2. newsletter, December 2010

EAVLD Newsletter

Foreword

This newsletter...

Dear colleague

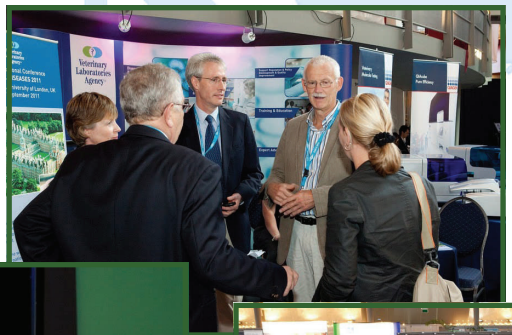
This is the second Newsletter for members of the EAVLD. The first Newsletter was sent to members on May 4th 2010 and it is available on the EAVLD website **www.eavld.org** under Member pages.

In this issue we present some information about the members and the geographic distribution within Europe. We would like all members to encourage colleagues to become members of EAVLD in order to support further strengthening of the association, see also the invitation to volunteer as Country representative below.

We also include some information and statistics on the recent EAVLD congress, 15-17 September, in Dronten/Lelystad, the Netherlands.

Last but not least you can read a resumé of the excellent presentation by Russell Williams on the Congress in September: **ACCREDITATION – DEFINING AND MAINTAINING QUALITY**

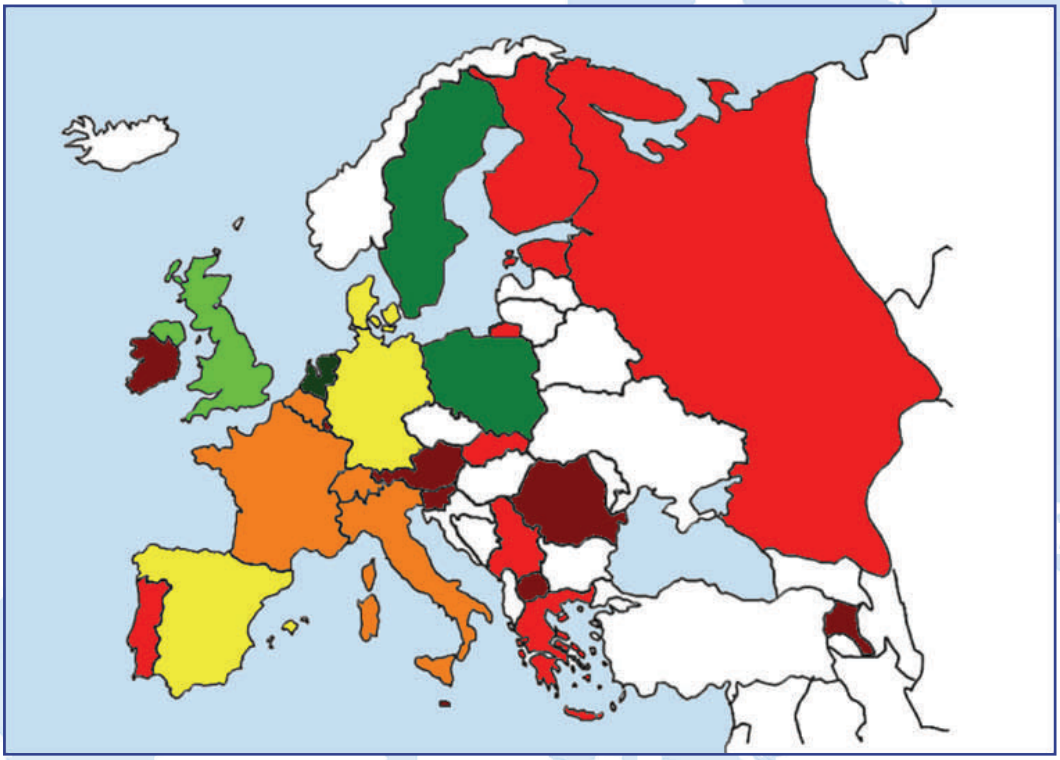
Impressions from the first EAVLD congress



EAVLD Newsletter

Members of EAVLD and the geographic distribution

In October 2010 there were 223 persons registered as members of EAVLD. The geographic distribution of the European members is illustrated on the map below. In addition we have a few members from Africa, Australia, the Middle East and North America. However, we need to increase the number of members significantly. So, we kindly ask you to encourage your colleagues to become members in order to support the foundation and development of the EAVLD. The application form is available on the EAVLD website and you can mail it to the secretary at **secretary@eavld.org**.



Color	Members
	26-50
	21-25
	16-20
	11-15
	6-10
	3-5
	1-2
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Impressions from the first EAVLD congress

Invitation to volunteer as country representative

The foundation of EAVLD was announced during the WAVLD Congress in Madrid in June 2009. Since then the growth of the EAVLD has been quite significant in only one year of life. However, to fulfill the aim of creating an inclusive forum for veterinarians working in all disciplines across the full range of animal species, and include everyone with an interest in the veterinary laboratory diagnostics, we need to be known in every country and veterinary diagnostic laboratory.

Unfortunately, Board members cannot reach everywhere and for that reason the Association needs to have country representatives in each country. They would make the EAVLD known to their colleagues and become a first level of communication between members in their countries and the EAVLD Board. They can be helpful to the Board in any matter related to their country and propagate contributions for our Newsletter. Mutual communication between country representatives could also be an option which the Board would like to encourage in the future.

Please, if you want to collaborate in making the EAVLD bigger and stronger, or you know somebody that could be of help, send a message to:

Jose A. Garcia
Dpto. Sanidad Animal, Fac. Veterinaria (UCM)
Avda. Puerta de Hierro s/n
28040-Madrid, Spain
Email: **gcabrera@vet.ucm.es**

In a future newsletter we will publish all the actual country representatives.

So far, between volunteers and Board members there are 17 countries covered.

But we would like to find volunteers from any of the following countries:

- **Albania**
- **Armenia**
- **Austria**
- **Azerbaijan**
- **Belarus**
- **Belgium**
- **Bosnia and Herzegovina**
- **Bulgaria**
- **Croatia**
- **Cyprus**
- **Czech Republic**
- **Estonia**
- **France**
- **Georgia**
- **Hungary**
- **Iceland**
- **Ireland**
- **Kazakhstan**
- **Latvia**
- **Lithuania**
- **Luxembourg**
- **Malta**
- **Moldova**
- **Montenegro**
- **Norway**
- **Turkey**
- **Ukraine**

The first EAVLD Congress, 15-17 September, in Lelystad

The first EAVLD-congress was ultimately visited by 267 people from 31 different countries. 145 of those participants were not yet a member of the EAVLD. The congress was quite a success since the number of attendants surpassed our expectations. Hence, the congress venue had to be changed to Dronten instead of Lelystad. We have mainly received positive feedback, with only some comments on the distance between the hotels and the congress venue. Thank you to all members who provided helpful feedback on the congress. This will help to improve future meetings.

Several speakers at the congress have allowed their PowerPoint presentations (as pdf-files) to be published on the website. Some of these presentations are publicly available and can therefore be found on the **congress website**. Others are only available to EAVLD-members and can be found in the members area of the **EAVLD-website**. If you have not yet approved publication of your presentation, but still want to do so, please send an e-mail to **secretary@eavld.org**.

To find available presentations, just go to the **scientific program on the congress website**. Available presentations are marked with either  or  . Click on these icons to either directly view the presentation or to be referred to the EAVLD website, where you will need to log in to the members area to be able to view or download the presentation (under General Meetings).

On the first day of the congress, several photo's were made at the congress. You can now view these **photo's on-line**. Photo's may be used freely for non-commercial purposes, as long as the source is being mentioned (CVI-Lelystad).

Invited speakers

- Dr Phil Wakeley, Veterinary Laboratories Agency, UK, presented his thoughts on "Current molecular diagnostics and future prospects" including the polymerase chain reaction, isothermal amplification methods, new and old extraction methods and penside testing, which seemed to be a favourite subject.
- Christian Griot from the IVI in Switzerland introduced the idea of "Biorisk management in diagnostic laboratories" and also the role of a dedicated biorisk manager in a veterinary laboratory – food for thought.

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- Aart van Amerongen from Wageningen University talked about "Multi-analyte diagnostics" in the multiplexing session of the congress and discussed different platforms including Luminex.
- Matthias Greiner from the Federal Institute for Risk Assessment in Berlin presented a very clear paper on "Validation of laboratory tests" taking a very statistical and analytical approach.
- Finally Russell Williams from VLA, UK, gave an excellent presentation on "Accreditation – defining and maintaining quality". It was not only informative but extremely amusing covering St Paul's Cathedral, various ISO and UKAS standards and of course a big spider called Katie.

In addition to the keynote presentations there were a further 43 presentations and of course well populated poster sessions.

Accreditation - Defining and Maintaining Quality

by Russell Williams

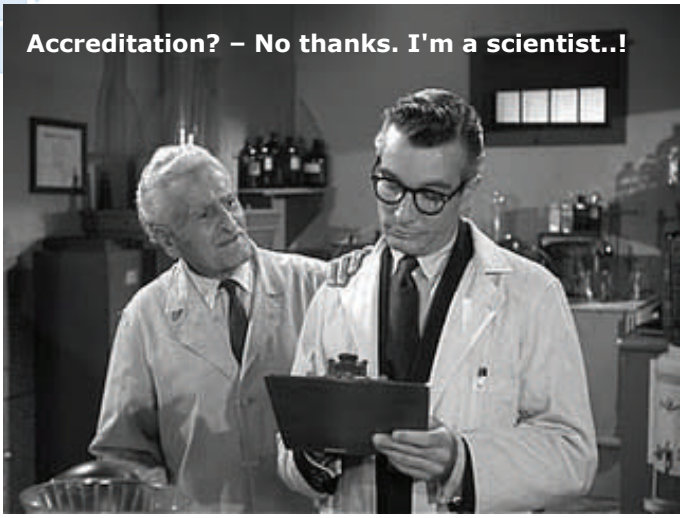
Laboratory Services Department, Veterinary Laboratories Agency, VLA Penrith, Merrythought, Calthwaite, Penrith, Cumbria CA11 9RR, UK

What is Quality?

Quality has no SI units and no instruments to physically measure it - is it just a matter of opinion? Quality is defined by the ISO9000 standard as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs". Put in simpler terms, "is it as good as you expect?"

How do you compare results?

Veterinary laboratories produce test results for disease diagnosis, research, health monitoring, international trade, breeding etc. How confident can we be in these results? Are results from one lab consistent? Are they comparable to results from other labs in the same or different countries using identical or equivalent methods? How can we evaluate or compare them…?



Accreditation? – No thanks. I'm a scientist..!

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ISO17025 – the testing standard

Quality cannot exist in a vacuum. It is *always* relative to a set of requirements or standard. ISO17025:2005 *General requirements for the competence of testing and calibration laboratories,* is a world standard. It contains detailed management and test requirements for laboratories. The standard does not specify *how* the requirements are to be met. Each laboratory must be able to demonstrate they meet them all if they want to achieve and maintain accreditation.

Accreditation – meeting the standard

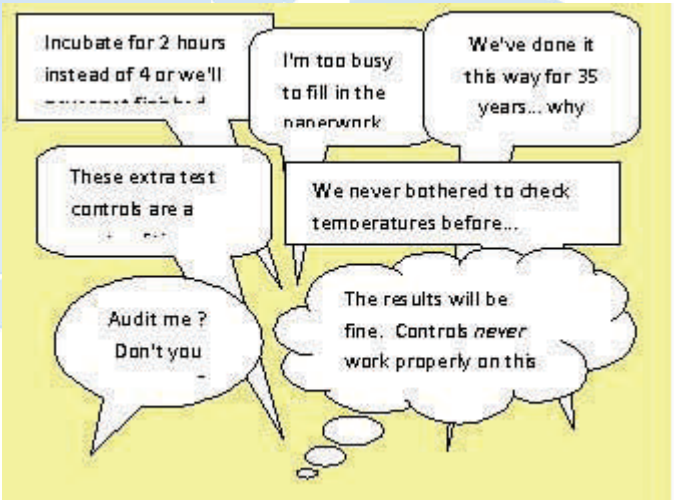
Laboratory accreditation gives confidence in test results and international recognition of the standard of those results. Accreditation of a laboratory to ISO17025 is formal recognition (by a recognized authority) of the technical and organizational competence of the laboratory to carry out a specific service in accordance to the standards and technical regulations described in their schedule of accreditation. This schedule (or scope) lists the test methods and procedures that are accredited.

Each country has a national accreditation body that assesses laboratories to the requirements of ISO17025 and can grant, maintain and, if necessary, withdraw accreditation. The International Laboratory Accreditation Cooperation (ILAC) ensures uniformity of assessment by the accreditation bodies of all participating countries.

Ownership of quality

When a laboratory goes down the route of accreditation, it may present challenges and changes in working practice for laboratory staff.

Tests used for many years may need additional validation and controls, there will be new written procedures, document control, extra record keeping, environmental monitoring, staff training and competence records, uncertainty of measurements to determine, internal audits to complete, visits from external assessors etc.



It is important for laboratory staff at all levels to take ownership of the quality system. To understand *why* the systems are in place, how

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it all works, and the importance of their role in working to, maintaining and improving the quality system.

Get in the habit...

"Quality is not an act. It is a habit". Gaining accreditation is important but there must be ongoing monitoring that the requirements of the standard are continually being met. This is achieved through a programme of systematic internal auditing, external proficiency testing and ring trials covering all testing methods, staff training programmes, management review and surveillance visits from the accreditation body.

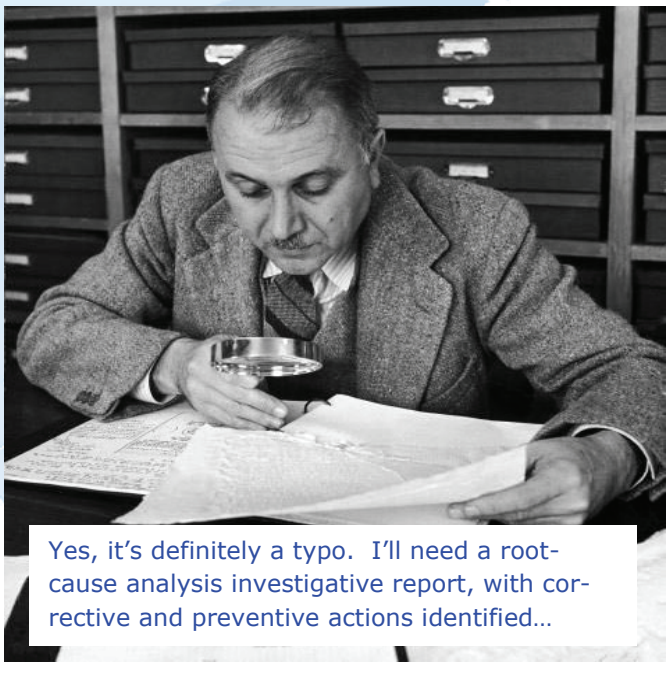
ISO17025 4.3 – Document Control…

Traceability

An accredited lab needs traceable evidence that can prove an incubator was at 37°C, that a technician is competent in a test procedure or that reagents are working correctly. How these records are maintained is up to the laboratory but they must show a continuity of traceability, in all aspects of the testing procedure.

Auditing

A systematic programme of auditing is an important way of demonstrating the quality system is working. Audits may be in-house (by the laboratory staff), internal (by staff from another part of the organisation) or external (by the accreditation body). Vertical audits follow all aspects of a submission - reception, booking in, processing, testing, equipment, reagents, media, operator competence and reported results.



Yes, it's definitely a typo. I'll need a root-cause analysis investigative report, with corrective and preventive actions identified…

Horizontal audits look particular clauses of the standard, e.g. staff competence (clause 5.2.1), equipment (clause 5.5), etc. Test witness audits an individual test procedure as it happens.

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Findings from audits and actions taken to resolve them must be recorded. Lenient internal auditing (few findings, fixing problems without actually recording them) may make things appear to be good, but can result in the accreditation body losing confidence in the internal auditing processes of the laboratory, particularly if they are finding things the internal audits have missed.

When things go wrong...

A failure can be seen as success *if* you learn from it and then improve the quality/testing systems as a result. With ISO17025 accreditation, problems should be detected *before* results are reported and a root-cause analysis made.

1. Correct the actual problem.
2. Identify the *cause* of the problem.
3. Implement a corrective action to prevent it happening again.
4. Review to ensure actions are effective.

Accreditation also requires monitoring of results, complaints and failures for patterns and trends to identify *potential* problems before something happens so action can be taken to prevent it from ever happening. This is part of the continual improvement process.

Uncertainty of measurement

ISO17025 requires an assessment of the uncertainty in all accredited testing methods. There are well established statistical methods for determining uncertainty of quantitative results (e.g. 263ug/ml ±10ug). Certain tests (e.g., '*E.coli* O:157 isolated') may preclude metrologically and statistically valid calculation of uncertainty of measurement. In such cases the laboratory must attempt to identify and estimate all the components of uncertainty based on knowledge of the performance of the method and making use of previous experience, validation data, internal control results etc.

Continual improvement

ISO17025 requires evidence of continual improvement in the laboratory quality system and services provided. Opportunities for this may be improved technology, new tests and meeting changing customer requirements for faster, cheaper or more specific testing.

Reviewing the quality system and testing methods helps prevent things from going wrong, but also identifies patterns and trends that may help to streamline and improve the system, saving the laboratory time and money and meeting changing customer demands.

Summary

Accreditation of a laboratory to ISO17025 is formal independent recognition of the high standard of quality of laboratory management, staff competence and those testing procedures listed on the schedule of accreditation.