Reference Laboratory status
Achivements of the twinning programme

• The capacity of most of the candidate labs was considerably improved
Achivements of the twinning programme

• The capacity of most of the candidate labs was considerably improved

• 25% (5 of 20) candidate labs of completed projects have been designated as OIE Reference Laboratories or Collaborating Centres
Adopted in May 2012

• OIE Reference Laboratory for Rabies - Changchun Veterinary Research Institute, P. R. China

• OIE Reference Laboratory for avian mycoplasmosis - National Centre for Animal and Plant Health, Cuba

• OIE Reference Laboratory for contagious bovine pleuropneumonia - National Veterinary Laboratory, Botswana
Contribution of twinning to OIE Reference Centre network

Adopted in May 2014

• OIE Reference Laboratory for infectious salmon anaemia - Aquaculture Pathology Laboratory, Chile

• OIE Collaborating Centre for Veterinary Epidemiology and Public Health - China Animal Health and Epidemiology Centre, P.R. China
OIE laboratory twinning
Host and candidate laboratories

Host laboratories
- Projects underway
- Projects completed

Candidate laboratories
- Projects underway
- Projects completed

- Appointed as OIE Reference Centre
The laboratory Twinning Programme has made important contributions to improve the global disease control capacity

http://www.oie.int/en/support-to-oie-members/laboratory-twinning/
“Parent lab” in the website was changed to “host lab” in this presentation
Acknowledgements

• Ms Sara Linnane
• Mr Keith Hamilton
• Mr Gounalan Pavade
Acknowledgement

• Ms Sara Linnane
• Mr Keith Hamilton
• Mr Gounalan Pavade

Thank you very much for your attention!