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# CONTRIBUTIONS

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## Science as a Human Right: ESA and the AAAS Science and Human Rights Coalition

Clifford S. Duke, Ecological Society of America (E-mail: [csduke@esa.org](mailto:csduke@esa.org))

George Middendorf, Howard University

Jessica Wyndham, AAAS Science and Human Rights Program

In December 2008, the Universal Declaration of Human Rights celebrated its 60th anniversary. Soon after, the American Association for the Advancement of Science (AAAS) led scientific societies in launching a new Science and Human Rights Coalition (SHRC). ESA Executive Director Katherine McCarter and Science Programs Director Clifford Duke attended the January 2009 launch, where participants heard from colleagues and human rights practitioners about why such a coalition is needed and what it is committed to accomplishing. Participants learned how they can both benefit from and contribute to Coalition working groups and to a joint initiative of the Coalition. Subsequently, ESA became a full member of the Coalition, represented by Clifford Duke and George Middendorf of Howard University.

Coalition members work both through working groups devoted to specialized areas of activity and together on an over-arching initiative. The five working groups are:

1. *Welfare of Scientists*, which works to protect and defend the human rights of scientists under threat and help the scientific community to better respond to cases of alleged human rights violations by increasing the number of scientific associations involved and coordinating their efforts.

2. *Science Ethics and Human Rights*, which aims to enhance the ethical underpinnings of research by raising the visibility of human rights principles as part of the practice of science, including but not limited to scientific research.

3. *Service to the Scientific Community*, which helps scientific associations develop human rights-related activities and services specifically for the scientific community and contribute their unique skills and knowledge to the larger community dedicated to the realization of human rights.

4. *Service to the Human Rights Community*, which works to identify scientific expertise or

resources needed by human rights practitioners and promotes the application of scientific techniques and methods by the human rights community.

5. *Education and Information Resources*, which works to identify, compile, and develop resources and create opportunities for exchange to establish a stronger foundation for productive, collaborative work on human rights.

Clifford Duke participates in the Service to the Scientific Community working group, and George Middendorf in the Science, Ethics and Human Rights working group.

The Coalition is also pursuing a joint initiative to help realize the human right to “the benefits of scientific progress.” First internationally recognized in the Universal Declaration of Human Rights (1948; Article 27) and subsequently elaborated as part of the internationally binding International Covenant on Economic, Social and Cultural Rights (1966; Article 15), the right to the benefits of science remains one of the least well-known and understood aspects of the international human rights framework. In 2007, UNESCO initiated a process to elucidate the meaning of the right, leading to the adoption in July 2009 of the “Venice Statement,” which outlines the core content of the right. The Venice Statement also calls upon the scientific community, among others, to contribute to the further elucidation and promotion of the right, and to monitoring of its implementation.

Specifically, Article 15 of the International Covenant on Economic, Social and Cultural Rights requires governments to:

1. recognize the right to “enjoy the benefits of scientific progress and its applications,”
2. take the steps necessary for the “conservation, the development, and the diffusion of science,”
3. “respect the freedom indispensable for scientific research,” and
4. “recognize the benefits to be derived from the encouragement and development of international contacts and cooperation” in science.

While a great deal of work remains to be done in clarifying the meaning of the right to benefit from scientific progress, some practical examples of the types of outcomes that might occur through the promotion of this right include:

- implementing international exchange programs to bring together scientists and students to develop ways to improve the living conditions of marginalized persons (e.g., cheap water purification methods; agricultural solutions to drought)
- encouraging scientists, governments, and corporations to participate in cooperative programs that provide life-saving technologies to marginalized persons (e.g., pharmaceutical companies working with human rights organizations to make AIDS drugs available to children in the developing world)
- establishing research and funding priorities that take into account the needs of impoverished and marginalized people (e.g., funding agencies in health and agriculture including as a priority the development of scientific applications to improve the economic well-being and health of

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vulnerable populations)

- developing new approaches to meeting the dual needs of protecting intellectual property to encourage scientific progress and assuring that impoverished and marginalized people have access to the benefits of science (e.g., awarding prizes to reward innovation), and
- developing methods for improved dispersal and understanding of scientific information that can be used by affected communities in political decision-making processes.
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The Coalition-sponsored Joint Initiative aims to: increase knowledge among scientific associations about the existence, significance and potential applications of this human right; engage scientific associations and other key institutions in efforts to realize this right; and leverage this right to accomplish the objectives of the Coalition's areas of activity. The first stage of the Coalition's Joint Initiative is underway as each working group determines how Article 15 is relevant to its area of activity and develops projects aimed at contributing to the elucidation and promotion of the right.

The working group on Service to the Scientific Community is engaging individual scientific associations (through their institutional committees, leadership, and/or membership) from across the life, physical, social, behavioral, and engineering sciences to determine what measures need to be adopted to realize the right in practice. Once having considered this question, the associations will also be asked to identify the existing barriers to the realization of the right in practice. This information will contribute to the work of the Service to the Human Rights Community working group which is going to develop indicators by which to measure government compliance with their obligation to realize the right to the benefits of science.

This first stage of the Joint Initiative will lead to a presentation of findings and recommendations to the Office of the UN High Commissioner for Human Rights in December 2011. Further information about the Coalition's programs, mission and goals, membership, and organizational structure is available in the Foundational Documents and Plan of Action (2009–2011), available at <http://shr.aaas.org/coalition/>. In addition, ESA members will have the opportunity to learn more about Article 15 and the work of the Coalition in a special session at the 2011 Annual Meeting in Austin, Texas. For details, contact Cliff Duke ([csduke@esa.org](mailto:csduke@esa.org)) or George Middendorf ([gmiddendorf@howard.edu](mailto:gmiddendorf@howard.edu)).

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## ERRATUM

We regret that in the article “Does Science Education in Developing Countries Really Count?” in *ESA Bulletin* 91(4), October 2010, pages 432–437, the author's name, Emmanuel T. Tyokumbur, was misspelled.