



ADVANCING SCIENCE. SERVING SOCIETY

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Mr. John Crowley
Division of Ethics and Global Change
UNESCO

Dear Mr. Crowley:

On behalf of the American Association for the Advancement of Science (AAAS), I am pleased to write in response to your request for comments on the draft document, *Preliminary Study on the Technical and Legal Aspects Relating to the Desirability of Revising the 1974 Recommendation on the Status of Scientific Researchers*. AAAS is the world's largest multi-disciplinary scientific society with approximately 120,000 individual members and 262 affiliated societies, and the publisher of the highly esteemed peer-reviewed journal, *Science*.

In thinking about the matters discussed both in the 1974 Recommendations and the draft, we are guided by the 1975 AAAS document, *Scientific Freedom and Responsibility* (<http://archives.aaas.org/docs/1975-ScientificFreedomResponsibility.pdf>). That seminal report made very clear that "the issues of scientific freedom and responsibility are basically inseparable. Scientific freedom...is an acquired right, generally approved by society as necessary for the advancement of knowledge from which society may benefit. The responsibilities are primary; scientists can claim no special rights, other than those possessed by every citizen, except those necessary to fulfill the responsibilities that arise from the possession of special knowledge and of the insight arising from that knowledge." We are, therefore, very pleased that the draft stresses the importance of considering scientific freedom and responsibility as two sides of the same coin, where both are critical to being a productive and successful scientist.

Although the essence of the *1974 Recommendation* is as relevant today as it was nearly 40 years ago, there is a need for updating to reflect changes in the social organization of science, the impact of the "digital revolution," the transformation of the broader environment in which scientists work and persisting disparities in the capacity of countries to fund research and of people to gain access to the benefits of science. Scientific research is more international than ever before, costs are increasing, the role of the private sector is expanding, and science is inextricably intertwined with major political, social, military, and economic interests. As a result, science is subject to competing claims from an expanding number of stakeholders and there are greater demands on science for accountability and transparency.

Furthermore, there are still places in the world where scientists are severely restricted in their freedom to travel, to pursue certain lines of inquiry, or to disseminate their findings. In such instances, it is important for the scientific community to collectively assert, through UNESCO

and other international organizations, that scientific research flourishes best and is more likely to contribute to society's needs in conditions that foster "respect [for] the freedom indispensable for scientific research" (*International Covenant on Economic, Social and Cultural Rights*, UN, 1966).


We offer the following suggestions regarding the process and content of efforts to revise the *1974 Recommendation*:

1. The process should capture the views of a wide segment of the scientific community, being sure to include views from both developed and developing countries.
2. If the document is to retain its legitimacy as a statement of "the relationship between what scientific researchers can reasonably expect of society, and what society can reasonably ask from its scientific researchers," then the revision process should include broad public consultation.
3. As noted in the draft document, the revision should expand on the notion of the "social responsibilities" of scientists. The concept should be clearly defined, and the document should include a detailed articulation linking scientists' professional responsibilities with their social responsibilities (the issues surrounding "dual use research" are of particular relevance here).
4. In considering monitoring mechanisms and strategies, there should be emphasis on the development of tools and metrics for measuring and evaluating the progress of efforts that the revised *Recommendation* is intended to address.
5. The revision should comment on the education of future scientists as it relates to their ethical and social responsibilities, including suggestions on what might constitute an "adequate education" on such matters and institutional responsibilities for providing it.
6. There should be a focus on the critical importance of diversity, in all of its manifestations, to both the conduct of research and its social consequences. For example, existing language already in the *Recommendation* concerning discrimination should be updated to acknowledge explicitly discrimination on the basis of disability and sexual orientation.
7. The revision should make explicit the connection between scientific research and the right to enjoy the benefits of scientific progress and related protections articulated in Article 15 of the *International Covenant on Economic, Social and Cultural Rights*.
8. Acknowledging the increasing role of the private sector in research and development, suggestions should be made as to how Member States might appropriately regulate and create incentives for the private sector to act in accordance with the *Recommendation*.
9. Where the *Recommendation* encourages decision-making consistent with public opinion, suggestions should be made for effectively and responsibly communicating science to the public.
10. In the event that Member States do not have the financial means to develop an indigenous scientific research capacity, suggestions should be made for how to encourage international contacts and cooperation in science, including through engaging diaspora scientific communities.

11. The revised document should explicitly recognize the value and importance of all fields of science – life, physical, computational, behavioral and social – as well as both applied and basic research.

We hope that our comments are useful to UNESCO as you proceed with your deliberations on the “desirability of revising the 1974 Recommendation.” Should you have any questions about our comments or seek further elaboration on our specific suggestions, please contact Dr. Mark Frankel, Director of the AAAS Scientific Responsibility, Human Rights and Law Program, at mfrankel@aaas.org. We wish you much success with your efforts.

Sincerely,



Alan Y. Leshner