

Meeting Report

Interactions with Source Countries. Guidelines for Members of the American Society of Pharmacognosy

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The formulation of a set of guidelines for members of the American Society of Pharmacognosy to follow in their relationship with genetically rich source countries has been discussed for several years. At the 37th Annual Meeting of the American Society of Pharmacognosy, held in July 1996 at the University of California, Santa Cruz, a resolution and set of guidelines promoting the research and training of source country scientists, the facilitation of technology transfer, and the fair and equitable sharing of results and benefits arising from the utilization and commercialization of source country natural resources were officially endorsed by the membership in attendance.

Natural products, and biological and medicinal agents derived therefrom, are an integral part of the economic and health care systems of most of the world's nations and continue to be a major source of novel bioactive agents.¹ Members of the American Society of Pharmacognosy (ASP) have been at the forefront of natural product drug discovery and development, and much of their research has involved the investigation of materials from biologically rich source countries, located

principally in developing regions of the world. In recent years, and particularly since the signing of the United Nations Convention on Biological Diversity by over 150 nations in Rio de Janeiro in June 1992, there has been an increasing awareness in developing countries of the potential value of their indigenous genetic resources. This has resulted in the publication of a number of declarations and resolutions urging greater international collaboration and coordination in efforts to pro-

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mote the conservation of biological and cultural diversity worldwide.²

In 1992, discussions concerning the formulation of guidelines for ASP members to follow in their interaction with source countries were initiated, and in 1994, the then President of the American Society of Pharmacognosy, Dr. John M. Cassady, established an ad hoc Committee on Indigenous Materials to develop a set of guiding principles for members of the Society to follow in pursuing research involving the use of indigenous knowledge and resources. As their first task, the Committee prepared a paper entitled "Natural Products Drug Discovery and Development: New Perspectives on International Collaboration", which was published in 1995 in the *Journal of Natural Products*.² This paper discussed the implications of some of the declarations and the United Nations Convention on Biological Diversity for the natural products scientific community and summarized the policies of several developed country organizations involved in natural products research. The paper also presented the perspectives of representatives of some of the source countries located in the regions of greatest biodiversity. The Committee then prepared a resolution and draft set of guidelines that were published in the ASP Newsletter, Vol. 32, No. 1, 1996, and ASP members were invited to comment and suggest modifications. In July 1996, the resolution and guidelines were presented to ASP members attending the 37th Annual Meeting of the Society at the University of California, Santa Cruz, and were approved without any dissenting votes.

The resolution and guidelines as approved by the ASP membership are presented below.

Resolution

The American Society of Pharmacognosy, a community of scientists from many different countries and cultural backgrounds, dedicated to the moral, ethical, and sustainable use and development of all natural resources for medicinal and biological purposes, fully supports the worldwide adoption of measures to promote the conservation of biological and cultural diversity. Recognizing that source country governments have ultimate sovereignty over their biological resources, and recognizing the contribution of indigenous and local peoples and their knowledge to the conservation and sustainable utilization of many of these resources, the Society stresses that the implementation of the above measures should be strengthened through enhanced international collaboration in such a manner as to:

- Promote the research and training of source country scientists and the facilitation of technology transfer.
- Ensure the fair and equitable sharing of the results and benefits arising from the utilization and commercialization of source country natural resources with all participants.

Members further recognize that their actions affect the research activities of their fellow members and other colleagues and accept an obligation to maintain integrity and professional behavior so as not to jeopardize current and future research by others.

Guidelines for Implementation of Resolution

(1) Accepting that collaborators from many source countries will be adhering to the principles embodied

in the United Nations Convention on Biological Diversity and declarations such as the Manila Declaration, ASP members will establish collaborations with recognized source country scientists and/or organizations in the performance of research on natural materials for medicinal and biological purposes. In the absence of suitable collaborators, members will comply with all permit requirements and will abide by all source country regulations governing the collection of materials. When acquiring samples through brokers or other intermediaries, members will require that the samples be accompanied by written evidence that they were obtained in compliance with all source country legal requirements.

(2) In sampling from land and/or sea used by indigenous and/or local communities, or in the event that use is made of indigenous knowledge in guiding the selection of samples for collection, members and their source country collaborators will make good faith efforts to obtain the prior informed consent of the relevant parties and to safeguard the legitimate rights of such communities.

(3) Collaborations with organizations or individuals in source countries will reflect equitable partnerships in the sustainable use and development of biological materials in the source country and the exchange of results of the biological and chemical evaluation of materials in a confidential and timely manner.

(4) Through training and technology transfer, members and their parent organizations will endeavor to support the development of the source country human and material resources needed for all aspects of natural products research, including collection, cataloguing, and biological and chemical evaluation. When feasible, members will endeavor to promote the improvement of relevant source country facilities by eliciting the support of appropriate government departments, international agencies and foundations, and/or multinational corporations.

(5) Members and their parent organizations will recognize, financially, or in some other appropriate manner acceptable to all participating parties, directly and/or indirectly, both the source of the biological material and the use of traditional knowledge in the event that one or both of these factors contributed to the development of a commercial product.

(6) In the pursuit of the production of a biologically active agent for advanced development and possible commercial production, members, their collaborators, and their parent organizations will identify activities that might have an adverse impact on the conservation and sustainable use of biological diversity and adopt appropriate measures to change those activities so as to minimize any adverse effects. They will inform the relevant source country government department(s) and local communities of such activities and monitor and minimize the effects to the satisfaction of these parties.

References and Notes

- (1) Cragg, G. M.; Newman, D. J.; Snader, K. M. *J. Nat. Prod.* **1997**, *60*, 52–60.
- (2) Baker, J. T.; Borris, R. P.; Carte, B.; Cordell, G. A.; Soejarto, D. D.; Cragg, G. M.; Gupta, M. P.; Madulid, D. A.; Tyler, V. E. *J. Nat. Prod.* **1995**, *58*, 1325–1357.