

## ISHAM Working Group Annual Report 2021

### 1. Title of Working Group

Environmental fungal exposure and human health

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

Coordinator: Prof. Esther Segal, M.Sc., Ph.D., FECMM – ISHAM MM0473, [segale@tauex.tau.ac.il](mailto:segale@tauex.tau.ac.il)

Co-coordinators:

Dr. João Brandão, PhD., ISHAM MM3894, [joao.brandao@insa.min-saude.pt](mailto:joao.brandao@insa.min-saude.pt)

Prof. Jean-Pierre Gangneux, M.D., Ph.D., FECMM, ISHAM MM3895, [jean-pierre.gangneux@univ-rennes1.fr](mailto:jean-pierre.gangneux@univ-rennes1.fr)

### 3. Website URL for external website (if relevant)

### 4. Objectives and expected outcomes for the forthcoming year

Explore further the fungal flora in sand and water of inland and coastal recreational water settings

### 5. Achievements of the Working Group in 2021 (250 words) <sup>1-3</sup>

Educational/Scientific Meetings relevant to the topic of the Grant :

1. The Group meeting in Nice (TIMM9): The Mycosands team organized a meeting in NICE, following TIMM9 and supporting the extended stay and meals of those willing to participate in it. The laboratory results obtained by then and possible approaches for a joint paper production were discussed. The draft section of the forthcoming fungi section of a chapter on sand of the new World Health Organization Guidelines for recreational water quality was also discussed during this meeting.
2. Contributed to the organization of the "Rare Yeast Symposium" which took place in June of 2021.
3. There was a group meeting in Aberdeen during TIMM10, in October 2021. The aim of the meeting was to plan the next actions of the group as a whole (see point 4).
4. A presentation at the EFISG IFI Crash Course on: "Environmental Sources of Fungi", by E. Segal.
5. Organized a symposium on fungi in sand and in water in recreational water settings at ECCMID 2021 (on line). The session was chaired by E. Segal and J. P. Gangneux, supported by two presentations by J. Brandão on fungi in sand and by M. Mars on fungi in water.

## 6. Publications arising from the Working Group

1. Collective Publication of the team: Brandão, J. *et al.* (2021). Mycosands: Fungal diversity and abundance in beach sand and recreational waters - relevance to human health. *Sci. Total Environ.* 781, 146598.

<https://doi.org/10.1016/j.scitotenv.2021.146598>

2. The individual Publications:

2.1 Frenkel *et al.* (2020). Fungi in sands of Mediterranean Sea beaches of Israel- Potential relevance to human health and well-being. *Mycoses* 63 (11), 1255-1261, <http://doi.org/10.1111/myc.13144>

2.2 Brito *et al.* (2019). Fungos em areias e águas costeiras e interiores em Portugal – relevância para a saúde humana e bem-estar. *Bul. Epidem. Observações*, 11, 49-54

2.3 Spin-off publication: World Health Organization, 2021. Guidelines on recreational water quality: Volume 1 coastal and fresh waters. Geneva, Switzerland: World Health Organization.

<https://www.who.int/publications/i/item/9789240031302>

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

5000 CHF in 2019

## 8. Composition of the working group

Number of working group members 42

Number of ISHAM members among WG members: 25

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Supporting information for achievements are welcome.

Please complete and return to Dr. Yee-Chun Chen ([yeechunchen@gmail.com](mailto:yeechunchen@gmail.com)) by January 28, 2022.

Reports will be placed on the ISHAM webpage (<https://www.isham.org/working-groups>) for the respective working group.