

ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY
200 Main Street, Suite 210, Little Rock, Arkansas 72201 (501) 371-3554

ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY
MINUTES OF THE SPECIAL EIGHTEENTH MEETING OF THE BOARD OF DIRECTORS
LITTLE ROCK, ARKANSAS
JUNE 19, 1986

The June 19, 1986 special meeting of the Board of Directors of the Arkansas Science & Technology Authority was called to order by Mr. Louis Ramsay at 1:15 p.m. Other members of the Board attending the meeting included Dr. Joycelyn Elders, Dr. Ron Hart, Dr. Joe Nix, Mr. Win Thompson, Dr. Paul Marion, and Representative John Lipton. A quorum was present.

Dr. John Ahlen presented the budget submitted for the next fiscal year--FY 87. He estimated that during the current fiscal year, which ends June 30, 1986, the Authority has spent \$360,000 on operations. This figure is considerably less than the amount appropriated, which was approximately \$530,000, due to the multiple budget cuts made during 1986. For FY87, the Authority's budget has already been reduced approximately 5 percent from the original appropriation. Items that were unable to be completed due to the decrease in funds were two professional service contracts--for legal help and advertising for the Authority and its programs. Both contracts had to be renegotiated downward during the past months.

The budget for the next biennium's operating funds has been prudently estimated using the current biennium as a base, with a few alterations. Two additional professional staff positions have been requested to help the already overloaded personnel in the Basic and Applied Research Grant Program and the Seed Capital Investment Program. Another additional clerical position has also been requested for maintenance and operations.

The advertising contract with Combs & Company was also outlined for the Board. Discussion concerning the direction and avenues for publicizing the Authority's activities was held. Dr. Hart strongly urged that the advertising be as effective and productive as possible to really produce results for the State of Arkansas and its people. Another option for consideration was the idea of possible increased coordination of some advertising avenues for publicizing the State's activities with AIDC's budget. Dr. Ahlen pointed out, however, that AIDC's marketing efforts are generally marketed toward attracting people from outside the

State, and the Authority's mission and goals are directed at building Arkansas from within. The Authority's message needs to be presented to the people in the State. Mr. Ramsay suggested the possibility of arranging a meeting between AIDC and the Authority to discuss the prospects of cooperative advertising efforts. Dr. Ahlen suggested the possibility of such a meeting occurring at the Industrial Developers of Arkansas' annual meeting to be held in September 1986, since members from both agencies will be in attendance.

Dr. Ahlen discussed the proposed budget request for the next biennium. There is an increase of \$20,000 in salaries. This includes a 5 percent yearly increase for all staff personnel plus an adjustment for two positions on the staff who deserve compensation above what is currently being provided in order to bring their salaries up to an appropriate level.

These suggestions for the next biennial year's budget will be brought back to the Board for approval at the next regular meeting to be held on July 17, 1986.

Dr. Hart presented six remaining proposals from the February 3, 1986 solicitation to the Board in the form of draft Resolution No. 86-3 (see Appendix A) which was recommended to the Board by the Research Committee. (See Appendix B for the unapproved minutes of the Research Committee meeting on June 19, 1986.) He stated that each of the proposals being presented for approval of funding each had economic and research development potential, and all have passed rigorous external and internal peer review. These proposals conclude those considered eligible from that first solicitation.

Resolution No. 86-3 was approved unanimously on a motion by Dr. Marion, seconded by Mr. Thompson. The funded proposals were 86-B-0011, "Advancement of Laser Doppler Instrumentation in Bioprocess Engineering;" 86-B-0042, "Goniometer-Based System for Neonatal Screening of Congenital Hip Disease;" 86-B-0043, "Development of Microprocessor-Based Instrumentation and Digitized Imagery for Investigation of the Varying Light Environment of the Forest Floor;" 86-B-0048, "Studies of Actual Viscosity of Oil Between Friction Plates During Operation in a New Patented Brake Design;" 86-B-0055, "Selection of Glyphosate Resistant Bermudagrass Through Cell Culture;" and 86-B-0066, "Moving Horizon Control and Its Application to Robotics."

Mr. Thompson requested that the Board be advised of the actual dollar amounts funded after negotiations of the individual proposal budgets are completed.

Dr. Marion requested that after the Board meeting the Authority's staff put the six approved proposals in non-technical terms for the ease of the press' understanding.

Dr. Hart next presented draft Resolution No. 86-4 to the Board (see Appendix C). The Resolution states that some of the meritorious proposals which have long-term benefits, as opposed to the short-term benefits considered in the first review, be reconsidered for funding if sufficient funds remain. The Resolution met with enthusiastic support from the Board and was unanimously approved on a motion by Dr. Hart, seconded by Dr. Elders.

The Board meeting was adjourned at 2:35 p.m.

Respectfully submitted,

Joe Nix, Ph.D.
Secretary, Board of Directors

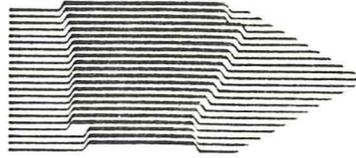
List of Appendices:

- A. Resolution No. 86-3
- B. Research Committee Minutes of June 19, 1986
- C. Resolution No. 86-4

APPROVED by the Board of Directors on this _____ day of

_____.

Joe Nix, Ph.D.
Secretary, Board of Directors



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RESOLUTION NO. 86-3

PROVIDING THE APPROVAL FOR THE FUNDING OF SIX BASIC RESEARCH GRANT PROGRAM PROPOSALS BY THE BOARD OF DIRECTORS OF THE ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY.

WHEREAS, Act 859 as amended empowers the Arkansas Science & Technology Authority to establish and administer a Basic Research Grant Program; and

WHEREAS, Act 595 includes an appropriation of \$1,800,000 for funding basic and applied research in Arkansas' colleges and universities; and

WHEREAS, proposals were solicited in accordance with rules and guidelines for the Program; and

WHEREAS, proposals were reviewed for eligibility and completeness by the Authority's staff; reviewed for scientific merit by the Authority's Science Advisory Committee; and evaluated and ranked on the basis of scientific merit by a panel of internal and external peers in the appropriate fields of science; and

WHEREAS, the Science Advisory Committee recommends, and the Authority's Research Committee concurs, that (1) no proposal shall be funded without first receiving at least one evaluation from a peer outside the State of Arkansas, and (2) no proposal shall be funded if its average rank score is less than 7.5 on a scale of 10; and

WHEREAS, the Arkansas Legislative Council advises the Authority to give funding priority to those proposals which have clear economic potential that will create jobs, providing the proposals satisfy the conditions listed above; and

WHEREAS, the Research Committee is committed to recommending to the Board of Directors those proposals that have clear economic development potential, are ranked as having the best science, and carry on the effort of the National Science Foundation's Experimental Program to Stimulate Competitive Research among Arkansas' young investigators; and

WHEREAS, the Research Committee finds that it is appropriate for the Authority to fund only proposals that propose research efforts which clearly test a scientific hypothesis; and

NOW THEREFORE BE IT RESOLVED;

THAT the Arkansas Science & Technology Authority's Board of Directors approves for funding the following proposals:

PROPOSAL NO. 86-B-0011, to develop a research center of laser instrumentation with particular focus in bioprocess engineering and a modified aerosol delivery system, "Advancement of Laser Doppler Instrumentation in Bioprocess Engineering," by Malay K. Mazumder of the Graduate Institute of Technology, University of Arkansas at Little Rock.

PROPOSAL NO. 86-B-0042, for a device which can be used to screen for hip diseases in newborns, "Goniometer-Based System for Neonatal Screening of Congenital Hip Disease," by Paul C. McLeod of the Graduate Institute of Technology, University of Arkansas at Little Rock.

PROPOSAL NO. 86-B-0043, for development of an instrument which has application in the estimation and prediction of net forest productivity, "Development of Microprocessor-Based Instrumentation and Digitized Imagery for Investigation of the Varying Light Environment of the Forest Floor," by James Douglas Wilson of the Graduate Institute of Technology, University of Arkansas at Little Rock.

PROPOSAL NO. 86-B-0048, for an understanding of the heat dissipation during operation of an innovative clutch which has potential uses in a wide variety of fields, "Studies of Actual Viscosity of Oil Between Friction Plates During Operation in a New Patented Brake Design," by D.A. Renfroe of the University of Arkansas at Fayetteville.

PROPOSAL NO. 86-B-0055, for research with potential application to both forage and turf bermudagrass, "Selection of Glyphosate Resistant Bermudagrass Through Cell Culture," by John W. King and Feng H. Huang of the University of Arkansas at Fayetteville.

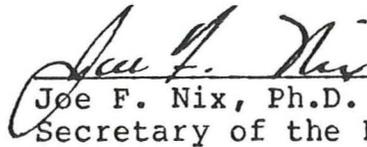
PROPOSAL NO. 86-B-0066, to develop the mathematical equations necessary for the computer-aided design of complex control systems necessary in the design of robotic manipulators, "Moving Horizon Control and Its Application to Robotics," by Engin Yaz of the University of Arkansas at Fayetteville.

THAT the Authority's staff may negotiate, in consultation with and concurrence by the Research Committee, individual award amounts not to exceed the amounts requested in the identified proposals and in the aggregate not to exceed \$241,673; and

BE IT FURTHER RESOLVED:

THAT all of the above policies are subject to the action of the Board of Directors within the framework established by Act 859 of 1983 as amended.

APPROVED by the Board of Directors
on this 19th day of June, 1986.



Joe F. Nix, Ph.D.
Secretary of the Board of Directors

UNAPPROVED MINUTES
OF THE
RESEARCH COMMITTEE MEETING
JUNE 19, 1986

The Research Committee of the Board of Directors met at 9:00 A.M., Thursday, June 19, 1986 at the Authority office. Dr. Ron Hart, chairman, Dr. Joycelyn Elders and Dr. Joe Nix, committee members, and John Ahlen and Patricia Troth, staff members were present.

The purpose of the meeting was to complete the review of the remaining proposals from the Basic Research Grants Program, February 3, 1986 proposal solicitation, in accord with policies established at the April 12, 1986 committee meeting.

Review Process. Fourteen proposals, which had not completed the peer review process prior to the April 12, 1986 meeting, were reviewed.

Policy Decisions. The Research Committee reaffirmed its commitment to recommend to the Board of Directors those proposals that have clear economic development potential, are ranked as having the best science, and that carry on the the effort of the National Science Foundation's Experimental Program to Stimulate Competitive Research among Arkansas' young investigators.

The Research Committee further found it appropriate to recommend for funding only those proposals that propose research efforts which clearly test a scientific hypothesis.

Of the 14 proposals reviewed by the Research Committee, six proposals were recommended to the full Board for funding approval. The maximum sum requested from the Authority for these six proposals is \$241,673.

It was the concensus of the Research Committee that specific line items within the budget of each proposal approved for funding should be negotiated where appropriate in order to ensure prudent use of State funds.

The Research Committee further recommended that the Board of Directors, after funding those proposals from rounds one and two of grant applications that meet the will and spirit of the Arkansas Legislative Council, should consider those proposals from the first two rounds of grant applications that address long-term economic impact through educational enhancement, furtherance of general knowledge, and encouragement of general research expertise.

The meeting adjourned at 12:00 P.M.



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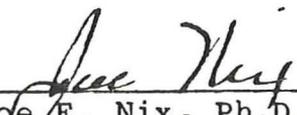
RESOLUTION NO. 86-4

WHEREAS, the Research Committee, Science Advisory Committee, and panels of external and internal expert reviewers have conscientiously fulfilled the first and prospectively will fulfill through the second round of grant applications, the will and spirit of the resolution of the Joint Legislative Council;

NOW, THEREFORE BE IT RESOLVED;

THAT those funds remaining based upon scientific merit will be allocated to those programs and projects which have long-term economic impact, through educational enhancement, furtherance of general knowledge, and encouragement of general research expertise within the State of Arkansas.

APPROVED by the Board of Directors
on this 19th day of June, 1986.



Joe F. Nix, Ph.D.
Secretary of the Board of Directors