



Request for Proposal (RFP) for Investigating the Impacts of Climate Variability and Climate Change on Fungal Pathogens of Public Health Importance

1. RFP Background

At the core of Wellcome's strategic approach on [Climate and Health](#) is the commitment to put health at the heart of climate action. Simultaneously, our [Infectious Disease](#) strategy focuses on funding research that enhances our understanding of infectious diseases and advances interventions for their control.

Fungal infections are an emerging threat to global health due to multiple factors such as climate change and antifungal resistance. Despite their significance, research on fungal pathogens (see non-exhaustive list in Annex 1) lags behind research on other organisms.

There is a critical need to explore how climate variability and climate change impact fungal pathogens and to gather data that support or may support this research. Consequently, Wellcome is inviting qualified consultancy teams, think tanks, and do tanks to submit proposals that will contribute to our understanding of the potentially complex relationships between fungal pathogens and climate.

This RFP aims to support comprehensive reviews and data analyses that might identify existing gaps in research, data, and knowledge. The selected supplier will contribute to clarifying the current state of evidence and data availability in this field to inform future investments and catalyse novel research.

Objectives

The project will address the following objectives:

- Conduct a comprehensive literature review of the impact of climate variability and climate change on the emergence, distribution, and spread of fungal pathogens, through a systematic assessment of the available evidence, highlighting key challenges and opportunities for future research. A non-exhaustive list of fungal pathogens is provided in Annex 1, but the expectation is that the literature review explores the effects of climate variability and climate change on fungal pathogens beyond that list including those affecting animals and plants with potential to affect humans (i.e., zoonoses and phytonoses) and fungal pathogens that produce toxins that affect human health (i.e., mycotoxins and aflatoxins).
- Identify, map, and catalogue existing data assets and ancillary resources that can support research into the impact of climate variability and climate change on fungal pathogens, facilitating more informed and targeted research efforts.

2. RFP Specification

This section sets out the specification of services for this RFP exercise. Suppliers should use this section to fully understand Wellcome's requirements and to inform their response.



Wellcome will be guided by the supplier as to what is a reasonable budget for this activity as we do not want limit ambition or innovation.

The primary tasks for the project are:

A. Formation and Coordination of a Scientific Advisory Committee (SAC)

- The supplier, with input from Wellcome, will establish a multidisciplinary SAC comprising experts in mycology, epidemiology, climate science, public health, and related fields. The SAC will provide strategic guidance and expert insights throughout the project to ensure outputs generated will be relevant and informative to the field.
- Ensure the SAC meets regularly and provides input and feedback through structured reporting mechanisms to ensure alignment with project goals and Wellcome's portfolio on fungi and fungal diseases.
- The SAC will be required to meet at least 3 times over the contract period with Wellcome's cross-matrix fungal group to report on findings.
- The supplier and the SAC will also be required to collaborate with other ongoing activities on fungal pathogens and infections indicated by Wellcome. We note that the SAC will be asked to provide input and guidance on two further pieces of work aimed at estimating the global burden of disease and on community engagement and fungal infections (see Annex 2).
- Roles and responsibilities of the SAC:
 - **Review and Validate Findings:** Review the findings from literature review and other project outputs to ensure scientific accuracy and relevance.
 - **Identify Research Priorities:** Highlight key research priorities and areas requiring further exploration or data acquisition in understanding the impact of climate on fungal pathogens. The SAC will also provide guidance on the pathogens of focus for this work and how to best approach their identification (e.g., identification of zoonotic and phytonotic pathogens of public health importance).
 - **Provide Recommendations:** Offer strategic recommendations to address research gaps and explore future research priorities guiding efforts to advance our understanding and address the impact of climate on fungal diseases.

B. Literature Review

- Conduct a comprehensive global literature review of existing studies, reports, academic papers, and grey literature that examine both short-term (i.e., seasonal or sub-seasonal) and long-term (i.e., inter-annual, decadal) climate variations, focusing on their impact on the emergence, distribution, and spread of fungal pathogens (see non-exhaustive list in Annex1).
- Compile and document the range of methodologies used in research to establish associations between climatic factors (NB. including the formal attribution of climate impacts on fungal infections) and non-climatic factors (e.g., population density, socioeconomic development, land-use change) on fungal pathogens globally.
- Develop a classification system to organise the literature by themes such as geographic region, vulnerable populations, climatic factors, fungal pathogen, and study methodology, enabling a structured analysis of the findings.



- Whenever possible, conduct a comparative analysis of research findings from different regions to identify regional patterns, similarities, and differences in the impact of climate on fungal pathogens.
- Highlight gaps in current research and knowledge, discussing the limitations of existing evidence and suggesting areas for further exploration and study.

C. Data Audit & Curation

- Systematically identify and catalogue datasets within and beyond published literature, such as grey literature, open data platforms, epidemiological studies, clinical reports, and public health records which have informed current research and could inform further research into the impact of climate variability and climate change on fungal pathogens. The supplier shall ensure a balanced focus on both climatic and environmental data (e.g., temperature, humidity, land use change, population density) and health-related data.
- Evaluate the quality and completeness of identified data sources, noting any potential limitations or biases that may affect research outcomes. This assessment should include methodological considerations such as data accuracy, temporal and spatial coverage, and metadata quality, providing a critical understanding of the data's robustness.
- Identify data gaps, highlighting areas where data is lacking or insufficient to explore the relationships between climate and fungal pathogens. Highlight key areas that require further data collection or research focus and provide context on how these gaps impact the current understanding.
- Assess the availability, accessibility, usability, and distribution of data across different time periods, geographical regions, and populations. Highlight any barriers to data access, acquisition, and usability, such as access restrictions, licensing issues, data formatting, or integration challenges across different dataset formats or sources.
- Provide strategic and actionable recommendations for data enrichment and enhancement, suggesting methods and data collection initiatives to address data gaps, increase data interoperability, and allow the attribution of climate change impacts on fungal infections. Suggest actionable steps to facilitate the enrichment of data to better support research on fungal pathogens and their associations with climate.

The intended deliverables for this project are as follows:

Deliverable	Deliverable Requirements
Deliverable 1: Inception report	<ul style="list-style-type: none"> • Word document (maximum four A4 pages) clearly defining the scope of the project indicating the overall objectives and potential research questions. • Describe the methods and approaches considered for the implementation of the work. • The report should include clear criteria for selecting SAC members, ensuring a multidisciplinary approach from relevant fields such as mycology, climatology, epidemiology, and public health.



Deliverable	Deliverable Requirements
	<ul style="list-style-type: none"> • The supplier must indicate how they intend to engage with the other suppliers in the Wellcome’s fungal disease portfolio; specifically, with suppliers working pieces led or commissioned by the Infectious Disease and Community Engagement teams. Outline strategies for collaboration and information sharing with these suppliers. • The supplier must indicate how they will communicate and engage with Wellcome’s cross-matrix fungal group including regular updates, meetings, and collaborative activities. • Provide details of the communication or dissemination plans for the outputs, including target audiences, channels, and formats for dissemination. • Include a risk management plan that identifies potential risks to the project and outlines mitigation strategies. • Provide a detailed timeline with key milestones and deliverables for the project.
<p>Deliverable 2: Scientific Advisory Committee</p>	<p>Word document (max. five A4 pages) clearly indicating the following:</p> <ul style="list-style-type: none"> • Outline the criteria used for selecting SAC members, ensuring a multidisciplinary approach and diverse representation in terms of expertise, geographic distribution, and demographics to provide a comprehensive range of perspectives and insights. • Define of clear roles and responsibilities for SAC members throughout the project, ensuring these roles align with the projects’ objectives and best practices. • Describe the engagement strategy including plans for regular meetings or workshops to discuss progress, review findings, and provide input on key project deliverables. • Detail the feedback mechanisms that will be used to capture and integrate SAC input into project outputs and decision-making processes. Explain how feedback will be collected, reviewed, and implemented. • Provide a summary of records or minutes of SAC meetings, including key points discussed, recommendations, and action items identified.
<p>Deliverable 3: Details on the criteria for the literature review development</p>	<p>Word document (max. four A4 pages) defining the scope of the project and the methods being considered for its implementation. The report should cover the following points:</p> <ul style="list-style-type: none"> • Indicate a timeline and frequency for engagement with other suppliers of the Wellcome fungal disease portfolio, ensuring regular catch ups throughout key phases of the project to facilitate collaboration and knowledge sharing. • Identify the criteria for inclusion/exclusion of publications, and provide a preliminary overview of the topics, geographic scope and data sources considered in the review.



Deliverable	Deliverable Requirements
	<ul style="list-style-type: none"> • Map potential data sources to be reviewed, including academic journals, conference papers, governmental reports, grey literature, and other digital repositories. • Develop a search strategy that includes a comprehensive list of keywords and relevant phrases. Ensure keywords capture a wide breadth of literature and are relevant to the research questions. • Specify the tools and frameworks to be used for the appraisal of the literature. Ensure that these tools enable a consistent evaluation of study quality and relevance. • Provide details on how the findings from the literature review will be reported and presented. Include information on the format, structure, and key sections of the final report. • Explain how the supplier will seek input from the SAC throughout the literature review process. Describe the methods for soliciting feedback, such as surveys, interviews, or workshops. • Detail how the SAC's input will be integrated into the project outputs and decision-making processes. Ensure that the feedback is used to enhance the quality and relevance of the literature review.
<p>Deliverable 4: First draft of the report</p>	<p>Word Document (max 30 pages, including visual aids) with the following structure:</p> <p>Executive Summary</p> <ul style="list-style-type: none"> • Provide a succinct overview of the main findings from both the literature review and data audit, highlighting key conclusions and strategic recommendations. • This section should be concise and easily accessible to a non-technical audience. <p>Introduction</p> <ul style="list-style-type: none"> • Introduce the report, its objectives, scope, and the significance of the literature review and data audit. <p>Literature Review:</p> <ul style="list-style-type: none"> • Scope: Describe the scope of the literature review, including the criteria for inclusion and exclusion of sources, and the process for gathering and analysing the literature. • Thematic Compilation and Analysis: Document and classify the literature thematically based on geography, climatic factors, pathogen, and methodologies used in studies. • Regional Analyses: Conduct a comparative analysis of research findings across different regions to elucidate patterns, similarities, and differences. • Research Gaps and Limitations: Identify gaps in existing literature and discuss the limitations of current research, proposing areas for future exploration.



Deliverable	Deliverable Requirements
	<p>Data Audit and Curation:</p> <ul style="list-style-type: none"> • Data Mapping and Cataloguing: Systematically map and catalogue relevant datasets. • Quality Evaluation: Evaluate the quality of data sources assessing their potential biases, accuracy and spatiotemporal coverage. • Data Availability and Barrier Assessment: Assess the distribution and accessibility of data, identifying any barriers to data acquisition, usability, and integration. • Data Gaps: Highlight specific areas where additional data are needed to fully explore the climate-pathogen relationships. • Strategic Recommendations: Formulate actionable recommendations to improve data quality, address gaps, and enhance usability and interoperability. <p>Methodology:</p> <ul style="list-style-type: none"> • Provide a detailed description of the methods used in both the literature review and data audit. This section should include information on data collection, analysis techniques, and any tools or software used. <p>Stakeholder Engagement:</p> <ul style="list-style-type: none"> • Describe how stakeholders, including the Scientific Advisory Committee (SAC), were engaged throughout the project. Explain how their input was solicited and integrated into the report. <p>Recommendations:</p> <ul style="list-style-type: none"> • Discuss potential future directions for research and data collection. Highlight any emerging trends or areas of interest that could be explored further, identifying priority areas. • Formulate actionable recommendations based on the findings from the literature review and data audit. These recommendations should aim to improve data quality, address gaps, and enhance interoperability. • Provide recommendations for policymakers to support research and data collection efforts. Suggest policies that could facilitate better understanding and management of climate impacts on fungal pathogens. <p>Conclusion</p> <ul style="list-style-type: none"> • Summarise the findings discussing implications for future research, policy development, and decision-making. <p>Appendices</p> <ul style="list-style-type: none"> • Include additional materials such as detailed tables, figures, or charts that support the review and audit findings.



Deliverable	Deliverable Requirements
<p>Deliverable 5: Final report</p>	<p>The supplier is required to submit a PDF document (maximum 30 pages, including visual aids) formatted using Wellcome’s brand guidelines (to be provided by Wellcome).</p> <p>The document must comply with Wellcome’s accessibility guidelines (to be provided by Wellcome) and have the same structure indicated for Deliverable 4, in addition to the following sections:</p> <ul style="list-style-type: none"> • Implementation Pathways: Outline possible implementation pathways for the recommendations, including suggestions for stakeholder engagement and collaboration. • Research Roadmap: Develop a roadmap for future research efforts, identifying priority areas and outstanding questions. <p>The supplier must ensure consistency and coherence between sections of the report. Use clear headings and subheadings to organise the content logically. Maintain a consistent writing style throughout the document.</p> <p>Use visual aids (e.g., charts, tables, diagrams) to enhance understanding and visual representation of complex data. Ensure that visual aids are clear, well-labelled, and appropriate referenced and discussed in the text. Ensure visual aids are colour-blind accessible.</p> <p>Provide citations and references for all literature and datasets considered for the report. Use a consistent citation style and include a comprehensive reference list at the end of the document.</p>

3. RFP Timetable

#	Activity	Responsibility	Date
1	RFP issued on Contract Opportunities webpage	Wellcome	14 April 2025
2	Deadline for suppliers to ask questions and submit Expression of Interest	Supplier	28 April 2025
3	Return of Supplier Q&A to Suppliers	Wellcome	9 May 2025
4	Submission of RFP Response	Supplier	30 May 2025



5	RFP Evaluation Period	Wellcome	June 2025
6	Supplier Presentations	Supplier	w/s 23 June 2025
7	Notification of Contract Award	Wellcome	2 July 2025
8	Contract Negotiation	Wellcome & Supplier	July 2025
9	Contract Start Date	Wellcome & Supplier	August 2025

4. Response Format

The following headers support the timetable by providing further detail of the key steps.

Expression of Interest and Supplier Q&A

Suppliers are asked to submit a short expression of interest by e-mail to the Wellcome contact in accordance with the RFP timetable, which should contain the following information.

- Confirming whether you are an organisation or individual
- If an organisation please provide registered name, address, and registration number.
- A non-binding cost estimate as a single figure in GBP
- Any questions you have about the exercise and activity

Prior to the submission of your full proposal to the RFP, Suppliers are provided the opportunity to submit any questions they have about the exercise and the activity. All questions will be collated, anonymised, answered and returned to all Suppliers who have submitted an expression of interest in the RFP process. Please make sure you ask all questions at this stage. Once Wellcome have responded to all questions if you have any additional questions after this deadline these will not be answered to ensure that this is a fair and equitable process.

Submitting an EOI/Q&A is not a binding commitment to submit a full proposal should your organisational priorities change, you will not then be penalised for future opportunities

Please note, if we have an overwhelming response, we may choose to use this EOI stage as a selective phase, this is at Wellcome's discretion.

We will review expressions of interest to ensure that proposals fit within the scope of the RFP. Where we are satisfied of this, we will invite organisations to submit a full proposal to the RFP in accordance with the RFP timetable. Please note that you should only submit a full proposal to the RFP if you have been invited to do so.

RFP Response



Suppliers submitting a full proposal should cover the following areas in their response:
 (Response format size A4, recommended font: Arial, Trebuchet MS, Verdana, size 11)

#	Question	Max Pages
1	Proposed approach/methods to deliver outputs as specified above	1.5 pages
2	Relevance of experience of supplier	1 page
3	Time contribution and roles of the various team members (if supplier is a team)	0.5 page
4	Costs (including a comprehensive breakdown of expenses, including how many FTEs and number of days that will be required)	0.5 page
5	Quality assurance process for drafts and final deliverables	0.5 page

Evaluation Criteria

Criteria	Detail	%
Methodology	<p>Coverage: How well are the desired focus areas (as outlined in the specification) covered in the proposed methodology address?</p> <p>Quality: Is the proposed methodology aligned with our needs?</p> <p>Utility: Will the proposed methodology deliver the desired, credible, and useful results?</p>	30%
Experience	<p>Skills and Experience: Does the Supplier have the relevant skills, experience, and contextual understanding to deliver this work?</p> <p>Does the Supplier have a sufficiently representative team to provide insight into the issues being explored?</p>	30%
Delivery & Outputs	<p>Communication: Is there a good plan for communicating and collaborating with the Wellcome team?</p> <p>Delivery plan: Is the proposed delivery plan appropriate and achievable?</p> <p>Feasibility: How feasible is the delivery plan? Are there significant risks associated with the proposed timelines, and how well are they mitigated?</p>	20%



Criteria	Detail	%
	Risk: What are the limitations of the proposed approach in relation to our aims?	
Budget	Value for Money: Is the proposed work within your budget and good value for money?	10%
EDI	Does the Supplier have EDI policies and are these being put into practice in the proposal?	10%
Total:		100%

Contract Feedback

This section allows Suppliers to provide specific feedback to the contractual agreement which will be used should their proposal be successful. This is the suppliers' opportunity to provide negotiation points on Wellcome's terms and conditions, we will not consider negotiations that are only raised after the contract has been awarded so as not to delay the contracting process. Please ensure you engage with a relevant legal contact if applicable. Contract feedback is to be incorporated into your proposal as an annex and in the following format:

Clause #	Issue	Proposed Solution/Comment

Suppliers submitting proposals as a registered company should review Wellcome's Standard Terms and Conditions. [Wellcome General Terms and Conditions.pdf](#)

Individuals submitting proposals as a sole trader (not registered) should review this document. [Wellcome-Consultancy-Agreement-individual.pdf](#)

Individuals submitting proposals through their own personal services company please highlight this to the Wellcome contact immediately (see point 6 below).

Information Governance

Wellcome is committed to upholding data protection principles and protecting your information. The [Wellcome-Privacy-Statement-2023.pdf](#) explains how, and on what legal basis, we collect, store, and use personal information about you. This includes any information you provide in relation to this proposal.



Under [GDPR/Data Protection law](#), Wellcome must keep a record of all personal information it is processing (i.e., collecting, using, and sharing). This record will be made available to the Information Commissioner's Office upon request.

This is Wellcome's record of data processing activities which meets GDPR article 30 requirements.

Supplier Presentations

Following a submission of the proposal successful proposals may be invited to a virtual meeting which will last 50 minutes in total and will be a PowerPoint presentation followed by questions and answers session.

5. About Wellcome

Wellcome improves health for everyone by funding research, leading policy and advocacy campaigns, and building global partnerships. Collaborative research that involves a diverse range of people from different fields of interest is key to progress in health science – and to achieving our aim of fostering a healthier, happier, world. We're taking on the biggest health challenges facing humanity – climate and health, infectious disease, and mental health – to find urgent solutions and accelerate preventions. Find out more about Wellcome and our work at: wellcome.org.

6. Prospective Suppliers Personnel - IR35 and Off Payroll Working Rules

Before the RFP response deadline, Prospective Suppliers must make the Wellcome Contact aware if they are intending to submit a proposal where the services will be provided by any individuals who are engaged by the Prospective Supplier via an intermediary i.e.

- Where the Prospective Supplier is an individual contracting through their own personal services company; or
- The Prospective Supplier is providing individuals engaged through intermediaries, for the purposes of the IR35 off-payroll working rules.

7. Equity Diversity and Inclusion

Embracing [diversity and inclusion](#) is fundamental to delivering our mission to improve health, and we are committed to cultivating a fair and healthy environment for the people who work here and those we work with. We want to cultivate an inclusive and diverse culture, and as we learn more about barriers that disadvantage certain groups from progressing in our workplace, we will remove them.

Wellcome takes diversity and inclusion seriously, and we want to partner with suppliers who share our commitment. We may ask you questions related to D&I as part of our RFP processes.



8. Disability Confident

The Wellcome Trust is proud to be a Disability Confident Employer (DC Level 2) and we encourage all our partners and suppliers to do the same. More information about this can be found on the government website [Disability Confident employer scheme and guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/guidance/disability-confident-employer-scheme). Disability Confident is creating a movement of change, encouraging employers to think differently about disability and take action to improve how they recruit, retain and develop disabled people.

9. Accessibility

Wellcome is committed to ensuring that our RFP exercises are accessible to everyone. If you have a disability or a chronic health condition, we can offer adjustments to the response format e.g., submitting your response in an alternate format. For support during the RFP exercise, contact the Wellcome Contact.

If, within the proposed outputs of this RFP exercise, specific adjustments are required by you or your team which incur additional cost then outline them clearly within your commercial response. Wellcome is committed to evaluating all proposals fairly and will ensure any proposed adjustment costs sit outside the commercial evaluation.

10. Independent Proposal

By submission of a proposal, prospective Suppliers warrant that the prices in the proposal have been arrived at independently, without consultation, communication, agreement or understanding for the purpose of restricting competition, as to any matter relating to such prices, with any other potential supplier or with any competitor.

11. Funding

For the avoidance of doubt, the output of this RFP exercise will be funded as a **Contract** and not as a Grant.

12. Costs Incurred by Prospective Suppliers

It should be noted that this document relates to a Request for Proposal only and not a firm commitment from Wellcome to enter into a contractual agreement. In addition, Wellcome will not be held responsible for any costs associated with the production of a response to this Request for Proposal.

13. Sustainability



Wellcome is committed to procuring sustainable, ethical and responsibly sourced materials, goods and services. This means Wellcome seeks to purchase goods and services that minimise negative and enhance positive impacts on the environment and society locally, regionally and globally. To ensure Wellcome's business is conducted ethically and sustainably, we expect our suppliers, and their supply chains, to adhere to these principles in a responsible manner.

14. Wellcome Contact Details

The single point of contact within this RFP exercise for all communications is as indicated below:

Name: Hardip Dhaliwal
Pronouns: She/ her
Role: Procurement Manager
Email: RFP@wellcome.org



Annex 1.

Non-exhaustive list of fungal pathogens

- **Critical WHO group:** *Cryptococcus neoformans*, *Candida auris*, *Aspergillus fumigatus*, and *Candida albicans*.
- **High WHO group:** *Nakaseomyces glabrata* (*Candida glabrata*), *Histoplasma* spp., eumycetoma causative agents, Mucorales, *Fusarium* spp., *Candida tropicalis* and *Candida parapsilosis*.
- **Fungal pathogens of pandemic potential:** *Cryptococcus neoformans*, *Candida auris*, *Aspergillus fumigatus*, *Histoplasma capsulatum*, *Pneumocystis jirovecii*, *Mucormycetes*, *Mycetoma* (i.e., *Madurella mycetomatis*),
- **Species that produce toxins of public health relevance:** *Aspergillus flavus* and *Aspergillus parasiticus*, *Penicillium* spp., and *Fusarium* spp.
- **Zoonotic and phytonotic pathogens:** *Trichophyton indotineae*, *Sporothrix brasiliensis*, *Blastomyces* spp., *Histoplasma* spp., *Cryptococcus gattii*, *Talaromyces* (*Penicillium*) *marneffei*, *Lacazia loboi*, *Emmonsia* spp., *Basidiobolus ranarum*, *Conidiobolus* spp. and *Paracoccidioides brasiliensis*, and *Klebsiella variicola*.
- **Other pathogens of public health relevance:** *Coccidioides immitis* and *Coccidioides posadasii*

References:

1. Howard, M. H., Sayes, C. M., Giesy, J. P., & Li, Y. (2024). Valley fever under a changing climate in the United States. Elsevier BV. <https://doi.org/10.1016/j.envint.2024.109066>
2. Jafarlou, M. (2024). Unveiling the menace: a thorough review of potential pandemic fungal disease. Frontiers Media SA. <https://doi.org/10.3389/ffunb.2024.1338726>
3. Rodríguez-Medina, N., Barrios-Camacho, H., Duran-Bedolla, J., & Garza-Ramos, U. (2019). *Klebsiella variicola*: an emerging pathogen in humans. Informa UK Limited. <https://doi.org/10.1080/22221751.2019.1634981>
4. Seyedmousavi, S., Guillot, J., Toloee, A., Verweij, P. E., & de Hoog, G. S. (2015). Neglected fungal zoonoses: hidden threats to man and animals. In *Clinical Microbiology and Infection* (Vol. 21, Issue 5, pp. 416–425). Elsevier BV. <https://doi.org/10.1016/j.cmi.2015.02.031>
5. WHO (2022) WHO fungal pathogens list to guide research, development and public health action. Geneva. Licence: CC BY-NC-SA 3.0 IGO.



Annex 2.

Other work on fungal pathogens and infections to there the Scientific Advisory Committee will provide input and insights

Wellcome's active interest/investment in Fungal Infections

This RFP is one of three activities that Wellcome will be supporting on fungal pathogens and infections. It is expected that the supplier and the Scientific Advisory Committee will engage with the suppliers and Wellcome teams of the other two activities described below.

1. Review of global data on fungal infections

This project will build our understanding of what data is collected and available to define the global burden of fungal infections, including what data types are available, where the data are stored, and if and how they can be accessed. The review will entail literature reviews, key opinion leader interviews, building relevant networks in different regions and geographies, and building a database of existing data on the burden of fungal infections. The goal is to clarify the current state of burden data available on human fungal infections, as well as identifying gaps in data and recommendations of opportunities for future research.

Objectives:

- Examine what data types are currently available to assess the global burden of human fungal infections and resistance (e.g., microbiological data, clinical diagnoses, post-mortem evaluation)
- Identify, map and catalogue existing data assets and ancillary resources to support burden analyses
- Identify gaps in data that would hinder burden analyses and recommend opportunities for future research
- Develop a comprehensive framework outlining the pathway to estimation of the global burden of fungal disease.

2. Contextual Understanding of Fungal Infections to Inform Research Priorities

This Project aims to engage in the topic of Fungi and Fungal disease to ensure a diversity of people and perspectives influence Wellcome's work in three key geographies: Thailand, India, and South Africa. Through utilizing equitable and context-specific inclusive approaches to participation, we hope that the priorities and perspectives of those affected by fungal diseases will be able to inform future research priorities in this space. This work will help to create better contextual understanding to shape future decision-making around fungal research priorities and explore the opportunity areas for augmenting fungal research via citizen data initiatives.



Objectives:

- Develop a deeper contextual understanding to guide future decisions on fungal research priorities. This involves exploring local perceptions of fungi and fungal diseases, examining the community's experience with fungi from an agricultural perspective, and investigating health-seeking behaviours related to both systemic and local fungal infections (including sentiments around transmission)
- Identify key questions about systemic and local fungal diseases at a community level, outlining future research questions that Wellcome and other stakeholders could explore.
- Explore opportunity areas for working with communities using citizen data initiatives. This will include determining informal community led surveillance efforts noted, including belief systems or perceived transmission patterns around fungal disease. Fungal diseases are often misdiagnosed; consequently, we will also include information related to community surveillance systems of emerging infections of unknown origin.
- Illustrate citizen data initiatives and ideal methodologies for Wellcome to pursue and support in the future. This includes mapping key partners either currently working in this space or best placed to support citizen data initiatives in the future as well as early-stage routes to implementation for Wellcome to support.