

WHO convention, agreement or other international instrument on pandemic prevention, preparedness and response must not control and regulate knowledge-driven research

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The DFG Interdisciplinary Commission for Pandemic Research generally supports the World Health Organization's efforts to strengthen preparedness for future pandemics in a global perspective, in particular the general principles of

- ▶ creating more global equity through international collaboration, coordination and co-operation,
- ▶ facilitating access to knowledge and knowledge exchange
- ▶ and the recognition of the central role of interdisciplinary scientific expertise as a basis for public health decisions and the related development of plans.

The importance of research for pandemic preparedness and response

In the COVID-19 pandemic, the sciences and humanities provided an invaluable service. Researchers in Germany and worldwide reacted to the onset of the coronavirus pandemic simultaneously by engaging in intense research activity. In this, global collaboration for the benefit of the common good is a guiding principle of the international research community.

Decades of basic research and academic cooperation enabled the rapid development of SARS-CoV-2-specific vaccination strategies. The research on immunotherapies is therefore an outstanding example of the long-term value of knowledge-oriented basic research and its funding.

Tying research funding to content-related conditions of global health equity damages what has been successful

While pandemic- and epidemic-related research was necessary and still is, a concentration of funds on these research areas at the expense of other topics, including health research in

areas such as non-communicable diseases and the consequences of climate change and biodiversity loss, entails great risks. The COVID-19 pandemic has shown how quickly results of basic research can be put to use to address concrete problems of global relevance. These are research outcomes from projects that were identified as relevant by the research community itself – and not based on a benefit-oriented funding logic. Longer-term concentration of funding for predefined topics must be avoided in order to continuously fill a broad-based store of knowledge for future and unforeseen pandemics and other crises.

Against this background, we advocate that the WHO CA+ should not regulate basic, knowledge-driven research. Measures to prevent future pandemics should be strengthened worldwide and through international collaboration. However, this must be done by strengthening public health systems, by government monitoring and control mechanisms that allow early detection and containment of disease outbreaks with pandemic potential. At best, such mechanisms would cover not only outbreaks in human populations, but should also monitor the wildlife-livestock-human interface. In contrast, the steering of research programs and research budgets cannot have a preventive effect. Free knowledge-driven research was and will be essential for pandemic preparedness but not suitable as an instrument for pandemic prevention.

Create legal certainty through scientifically valid scope of the agreement

One of the main flaws of the WHO CA+ draft is the lack of a precise scientific definition of the scope of the agreement. The draft for the new pandemic treaty, which among other things proposes a regulation of the distribution of and access to research results, does not clearly distinguish between basic, knowledge-driven research and more applied, product-oriented research. Moreover, the scope regarding pathogens of interest remains unclear. From a scientific perspective, it is not possible to formulate a clear definition of “Pathogens with pandemic potential” a priori to a pandemic outbreak. Based on current scientific knowledge, lists of pathogens with known zoonotic potential are available. But this does not imply that these listed pathogens also have a pandemic potential. A differentiation between zoonotic potential and pandemic potential is a priori not possible for the majority of pathogens. Known pandemic pathogens are characterised by the fact that they change their infectivity through mutations enabling transmissions to new hosts. At present, the potential for such mutations cannot be predicted scientifically for a given pathogen and can also not be classified for all pathogens in advance.

Consequently, the question of whether research on a particular pathogen falls within the scope of this treaty can probably not be answered in interpandemic phases and can only be assessed retrospectively. The latter would raise the legal problem of retroactive obligations under the

treaty. The relationship to other legal frameworks, in particular the Nagoya Protocol, is also open. As far as crisis prevention is concerned, the responsiveness of research must not be hampered by burdensome approval procedures.

Free research creates the best knowledge to prepare for unknown future pandemics and other crises

An essential cornerstone for a rapid response to future unpredictable crisis situations remains free, curiosity-driven basic research that produces a broad-based store of knowledge and a sound basis for scientifically substantiated decisions. This is key to overcoming crises and the financial burdens they impose. For this reason, such research must not be weakened in the future compared to programme-oriented funding with a predefined focus. All restrictions, especially within a framework of specified research budgets, limit the potential of science-led knowledge gain.

In order to maximise the potential of basic research as outlined, it should explicitly fall outside the scope of this agreement.

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Further Information: The Interdisciplinary Commission for Pandemic Research was established by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) in June 2020 in response to the coronavirus pandemic. It has 21 members from all academic disciplines. The Chair of the Commission is Professor Dr. Katja Becker, President of the DFG. Further information is also available on the DFG website of the interdisciplinary Commission for Pandemic Research: www.dfg.de/commission_pandemic_research

The Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) is the central self-governing research funding organisation in Germany. More: www.dfg.de/en

References: Interdisciplinary Commission for Pandemic Research (2022), The Sciences and Humanities in the Coronavirus Pandemic: Insights, knowledge and action gaps, and conclusions for the preparedness for future pandemics, DOI: 10.5281/zenodo.7043356, www.dfg.de/download/pdf/foerderung/corona_infos/stellungnahme_pandemic_preparedness_en.pdf

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