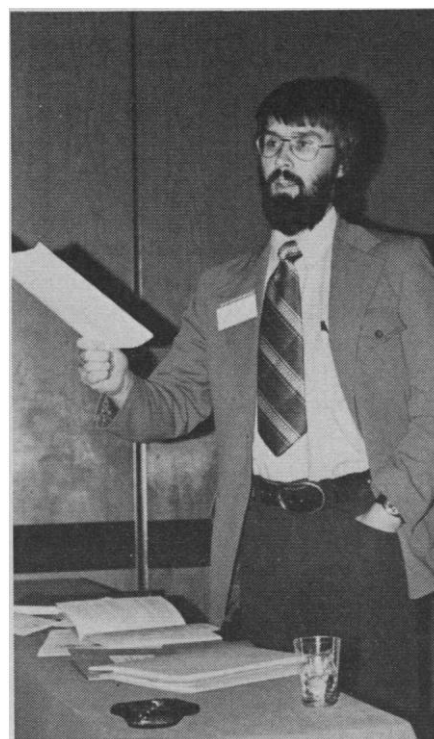


During the 3 days of the workshop the state representatives discussed the technical, economic, and political aspects of the waste disposal problem both with scientific experts and among themselves. Attendees were also presented with a bibliography of source

materials and responded actively to the opportunity to order reprints. An all-day tour of the Atomic Energy Commission's (AEC) Nevada Weapons Test Site gave them a firsthand look at a proposed interim surface disposal facility. During the site visit current AEC thinking regarding technical aspects of disposal was presented by Harvey Soule, chief of the planning branch of the AEC Division of Waste Management and Transportation.

It was clear from the outset that many of the policy-makers who attended the workshop were skeptical about the AEC's disposal plans and the procedures it is employing to effect those plans. In the opening address, Nevada Governor Mike O'Callaghan stated: "Assurances coming from a federal government which many feel is unresponsive to local feedback is not going to convince the American public that a particular proposal is safe. State government must be involved in decisions regarding the development of nuclear programs and proposals. Without the involvement and subsequent support [of the states] in those cases where it is appropriate, this nation's nuclear effort will flounder." The governor suggested specific changes in federal law which would give the states coequal regulatory power over the transportation and disposal of radioactive wastes. He also listed a number of specific conditions that would have to be met by the AEC if a Nevada site were to be considered for waste disposal purposes.

Proponents and opponents of large-scale nuclear power generation were well represented at the workshop, both among the technical experts and the state representatives. Alfred T. Whatley, a physicist who is executive director of the Western Interstate Nuclear Board, provided a balanced summary of the hazards involved in the transportation and disposal of radioactive wastes, though he also professed his belief that the problems involved in minimizing those hazards are soluble. Terry Lash, a physicist with the Natural Re-



Representative Perry Bullard of Michigan's 53rd Legislative District.

sources Defense Council, made a strong case against the implementation of an extensive nuclear energy program. Panels on present federal and state regulatory programs and on possible future state programs provided opportunities for the policy-makers to examine the AEC's transportation and disposal plans in detail, and to exchange experiences and ideas for more effective state involvement in policy-making.

The Las Vegas workshop was one of a series of AAAS regional seminars which are being funded by the National Science Foundation (NSF) for the purpose of initiating and maintaining dialogues between scientists, engineers, and policy-makers. It was the first of these seminars to concentrate on a regional issue whose solution is an essential component of this nation's long-range energy posture. In a letter of thanks addressed to the co-organizers of the workshop, Philip R. Grant, of the New Mexico State Legislature, expressed the hope that the sort of dialogues AAAS has been furthering might ultimately be instituted for legislators in all states and on a continuing basis.

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Nevada Governor Mike O'Callaghan inaugurates the workshop. Seated: Joseph W. Mullin of the National Legislative Conference.

Geneticists found isozymes, particularly the allelic isozymes, to be useful gene markers for investigating genetic linkage, gene expression in somatic cell hybrids, and gene flow between populations. A number of sessions were devoted to isozymes encoded in multiple loci for the purpose of studying the evolution of the genome.

Several new biological observations were presented during these meetings. For example, it appears that many isozymes have characteristic subcellular locales which contribute to overall regulation of enzymatic activity and physiological function. In a very similar vein, evidence was brought forth indicating that some isozymes are bound preferentially in the cell and that the release from binding is mediated by a change in coenzyme ratios. The binding specificities of these isozymes are undoubtedly important in subcellular localization, and there are substantial differences in kinetic properties between the bound and unbound forms, suggesting an important regulatory role for these isozymes.

Those researchers employing allelic isozymes in population, ecological, and evolutionary studies indicated the importance of examining allelic isozymes at many enzyme loci, loci encoding for enzymes in many different metabolic pathways, in order to gain a coherent picture of responses to different selective forces.

A consideration of gene expression during cellular differentiation and the analysis of isozyme patterns in neoplastic cells may permit the elucidation of some of the genetic and molecular bases of cancer. Furthermore, the presence of embryo-specific and cell-specific isozymes opens new avenues of investigation into the specificity of gene function and in addition raises the rather broad question of whether constellations of enzymes exist in unique isozymic forms within certain specialized cells and tissues.

The success of the meeting was in part reflected by the enthusiastic and vigorous discussions during the sessions and by the large number of younger scientists who use isozymes to test hypotheses that had only been formulated within the last few years. The symposium proceedings are expected to be published, in four volumes, by Academic Press.

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Other AAAS seminars held since May 1973 have dealt with regional energy resources and transportation problems. During 1974 seminars were held in Tucson, San Diego, Albuquerque, and Portland, Maine. The Association plans to strengthen and broaden the program during the coming year.

—WILLIAM A. BLANPIED

A Request to Readers

"AAAS News" was inaugurated with the 15 November 1974 issue of *Science* as a means of communication between the AAAS Membership and Program offices. Since all five of those offices have presented brief outlines of their programs, it is time to ask AAAS members what they would like to see reported in "AAAS News" and, more generally, how they believe the program offices can better serve their needs and interests.

Letters can be addressed to the Communications Department or directly to the appropriate program offices.

Notes from the Offices

Science and Society Programs. The deadline for completed applications for the 1975-76 Congressional Science Fellows Program is 31 March.

A "Directory of Public Service Internships" is available free of charge from the National Center for Public Service Internship Programs, 1735 I Street, NW, Washington, D.C. 20036.

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Opportunities in Science. Minority and women scientists who are interested in arranging symposia for the AAAS Annual Meeting in Boston in February 1976 should contact the office promptly.

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International Science. The office would appreciate receiving notes, reports, and other information on the problems encountered with the introduction of small-scale technologies, particularly small-scale energy devices and those related to food production and processing. The differentiated introduction to and the use by women is of special concern.

* * *

Communications. A series of seminars on the science of food is being planned. These will be organized in

cooperation with local science museums starting in late spring. Suggestions for specific themes, speakers, and locations are invited.

Members interested in participating in other education programs at their local science museums should also identify themselves.

* * *

Science Education. The office will continue its NSF-supported Leadership Specialist Project in 1975-76, assisting ten schools with large minority populations to develop effective in-service programs for teachers who are preparing to use *Science—A Process Approach*.

NOVA Program Schedule

9 February. *The Lysenko Affair.* A dramatic reconstruction of the battle that raged for 20 years in the Soviet Union between the Lysenkoists and the classical geneticists and ended abruptly in 1948 when Stalin announced his support of Lysenko (a BBC/WGBH production).

16 February. *The Tuaregs.* The way of life of Sidi Mohammed and his family, who live high in the Hoggar Mountains of the Sahara Desert, is crumbling. Yet they have still not admitted that perhaps they too must change (a Granada production).

23 February. *Bird Brain—The Mystery of Bird Navigation* (repeat). The use of radar has shown that many migrating birds travel at night and can be excellent meteorologists. Homing pigeons behave as if they have a map to tell them where home lies and a compass to tell them how to get there (a BBC production).

2 March. *The Search for Life* (repeat). The Viking lander will set down on Mars in July 1976 to try to find out if life exists outside the earth. The NOVA team explores the origins of life on Earth and examines the Viking lander being built in its germfree, ultraspecial room before starting on its long journey (a WGBH production).

9 March. *The Plutonium Connection.* An investigation is made on the ease with which a nuclear bomb could be designed using unclassified information, on how effectively the plutonium required for that purpose is guarded, and on whether it will ever be possible to keep track of the increasing quantities of plutonium being produced in reactors around the world (a WGBH production).