



## **Diagnostics in the veterinary field: The role in health surveillance and disease identification**

**May 15 - 17, 2019**

**Dorinth Pallas Hotel, Wiesbaden, Germany**

***Organized by IABS***

Diagnostics are an essential tool to ensure the health of domestic and wild animals for both endemic and emerging diseases. They allow animal health professionals to understand and manage the general health status of domestic animals. They are also important tools to support public health initiatives in the case of zoonotic disease control. The meeting will provide an overview of existing systems and approaches / strategies for the use of diagnostics and to discuss the currently available diagnostics. The advantages / benefits and disadvantages / gaps of the current methods and methodologies will be identified and discussed. Proposals on how to increase the quality, efficacy, and utility of the existing strategies and methods and those under development will be made

### **Scientific Committee**

Egbert Mundt	Boehringer-Ingelheim	Amir H. Noormohammadi	University of Melbourne
Vaughn Kubiak	Zoetis	Attila Farsang	CEVA
Cyril Gay	USDA	Paul Midtlyng	University of Oslo
Serge Leterme	IDEXX	Carmen Jungbäck	IABS
Sandra Blome	Friedrich Loeffler Institut	Sjaak de Wit	Deventer
David Mackay	EMA		
Rick Hill	IABS		
Suelee Robbe Austerman	APHIS-USDA		

# AGENDA

## Day 1 – Wednesday, May 15, 2019

- 13:00      **Registration**
- 14:00      Opening
- 14:10
- Introductory remarks: Expectations of all stakeholders (authorities, farmers, veterinarians etc) on Diagnostics and their use in outbreak investigations of Transboundary Animal Diseases
- TBC

### *Session 1 – Diagnostics: Current and new methods*

*Chairpersons: Sjaak de Wit, Deventer; Vaughn Kubiak, Zoetis*

- 14:50      Classical serological tests and moving them to new platforms  
**Gleeson Murphy**, USDA
- 15:10      Multiparameter-testing for pathogens and antibodies in a Point of Care approach  
**Heinz Schoeder**, Boehringer-Ingelheim
- 15:30      Isothermal amplification methods for the detection and monitoring of infectious diseases – chances and limitations  
**Hermann Unger**, FAO /IAEA
- 15:50      Coffee break
- 16:20      Biotechnology-based Diagnosis of Infectious Diseases in Veterinary Medicine  
**Fredric Granberg**, Swedish University of Agricultural Sciences
- 16:40      Rapid whole genome sequencing of animal pathogens from clinical samples  
**Marc Marends**, The University of Melbourne
- 17:00      Fourth generation DNA sequencing technology for diagnostic of poultry pathogens  
**Claudio Afonso**, USDA
- 17:20      A bead-based multiplex immunoassay for simultaneous measurement of antibody responses to multiple antigens; an example from Atlantic salmon  
**Hege Lund**, NMBU-School of Veterinary Science
- 17:40      Modern antimicrobial sensitivity testing: current state of affairs and future development  
**Alex Van Belkum**, Biomerieux
- 18:00      Discussion

## Day 2 – Thursday, May 16, 2019

### ***Session 2 – Diagnostics in epidemiological in clinical surveillance: practical applications***

**Chairpersons:** *Serge Leterme, IDEXX; Sandra Blome, Friedrich Loeffler Institut*

- 09:00 Diagnostic strategies for endemic diseases: surveillance and control  
**Margaret Good**, Consultant
- 09:20 Endemic diseases: US experience with epidemiology in pigs  
**Scott Dee**, Pipestone Veterinary Services
- 09:40 Endemic diseases : A novel modified-indirect ELISA based on spherical body protein 4 for detecting antibody during acute and long-term infections with diverse Babesia bovis strains  
**Carlos Suarez**, Animal Disease Research Center, USDA-ARS
- 10:00 Endemic diseases: Example: ruminant: TSE  
**Elena Maria Bozzetta**, President EAVLD
- 10:20 Endemic diseases : Genome sequencing and evolutionary analyses of Newcastle disease viruses from formalin fixed paraffin-embedded chicken tissues collected during disease outbreaks  
**James B. Stanton**, Department of Pathology, College of Veterinary Medicine, University of Georgia
- 10:40 Serology vs. real-time quantitative real-time PCR screening for viral infections; experiences from the control of Salmon pancreas disease in Ireland and Norway  
**Marian McLoughlin**, Fish Vet Group
- 11:00 Coffee
- 11:30 Rapid diagnostics Companion animals/point of care/clinical use  
TBC
- 11:50 Emerging diseases: Lumpy Skin Disease: History, Lessons and Perspectives on Diagnostic and Control  
**David Wallace**, Onderstepoort Veterinary Institute, Agricultural Research Council
- 12:10 Emerging diseases : African Swine Fever  
**Marisa Arias**, INIA, Animal Health Research Centre
- 12:30 Lunch
- 14:00 Development and use of DIVA vaccines and compatible diagnostic methods for containment, control and territorial clearance of infectious animal diseases – a vision for the future  
TBC

- 14:20 DIVA in DNA: Pseudorabies and IBR  
**Martin Beer**, Friedrich Loeffler Institut
- 14:40 DIVA in RNA: Avian Influenza, Strategies in control, surveillance and eradication – Problems with DIVA  
TBC
- 15:00 DIVA in RNA: Development of DIVA Compatible Diagnostics Tests for RVFV vaccines  
**William Wilson**, Arthropod-Borne Animal Diseases Laboratory
- 15:20 Discussion
- 15:50 Coffee

## ***Session 3 – Acceptance of data, qualification tools for laboratories and methods***

**Chairpersons:** *Egbert Mundt*, Boehringer-Ingelheim; *Suelee Robbe-Austerman*, APHIS-USDA

- 16:20 Networks: OIE. quality assurance of labs and methods  
**Donald King**, The Pirbright Institute
- 16:40 Network: AAVLD the role of veterinary diagnostics in health surveillance and disease, including new technologies, standardization and quality assurance  
**Speaker from AAVLD – NAHLN**
- 17:00 Networks: OMCL: quality assurance of labs and methods  
TBC
- 17:20 Licensing:USA  
TBC
- 17:40 Licensing EU  
**Sandra Blome**, Friedrich Loeffler Institut

## **Day 3 – Friday, May 17, 2019**

- 08:30 Experience from a manufacturer 1 Qualification/validation of methods challenges of developing diagnostic tests  
**Serge Leterme**, IDEXX
- 08:50 Experience from a manufacturer 2: Qualification / validation of methods challenges of developing diagnostic tests  
**Marianna Ivok**, CEVA

- 09:10 Experience from ringtests among European national reference laboratories for surveillance of viral infections in fish  
**Niels Jorgen Olesen**, National Institute of Aquatic Resources, Technical University of Denmark
- 09:30 ISO 17043 for organisers of proficiency testing schemes: Experiences with ring tests/collaborative studies  
**Sjaak de Wit**, Deventer
- 09:50 Discussion
- 10:20 Coffee

## ***Session 4 – Summary of the sessions, discussion, conclusions and recommendations***

***Chairpersons: Rick Hill; IABS; Attila Farsang, CEVA***

- 10:50 Summary of the sessions and the discussions
- 11:30 Conclusions and recommendations
- 12:00 Plenary /Panel discussion
- 12:30 Closing remarks  
Farewell lunch