

## ISHAM Working Group Annual Report 2022

### 1. Title of Working Group

**Fungal PCR Initiative (FPCRI)**

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

Juergen Loeffler (loeffler\_j@ukw.de), Lewis White (lewis.white@wales.nhs.uk), Mario Cruchiani (cruchianimario@virgilio.it), Rosemary A Barnes (barnesra@cardiff.ac.uk), J Peter Donnelly (p.donnelly@usa.net)

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

[www.fpcri.eu](http://www.fpcri.eu)

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

- Final Data analysis on the performance of Aspergillus PCR on blood samples from patients enrolled in the GILEAD GS-EU-131-0247: AmBiGuard Trial
- Continued data analysis for the EORTC randomized control trial of empirical versus a diagnostic driven therapy in haematology/allogeneic stem cell transplant patients (Protocol 65091-06093: Translational project #1 Aspergillus PCR testing).
- Finalizing the data analysis of evaluations of *A. fumigatus* PCR in bronchoalveolar lavage fluid.
- Quality assurance and control of *A. fumigatus* PCR.
- Continued evaluation of current PCR methodologies for Candida, in an attempt to determine analytical sensitivity, preparation of future sample panels.
- Final analysis/publication of Candida PCR analytical specificity data
- Continued data analysis on evaluations of current PCR methodologies for Pneumocystis, in an attempt to compare analytical sensitivity and specificity, preparation of future sample panels.
- Continued data analysis on evaluations of current PCR methodologies for Mucorales, in an attempt to compare analytical sensitivity and specificity, preparation of future sample panels.
- Final analysis/publication of Mucorales PCR analytical sensitivity data
- Designing and optimizing protocols to evaluate PCR methodology for the detection of fungi in tissue samples, preparation of future sample panels.
- Final analysis/publication of Tissue PCR analytical sensitivity data

- Finalize Meta-analysis of PCP PCR with follow up publication
- Guidance for the optimal diagnosis and clinical interpretation of fungal diagnostics for PCP.
- Continue collaborations with QCMD to present technical data derived from various QCMD panel distributions.
- Re-initiate efforts for a systematic review and meta-analysis of Candida PCR.

## 5. Achievements of the Working Group in 2022 (250 words) <sup>1-3</sup>

- Reactivating and reshaping our Working Group post COVID
- Setting up new strategic planning for the next two years
- Continued activities throughout all Working Parties, including Aspergillus (Aspergillus PCR in BAL, clinical trials), Candida (development, shipment and data analysis of specificity panel), Mucorales (data analysis of DNA panel in collaboration with ModiMucor), Pneumocystis (comparative analyses with commercial PCR products, preparation of meta-analysis of PCP PCR), Tissue (data analysis of first panel and design of further panel)
- Our Working Group FPCRI will convene a plenary meeting during this “Trends in Medical Mycology” meeting, TIMM 2023 (20 – 23 October 2023, Athens) and will hold a designated session as part of the programme (planned topics include PCP, Mucorales, Aspergillus).
- Initiation of a collaboration with QCMD (E. McCulloch, Glasgow) and with the Fungal Diagnostics Laboratories Consortium (FDLC) in USA (Dr. S. Lockhart, CDC, Dr. S. Zhang, Johns Hopkins Medical Center)

## 6. Publications arising from the Working Group

In 2022, we published the following manuscript:

White PL, Alanio A, Brown L, Cruciani M, Hagen F, Gorton R, et al. An overview of using fungal DNA for the diagnosis of invasive mycoses. *Expert Rev Mol Diagn.* 2022;22(2):169-84

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

January 2023: 10,000 CHF

## 8. Composition of the working group

Number of working group members: ~55 members

Number of ISHAM members among WG members: ~45 members

<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. Don Sheppard, ([don.sheppard@mcgill.ca](mailto:don.sheppard@mcgill.ca)) by February 28, 2023

Workgroup reports will be shared on the ISHAM webpage

( <https://www.isham.org/working-group>) to highlight the activities of your group.