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**ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY**

100 Main Street, Suite 450, Little Rock, Arkansas 72201 (501) 324-9006

**MINUTES OF THE 43RD MEETING OF THE  
ARKANSAS SCIENCE AND TECHNOLOGY AUTHORITY'S  
BOARD OF DIRECTORS  
LITTLE ROCK, ARKANSAS  
SEPTEMBER 21, 1990**

**CALL TO ORDER**

The meeting was called to order at 1:42 p.m. by Mr. Harry Truman Moore, Chairman of the Board, in the conference room of the Department of Higher Education in Little Rock, Arkansas.

A quorum of Board members was present and included Mr. William Bowen, Dr. Diane Gilleland, Dr. James Hendren, Mr. Harry Truman Moore, Dr. Joe Nix, Dr. Betty Overton, Dr. Don Pederson, and Mr. Jerry Webster.

The Authority's executive staff attending the meeting included Dr. John Ahlen, Mr. James T. Benham, Dr. Joe Gentry and Ms. Alice Rumph Smith. Other staff members attending the meeting included Melissa Adams, Jacqui Klodt, Anita Millard, Chuck Myers, Stacie Nunn and Marion Staab.

Visitors attending the meeting included Ms. Carol Griffee from Editorial Services, Inc.

**APPROVAL OF MINUTES**

Mr. Moore presented the minutes from the May 17, 1990 meeting for approval. Mr. Bowen moved that the minutes be approved. Dr. Overton seconded the motion; the Board gave its unanimous approval.

**PRESIDENT'S REPORT**

Dr. Ahlen directed the Board's attention to the President's Report. The first item brought before the Board was a copy of the completed ASTA "Plan For The 1991 Biennium and Beyond" that was approved by the Board of Directors. Dr. Ahlen stated that the plan has been used extensively by the staff in preparing ASTA's budget request for the next biennium. It has also been used in presentations to the executive staff that prepares the Governor's budget recommendations.

## NATIONAL BIOTECHNOLOGY COOPERATIVE UPDATE

Next, Dr. Ahlen asked Alice Smith to give the Board an update on the National Biotechnology Cooperative project.

Ms. Smith reported that the NBC feasibility study was submitted to NCTR on June 20. The study was officially released on September 5 in conjunction with a Wilowe Institute conference on Technology Corridors.

Ms. Smith stated that the study finds the project to be feasible. Four or five other volumes concerning the master plan have now been completed as a part of the two year contract.

There are two remaining tasks under the Scope of Work for the contract: (1) a potential user survey and (2) a national information program. Ms. Smith stated that due to events during the summer involving questions that came from meetings in Washington with federal officials, NCTR is anticipating that the Scope of Work will be revised and the two remaining tasks for this project will be geared towards the management and operating issues of the NBC entity at NCTR.

Ms. Smith reported that because of the situation with the federal budget, NCTR may have to shut down or furlough employees until the budget crisis subsides, which could delay things. She anticipates NCTR completing the contract by its due date of September, 1991.

## ANNUAL REPORT

The next item was the annual report. Dr. Ahlen reported that the annual report was at the printer and would be ready in time for the budget hearing on October 10.

Dr. Hendren moved that the Annual Report be distributed when it is printed; Mr. Bowen seconded the motion, which passed unanimously.

## NIST GRANT AWARD

Dr. Ahlen reported that ASTA was awarded a \$125,000 award by the National Institute for Standards and Technology. The award will be used to implement a federal technology transfer effort in the state.

The award will be used to administer small grants for colleges and universities to conduct the transfer of technology. This could lead to opportunities for either

applied research grant proposals or seed capital investments.

Dr. Ahlen stated that 40 states submitted proposals, which were limited to one per state. Arkansas had one of the top ranking proposals.

Dr. Ahlen stated that ASTA hopes to fund 36 technology transfer projects from this grant with a maximum budget for each project of \$3250 per project.

Dr. Ahlen noted that under the usual operations of the Authority, decisions concerning each individual project carried out through this award would come to the Board for approval, but since this is a pilot project with small award amounts, Dr. Ahlen requested that the staff be allowed to implement the project as it is described in the proposal, with the staff providing updates for the Board at its regular meetings.

Dr. Ahlen stated that since ASTA has only one year to carry out this project, he feels it would be a barrier to have to bring each project back to the Board for approval.

Dr. Overton asked how decisions were going to be made on what projects would be selected. Dr. Ahlen stated that ASTA would use what are called "business service providers" in the state to look for opportunities. These would include colleges and universities, ASTA's incubator managers, the Small Business Development Center, ASTA's staff and AIDC. ASTA has developed a one-page application format that would be used for reviewing projects, and they would be evaluated on a first come, first served basis.

With no further questions, Mr. Bowen moved that the NIST project be implemented by the ASTA staff with Board updates; the motion was seconded by Mr. Webster. It was passed unanimously.

Mr. Bowen made note of the news item about the award that appeared in the Arkansas Democrat. Mr. Bowen stated that he felt a bigger announcement should have been made.

Dr. Pederson urged the staff to put out another press release to stress the importance of this award. Dr. Pederson stated that this is a major award and that should be stressed.

## TECHNOLOGY DEVELOPMENT PROGRAM

Dr. Ahlen updated the Board members on the Technology Development Program, which was authorized in 1989 by the General Assembly, but not funded.

Dr. Ahlen stated that ASTA continues to learn about and recognize the need for this program from people across the state. There has also been interest expressed by two legislative committees; the rural development study commission and a subcommittee on assistance to inventors. ASTA staff members have been invited to make a presentation on the program to the subcommittee as a possible alternative way to provide help to inventors. Draft rules are being prepared.

Dr. Ahlen also stated that work is still being done to prepare the rules for the revamped Business Incubator Program, which is now called the Business Innovation System.

## COMMITTEE ASSIGNMENTS

Next item concerned Board member committee assignments. Dr. Ahlen pointed out that at present each Board member serves on one committee. Dr. Ahlen stated that as programs are becoming more active and workloads of these programs increase, it would be a good idea to have Board members serve on more than one committee so that each committee could draw on experience and ideas from other sources.

Dr. Nix agreed that the committees have become "compartmentalized" and this problem needs to be addressed. Mr. Moore gave an example of an investment considered under the seed capital program on Dr. Joe Gentry, Vice President Research, worked. Mr. Moore stated that the expertise and advice of the members of the research committee would have been helpful in investigating this project.

Mr. Moore suggested that the Board recommend to the new Executive Committee that Board members be assigned to two committees. Dr. Pederson moved that it be recommended; Mr. Bowen seconded the motion. The Board gave its unanimous approval.

The next item brought before the Board was if the Board members wanted to stay with quarterly meetings and called meetings when necessary or go to six regularly scheduled meetings.

Dr. Overton suggested that the Board continue having quarterly meetings with called meetings when necessary and see if that works for the upcoming year. Dr. Hendren

suggested that six scheduled meetings be better so the members can adjust their calendars.

Dr. Ahlen stated that the staff would prepare some dates and bring them to the Board at the next meeting.

#### R&D INDICATORS

The chair recognized Al Grijalva for a presentation on federal R&D spending. Mr. Grijalva presented the Board with statistics on the total federal R&D money spent in Arkansas over a ten year period and how that compares to R&D spending in other states. According to the figures presented, in 1987 Arkansas ranked 40th in the nation, which is up from 45th.

Dr. Nix noted that a recent publication, it compared how U.S. research spending compared to other countries. This study showed that the U.S. ranks below European countries that the United States will be competing with in the near future. Dr. Nix stated that not only does Arkansas have a localized problem, the country as a whole has a problem.

Dr. Ahlen stated that ASTA will be looking at a dozen key indicators that will most likely be based on federal data and comparing Arkansas to other states. The findings that are collected by ASTA will be reported to the Board on an annual basis. Some of these indicators would be the kinds of projects funded, jobs created, etc.

#### RESEARCH COMMITTEE REPORT

In the absence of Dr. Willingham, Dr. Joe Nix presented the Research Committee report. The Research Committee recommended for approval the following resolutions.

#### DRAFT RESOLUTION 91-1

Draft Resolution 91-1 provides for the funding of the following proposal:

PROPOSAL NO. 91-A-02, "Optimal 2- and 3-Valued ASM Algorithms for VLDB Applications," by Dr. Hal Berghel and Dr. David Roach of the University of Arkansas, Fayetteville, and Dr. John Talburt of the University of Arkansas at Little Rock, in the amount not to exceed \$40,000.00. This project is consponsored by Axcium Corporation, in the amount of \$40,000.00.

Dr. Nix made a motion for the approval of Draft Resolution 91-1. Mr. Bowen seconded the motion. Dr. Pederson stated

that UAF was the institution of his affiliation. Dr. Overton stated that UALR was the institution of her affiliation. The Board gave its unanimous approval.

DRAFT RESOLUTION 91-2

Draft Resolution 91-2 provides for funding of the following proposal:

PROPOSAL NO. 91-A-03, "Analysis and Design of a Vision Controlled Automatic Production System," by Dr. Mamdouh M. Bakr of the University of Arkansas at Little Rock, in the amount not to exceed \$12,505.00. This project is cosponsored by Molex, Inc., in the amount of \$12,505.00.

Dr. Nix made a motion for the approval of Draft Resolution 91-2. Mr. Bowen seconded the motion. Dr. Overton stated that UALR was the institution of her affiliation. The Board gave its unanimous approval.

DRAFT RESOLUTION 91-3

Draft Resolution 91-3 provides for funding of the following proposals:

PROPOSAL NO. 91-B-05, "Purchase of a Superconducting FT-NMR with Multinuclear Capability," by Dr. Tito Viswanathan of the University of Arkansas at Little Rock, in the amount not to exceed \$52,000.00.

PROPOSAL NO. 90-B-09, "Development of a Carbon/Hydrogen Analysis System" by Dr. M. Keith Hudson of the University of Arkansas at Little Rock, in the amount not to exceed \$27,821.00.

Dr. Nix made a motion for the approval of Draft Resolution 91-3. Mr. Bowen seconded the motion. Dr. Overton stated that UALR was the institution of her affiliation. The Board gave its unanimous approval.

DRAFT RESOLUTION 91-4

Draft Resolution 91-4 provides for funding of the following proposal:

PROPOSAL NO. 91-B-01, "Novel Organometallic Dithiooxalate Complexes," by Dr. Mark Draganjac of Arkansas State University, in the amount not to exceed \$32,000.00.

Dr. Nix made a motion for the approval of Draft Resolution 91-3. Dr. Hendren seconded the motion. The Board gave its unanimous approval.

#### INVESTMENT COMMITTEE REPORT

Mr. Webster brought before the Board the Investment Fund Reports for Quarter and Fiscal year ending June 30, 1990 and the General Fund Expenditure Report FY1990 for June 1990. Mr. Webster pointed out that the Investment Fund Report reflects two loans made to Emerging Technologies and ARTECH.

Mr. Webster made a motion for the approval of the Investment Fund reports. Mr. Bowen seconded the motion; the Board gave its unanimous approval.

Dr. Nix asked for an update on Nthrography. James Benham stated that ASTA was working with the Bank of Fayetteville and at the moment, there was no action being taken by ASTA. Mr. Moore stated that if the bank takes action against Nthrography, ASTA will support it.

#### DRAFT RESOLUTION 91-5

Mr. Webster brought before the Board Draft Resolution 91-5. Resolution 91-5 provides for the seed capital investment of \$400,000 in ARTEK Systems, Inc. in Fayetteville. This company produces wide-area bar-code readers used by the U.S. Postal Service. Mr. Webster noted that ASTA has made one investment in this company that was very successful; ARTEK Systems has fully repaid that loan. He also noted that ARTEK was presently negotiating with the government on a \$25 million contract.

Mr. Webster made a motion for the approval of Draft Resolution 91-5. Mr. Bowen seconded the motion; the Board gave its unanimous approval.

#### DRAFT RESOLUTION 91-6

Mr. Webster brought before the Board for approval Draft Resolution 91-6. Draft Resolution 91-6 provides for the seed capital investment of \$250,000 into Transgenic Sciences, Inc. (TSI), which is located in Massachusetts. Mr. Webster stated that TSI is locating part of its company in Arkansas. He also stated that TSI still has some things to work out before it will qualify for and accept ASTA's funding. The ASTA staff stated they are confident TSI would qualify for the funding.

Dr. Hendren asked what TSI did. James Benham stated that TSI contracts for pre-clinical testing for government agencies and biotech companies including ones in the

pharmaceutical industry. Jacqui Klodt stated that this company had just gone public in the last couple of years. Mr. Moore also stated that one contingency of the financing

is that they locate in Arkansas. James Benham added that TSI will have 90 days to secure the total financing.

With no further questions, Mr. Webster moved for approval of Draft Resolution 91-6. Dr. Overton scnded the motion; the Board gave its unanimous approval.

#### NOMINATING COMMITTEE

Dr. Nix gave the nominating committees report. The committee nominated Mr. John Troutt, Chairman of the Board; Dr. William Willingham, Vice Chairman of the Board; and Dr. James Hendren, Secretary of the Board. Dr. Pederson moved for the approval of the nominations. Mr. Bowen seconded the motion; the Board gave its unanimous approval of the slate.

#### NEW BUSINESS

#### NEXT MEETING DATE

The next meeting of the Board of Directors will be November 16, 1990.

#### ASTA FOUNDATION

Mr. Moore brought before the Board the concept for an ASTA Foundation. Mr. Moore stated he felt that ASTA should start working on creating a foundation to engage in certain activities that the agency could not. Mr. Moore asked for volunteers for a committee that will present to the members at the next meeting proposed articles of incorporation. The committee will consist of Mr. Harry Truman Moore, Mr. James Hendren, and Mr. Bill Bowen.

Before the meeting was adjourned, Mr. Moore stated that he had a chance to meet with representatives from the Department of Finance and Administration during ASTA's budget presentation. Mr. Moore stated that he and Dr. Ahlen told the members of DFA that ASTA has tried to be all things to all people whenever someone has asked ASTA for help. It was stated that if ASTA is going to expand its scope, then the state needs to provide additional financial support.

#### ADJOURNMENT

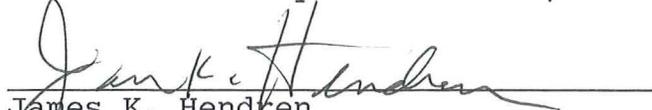
With no further business to conduct, the meeting was adjourned at 2:52 p.m.

Respectfully submitted,



James K. Hendren  
Secretary  
Board of Directors

Approved by the Board of Directors  
on this 16th day of November, 1990.



James K. Hendren  
Secretary  
Board of Directors