OPEN LETTER

TO THE DECISION-MAKERS IN THE REPUBLIC OF MOLDOVA

We write to share with you the unforgettable impressions of our meetings and discussions from September 18 and 22, 2023 concerning the state of research in the Republic of Moldova. We met with scientists, teaching staff, young researchers from various universities and research laboratories. Our collaborative interaction, initiated a few years ago, materialized especially during the COVID-19 pandemic, and our views developed in public lectures and reasoned opinions generated in our discussions about the place and role of research in the modern society.

In particular, we emphasize the concentrated efforts of scientists from the Republic of Moldova to fully integrate into the European Research Area as a result of the opportunity presented by the June 23, 2022 announcement of Moldova's candidacy for accession to the European Union.

At the same time, we appreciate the support of the Republic of Moldova, and of the scientific community, for global policies that promote the fundamental sciences. The Academy of Sciences of Moldova actively participated in international meetings related to the International Year of Basic Sciences for Sustainable Development, proclaimed by the United Nations General Assembly on December 2, 2021. Currently, the Academy of Sciences and the entire scientific community from Moldova plan to participate in the implementation of the resolution of the United Nations General Assembly of August 25, 2023, which proclaimed the years 2024-2033 as the International Decade of Sciences for Sustainable Development.

We credit the dedication and enthusiasm of researchers from the Republic of Moldova for high-performance results obtained in several fields in recent years. Regrettably, the size of our scientific community has declined year by year, a fact noted in discussions we held during our visits to the Academy of Sciences of Moldova, the Technical University of Moldova, and the State University of Medicine and Pharmacy "Nicolae Testemiţanu".

Nonetheless, in the 21st century, Moldova has an opportunity to achieve prosperity and sustainable development if a new effort to promote basic science, support scientists, and capitalize on research results for the benefit of society. This promise cannot be achieved if the Republic of Moldova continues an inadequate investment at the level of 0.23% of GDP. A commitment of anything less than 1% of the GDP will lead to further erosion in the research and innovation infrastructure of the country. We already see a massive exodus of young people from the country who choose to pursue scientific and teaching careers elsewhere in Europe and around the world. The scientific community is an international enterprise where the best and the brightest settle where the resources are sufficient to sustain meaningful careers. Moldova cannot compete in a situation where discoveries made here cannot be advanced and commercially exploited because of systematic underfunding of our scientific enterprise.

Many examples elsewhere attest to the value of an investment in basic science. In the US, University research in the mid- late-1970's led to the birth of the biotechnology industry. As a result of a synergistic relationship between basic science in the Universities and the biotech sector the enterprise has become a vital economic engine in all 50 states, providing 2.1 million jobs and a \$2.9 trillion impact on the economy in 2021. Moldova is a small country that cannot compare to the major economies in Western Europe and North America, nonetheless, other small countries such as Israel, are able to compete on an international level because of a wise government investment in the science infrastructure.

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We hope that on the eve of the International Decade of Sciences for Sustainable Development, the decision-makers in the Republic of Moldova will dialogue with the academic community to identify selected opportunities for development in fields of research and innovation. With proper financial support of science, research career opportunities will be restored, and young people will return home. The senior members of the scientific establishment who remain and are committed to the development of a knowledge-based society stand ready to welcome a new young leadership. A substantial increase in investment in the scientific infrastructure by the Republic of Moldova will surely encourage additional philanthropic and non-government agency support from our friends in the West. We stand ready to help the Republic to capitalize on the native intelligence and industriousness of the people of Moldova to join as equals with our friends and allies in the EU.

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