

Answers to open questions are categorized here according to themes that emerged

3. Most important outcomes from EUPHEM fellowship:

Networking

- *Building up of a strong professional network in the PH microbiology field*
- *European-wide network of professional contacts including microbiologists and epidemiologists*
- *Increased European network of public health professionals epi and lab*
- *Networking with European epidemiologists and microbiologists*
- *Networks / networking*

Skills and knowledge in PHM and epidemiology

- *Acquisition of essential skills for public health laboratory management (e.g. Biorisk and quality management, development/evaluation of diagnostic assays)*
- *Following interesting courses (e.g. communication and scientific writing, vaccinology module)*
- *Increased professional knowledge-base and skills in both PHM and epidemiology*
- *Learning epidemiology basic concepts*
- *Understanding the principles of epidemiological investigations and the needs of epi partners*
- *Widening my knowledge in different fields of microbiology (virology, bacteriology, parasitology, mycology)*
- *Exposure to Public Health Microbiology (both lab based / and population based)*
- *Exposure to Epidemiology and Public Health*
- *Food competency working at the epi-lab interface and lab capacity for surveillance*
- *Management of applied public health microbiology projects*
- *Population based thinking rather than individual patient oriented when it comes to assay development/validation/analysis*

Contextual skills and experience

- *Country experience working in a European National Public health institute (versus international organizations eg WHO)*
- *Increased knowledge of the different European public health systems*
- *International work experience*
- *Gaining the confidence to work truly cross-disciplinary*

ECDC-related comments

- *Connection / awareness of the work of ECDC*

- Understanding of the role of ECDC in public health protection in Europe, and established connections to ECDC staff

Professional opportunities

- Several professional opportunities and proposals have emerged that otherwise would not have taken place

Language

- Improving my English

8. Suggestions on how to ensure or improve the competency of fellows graduating from the EUPHEM programme:

Modules/courses

- Development and continuous improvement of PH microbiology training modules and case studies*
- Good quality modules targeted specifically for EUPHEM fellows*
- Grading of presentation / discussion style / background knowledge of fellow during presentation in the project review module*
- Propose more modules addressed to microbiologists*
- Specific EUPHEM project review session*

Training objectives

- Do not accumulate too many objectives (EPIET objectives + EUPHEM specific ones) to reach during the fellowship as the fellows might be too dispersed*
- Ensure that the definition of PHM is the same among all host institutes!*
- Ensuring new and old host sites all have the same understanding of the programme*

Evaluation of fellows

- Careful periodical skills assessments to monitor the learning curve of each fellow*
- Clearly define the competencies the fellow wants / needs to gain /improve after 6 month of the fellowship and re-evaluate progress after 18 month and 24 month*

Projects

- Allowing for flexibility in choosing projects and curriculum based on different individual backgrounds of fellows entering the programme*
- Experiencing a variety of different aspects of PHM (outbreak in the field, outbreak logistics in the lab network, assay development/assessment, political aspects of decisions, biosafety, quality) is more important than ticking boxes on a form!*
- Flexibility to work in different PH laboratories (and institutes)*
- Leave some autonomy to the fellows to find and pursue their own projects in each institute being aware that all host sites have advantages and limitations*

Lab-epi collaboration

- Ensure that EUPHEMs have both a microbiology and an epi supervisors assigned to get equal opportunities to access to outbreaks (so far it has been quite a challenge)
- Integrate host site visits both EPIET and EUPHEM together where both fellows are present

International assignments

- Create more opportunities for Public health microbiology specific international assignments
- Give people opportunities to collaborate internationally to experience other laboratory systems (not laboratories!) and give international partners (WHO, NGOs) an opportunity to be exposed to EUPHEM.

Coordination of the programme

- Find inspiring PHM leaders to take on fellows, since this discipline is unknown but very important it all hangs and falls with people to translate the ideas. Meaning: ECDC don't be too restrictive.
- Increase number of EUPHEM coordinators to ensure variety of experience/expertise and highest standard of feedback

Appraisal of the programme

- Evaluate the work of ECDC -EUPHEM coordinator / supervising personnel (e.g. time for response / relevance of comments /discussion culture) externally to ensure highest level of support and supervision
- Learning from past experiences, i.e. alumni

Identity of EUPHEM fellow

- Do not confuse EUPHEM fellows with lab technicians, PhD students (=hands in the lab) or junior epidemiologists. PHM is a separate discipline and should be fostered as such.

9. Would you recommend EUPHEM fellowship to someone interested in a career in Public Health Microbiology? Why?

- Because it is a unique way of learning and experiencing true public health oriented work using scientific methods.
- Network: the network gained through close collaboration / connection to EPIET, ECDC and the host side is extremely valuable for future career development; Experience: the unique opportunity to increase and grow experience, knowledge, expertise in a safe, supporting and constructive environment; Exposure: Through the fellowship one has the opportunity to get deep insights into the structure / organization / procedures of another Public Health institute which, for me, was of outstanding value

-Yes, as to my knowledge there is no other professional training program (academic or fellowship) to provide such a complete and applicable training in public health microbiology in Europe.

-Yes I did recommend the program several times because I benefited greatly from my EUPHEM experience and I think the program gets better year after year as our advices are taken into account by the supervisors and coordinators of the host sites and ECDC. I really hope it will continue this way.

-Yes. It provides a unique opportunity for professional networking as well as to be involved in a wide range of different projects in a relatively short period of time.