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Biobanking

OIE Actions

19th International Symposium of the WAVLD
OIE Side Event
21 June 2019

 WORLD ORGANISATION FOR ANIMAL HEALTH *Protecting animals, preserving our future*

Standards setting organisation



<http://www.oie.int/>

The Biological Standard Commission

Production of the **Terrestrial Manual** in a timely manner so that it includes the latest validated **diagnostic tests** and vaccines.



The **Standardisation Programme**

The Standardisation Programme

Suppliers: OIE Reference laboratories

Home | About us | **Scientific expertise** | Solidarity | Animal health in the World | Standard Setting

Home > Scientific expertise > Veterinary products > **Reference reagents**

Scientific expertise

- > Overview
- > Collaborating Centres
- > Reference Laboratories
- > Biological threat reduction
- > OFFLU, the animal influenza network
- > Registration of diagnostic kits
- > **Veterinary products**
 - > VICH Outreach Forum
 - > Antimicrobials
 - > Diagnostic tests
 - > **Reference reagents**
 - > Specific information and recommendations

OIE-approved International Standard Reagents

The OIE Biological Standards Commission coordinates a programme for the preparation, validation and distribution of OIE-approved International Standard Reagents for diagnostic assays for infectious diseases of animals. The standards are prepared by an OIE Reference Laboratory in accordance with Guidelines for **antibody, antigen and polymerase chain reaction (PCR) standards** drawn-up by the Commission in collaboration with other laboratories. Such standard preparations are designated by the OIE as primary reference standards for use in conjunction with tests described in the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (mammals, birds and bees)*. The aim of the programme is to harmonise diagnostic testing and encourage the mutual recognition of test results for international trade.

Currently available OIE-approved International Standard Reagents

Disease	Test	Available from
African horse sickness	Enzyme-linked immunosorbent assay	Marisa Arias Centro de Investigación en Sanidad Animal, Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (CISA-INIA), 28130 Valdeolmos, Madrid, Spain Tel: (34-91) 620.23.00 Fax: (34-91) 620.22.47 arias@inia.es / diagnost@inia.es
Aujeszky's disease	Enzyme-linked immunosorbent assay; Virus neutralisation	Dr Marie-Frédérique Le Potier Anses Ploufragan, Laboratoire de Ploufragan/Plouzané Unité de Virologie Immunologie Porcines ZOOPOLE LES CROIX 22440 Ploufragan, France Tel: +33 (0)2 96 01 62 90 Fax: +33 (0)2 96 01 62 94 marie.fred@anses.fr

- > WAHIS Interface
- > Online bookshop
- > For the media
- > OIE world conferences
- > Documentary database

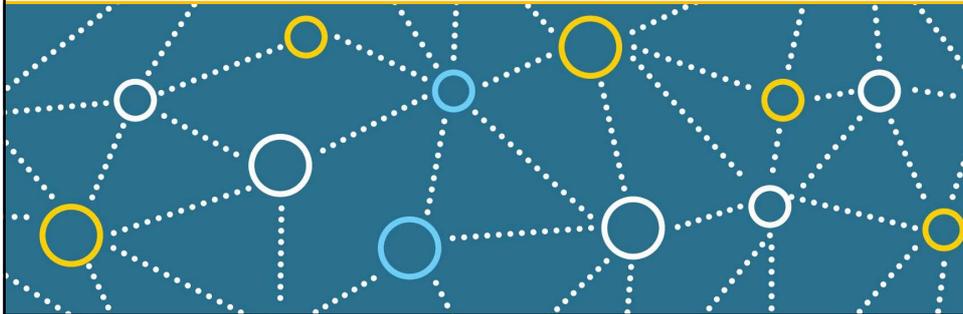
OIE Reference Centres

OIE Collaborating Centers

58 Collaborating Centres covering 50 topics in 28 countries

OIE Reference Laboratories

254 Reference Laboratories covering 106 diseases or topics in 37 countries



OIE-approved international standard reagents



Foot and mouth disease	Enzyme-linked immunosorbent assay (antigen and antibody detection); Virus neutralisation	Dr Donald King The Pirbright Institute, Ash Road, Pirbright, Woking, Surrey, GU24 0NF, United Kingdom Tel: (44-1483) 23.24.41 Fax: (44-1483) 23.24.48 donald.king@pirbright.ac.uk
Foot and mouth disease	Nonstructural protein tests	To be decided Centro Panamericano de Fiebre Aftosa OPS/OMS, Av. President Kennedy 7778, Sao Bento, Duque de Caxias, ZC 25040-004 Rio de Janeiro, Brazil Tel: (55-21) 36.61.90.64 Fax: (55-21) 36.61.90.01 pitucoedv@paho.org

The 6th strategic plan (2016-2020)

Standardisation programme



Current situation

Only 22 reagents. We need to:

- i. Improve and streamline the process for inclusion (BSC) (reagents must meet minimum quality criteria)
- ii. Collect relevant metadata on diagnostic reagents
- iii. Improve the dissemination of this information at global level



The OIE Virtual Biobank project



Conception of the project

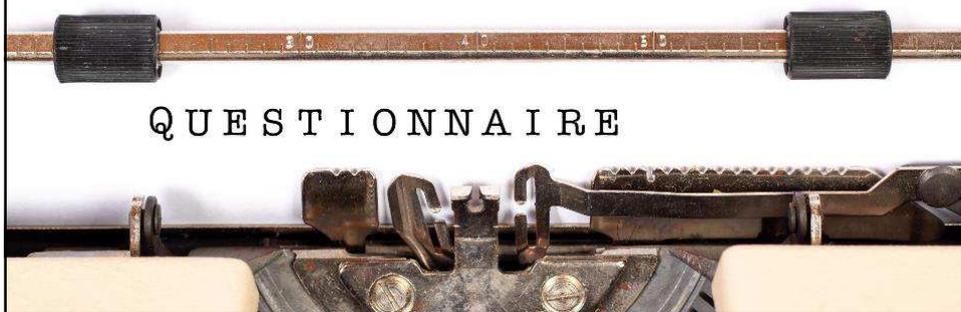
- 2 surveys
- Ad hoc expert group meeting

Surveys

Surveys addressed to OIE Reference Centers:

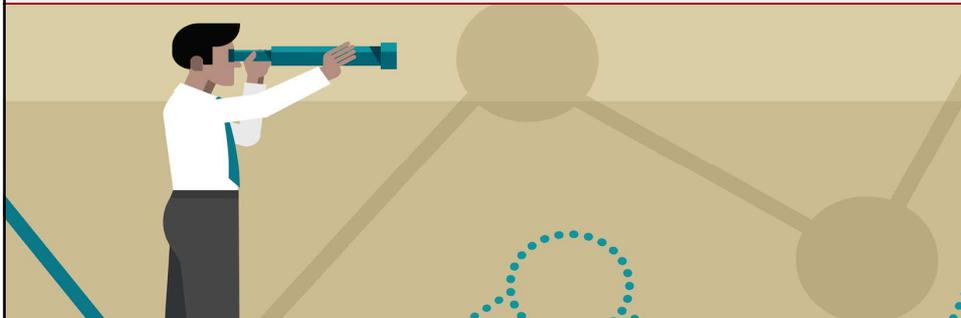
2014 - Survey on the availability of biological resources

2015 - Survey on biobanking capacity



Findings from the surveys

- Lack of knowledge of international regulations
- Quality of the samples
- No IT management system in place
- A **Virtual Biobank** would increase the distribution of materials and methods

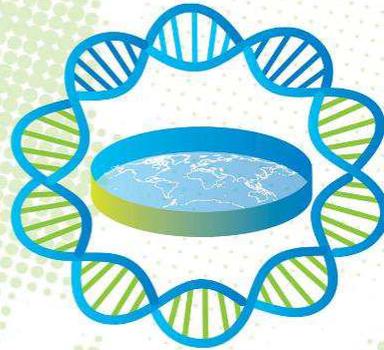


3rd Global Conference of OIE Reference Centres

Third Global Conference of OIE Reference Centres:
**CHALLENGES AND EXPECTATIONS
FOR THE FUTURE**

Incheon (Seoul), Korea (Rep. of), 14–16 October 2014

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Recommendation

Further develop the concept of establishing a **OIE Virtual Biobank** of the biological resources available at OIE Reference Centres

Ad hoc Group meeting

Outcomes

1. MTA
2. Quality requirements and metadata of biological resources
3. Guidelines
4. High level requirements of the IT system



MTA

- Drafted by the ad hoc Group on Veterinary Biobanking
- Finalised by the ad hoc Group on Transport
- Endorsed by the General Assembly of OIE Delegates at the GS in 2018 (Resolution n.14)



Quality requirements and metadata

To be included in the list of biobank materials, biological resources must:

- Meet quality requirements
- Be associated with a minimum set of metadata



OIE Guidelines for the Establishment, Operation and Networking of Veterinary Biobanks

- Types of biobank materials
- Storage areas
- **Quality management assurance**
- IT system
- Shipment



Following step

- IZSLER
*Collaborating Centre for
Veterinary Biologicals Biobank*
- Drafting of a **business plan**
- High level requirements by the AHG
- Involve a core group of OIE Reference Laboratories



The *OIE Virtual Biobank*:

A Web-based Catalogue of Biological Resources

Outcome:

to enable the **identification and localisation** of high-quality biological resources supplied by OIE Reference Laboratories

Objectives of the OIE-VB project

- i. The development of a standardised **quality** classification scheme for biobank materials
- ii. The development of a standardised **metadata** scheme for biobank materials based on a harmonised vocabulary
- iii. The development of an **IT data management system**

3 components:

OIE-VB + Biobank protocol + Biobank management system

First meeting

First meeting of the steering committee by the end of the year

Objectives:

1. Discuss IT option
2. Review the quality requirements and metadata schemes



OIE Virtual Biobank

A web-based system for the identification and localisation of biological resources available globally

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