Next Generation Biobanking
QMS Improvements Impact Research Output

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The EVA Global Project

EVA is a non-profit organization that mobilizes a global network with expertise in virology to authenticate viruses and derived products. A unique biological resource in the field of virology, readily available online. Users may benefit from special funding to access to products of interest, do not hesitate to apply.

Start browsing through our viruses and related products.

A network of laboratories
An international group of 25 laboratories, including 15 EU member state institutions and 10 non-EU institutions that represent an extensive range of virological disciplines.

Collaborations
An open entity aiming at developing synergies and complementarity capabilities in such a way as to offer an improved access to researchers.

Quality
We highly take into consideration the quality of the viruses and derived products added to our catalogue. Improvements on quality process will be addressed during the project.

Preparedness and Response
Funding generates and distributes validated diagnostic materials and protocols in the event of virological emergencies.

Research
Focussed on the creation of new tools, techniques and concepts to develop the infrastructure and to provide easier and less expensive access to virological materials.

Online Catalogue
A user-friendly web portal with a continuously increasing number of viruses and derived products. Start here.

25 Partner Laboratories
1300 References in our catalogue
700+ Online Enquiries
1600 Items ordered

The EVAg initiative will increase competitiveness and provides for a strong interaction with industry and a promising foundation for the innovation process between academia and industry.

- The European Commission

GA N°653316 – H2020
The EVA Global Project & BBMRI

- The European Virus Archive (Global) continues and expands the original EVA (FP7) project from 9 European labs to 26 worldwide labs, plus >12 associated partners.
- H2020 funding plus national government support for associate labs.

- EVAg’s principal aim is to provide access to high grade resource material to support virus research and development of vaccines, diagnostic kits & antiviral drugs.
- We do this by populating a web-based catalogue of virus isolates and derived materials stored at EVA partner labs.
- Harmonisation / improvement to EVA labs’ Quality Management.

- Memorandum of Understanding signed between EVAg and BBMRI-ERIC.
EVA Global & BBMRI

- EVA has signed a Memorandum of Understanding (MoU) with BBMRI-ERIC
The European Virus Archive goes GLOBAL
It is now an international group of 26 laboratories
Including 17 EU and 9 non-EU research centers that represent an extensive range of virological disciplines.
The EVA Global Project – raison d’être

- From Pasteur/rabies & Jenner/cow pox to the 21st Century & MERS CoV
- Early virus isolation & characterisation heralded a new era in veterinary and medical microbiology
- Virus collections grew according to the owning centre’s specialism
- Poor or limited Quality Assurance – no ISO
- Legacy collections lack reliable provenance data. Poor or inconsistent records.
- Exchange only via collaboration or “Virus Club” personal contact
- Researchers complain that high quality samples are difficult to locate and acquire
- EVA was formed to connect researchers with high grade viruses and associated products
The EVA Global Project – quality management philosophy

- Based upon ISO9001, but with additions. Aims to meet standards set out in OECD guidelines.

- Compliance with ISO9001 demonstrates process control, but does not assure high grade, just reproducibility!

- The EVA QMS aims to harmonise best practice in a virology lab, not all EVA labs are certificated / accredited to a Quality Standard.
- Labs that are accredited may not necessarily comply with the EVA requirements.

- EVA Global aims to provide high grade virus products and derived materials (recombinant proteins etc) to end-users. If partner labs fail to provide Quality Assured virus products, their sample resources will not be uploaded to the catalogue.
EVA Global - Critical Elements of QMS

- Job Descriptions – roles & responsibilities, skills needed
- Training Programme – continuing professional competence
- Staff Training Records – matches with JD and underscores laboratory skill set / suitability for the role
- Records Retention Policy – maintenance of provenance data adds value to virus samples
- Internal Audit Programme – self policing demonstrates commitment to the QMS and continuous improvement

- **Virus Specification** – is it what I think it is?
The EVA Global Project

 Virus Specification - confers product grade

- Unique sample identifier
- Identity check: confirmatory sequence - partial or full
- Purity check: PCR to quantify mycoplasma content
- Viability check: infectivity & concentration
- Newly acquired virus - expand in cell culture to create Master stock & generate Working stock
- Storage & preservation (frozen or lyophilised). Ideally split 50:50 for disaster recovery
- Dispatch with Cert. of Analysis (name, accession & batch no., tests performed for viability, purity and identity)
- EVA Global products will be graded according to the extent of the specification

Gold Standard = fully sequenced, mycoplasma free, lyophilised virus isolate of known concentration and infectivity titre.
Compliance Improvements Achieved Within EVA 2009 - 2014
Acknowledgements – EVA colleagues & The European Commission
EVA Global

- Thank you for your attention
Middle Eastern Respiratory Syndrome (MERS)

Two cases of a rapidly progressive acute respiratory infection in adults associated with a novel coronavirus, detected in Saudi Arabia & Qatar

Case definition by WHO – Sept 2012

Collaborative activity co-ordinated by European and national epidemic response networks

University of Bonn (EVA lab) developed diagnostic real-time reverse-transcription polymerase chain reaction (RT-PCR) assays suitable for qualitative and quantitative detection of the new agent

EVA was mandated for the delivery of the assay reagents (positive controls): up to date more than 300 kits distributed worldwide to National Ref Labs

Since Sept 2012, WHO states 1348 cases, 479 deaths (35%)

No currently available vaccine
Disaster can strike… fortunately the EVA virology lab was on the floor below