

ISHAM Working Group Annual Report 2023

1. Title of Working Group

ISHAM Veterinary Mycology and One Health Working Group

2. Name(s) of Coordinator(s) with email addresses

1. Amir Seyedmousavi. DVM, PhD, F(ECMM)
National Institute of Health, Bethesda, MD, USA.
Seyedmousavi@nih.gov
2. Jacques Guillot. DVM, PhD, dipl. EVPC
Ecole nationale vétérinaire de Nantes, Oniris, France
jacques.guillot@oniris-nantes.fr

3. Website URL for external website (if relevant)

<https://www.isham.org/working-groups/veterinary-mycology>

Twitter: @ISHAM_VetMyco

<https://www.linkedin.com/in/veterinary-mycology-working-group-of-isham-b9141283/>

<https://www.facebook.com/isham.mycology>

4. Objectives and expected outcomes for the forthcoming year

1. We are planning to organize a course pre-conference ISHAM2025, subject **‘Fungal Diseases in Animals’** on Tuesday, 20 May 2025.

This lecture based scientific and educational event is intended for ~50-100 participants including PhD students, postdoctoral researchers, veterinarians, veterinary/medical mycologists/microbiologists, veterinary pathologists, or scientists from academia (or companies) who work or want to work in the field of “Veterinary Mycology” and are looking to improve their knowledge and understanding in this area.

Course Objectives: to provide a comprehensive, and detail-oriented primer or refresher on the currently available approaches, challenges and solutions in diagnosis and treatment of fungal infections in animals. The antifungal susceptibility and resistance testing will be also discussed. In addition, we will provide scientific evidence on the epidemiology of mycosis in domestic and wild animals and on importance of fungal disease laboratory screening and infection prevention from a one health prospective.

We also submitted our proposal to organize below list of sessions during ISHAM2025:

- Session 1. General Meeting- Veterinary Mycology and One Health Working Group
- Session 2. Advances in the diagnosis of fungal infections in animals
- Session3. Antifungal drug resistance in veterinary medicine and one health
- Session 4. Small mammals as reservoirs of fungal infections
- Session 5. Cases of animal mycoses and fungal-like infections

2. To continue our ongoing work on 'Atlas of Veterinary Fungi'.

2. Achievements of the Working Group in 2023 (250 words) ¹⁻³

- 1- 2021, 2022 and 2023:- ISHAM Veterinary Mycology General Assembly meeting was organized successfully each year.
- 2- A successful Pre-ISHAM Workshop was organized: ISHAM Veterinary Mycology & One Health Workshop (17 and 18 September 2022) Banaras Hindu University, Varanasi, India. Lecturers and Participants were from India, Columbia, Italy, USA, Netherlands, Hong Kong, France, and Germany. <https://www.isham2022.org/isham-veterinary-mycology-course/>
- 3- Two scientific sessions were organized during ISHAM2022, India:
 - Wednesday 21 September:**
Conference hall A | S1.2 S Animal Mycoses
Chairs: Vanessa Barrs, Hong Kong and Andrea Peano, Italy
11:00 S1.2a 'Veterinary relevant and zoonotic fungal groups': Amir Seyedmousavi, USA
11:20 S1.2b Penicilliosis: an emerging concern in dogs?: Jacques Guillot, France
11:40 S1.2c Diagnosis of fungal infections in animals: combining the old and the new to maximize results: Andrea Peano, Italy
12:00 S1.2d* Evolutionary trends of Trichophyton mentagrophytes/T. interdigitale Species Complex originating from animals: Chao Tang, Netherlands
12:15 Q&A with all speakers
<https://www.isham2022.org/21september/>
 - Wednesday 21 September:**
Suite No. 293 (Sapphire) | S2.4 Veterinary Mycology Research
Chairs: Jacques Guillot, France and Amir Seyedmousavi, USA
15:00 S2.4a Pythiosis: an emerging disease in Hong Kong: Vanessa Barrs, Hong Kong
15:20 S2.4b Population biology of hedgehog fungus Trichophyton eninacei: Vit Hubka, Czech Republic
15:40 S2.4c Metagenomic analysis of histoplasmosis in dogs: Gregory Jouvion, France
16:00 S2.4d* Determination of the virulence potential of yeast fungi isolated from cattle milk:
Marina Manoyan, Russia

16:15 Q&A with all speakers

<https://www.isham2022.org/21september/>

4- Working group business meeting was organized during ISHAM2022, India

Friday 23 September:

Suite No. 293 (Sapphire) | S8.4 Veterinary Mycology and One Health Working Group Business Meeting

15:00-16:00 Chairs: Jacques Guillot, France and Amir Seyedmousavi, USA

<https://www.isham2022.org/september23/>

5- The 5th ISHAM International Veterinary Mycology Course, was organized successfully, 16-19 October 2023, at Faculty of Veterinary Medicine, Iasi, Romania. The 4-day intensive training course included 28 lectures and 5 practical sessions. The sessions were interactive. A total number of 23 speakers from all around the globe also served as Faculty for the course. 28 Participants and 23 speakers from a diverse background of Veterinary Clinical Practitioners, Veterinary Dermatologists, MDs, Postdoctoral Researchers, PhD Students, Diagnostic Microbiologists (Medical and Veterinary) completed the course successfully and received the certificate.

A copy of the program including list of speakers can be found in the attached PDF file.

3. Publications arising from the Working Group

Publication of six book chapters in 'Atlas of Veterinary Fungi':

- Fungal Diseases of Mammals / Carnivora / Canidae (canines)
- Fungal Diseases of Mammals / Carnivora / Felidae (felines)
- Fungal Diseases of [Mammalia, Artiodactyla: Ruminantia](#)
- [Fungal Diseases of Mammalia, Monotremata: Ornithorhynchidae](#)
- Diseases of Osteichthyes: Actinopterygii (ray fishes)
- Specimen processing

4. Funding provided by ISHAM in the past 3 years (Budget and year)

- **2023** = 10,000 CHF to support 5th ISHAM International Veterinary Mycology Course

Supplemental material for the new website

We would like to add this report, the 2023 Romania course program and some of the selected photos (attached) in the ISHAM website.

5. Working Group Mission Statement

Please summarize in one paragraph of approximately 50-75 words the scope, purpose and ambition of your working group:

The Veterinary Mycology Working Group has been established in 2010 by a group of experts under the umbrella of International Society for Human and Animal Mycology (ISHAM) to support all scientific aspects that deals with mycology and veterinary sciences, including:

- Diagnosis & identification of veterinary pathogenic fungi
- Pathophysiology and immunology of fungal diseases in animals
- Epidemiology, prevention, control, and eradication of animal mycoses
- Vaccine development, pharmacokinetics and pharmacodynamic evaluation of Antifungals in Animals
- Fungal zoonoses
- Mycotoxins and Mycotoxicosis
- Standardization of animal model on invasive fungal infections and use of alternatives
- One Health

We aim to share expertise among all countries around the globe to provide a strong framework of existing knowledge, as we may learn a lot from each other. We collaborate with other ISHAM-working groups, international societies, regulatory agencies, and governmental authorities.

1. Upcoming events planned for 2024-2025

We are planning to organize a course pre-conference ISHAM2025, subject ‘**Fungal Diseases in Animals**’ on Tuesday, 20 May 2025, intended for 50-100 participants.

2. Top 3 WG products from the past 5 years

1. The working group’s publication, titled: Fungal infections in animals: a patchwork of different situations’ is the most cited paper and also highest viewed paper in Medical Mycology, [https://academic.oup.com/mmy/article/56/suppl_1/S165/4925968?searchres
lt=1](https://academic.oup.com/mmy/article/56/suppl_1/S165/4925968?searchres
lt=1)
2. Publication of a textbook, titled: Emerging and Epizootic Fungal Infections in Animals <https://link.springer.com/book/10.1007/978-3-319-72093-7>
3. A successful Pre-ISHAM Workshop was organized: ISHAM Veterinary Mycology & One Health Workshop (17 and 18 September 2022) Banaras Hindu University, Varanasi, India. Lecturers and Participants were from India, Columbia, Italy, USA, Netherlands, Hong Kong, France, and Germany.
4. Two scientific sessions were organized during ISHAM2022, India
5. Publication of Atlas of Veterinary Fungi
6. The 5th ISHAM International Veterinary Mycology Course, was organized successfully, 16-19 October 2023, at Faculty of Veterinary Medicine, Iasi, Romania.

1. Images

Please provide a links or attach by email to this report at least one striking image that can be shared in your WG space for visual impact. Please provide here a short (one to two sentence) description of all images. All images should be public domain

- Two images are attached.

2. Working Group members

Please provide a complete list of all WG members

Working group board members for duration of 2022-2025.

- Jacques Guillot (FR)
- Vanessa Barrs (HK)
- Ankita Kumari (IN)-Junior
- Patrizia Danesi (IT)-Junior
- Andrea Peano (IT)
- Hans de Cock (NL)
- Mihai Mares (RO)
- Bridget Barker (USA)
- Amir Seyedmousavi (USA)

Our working group also has >200 members from all around the globe:

First Name:	Family Name:
Sergio	Álvarez-Parez
Alejandra	Calderín Hernández
Sandra	Bosco
Farzad	Katiraei
Vit	Hubka
J Peter	Donnelly
Vania	Vicente
Sandro	Pereira
Vanessa	Barrs
Masoomah	Shams-Ghahfarokhi
Mohammadali	Zia
Ankita	Kumari
Bożena	Kaszak or Dworecka-Kaszak
Tessa	Cornell
Selene Dall' Acqua	Coutinho
Ellen	Christensen
Ilse	Jacobsen

ELSA	LECLERC DUARTE
Ramona	Moraru
Roman	Ovchinnikov
Chioma	Aneke
Ali	Ahmad
Veronica	Risco-Castillo
Robert	Pore
Karuna	Singh
MASANOBU	ONOZAKI
Mahendra	Pal
Zdenek	Hubalek
Marina	Manoyan
francesca	mancianti
Richard	Malik
Christiane	Kupsch
Erin	McClelland
Orazio	Romeo
Jon	Woods
Melanie	Cushion
Livio	Pagano
ZLATIAN	OVIDIU
Petr	Hamal
Dave	Engelthaler
Bridget	Barker
Jacques	Guillot
Analy	Salles de Azevedo Melo
Anderson	Rodrigues
Robert	Cramer
David	Denning
David	Perlin
UCHENNA	NNADI
Joy	Sturtevant
GAYATHRI THEVI	SELVARAJAH
M.Teresa	Martin Gomez
Flavio	Queiroz-Telles
Amy	Karlsson
Jayaseelan	Murugaiyan
Pascal	Arnã©
Andrea	Peano
Giorgia	Matteucci
Frank	Pasmans
Jeffrey	Townsend
Daniel	Elad
Nathan	Wiederhold
Lois	Hoyer
Ferry	Hagen

Eric	Dannaoui
Gudrun	Wibbelt
Ayako	Sano
Hein	van der Lee
Eva	Cechova
Yu	Quan
Florent	Morio
Matt	Jones
F. Javier	Cabañes
Amanda	Burnham-Marusich
Isabella	Gremiño
Andrew	Hanzlicek
Iwona	Dąbrowska
Ida	Skaar
Nazárkan	Gürkan
Sarah	Ahmed
Jon	Woods
Hans	de Cock
Leticia	Sopán Prada
María Alejandra	Vanegas Álvarez
abhishek	abhishek
Stefan	Hobi
SONU	S. NAIR
Hein	van der Lee
Gunjan	Uttam
Karuna	Singh
Ankita	Kumari
NEHA NIDHI	TIRKEY
Luca	Villa
JOSE L.	BLANCO
Indarjulianto	Soedarmanto
Henrik Elvang	Jensen
Mahek	Sharan
Pankaj	Chaudhary
Elsa	Leclerc Duarte
Tahereh	Shokohi
Ali	Ahmad
Grigory	Jouvion
Dobora	Castelo Branco de Souza Collares Maia
Sergio	Alvarez-Perez
Florent	Morio
Laura	Goodman
AMEL	SALAH
Mohammed	Abdoelgabbar
Jurate	Paltaroke-Vilime
Carolina	Prado

Eric	Holbrook
Moises	Silva
Georgiana	Dumitru
Igor	Suguiura
Andy	Alhassan
Mariana	Williams
Nidhi	Singla
Anthony	Mgbeahuruike
Taylor	Fisher
ayatollah	nasrollahi omran

¹ The achievement arising from the Working Group with acknowledge its status within ISHAM by explicitly including the phrase “ISHAM Working Group” in all public and professional publications, workshop programs, lectures, its website or similar activities.

² Achievements of the Working Group include but not limited to the following:

- meeting/workshop/training course/symposium of the working group,
- peer-reviewed publication,
- presentation (symposium, oral or poster paper) from working group during ISHAM congress,
- contribute material to the main ISHAM website and its regular newsletter.
- Increase ISHAM members, strengthen link between ISHAM and working group, and enhance visibility of ISHAM.

³ Supporting information for achievements are welcome.