2\textsuperscript{nd} International Veterinary Mycology Course

26-30 October 2015

Department of Veterinary Sciences

Turin University, Italy
Report of finishing the course

We are delighted to announce that 2\textsuperscript{nd} International Veterinary Mycology Course under the umbrella of International Society for Human and Animal Mycology (ISHAM) was organized successfully, 26-30 October 2015 at the Department of Veterinary Sciences, Turin University, Turin, Italy.

There was a huge opportunity for debate among participants and course faculty discussing diagnosis & identification of veterinary pathogenic fungi, pathophysiology and immunology of fungal diseases in animals, epidemiology, prevention, treatment, control and eradication of animal mycoses, evaluation of antifungals activity, fungal zoonoses, mycotoxins and mycotoxicosis, animal model on invasive fungal infections and use of alternatives.
In order to ascertain an interactive course, this 5 days scientific and educational event included theoretical lectures, practical training, clinical case presentations, Q & A sessions, discussions followed by an interactive exam in the last day.

The opening speech was given by Prof. RE, Head of Department of Veterinary Sciences at Turin University, Turin, Italy who introduced current research and educational activities at the host institute, followed by course organizers: Prof. Jacques Guillot from Ecole Nationale Vétérinaire d’Alfort, France, Dr. Andrea PEANO from Department of Veterinary Sciences of Turin University, Italy and Dr. Amir SEYEDMOUSAVI from Department of Medical Microbiology, RadboudUMC, The Netherlands, who introduced ISHAM to all participants, defined the main aims of this course and overviewed current activities and achievements of ISHAM-Veterinary Mycology Working Group and future plans for the next 3 years. In addition, the official journals of ISHAM (Medical Mycology and Medical Mycology Case Reports) were presented to all participants and encouraged them to publish their research results.
This 5 days educational event counted 16 participants and 18 speakers from 14 countries. The course included 20 hours lectures and 12.5 hours laboratory practice focusing on a broad theme diversity in Animal Mycoses and translating from Medical to Veterinary Mycology, demonstrating recent results about taxonomy of Medical and Veterinary pathogenic fungi, molecular techniques, identification and diagnosis of clinical agents based on morphology and histopathology, prevention, control, standard dosing regimens of antifungals and therapeutic options, emerging fungal diseases in animals and importance of mycotoxin and mycotoxicosis. Hard copies and electronic version of course materials were provided for all participants.
The course venue (Department of Veterinary Sciences at Turin University, Turin, Italy) was quite accessible, organized at relatively low costs intending to encourage participation of scientists and clinicians from different countries.

The course was supported financially in part by the International Society for Human and Animal Mycology (ISHAM) and Department of Veterinary Sciences at Turin University, Turin, Italy. Other organizational costs came from the registration of Course participants.

As a result of current event, 9 out of 16 participants joined ISHAM as new members.
Future activities

For 2016, we are planning to organize one day joint symposium between ISHAM-Veterinary Working Group (ISHAM-Vet WG) and ISHAM–Medical Phycology Working Group (ISHAM-MP WG) during annual conference of Japanese Society of Veterinary Society (JSVS) which will be held 6th-8th September 2016 at Nihon University College of Bioresource Sciences, Kanagawa, Japan.

The next course of the ISHAM-Veterinary Mycology Working Group is also planned around winter 2017 in Brazil.

Information on these events will be announced in advance through ISHAM news (http://www.isham.org) and official website of ISHAM-Veterinary Working Group (www.veterinarymycology.org).
Course Directors and instructions

Prof. Jacques Guillot. DVM, PhD
Ecole Nationale Vétérinaire d’Alfort, France

Dr. Amir SEYEDMOUSAVI. DVM, PhD
RadboudUMC, The Netherlands

Dr. Andrea PEANO, DVM, PhD
Dipartimento di Scienze Veterinarie, Grugliasco (To), Italia

www.veterinarymycology.org
veterinarymycology@gmail.com
### Course Faculties (18 speakers)

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Country</th>
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<tbody>
<tr>
<td>Prof. H. E. Jensen</td>
<td>University of Copenhagen</td>
<td>Denmark</td>
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<tr>
<td>Prof. J. Guillot</td>
<td>Ecole Nationale Vétérinaire d’Alfort</td>
<td>France</td>
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<td>Prof. R. Chermette</td>
<td>Ecole Nationale Vétérinaire d’Alfort</td>
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<td>Dr. P. Arné</td>
<td>Ecole Nationale Vétérinaire d’Alfort</td>
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<td>Dr. G. Wibbelt</td>
<td>Leibniz Institute for Zoo and Wildlife Research</td>
<td>Germany</td>
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<td>Prof. I. Jacobsen</td>
<td>Leibniz Institute for Natural Product Research and Infection Biology</td>
<td>Germany</td>
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<td>Dr. A. Peano</td>
<td>Turin University</td>
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<td>Dr. C. Cafarchia</td>
<td>Bari University</td>
<td>Italy</td>
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<td>Dr. Patrizia Danesi</td>
<td>Istituto Zooprofilattico delle Venezie, Padova</td>
<td>Italy</td>
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<td>Dr. A. Fondati</td>
<td>Private practitioner, Rome</td>
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<td>Prof. D. Elad</td>
<td>Kimron Veterinary Institute</td>
<td>Israel</td>
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<td>Prof. P. Verweij</td>
<td>Radboudumc</td>
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<td>Dr. S. Seyedmousavi</td>
<td>Radboudumc</td>
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<td>T. Rijs</td>
<td>Radboudumc</td>
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<td>M. Tehupeiory-Kooreman</td>
<td>Radboudumc</td>
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<td>Prof. E. Piecková</td>
<td>Slovak Medical University</td>
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<td>Prof. M. Fisher</td>
<td>Imperial College</td>
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<td>Dr. Kate English</td>
<td>University of London</td>
<td>United Kingdom</td>
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<tr>
<td>Suzana Hadina</td>
<td>Croatia</td>
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<td>Penny Wright</td>
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<td>Annegret Wiedemann</td>
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<td>Anna Schmitz</td>
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<td>Antonio Corona</td>
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<td>Moira Monaco</td>
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<td>Sara Legnani</td>
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<td>Roberta Iatta</td>
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<td>Diana Di Mattia</td>
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<td>Stefano Borio</td>
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<td>Mario Pasquetti</td>
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<td>Anna Rita Molinar</td>
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<td>Sara Aroldi</td>
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<td>Silvia Auxilia</td>
<td>Oman</td>
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<td>Rares Capitan</td>
<td>Romania</td>
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<tr>
<td>Maria Rosa Caro</td>
<td>Spain</td>
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## Course Program

### Monday 26 October (Room “Godina”)

**Morning sessions (Lectures):**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:00-9:15</td>
<td>Prof. Re: (Head of Veterinary Sciences Department, University of Torino)</td>
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<tr>
<td>9:15-9:45</td>
<td>Jacques Guillot/Amir Seyedmousavi/Andrea Peano</td>
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Opening of the course

Overview of the course

**9.45-10.30** Amir Seyedmousavi
- Introduction, general taxonomy and classification

**10:30–11:00 Coffee break**

**11.00-11.30** Amir Seyedmousavi
- Biosafety
- Lobomycosis

**11.30-11.45** Jacques Guillot
- Sporotrichosis

**11.45-12.30** Ton Rijs
- Mycology laboratory: Direct microscopic examination of clinical specimens

**12.30-13.30: Lunch**

**Afternoon sessions (Practice lab): (Biological laboratory)**

**13.30-15.30** Ton Rijs / Marlou Tehupeiory-Kooreman
- Moulds identification

**15:30–16:00 Coffee break**

**16.00-17.30** Ton Rijs / Marlou Tehupeiory-Kooreman
- Yeasts identification

### Tuesday 27 October

**Morning sessions (Lectures): (Room “Godina”)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:00-9:45</td>
<td>Jacques Guillot</td>
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<td>- Clinical manifestations of fungal infections in domestic animals</td>
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**9.45-10.30** Daniel Elad
- Diagnostic overview in veterinary mycology

**10:30–11:00 Coffee break**

**11.00-11.45** Jacques Guillot
- Antifungal drugs, prevention and management of fungal infections in animals

**11:45-12:30** Paul Verweij
- Antifungal-resistance in pathogenic fungi (Possible role of Agriculture)

**12.30-13.30: Lunch**

**Afternoon sessions (Lectures/Practice lab): (Room “multiple microscopes”)**

**13:30-14:30** Henrik E. Jensen
- Histomorphological diagnosis of mycoses (lecture)

**14:30-16.30**
- practical work: 14:30–15:15 and 15:30-16:15 Microscopy of cases (participants);
  15:15-15:30 and 16:15-16:30 Interpretation of cases (H. E. Jensen)

**16:30–17:00 Coffee break**

**17:00-18.00** Kate English
- Clinical case cytology
### Wednesday 28 October

**Morning sessions (Lectures):** *(Room “Godina”)*

- 9:00-10:00 Andrea Peano
  - Dermatophytosis in animals
- 10.00-10:30 Jacques Guillot/Patrizia Danesi
  - Pneumocystis and mammals
- 10:30-11:00 Coffee break
- 11:00-11:45 Pascal Arné
  - Aspergillosis in birds
- 11:45-12:30 Jacques Guillot
  - Aspergillosis in mammals
- 12:30-13:30: Lunch

**Afternoon sessions (Practice lab):** *(Biological laboratory)*

- 13.30-15.30 Andrea Peano/Mario Pasquetti/Anna Rita Molinar
  - Laboratory diagnosis of animal dermatophytoses
- 15:30–16:00 Coffee break
- 16.00-17.30 Ton Rijs/Marlou Tehupeiory-Kooreman/Amir Seyedmousavi
  - Antifungal susceptibility testing: yeasts and filamentous fungi

(Overview of laboratory procedures)

### Thursday 29 October

**Morning sessions (Lectures):** *(Room “Godina”)*

- 9:00-9:30 Amir Seyedmousavi
  - Phaeohyphomycoses in animals
- 9.30-10:00 Patrizia Danesi
  - Molecular epidemiology of Cryptococcus spp.
- 10:00-10.30 René Chermette
  - Cryptococcosis in animals
- 10:30–11:00 Coffee break
- 11:00-11:45 Claudia Cafarchia/Jacques Guillot
  - Malassezia yeasts and Malassezia dermatitis in animals
- 11:45-12.30 Elena Piecková
  - Mycotoxins and mycotoxicoses in animals
- 12.30-13.30: Lunch

**Afternoon sessions (Practice lab):** *(Room “Godina”)*

- 13.30-15.30 Alessandra Fondati/Jacques Guillot/Andrea Peano
  - Clinical case reports and problem analysis
- 15:30–16:00 Coffee break
- 16.00-17.30 Jacques Guillot/Andrea Peano
  - Clinical case reports and problem analysis
**Friday 30 October**

**Morning sessions (Lectures and exam): (Room “Godina”)**

9:00-10:00 Matthew Fisher  
   - Fungal infections of amphibians and reptiles  
**10.00-10:45 Ilse Jacobsen**  
   - Animal and alternative models for fungal infections  
**10:45–11:00 Coffee break**  
**11:00-11.45 Gudrun Wibbelt**  
   - Bat White Nose Syndrome  
**11:45-12:30**  
   - Final exam  
**12.30-13:30 Jacques Guillot / Amir Seyedmousavi / Andrea Peano**  
   - Course summary & closing remarks & certificates  
**13:30-14:30**  
   - Lunch & farewell