



Food and Agriculture
Organization of the
United Nations



World Health
Organization

JOINT FAO/WHO EXPERT MEETING ON MICROBIOLOGICAL RISK ASSESSMENT (JEMRA)

Call for Experts on Risk Assessment of Microbiological Hazards related to Food Safety

Issued in **July 2022**

Application Deadline: The review of applicants will begin on **1 October 2022** and continue until suitable candidates are identified.

Background

The Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) began in 2000 and is an international scientific expert group that is administered jointly by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). One of the main aims of JEMRA is to provide a transparent review of scientific advice on the state of the art of Microbiological Risk Assessment (MRA), and to develop the means of achieving sound risk assessments for specific pathogen–commodity combinations. The work includes establishment of new risk assessment; review of existing risk assessments; review and assessment of the available data and current risk assessment methodologies; provision of examples; and identification of ongoing data and information needs. This work often includes an evaluation of the impacts of different risk management options in the reduction or control of specific microbiological risks in food based on an analysis of the available scientific knowledge. In addition, JEMRA aims to make risk assessment approaches equally available to both developing and developed countries.

JEMRA meetings are convened on an ad-hoc basis, depending on the request from Codex, in particular the Codex Committee on Food Hygiene (CCFH). As seen from the previous work, JEMRA covers a diverse range of foodborne pathogens and related risks and requires expertise from multiple sectors and perspectives.

Individuals participate in the JEMRA in their personal capacity, as technical experts, yet bring diverse regional and national perspectives that contribute to practical applications, particularly for low- and middle-income countries (LMICs). Over 370 experts from around the globe have contributed to the meeting outcomes that have been published in nearly 40 monographs in the FAO/WHO microbial risk assessment (MRA) series, addressing particular food commodities with microbial hazard(s) combinations or a methodological aspect of microbial risk assessment.¹

According to the procedures described in the FAO/WHO framework for the provision of scientific advice on food safety and nutrition, the FAO/WHO JEMRA Secretariat establishes a list of experts (appointments are for a period of five years). Experts are selected from the list referred to as the *roster*

¹ <https://www.mdpi.com/2304-8158/10/8/1873/htm>

of experts, for each meeting of JEMRA to serve as members of the expert meeting or to assist the Secretariat with preparatory work.

The objective of this call is to renew the current JEMRA expert roster (1 January 2018 – 31 December 2022)², for the next five-year cycle (**1 January 2023 – 31 December 2027**), to serve as JEMRA experts. Kindly note that all the experts will be removed from the current roster and will need to apply again if they want to be considered for inclusion on the roster for next term.

Basic and essential qualifications of experts

Undertaking microbiological risk assessment and related activities as the basis for providing scientific advice on microbiological food safety hazards and risks is a multidisciplinary exercise that involves, among others, specialists in identification and characterization of hazards, exposure assessment, and risk characterization. Experts are expected to have a high level of expertise and experience within their scientific area in one or more of the components of the risk assessment process as demonstrated in the peer-reviewed literature or contribution to relevant national or international meetings and/or reports. The mutual respect and understanding between scientists from various disciplines is a key element of success in reaching a consensus based on the best available science. An understanding of the overall food safety risk analysis process would be of advantage.

Qualified experts will be selected from the roster for each meeting depending on the expertise required and are then requested to review the literature and prepare background papers in advance of the meeting. Meetings are conducted in English and participation in the meeting is required for the whole duration, usually five days (physical meeting) or a few weeks (virtual meeting). Cost of participation is covered by FAO/WHO, however, honoraria are not provided.

Successful candidates should meet most or all the following qualifications:

- a. Advanced university degree(s) in microbiology, food technology, food science, food hygiene, epidemiology, public health, veterinary medicine, biostatistics, bioinformatics, or related fields;
- b. Scientific publications in peer reviewed journals or proven experience in delivering scientific opinions on food microbiology, food safety, and/or risk assessments at national, regional or international level;
- c. Experience in food safety/risk analysis related to microbiological hazards in foods
- d. Ability to converse in and write documents in English
- e. Ability to prepare documents and spreadsheets in electronic format; and
- f. Leadership or invited participation in national or international scientific bodies, committees, etc. that are pertinent to the above disciplines and described tasks.

Specific Expertise and resources required

FAO and WHO are seeking experts from across sectors (i.e. research, academia, food industry, regulatory, etc.) who will be capable of supporting in identifying, sourcing, and using the best scientific evidence in the following tasks/fields:

- Food Microbiology (e.g. expert on foodborne parasites, bacteria, and/or viruses, their occurrence, behavior, pathogenicity, emerging traits e.g. antimicrobial resistance etc.)

² JEMRA roster (2018-2022): <https://www.fao.org/3/BU616EN/bu616en.pdf> and https://cdn.who.int/media/docs/default-source/food-safety/jemra/roster_of_experts_for_microbial_risk_assessment.pdf?sfvrsn=59ae2e76_17

- Food science (e.g. physical, chemical and biochemical nature of food and principles of food processing)
- Microbial behavior in particular food and food production/processing environments (predictive microbiology modelling)
- Epidemiology (e.g. food source attribution, outbreak investigation, analytical & quantitative epidemiology)
- Design and implementation of sampling plans, use of data for monitoring and surveillance programs
- Risk assessment methodology including biostatistics (data collection, analysis and modelling, e.g. dose-response modelling, exposure modelling, model validation, Monte-Carlo simulation, uncertainty and sensitivity analysis, meta-analysis, etc.)
- Veterinary medicine and sciences
- Risk ranking and risk profiling
- Systematic review methodologies and their application
- Control and management of foodborne microbiological hazards (e.g. assessment of efficacy of potential control options)
- Monitoring programs and inspection systems
- Laboratory methods in food microbiology including molecular methods and genomic tools for identification and characterization of pathogenic microorganisms.

Criteria and process for the selection of experts

The criteria for the selection of experts are the basic and essential qualifications together with the proven competence and expertise in various tasks related to risk assessment and microbiological food safety as described above. The *curriculum vitae* of applicants will be reviewed based on the criteria stated above by a selection panel consisting of four or more individuals including at least two independent, internationally recognized external experts appointed by FAO and WHO. The qualified individuals that are selected by the panel will be placed on the roster that will be used by FAO and WHO to invite experts to JEMRA meetings.

Appointments to the roster will be for a period of 5 years. The names, affiliations, and area of expertise of those placed on the roster will be published on the FAO and WHO websites³ together with the eligibility period of each expert.

Updating of roster

Qualified experts will remain on the roster for a period of five years. After that time, they will be removed from the roster and will need to apply again if they want to be considered for inclusion on the roster for another term.

³ FAO website: <https://www.fao.org/food-safety/scientific-advice/calls-for-data-and-experts-expert-rosters/en/>

WHO website: [https://www.who.int/groups/joint-fao-who-expert-meetings-on-microbiological-risk-assessment-\(jemra\)](https://www.who.int/groups/joint-fao-who-expert-meetings-on-microbiological-risk-assessment-(jemra))

Appointment of Experts for JEMRA meetings

Experts of the roster will be considered for future meetings of JEMRA according to expertise required for the respective meetings. Inclusion in the roster does not guarantee such participation. Additional experts can be recruited if required to address specific questions at certain meetings.

During the selection process, diversity and complementarities of scientific backgrounds, and balanced representation from geographic regions including developing and developed countries as well as gender will be considered.

The experts will be invited to participate only in their individual capacity based on their expertise to provide advice on specific topics. The term "personal capacity" means that the expert is expressly expected to serve in his/her capacity as an independent expert rather than a representative of his or her employer, any government, industry, or other group. The views of the independent expert would not necessarily be reflective of any views and positions of his or her employer, any government, industry, or other group.

Before participating in meetings, experts will be required to declare any potential interests associated with the subject of the meeting that will be evaluated through completion of a standard Declaration of Interest form adopted by FAO and WHO. They will be asked to indicate in writing any interest on their part or their spouse.

Application and Deadline

Interested applicants should

- 1) complete the **online application** at " <https://forms.office.com/r/gCW0fCeSgs> " and
- 2) submit the **curriculum vitae** including a description of their education, work experience, two professional references and a list of peer reviewed publications relevant to the factors above (please do not include reprints in your submission unless specifically requested at a later date) **by email** to FAO and WHO JEMRA Secretariat to the addresses below

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