

In April 2002, the U.S. National Academies hosted an interacademy workshop, in conjunction with the Iranian Academy of Medical Sciences, on the topic of Science and Ethics. The workshop was held at the Conference Center of the Rockefeller Foundation in Bellagio, Italy, and included almost 20 participants from the United States and Iran. Lectures were given by American and Iranian participants on a range of topics, including; Bioengineering and Ethics, Ethics in the Protection of the Environment, The Impact of Moral Values on the Promotion of Science, and the Current Situation

of Bioethics in Genetic Research in Iran. Participants also took part in four break-out groups to discuss important, far-reaching topics in Science and Ethics. These groups focused on; Research Integrity, Environmental Equity, Ethics in Medicine, and Ethics and Education.

POTENTIAL FOR FUTURE COOPERATION IN SCIENCE AND ETHICS

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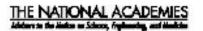
Experiences and Challenges

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of Science and Ethics

As a result of these lectures and discussions, during the final plenary session of the workshop the group identified the following potential cooperative projects in science and ethics that it considered to be of highest priority;

- 1. The academies should encourage the integration of ethical values into kindergartengrade 12 science curricula with special attention to "hands-on" approaches that encourage pupils to work together and gain an appreciation of how individual values should be reflected in real life situations.
- 2. The academies should organize a workshop or study on food security, including consideration of the control of food contamination and food-borne diseases as well as the adequacy of and access to the food supply in changing demographic situations. In the project, consideration should also be given to the importance and content of nutritional diets that help prevent obesity and other food-related ailments. The project should involve a review of relevant legislation in both countries to help ensure that the project encompasses the major issues of current concern.
- 3. The academies should arrange for an exchange of ethics experts who are familiar with science and technology issues. Initially, one expert from each country should visit the other country and lead several seminars on science, technology, and ethics while also consulting with local experts in the field of ethics. A second step might include preparation by the two experts of a joint paper on key ethical concerns in developing and carrying out scientific research and related programs.



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- 4. The Iranian Academy of Sciences should review the report of the National Research Council entitles On Being a Scientist and determine whether the report or a modified version of the report would be appropriate for distribution in Iran and/or in other Muslim countries. The Iranian academy should also consider preparing a first draft of a companion report that might be entitled On Being an Engineer. After review by the U.S. National Academy of Engineering, the report might be published as a joint report of the two academies. Alternatively, each side could prepare its own version of the report.
- 5. The academies should consider organizing an exchange of experts in the field of cancer epidemiology who might compare different approaches to assessing the impact of environmental pollutants on cancer rates including impacts from the petrochemical industry. A second priority field for an exchange of experts should be medical genetics.
- 6. The academies should consider organizing workshops on environmental education at various levels from kindergarten through university. A unique aspect of the workshops would be to develop modules for appropriate levels that could be presented in films and other animate forms that attract the interest of students.
- 7. The academies should organize workshops and related activities on the legal and policy frameworks for addressing environmental issues while also encouraging the development of sister city arrangements between municipalities that have been concerned with health, environmental, and other issues involving a host of ethical considerations.
- 8. The academies should facilitate exchanges of scientists, educators, and students that emphasize the ethical aspects of the education process. One approach would be to enlist the participation of organizations in the two countries that have histories of promoting exchanges that are sensitive to ethical issues.

More than a dozen other suggestions were presented in the reports of the breakout groups. While the participants decided not to expand the priority list to accommodate more of these suggestions, they agreed that these suggestions should not be lost, and included them in the reports of the breakout groups. Papers presented at the workshop are included as appendixes to the report.

THE COMMITTEE ON THE EXPERIENCES AND CHALLENGES OF SCIENCE AND ETHICS IN THE UNITED STATES AND IRAN

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For More Information

Copies of *The Experiences and Challenges of Science and Ethics: Proceedings of an American-Iranian Workshop* are available from the National Academy Press; call (800)624-6242 or (202)334-3313 (in the Washington metropolitan area), or visit the NAP website at <u>www.nap.edu</u>. For more information on the project, contact staff at (202) 334-2644 or visit the Policy and Global Affairs website at <u>www.nationalacademies.org/pga</u>.