ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY
100 Main Street, Suite 450, Little Rock, Arkansas 72201 (501) 371-3554

ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY
MINUTES OF THE 21ST REGULAR MEETING OF THE BOARD OF DIRECTORS
LITTLE ROCK, ARKANSAS
NOVEMBER 20, 1986

Board chairman Bill Bowen called the meeting to order at 1:40 p.m. Other Board members present were Dr. Joe Nix, Mr. Winfred L. Thompson, Dr. Joycelyn Elders, and Dr. Paul Marion. Dr. John Ahlen informed the Board that Mr. Bart Lindsey had called earlier in the day to apologize for not being able to attend the Board meeting.

Others present were Mr. Walter May of Wright, Lindsey & Jennings; Ms. Joyce Hamaty, Office of Legislative and Public Affairs, National Science Foundation; and Dick Rogers, University of Arkansas at Fayetteville.

The chairman announced that the Minutes of the October 3 Board Board meeting had been distributed to all members and that the Minutes stand approved as mailed unless there was some objection. There was no objection.

PRESIDENT'S REPORT

Dr. Ahlen pointed out this was the first Board meeting in Little Rock held in a location other than the Board Room of the former Commercial National Bank. Thanks was given to the State Chamber of Commerce for the use of their Board Room. Dr. Ahlen invited Board members and guests to drop in and visit the Authority's new offices in Suite 450.

Dr. Ahlen reported that the closing documents for the ARTECH seed capital investment project had been signed November 13 and that $150,000 had been delivered to the company.

He reported that in mid-October the Governor had released funds for all projects approved by the Board of Directors to date. Dr. Ahlen indicated there was uncertainty about any future release of funds.

The final corridor report was available for distribution. Any members of the Board with persons they would like to receive this document should provide the staff with names and addresses.

Dr. Ahlen reported that in the closing days of the 99th Congress, the Federal Technology Transfer legislation -- the Stevenson-Wydler Act -- was re-authorized. The re-authorization included some amendments that extend the Stevenson-Wydler provisions to include the National Center for Toxicological Research. The Authority's staff worked with Senator Dale Bumpers to assure that NCTR would be included in the re-authorized Act. Dr. Ahlen reported that he and Mr. Art Norris from NCTR attended the Annual Meeting of the Federal Laboratory Consortium and learned that the amended Stevenson-Wydler Act offers exciting new opportunities for Arkansas to benefit from the work conducted at the Lab.

Mr. Bowen asked if there was anything the Board of Directors needed to do in this regard. Dr. Ahlen said he had been in touch with Dr. Hart and that it appears that a delegation of authority from the Secretary of Health and Human Services to the Director of NCTR is progressing smoothly at this point. Dr. Ahlen is hopeful that the Stevenson-Wydler Act will offer the Authority and NCTR opportunities to work together much closer than in the past. Mr. Bowen asked Dr. Ahlen to check with Dr. Hart about whether the Board needed to take any action on behalf of NCTR.

Dr. Ahlen indicated that the Commission on the Future of the South met in Little Rock on Monday, November 17, to present its report titled "Halfway Home And A Long Way To Go" to the Southern Growth Policies Board. The report is of special interest to the Authority because three of the ten recommendations deal directly with issues important to the Arkansas Science & Technology Authority. These three recommendations include (1) a role in economic development for institutions of higher education, (2) ways to generate and use new technology, and (3) new strategies to develop home-grown businesses and industries. Mr. Bowen asked if copies of the report could be obtained for Board members.

Dr. Ahlen reminded the Board of Directors that the Authority's presentation of its budget request for the next biennium is to be made to the Legislative Council the afternoon of December 3. Dr. Ahlen invited any members who might be available to attend.

Lastly, Dr. Ahlen pointed out to the Board the first issue of the Authority's newsletter called The Authority Report. He indicated that Ms. Kay Speed Kelly of the Authority's staff wrote, edited and provided the photography as well as oversaw the production of the newsletter. The Authority applauded Ms. Kelly's efforts.

Dr. Ahlen asked Mr. Bowen to recognize Ms. Alice Smith, vice president information, for a report on the Authority's December 8 and 9 conference; Ms. Joyce Hamaty, Legislative Specialist from the Office of Legislative and Public Affairs at the National Science Foundation, for a report on a project of interest to Arkansas; and Mr. Thompson, vice chairman of the Board, for a report on an award won by the Authority.

ASTA CONFERENCE

Ms. Smith reported that the details for the Authority's conference -- "Winning the Race with Change" -- have all been arranged. Board members were urged to mark their calendars and to attend what she expects to be an outstanding conference on the role of science and technology in economic development. The conference will feature speakers of the quality of Bruce Merrifield from the Department of Commerce and Munro Pitt with Shearson Lehman Brothers. (A copy of the conference brochure is included as Appendix A.) Ms. Smith also reported that the list of corporate co-sponsors for the conference is growing and includes Arthur Young & Co., Inc., Peat Marwick Mitchell & Co., Southwestern Bell Foundation, General Dynamics, Arkansas Electric Cooperative Corporation, Arkansas Louisiana Gas Company, Highland Industrial Park Division of HRI Resources, Inc., Shearson Lehman Brothers, Inc., First National Bank of Camden, and the Arkansas Power & Light Company.

NATIONAL SCIENCE FOUNDATION PROJECT

The chairman recognized Ms. Joyce Hamaty, legislative specialist with the National Science Foundation's Office of Legislative and Public Affairs. Ms. Hamaty discussed a pilot project of the National Science Foundation's which is being coordinated with the National Governors' Association and the Conference Board of New York, Inc. The project's goal is to identify opportunities for state interaction with the National Science Foundation. According to Ms. Hamaty, there is a growing interest among the states and the National Science Foundation in applying the results of basic and applied research to economic competitiveness and economic development. The National Science Foundation has identified four states -- Arkansas, New Jersey, Michigan, and Utah -- for in-depth studies. Ms. Hamaty has been visiting with business, education and government leaders during her current visit to Arkansas. The National Governors' Association has a working group on applied research and the Conference Board is conducting a national survey of states with research and development programs. Issue papers will be prepared as a part of the pilot project and regional

forums will be convened to exchange information. In the end recommendations will be made to the Governors and to the National Science Board. The Board enthusiastically welcomed Ms. Hamaty's presentation and applauded her efforts.

FINANCE PROGRAM AWARD

The chairman recognized Mr. Thompson for a report on the Authority's award from the Small Business High Technology Institute. Mr. Thompson represented the Authority at an awards banquet held November 12 in San Francisco as part of the High Tech '86 Conference. The banquet was to recognize state efforts to develop their economies with innovative approaches. The award categories were (1) information and technical services, (2) financial assistance, (3) research and development infrastructure, and (4) comprehensive strategy. Mr. Thompson reported that the states west of the Mississippi River receiving the most commentary at the awards banquet were Utah, Colorado, New Mexico and Arkansas. Arkansas took first place for its development finance package which includes the Authority's Seed Capital Investment Program. Arkansas was second to Colorado in the category of comprehensive strategy to assist small technology-based companies.

INVESTMENT COMMITTEE REPORT

Jim Benham, vice president finance, in absence of any members of the Investment Committee, presented the quarterly report concerning the seed capital investment fund and the operational expenditures for the Authority through September 30, 1986 (Appendices B and C respectively). The reports were unanimously approved on a motion by Dr. Elders, seconded by Mr. Thompson.

PLANNING COMMITTEE REPORT

Mr. Thompson reported that the Planning Committee met on October 23 to hear presentations from five institutions including the University of Arkansas at Little Rock, Southern Arkansas University, Mississippi County Community College, North Arkansas Community College and the University of Arkansas at Pine Bluff. The evaluation report from the Gulf South Research Institute was prepared after the presentations were made and the Committee met on November 14 to consider the GSRI report and prepare the Committee's recommendations to the Board of Directors. (Unapproved minutes of the committee meetings held October 23 and November 14 are attached as Appendices D and E respectively). Mr. Thompson summarized a draft resolution (Appendix F) identifying the University of Arkansas at Little Rock proposal as the top-ranked proposal and the SAU proposal as the second-ranked proposal.

There was discussion concerning the potential availability and release of funds for these two projects. Dr. Ahlen reported that word from the Governor's office was that it was too early to determine whether any funds would be released for any of the research or business incubator proposals. It was decided that the best course would be to take no final action on the funding resolutions. This would eliminate confusion concerning conditional awards (as cropped up in the previous conditional award resolutions). This decision would also postpone final award action until the availability of funds is known and preserve flexibility in the case that the amount of funds released is insufficient to fully cover the proposed projects.

After this discussion, Mr. Thompson moved that the draft resolution be filed to indicate that the Planning Committee had completed its consideration of second-round business incubator proposals but that any final action on the resolution be deferred to a later, more appropriate date. Dr. Nix seconded the motion which was unanimously adopted.

Mr. Thompson presented the following motion, in summary:

IN SUPPORT OF THE CONTINUATION OF THE
BUSINESS INCUBATOR PROGRAM BY THE
ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY

WHEREAS, the Authority wishes to recognize the town of Salem and the North Arkansas Community College for their excellent proposal to establish a rural, community-sponsored incubator; and

WHEREAS, there is great potential for a successful incubator to be operated jointly by the University of Arkansas-Pine Bluff and the Jefferson County Industrial Foundation especially in light of the new Federal Technology Transfer Act and the provisions for cooperative agreements between industry and federal laboratories such as the National Center for Toxicological Research; and

WHEREAS, business incubators have been proven nationally as an effective tool for job creation and for sustaining small, technology-based businesses in critical early years of operation; and

WHEREAS, there is ever growing interest by Arkansas communities in establishing incubators that build on local strengths as part of their local economic development strategies;

NOW, THEREFORE BE IT RESOLVED:

THAT the Arkansas Science & Technology Authority's Board of Directors wishes to express its support of those communities which have garnered local resources to strengthen their local economies; and

THAT the Arkansas Science & Technology Authority Board of Directors endorses a continued state role in facilitating communities' efforts to build Arkansas from within.

Mr. Thompson moved that the motion be approved. Dr. Elders seconded the motion which was then unanimously approved.

RESEARCH COMMITTEE REPORT

Dr. Nix reported that the Research Committee met November 5 and the morning of the Board meeting (unapproved minutes at Appendices G and H respectively). He began the Research Committee report by discussing two draft recommendations (Appendices I and J). The first draft resolution dealt with two applied research projects. The details of the two projects are contained in the draft resolution in Appendix I. The second draft resolution was for a basic research proposal to match funds for a nuclear magnetic resonance spectrometer. Details are contained in the draft resolution in Appendix J.

Dr. Elders presented two draft resolutions. They are attached as Appendices K and L. The first draft resolution dealt with a basic research project involving gene analysis and the second dealt with epidermal growth factors. The Nobel Prize was awarded for research in growth factors in 1986.

Following the lead of the Planning Committee, Dr. Nix moved that the four draft resolutions be read into the minutes of the meeting to indicate that the Research Committee had completed its consideration of basic research proposals from rounds one and two and that final funding approval be deferred until a later, more appropriate time. Dr. Elders seconded the motion which passed unanimously.

OLD BUSINESS

There was no old business.

NEW BUSINESS

Dr. Ahlen reviewed the meeting schedule for 1986 and suggested that the Board might need to meet more frequently than on a

quarterly basis. It was decided that staff find a date early in January for the next meeting and prepare suggested meeting dates for the calendar year 1987.

Dr. Marion invited the Board to meet at the offices of the Department of Higher Education in Little Rock. He indicated that parking would perhaps be more convenient for Board members.

The meeting adjourned at 2:55 p.m.

Respectfully submitted,

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

Approved by the Board of Directors on this 16th day of January, 1987.

Joe Nix

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

APPENDIX B

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

GENERAL FUND
FISCAL YEAR 1987
FIRST QUARTER EXPENDITURE REPORT
JULY - SEPTEMBER 1986

DESCRIPTION	BUDGET FOR QTR	EXP FOR QTR	% EXP FOR QTR	BUDGET FOR FY	EXP FOR YTD	% EXP FOR YTD
SALARIES	$51,292.26	$40,879.98	80%	$222,266.46	$40,879.98	18%
EMPLOYEE BENEFITS	$13,100.00	$8,346.01	64%	$55,000.00	$8,346.01	15%
POSTAGE & FREIGHT	$7,600.00	$1,015.58	13%	$10,400.00	$1,015.58	10%
T-PHONE T-GRAPH T-TYPE	$1,275.00	$1,066.35	84%	$5,850.00	$1,066.35	18%
PRINT & DUPLICATING	$4,124.00	$308.60	7%	$19,124.00	$308.60	2%
OFFICE EQUIP MAINTENANCE	$1,000.00	$480.40	48%	$4,300.00	$480.40	11%
RENT OFFICE & EQUIP	$6,150.00	$4,156.18	68%	$31,350.00	$4,156.18	13%
TRAVEL & SPONSORED MEET.	$13,050.00	$2,806.11	22%	$64,803.00	$2,806.11	4%
PROFESSIONAL FEES	$14,500.00	$0.00	0%	$57,757.00	$0.00	0%
CENTREX SERVICES	$2,250.00	$1,514.51	67%	$9,000.00	$1,514.51	17%
CONF & CONV FEES	$1,700.00	$310.00	18%	$6,820.00	$310.00	5%
INSURANCE PREMIUMS	$0.00	$0.00	---	$401.00	$0.00	0%
STATIONARY & OFFICE SUPPL	$1,800.00	$319.35	18%	$9,450.00	$319.35	3%
SUBSCRIPTIONS & PUBS	$1,150.00	$368.99	32%	$2,900.00	$368.99	13%
PURCHASE DP SOFTWARE	$750.00	$204.75	27%	$4,500.00	$204.75	5%
TRAVEL FUND	$500.00	$0.00	0%	$500.00	$0.00	0%
CAPITAL OUTLAY	$1,900.00	$0.00	0%	$7,600.00	$0.00	0%
APPROPRIATION TOTAL	$122,141.26	$61,776.81	51%	$512,021.46	$61,776.81	12%

APPENDIX C

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

INVESTMENT FUND REPORT

Quarter ending September 30, 1986

Total Money Market Accts:			$ 304,736.72
Nat'l Bank of Arkansas	9,994.07		
Union Nat'l Bank	97,380.04		
1st American Bank	98,983.69		
Metropolitan Nat'l Bank	98,378.92		
Total Interest Earned:		30,437.55 *	
Money Mkt Accts		3,627.71	
CD Accts		26,809.84	
Total CD Accts:			1,595,000.00
Total Cash balance Investment Fund:			$ 1,899,736.72

* All interest earned is paid into the Money Market Accts.

APPENDIX D

UNAPPROVED MINUTES
OF THE
PLANNING COMMITTEE MEETING
OCTOBER 23, 1986

The Planning Committee of the Board of Directors met at 8:00 a.m., Thursday, October 23 in the board room of the old Commercial National Bank Building. Chairman Win Thompson called the meeting to order. Dr. Paul Marion and Mr. Bill Bowen, as an ex-officio member, were present. Consultants Trent Williams and Barbara Manner from the Gulf South Research Institute, retained to assist the committee in evaluating business incubator proposals, were also present.

Alice Smith reported that five proposals to establish business incubators had been received by the September 4, 1986 deadline for the second and final round of the Business Incubator Program. Preliminary staff review of the proposals indicated that all five were complete and eligible for full review by the Gulf South Research Institute.

The purpose of the meeting was to hear oral presentations of business incubator proposals, as follows:

8:15 a.m.	University of Arkansas-Little Rock
9:00 a.m.	Mississippi County Community College
9:45 a.m.	North Arkansas Community College
10:30 a.m.	University of Arkansas-Pine Bluff
11:15 a.m.	Southern Arkansas University

All five institutions had at least two representatives to present their proposals. Supporters from the business community were also present for several of the presentations.

No action was taken and the Committee was advised by the consultants that an evaluation report with recommendations would be forthcoming by November 15.

APPENDIX E

UNAPPROVED MINUTES
OF THE
PLANNING COMMITTEE MEETING
NOVEMBER 14, 1986

The Planning Committee of the Board of Directors met at 3:00 p.m. on Friday, November 14, at the Authority offices. Chairman Win Thompson called the meeting to order, with Dr. Marion present.

The Committee reviewed the evaluations and recommendations of the five business incubator proposals submitted by the Gulf South Research Institute (GSRI). With little discussion, the Committee noted their agreement with the recommendations contained in the report, especially noting support for the North Arkansas Community College proposal in cooperation with the town of Salem. The remaining funds under this program total $827,498.

It was agreed that staff would draft a resolution to present to the Board of Directors at the next regular meeting recommending awards to the University of Arkansas-Little Rock proposal in an amount not to exceed $500,000, and the balance of $327,498 to Southern Arkansas University. The Committee agreed that if there were additional funds, the North Arkansas Community College proposal was worthy of an award, and that the Board be made aware of the Committee's support.

DRAFT

APPENDIX F

DRAFT

RESOLUTION E

PROVIDING THE APPROVAL FOR THE FUNDING OF TWO BUSINESS INCUBATOR PROGRAM PROPOSALS BY THE BOARD OF DIRECTORS OF THE ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY.

WHEREAS, Act 859 of 1983 as amended empowers the Arkansas Science & Technology Authority to create, in cooperation with Arkansas colleges and universities, facilities to foster the growth of technology-based enterprises; and

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

WHEREAS, a preliminary review of the proposals was conducted by the Authority's staff; and reviewed for merit by the Authority's Planning Committee; and evaluated by the Gulf South Research Institute which has professional expertise with business incubators; and

WHEREAS, Act 595 of 1985 includes an appropriation of $1,900,000 for establishing Incubator Facilities under the auspices of Arkansas colleges and universities to foster the growth of technology-based enterprises; and

WHEREAS, the uncommitted balance in the aforementioned appropriation is $827,498;

WHEREAS, the Planning Committee is committed to recommending to the Board of Directors those proposals that further the goals of the Authority by demonstrating clear economic development potential and the highest probability of success;

NOW, THEREFORE BE IT RESOLVED;

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

> PROPOSAL NO. 86-I-0010, "The Technical Enterprise Center" a public/private partnership formed to establish an incubator facility in the Continental Building in downtown Little Rock to serve young, growing firms in central Arkansas; sponsored by the University of Arkansas-Little Rock, and managed under a contractual agreement with the Little Rock Enterprise Center Company, a subsidiary of Pryde, Roberts and Company of Washington, D.C., for a sum to be negotiated but not to exceed $500,000;

PROPOSAL NO. 86-I-0009, "The Institute for New Enterprise Formation: A Business Incubator Program for Southern Arkansas," sponsored by Southern Arkansas University, incorporating long-needed small business development assistance, a Small Business Investment Corporation comprised of a consortium of South Arkansas banks, and sustained incubator support services for a seven county region that has experienced a sagging economy in recent years; for a sum to be negotiated, but not to exceed $327,498.

THAT the Authority shall negotiate conditions of awards in consultation with and concurrence by the Planning Committee; and

BE IT FURTHER RESOLVED:

THAT the Authority, tnrough its staff, will monitor the implementation of the projects for compliance with Authority guidelines and directives; and

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 20th day of November, 1986.

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

UNAPPROVED MINUTES
OF THE
RESEARCH COMMITTEE MEETING
NOVEMBER 5, 1986

The Research Committee of the Board of Directors met at 1:30 P.M., Wednesday, November 5, 1986. Dr. Ron Hart, chairman, Dr. Joe Nix, member and Patricia Troth, staff member were present. Dr. Elders was not present but did give her recommendations by telephone.

The following three items were on the agenda:

1) complete the review of the basic research proposals received in response to the April 14, 1986 solicitation,
2) review two applied proposals, and consider them for funding,
3) review all proposals that were competitive but not funded from both the February 4, 1986 and April 14, 1986 solicitations for consideration for funding in light of Resolution 86-4 which states that after fulfilling the will and spirit of the Joint Legislative Council funds remaining based on scientific merit will be allocated to those programs and projects which have long-term economic impact, through education enhancement, furtherance of general knowledge, and encouragement of general research expertise within the State of Arkansas.

Of the 10 proposals remaining from the April 14th solicitation two proposals were competitive and discussed by the Research Committee. The recommendation was made by Dr. Nix to request information documenting the support that ASU could provide Robert Engelken in the event that his proposal was recommended for funding. Neither proposal was recommended for funding.

Applied research proposals by Scott Beasley of the University of Arkansas at Monticello cosponsored by Weyerhaeuser Co. on acid rain, and by Joseph Wrobel of the University of Arkansas at Fayetteville cosponsored by Texas Instruments and Baldwin Piano and Organ Co. on computer vision system applications in quality assurance and process control in electronic assembly operations were discussed and recommended for funding.

Of the 138 basic research proposals that were submitted in response to the February 4 and April 14 1986 solicitations, 54 proposals were judged to be competitive based on scientific merit. To date 18 of the competitive proposals that had obvious economic impact were approved for funding. The research committee reviewed the 36 remaining competitive proposals in light of Resolution 86-4 and decided to recommend for funding approval three additional proposals: Paul Frindik's proposal dealing with growth factors, James Hinton's proposal requesting matching funds for the purchase of a 300 MHz nuclear magnetic resonance spectrometer, and Charles Liarakos' proposal for equipment to set up a gene analysis laboratory at the medical school.

The meeting adjourned at 4:00 P.M.

UNAPPROVED MINUTES
OF THE
RESEARCH COMMITTEE MEETING
NOVEMBER 20, 1986

The Research Committee of the Board of Directors met at 11:00 A.M., Thursday, November 20, 1986 at the Authority office. Dr. Ron Hart, chairman, Dr. Joycelyn Elders and Dr. Joe Nix, committee members, and Patricia Troth, staff member were present.

The purpose of the meeting was to review the recommendations of the November 5, 1986 Research Committee meeting in light of information regarding the potential release of funds by the governor's office. It was recommended that four resolutions be drawn up -- one for Paul Frindik's proposal, one for James Hinton's proposal, one for Charles Liarakos' proposal, and one for the applied research proposals submitted by Scott Beasley and by Joseph Wrobel. It was suggested by the Committee members that the resolutions be read into the minutes of the Board Meeting to follow and that action be deferred on the resolutions until there was a clear indication from the governor's office that funds were available for release.

With these actions all proposals from the 1986 Basic Research Grants Program have completed the review process. The Applied Research Grants Program remains open until January 15, 1987.

The meeting adjourned at 12:15 P.M.

DRAFT

APPENDIX I

DRAFT

RESOLUTION A

PROVIDING THE APPROVAL FOR THE FUNDING OF TWO APPLIED RESEARCH GRANT 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 an Applied 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, there are sufficient unencumbered funds in the aforementioned appropriation; 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; and evaluated on the basis of scientific merit by peers in appropriate fields of science; and

WHEREAS, the Science Advisory Committee recommends, and the Authority's Research Committee concurs, that no proposal shall be funded without being reviewed by at least three peers, one of whom shall be from outside the State of Arkansas; and

WHEREAS, the Research Committee is committed to recommending to the Board of Directors those proposals that have clear economic development potential and are ranked as being scientifically meritorious; and

WHEREAS, the Research Committee finds that it is appropriate for the Authority to fund only proposals that are of limited time duration;

NOW THEREFORE BE IT RESOLVED;

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

PROPOSAL NO. 86-A-0006, "Computer Vision System Applications in Quality Assurance and Process Control in Electronic Assembly Operations," by Joseph S. Wrobel of the University of Arkansas at Fayetteville and co-sponsored by Texas Instruments Inc. in the amount of $45,000 and Baldwin Piano and Organ Company in the amount of $5,000 in an amount to be matched and negotiated by the Authority staff but not to exceed $47,875.

PROPOSAL NO. 86-A-0008, "Contrasting Acidic Deposition and Nutrient Pools in An Undisturbed Forest and a Young Pine Plantation in The Ouachita Mountains," by R. Scott Beasley of the University of Arkansas at Monticello and cosponsored by Weyerhaeuser Company in the amount of $31,000 in an amount to be matched and negotiated by the Authority staff but not to exceed $31,000.

THAT the individual award amounts not exceed the amounts requested in the identified proposals and in the aggregate not exceed $78,875.

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 the 20th day of November 1986.

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

DRAFT

APPENDIX J

DRAFT

RESOLUTION C

PROVIDING THE APPROVAL FOR FUNDING ONE BASIC RESEARCH GRANT PROGRAM PROPOSAL THAT WILL MATCH FUNDS FOR THE PURCHASE OF ONE NUCLEAR MAGNETIC RESONANCE SPECTROSCOPE BY THE DIRECTORS OF THE SCIENCE AND 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, there are sufficient unencumbered funds in the aforementioned appropriation; 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 form 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 Research Committee is committed to recommending to the Board of Directors those proposals that are ranked as having the best science, and carry on the effort of the National

Science Foundations's Experimental Program to Stimulate Competitive Research; 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

WHEREAS, the University of Arkansas at Fayetteville has the research capability to address cutting edge technology which is presently limited by the availability of appropriate equipment; and

WHEREAS, there are continuing opportunities for educational enhancement not only for chemistry but for other related sciences in the use of the proposed equipment far outlasting the cutting edge life span of the proposed equipment; and

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

WHEREAS, the proposed research will have long-term economic impact, through educational enhancement, furtherance of general knowledge, and encouragement of general research expertise within the State of Arkansas;

NOW THEREFORE BE IT RESOLVED;

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

> PROPOSAL NO. 86-B-0069, for the purchase of a nuclear magnetic resonance spectrometer which is vital to the expansion of the research of users in research areas relevant to national interests including membrane biophysics, neurobiological responses produced by ion-transport, electron transport by membrane components, organometallic synthesis, catalysis and the development of S-33 NMR spectroscopy as an analytical tool,"Matching Funds for the Purchase of a 300 MHz Nuclear Magnetic Resonance Spectrometer," by James F. Hinton of the University of Arkansas at Fayetteville.

THAT the Authority's staff may negotiate, in consultation with and concurrence by the Research Committee, the individual award amount not to exceed $194,500.

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 the 20th day of November 1986.

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

DRAFT

APPENDIX K

DRAFT

RESOLUTION D

PROVIDING THE APPROVAL FOR FUNDING THE ESTABLISHMENT OF A GENE ANALYSIS LABORATORY CONSISTING OF THREE RESEARCH INSTRUMENTS BY THE 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, there are sufficient unencumbered funds in the aforementioned appropriation; 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 form 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 Research Committee is committed to recommending to the Board of Directors those proposals that are ranked as having the best science, and carry on the effort of the National Science Foundations's Experimental Program to Stimulate Competitive Research especially among young scientists; 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

WHEREAS, the University of Arkansas for Medical Sciences has a critical mass of research personnel addressing timely issues of gene structure, function and regulation which require state-of-the-art research techniques which are becoming limited by the adequacy of available analytical equipment; and

WHEREAS, there are continuing opportunities for educational enhancement across the multitude of disciplines comprising the study of medical sciences in the presence and availability of the gene analysis laboratory far outlasting the cutting-edge life span of the proposed equipment; and

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

WHEREAS, the proposed research will have long-term economic impact, through educational enhancement, furtherance of general knowledge, and encouragement of general research expertise within the State of Arkansas;

NOW THEREFORE BE IT RESOLVED;

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

> PROPOSAL NO. 86-B-0021, for the establishment of a gene analysis laboratory which will provide the analytical equipment required to accomplish state-of-the-art basic research in gene structure, function and regulation, "Analysis of Gene Structure and Function," by Charles D. Liarakos of the University of Arkansas for Medical Sciences.

THAT the Authority's staff may negotiate, in consultation with and concurrence by the Research Committee, the individual award amount not to exceed $281,500.

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 the 20th day of November 1986.

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

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APPENDIX L

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RESOLUTION B

PROVIDING THE APPROVAL FOR THE FUNDING OF ONE BASIC RESEARCH GRANT PROGRAM PROPOSAL 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, there are sufficient unencumbered funds in the aforementioned appropriation; 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; evaluated on the basis of scientific merit by a panel of internal and external peers in the appropriate field of science; and evaluations reviewed by the Authority's Science Advisory Committee; 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 Authority has given priority to those proposals which have clear economic development potential that will create jobs and that satisfy the above conditions as recommended by the Arkansas Legislative Council; and

WHEREAS, the Research Committee is committed to recommending to the Board of Directors those proposals that 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;

NOW THEREFORE BE IT RESOLVED;

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

> PROPOSAL NO. 86-B-0058, "Role of Epidermal Growth Factor in Growth and Phenotypic Expression of Leprechaunism," by J. Paul Frindik of the University of Arkansas for Medical Sciences.

THAT the Authority's staff may negotiate, in consultation with and concurrence by the Research Committee, the individual award amount, which is not to exceed the $37,560 requested in the identified proposal; 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 20th day of November 1986

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