

The direct involvement of European academic institutions is crucial to an effective HERA.

European academic institutions fully support the creation of the European Health Emergency preparedness and Response Authority (HERA). The HERA is necessary to successfully navigate future health emergencies. **Direct, high-level involvement of European academic institutions within the HERA's composition and processes should be planned from the outset and will maximise the HERA's effectiveness.**

Academic institutions have played a critical role in the current COVID crisis

In the current COVID-19 pandemic, academic institutions have played a range of vital roles. University research groups and institutes were central to vaccine development, pioneered new treatments, sequenced the original genome and emerging variants, analysed epidemiological trends to forecast risk, and modelled societal impact to guide effective policy development. University hospitals also played a critical role at the front line of patient care, including the very specialized intensive care that is the limiting factor in coping with the current COVID crisis, as research sites that evaluated and developed best practices & treatments and disseminated these into existing networks of collaborating hospitals and providers of reference sentinel and screening laboratory services.

Many lessons have been learned about what it means to prepare for a health crisis of this magnitude, particularly the effectiveness of a transdisciplinary approach to preparedness. European academic institutes comprise leading centres of excellence in research and training in public health, global health, medicine, social science, data science, politics, economics and engineering, among other disciplines. Their academic experts already guide government strategies, scenarios and measures. This crucially independent role ensures that 'best practice' can follow 'best evidence', maximising the positive impact of programmes and policies and reinforcing public confidence.

The academic sector is not simply a stakeholder, but a first line actor in the current and in future health emergencies.

Successful management of future health emergencies will need more direct and high-level input from the academic sector.

It is intended that the HERA will prepare for a range of health emergencies, including those that are not of a pandemic nature, for example emergencies due to climate change. European academic institutes already host the Lancet Commission on Climate Change and the Lancet Commission on Migration among others. They have a history of work and thought on these risks - and likely strategies for mitigation. That past learning and future forecasting must be viewed as public good for the benefit of the HERA and all the populations it will serve.

To leverage that public good, the HERA must establish direct links with the academic research groups and hospitals which are crucial in advancing the state of the art in pandemic and disaster preparedness in all its multi-, inter and trans-disciplinary aspects. Through these direct links, the HERA can establish scientifically

directed practices and innovative impact pathways for the short term. In the longer term, this dialogue will help universities to prepare the next generation of pandemic and disaster preparedness experts, stimulate the development of prevention and intervention measures and speed national, regional and global recovery from health emergencies.

To build on this current and develop future expertise, the HERA must maintain research funding allocated to Horizon Europe and EU4Health and have an integral and transdisciplinary approach to health threats. From the start, the HERA while having a primarily European focus, must look beyond the borders of Europe to effectively scan the horizon and identify emerging threats. The HERA should then coordinate research into priority challenges to support global preparedness, risk reduction and response, and be a testing ground for potential solutions. Universities and their hospitals will be crucial here too.

How might the academic sector be involved in the HERA?

Academic institutions are prepared to play a proactive role in threat assessment, critical care organization and coordination of healthcare responses, international cooperation and transdisciplinary and one-health approaches to preparedness, risk reduction and response.

As outlined in a paper in the Lancet (2021)¹, the academic sector could contribute in many areas of the HERA's activities. Firstly, universities and their hospitals can play a crucial role in health threat assessment and intelligence gathering. Indeed, universities are already a critical part of the threat assessment system. This is clearly a very sensitive and important aspect of the HERA and cannot be achieved by ECDC or national and regional health authorities alone, that in any case rely on precisely the university reference laboratories and hospitals as sentinels or centres of expertise, as well as on their global networks. The monitoring process shall include establishing alliances with different local, national and international groups/organizations that could provide an early warning mechanisms, comprehensive control strategy and collaborative response framework. These steps align with the WHO Hub for Pandemic and Epidemic Intelligence and the possible Pandemic Treaty Research Centres have similarly important expertise.

The academic sector will be crucial in developing future experts and leaders to navigate complex health emergency problems through open-minded cooperation and a problem-solving orientation. Global health institutes can provide transdisciplinary training on preparedness, risk reduction and response, including master & postgraduate courses on global health, PhD programmes, general courses, summer/short courses and public health training, Erasmus+ programmes in the areas of action of the HERA and on general public and global health issues.

University hospitals in the EUHA alliance have, in the current pandemic, already set up cross-border rapid information exchange and patient transfer systems. This expertise can be used for a more comprehensive organization and coordination of international cooperation in healthcare responses and critical care. We have the expertise to participate in defining the common strategic EU research and innovation agenda for pandemic preparedness. Global health institutes are key actors in this research and some of the signatories have already

¹ Villa S et al, (2021) The Lancet. Volume 397, Issue 10290, P2145-2147, June 05, 2021

been involved in identifying the research and development needs in the area of preparedness. A non-extensive list of areas in which global health research institutes are already working and that should be included in the agenda are: bio-pharmacological research, innovations in surveillance and research on advanced forecasting tools, risk/benefit assessment methods of outbreak surveillance and monitoring of interventions, distributed Healthcare database networks and frameworks, global Virome project, operational research to pilot interventions, research into countermeasures, research into vaccine hesitancy, and co-creation of pandemic preparedness goals.

Conclusion

The signatories propose the creation of a HERA subgroup within its Advisory Committee, that liaises between the HERA and the academic sector. This subgroup should comprise of representatives from EU networks representing universities, research institutes and university hospitals. This activity could operate according to a so-called hub-and-spokes model, in which the HERA hub runs a focused package of research and innovation activities addressing key challenges, with spokes in universities, research institutes, university hospitals and relevant companies in member states that have proven experience and expertise.

Signatories

The [European University Hospital Alliance \(EUHA\)](#) is a collaborative network of 9 of the largest university hospitals or university hospital networks from 9 European countries. EUHA's vision is to build a network of sustainable healthcare ecosystems in Europe which achieve the best possible quality of care with the resources available. To this end, EUHA members are collaborating intensively in various fields and exchange knowledge and expertise. Although EUHA has many contacts and positive and successful collaborations with industry, we are independent and not driven by commercial considerations.

The [European Global Health Research Institutes Network \(EGHRIN\)](#) is a network of leading research institutions in Europe to promote and advocate for Global Health research and innovation. EGHRIN aims to facilitate and strengthen equitable collaboration among the network's institutes and their global partners on high quality research and provides knowledge insights that can inform improvements in health systems, including the development of cost-effective innovations for long-term sustainability of health care systems worldwide. In addition, EGHRIN is engaged beyond the health sector to advocate in favour of health through reaching out to other sectors and disciplines in full alignment with the Sustainable Development Goal (SDG) framework's call of integration and indivisibility for sustainable development in any sector.

The [League of European Research Universities \(LERU\)](#) is an association of leading European research-intensive universities that share the values of high-quality teaching within an environment of internationally competitive research. Founded in 2002, LERU advocates education through an awareness of the frontiers of human understanding; the creation of new knowledge through basic research, which is the ultimate source of innovation in society; and the promotion of research across a broad front in partnership with industry and society at large.