

ISHAM Working Group Annual Report 2021

1. Title of Working Group

ISHAM/ECMM Aspergillus Resistance Surveillance working group

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

Paul Verweij (paul.verweij@radboudumc.nl)

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3. Website URL for external website (if relevant)

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4. Objectives and expected outcomes for the forthcoming year

- To secure funding for international resistance surveillance
- To set up resistance surveillance networks

5. Achievements of the Working Group in 2021 (250 words) ¹⁻³

Group activities have been hampered by lack of funding opportunities and the emergence of COVID-19 with associated restrictions.

Despite lack of funding, group members have continued to publish on *Aspergillus fumigatus* resistance epidemiology.

Group members have been actively pursuing funding bodies to include antifungal resistance research within AMR programs. The inclusion of *Aspergillus fumigatus* in the urgent AMR threat list in 2019. Discussions with JPIAMR have resulted in a change in the Strategic Research and Innovation Agenda (SRIA), which was published in April 2021. Together with a number of researchers a review was recently published which marks this strategic change.

As fungal resistance is part of current and future JPIAMR calls the ARS-WG aims to submit proposals for diagnosis and surveillance of resistance in *A. fumigatus*. A call for surveillance networks is currently open (submission deadline June 14th) and a proposal is being prepared.

6. Publications arising from the Working Group

Working group members contributed to 2 important publications (which were collaborations with other organizations and researchers):

Verweij PE, Lucas JA, Arendrup MC, Bowyer P, Brinkmann AJF, Denning DW, Dyer PS, Fisher MC, Geenen P, Gisi U, Hermann D, Hoogendijk A, Kiers E, Lagrou K, Melchers WJG, Rhodes J,

Rietveld AG, Schoustra SE, Stenzel K, Zwaan BJ, Fraaije BA. The one health problem of azole resistance in *Aspergillus fumigatus*: Current insights and future research agenda. *Fung Biol Rev* 2020;34:202-214.

Fisher MC, Alastruey-Izquierdo A, Berman J, Bicanic T, Bignell EM, Bowyer P, Bromley M, Brüggemann RJM, Garber G, Cornely OA, Gurr SJ, Harrison TS, Kuijper EJ, Rhodes J, Sheppard DC, Warris A, White LP, Xu JP, Zwaan B, Verweij PE. Tackling the emerging threat of antifungal resistance to human health. *Nat Rev Microbiol*. 2022 Mar 29:1-15. doi: 10.1038/s41579-022-00720-1.

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

No funding was received

8. Composition of the working group

Number of working group members - 31

Number of ISHAM members among WG members - all

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.

Please complete and return to Dr. Yee-Chun Chen (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.