



ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY

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**MINUTES OF THE 62ND MEETING OF THE
ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY
BOARD OF DIRECTORS
ARKANSAS SCHOOL FOR MATHEMATICS AND SCIENCES
HOT SPRINGS, AR
MAY 20, 1994**

CALL TO ORDER

The meeting was called to order at 10:00 a.m. by Mr. Jerry Webster, Chairman of the Board, in the Board Room of the Arkansas School for Mathematics and Sciences (ASMS), Hot Springs, AR.

A quorum of Board members was present and included: Senator Kevin Smith, Mr. William C. Bridgforth, Mr. James Kelley, Mr. John Spraggins attended as an observer for Dr. Diane Gilleland, Dr. Don Pederson, Dr. Phillip Rayford, Dr. James Hendren, and Mr. John Troutt.

Staff members present included: John Ahlen, Joe Gentry, Chuck Myers, Melissa Adams, Courtney Johnson-Woods, Al Grijalva, Susan Collins, Joyce Sadler and Brock Patterson.

Visitors included: Kelly Hunt from the Governor's Office.

Mr. David Rainey, director of ASMS, welcomed the Board to the school and gave a comprehensive update on the school and its students and teachers.

The Board held a planning discussion in the morning session, then broke for lunch with the students followed by a tour of the ASMS facilities. The Board continued the planning discussion until 2:06 p.m. when it took up its regular business.

APPROVAL OF MINUTES

Mr. Webster presented the minutes from the March 18, 1994 Board meeting for approval. Mr. Bridgforth seconded the motion and asked that something be added concerning remarks

made by officials at UAMS during the Board's last meeting. The Board gave its unanimous approval of the minutes.

SUMMARY OF REMARKS FROM MARCH 18, 1994 BOARD MEETING

Dr. I. Dodd Wilson, Dean of the College of Medicine at UAMS, welcomed the Board to the UAMS campus and the Biomedical Research Center. He gave the members an overview of the various activities at UAMS.

In the past seven years, UAMS has gone from \$6 million in funded grants to \$32 million. UAMS is attracting professionals who will be a cornerstone in research in Arkansas. UAMS is gaining strength in fields that will compete nationally. Neuroscience, cancer research, etc.

Dr. Wilson stated that UAMS was established to teach, and also to seek, which is through research, research that will serve the state. Dr. Wilson stated that UAMS welcomes the opportunity to work with ASTA in any way possible to achieve that goal.

Remarks were also made by Dr. Edgar Garcia-Rill, a UAMS researcher who has received funding from the EPSCoR program.

During lunch, Dr. Harry Ward, Chancellor of UAMS, welcomed the Board, and gave a brief overview of UAMS and its accomplishments. Lunch was followed by a tour of the Biomedical Research Center.

PRESIDENT'S REPORT

Dr. Ahlen informed the Board that the Authority's Audit Report for FY 1993 had been filed with the Joint Legislative Auditing Committee. No audit exceptions were found.

INVESTMENT COMMITTEE

Mr. Bridgforth presented the FY 1994 General Fund Expenditure Report and the FY 1994 Investment Fund Report for the quarter ending March 31, 1994. Mr. Bridgforth made a motion for the acceptance of both reports. Mr. Troutt seconded the motion; the Board gave its unanimous approval.

Brock Patterson stated that Board member James Kelley is a member of the Board of Directors of the First National Bank of Magnolia, where the Authority currently has a CD, Mr. Patterson stated that when the CD matures in June, it will be moved to another bank to avoid any appearance of a conflict of interest.

DRAFT RESOLUTION 94-23

On behalf of the Investment Committee, Mr. Bridgforth introduced Draft Resolution 94-23. The resolution provides \$37,500 for the first quarter of the fiscal year 1995, to be used to fund projects under the Technology Transfer Assistance Grant (TTAG) program. Dr. Ahlen stated that there are two projects that are ready to be funded under this program.

Mr. Bridgforth made a motion for the approval of Draft Resolution 94-23. Dr. Pederson seconded the motion; the Board gave its unanimous approval.

AMERICAN FIBERS, INC.

Brock Patterson stated that during the Investment Committee's last meeting, it recommended a 60-day extension be granted to American Fibers, Inc. Mr. Patterson stated that American Fibers is still working to complete the bottle cap and start production. Until that is complete, ASTA will not release the seed capital award. Therefore, a 60 day extension was being requested.

Mr. Troutt made a motion to grant American Fibers a 60-day extension. Mr. Bridgforth seconded the motion; the Board gave its unanimous approval.

RESEARCH COMMITTEE

Dr. Rayford stated that the Research Committee met on May 3, 1994 and recommended for the Board's approval the following resolutions:

Draft Resolution 94-24 provides for the funding of one basic research project:

PROPOSAL NO. 95-B-07, "Development of a Novel Detection Method for Cytophaga-like Bacterial Fish Pathogens," by Dr. David F. Gilmore of Arkansas State University, in the amount not to exceed \$20,533.00.

Mr. Troutt made a motion for the approval of Draft Resolution 94-24. Dr. Hendren seconded the motion; the Board gave its unanimous approval.

Draft Resolution 94-25 provides for the funding of one basic research project:

PROPOSAL NO. 95-B-15, "Molecular and Biochemical Regulation of Apoptotic Cell Death by the Baculovirus Gene Product p35 and Intracellular

pH," by Dr. Steven W. Runge of the University of Central Arkansas, in the amount not to exceed \$35,600.00.

Dr. Rayford made a motion for the approval of Draft Resolution 94-25. Mr. Bridgforth seconded the motion; the Board gave its unanimous approval.

Draft Resolution 94-26 provides for the funding of three basic research projects:

PROPOSAL NO. 95-B-04, "Structure Function Relationships of Human NDP Kinase A," by Dr. Yun-Chi Yeh of the University of Arkansas for Medical Sciences, in the amount not to exceed \$40,200.00.

PROPOSAL NO. 95-B-13, "Estrogens and Pathophysiology of the Exocrine Pancreas," by Dr. George T. Blevins, Jr. of the University of Arkansas for Medical Sciences, in the amount not to exceed \$34,500.00.

PROPOSAL NO. 95-B-14, "Folate Availability Modulates Transformation of JB6 Mouse Epidermal Cells," by Dr. R. Jean Hine of the University of Arkansas for Medical Sciences, in the amount not to exceed \$31,973.00.

Dr. Hendren made a motion for the approval of Draft Resolution 94-26. Dr. Pederson seconded the motion. Dr. Rayford stated that UAMS was the institution of his affiliation. The Board gave its unanimous approval.

Draft Resolution 94-27 provides for the funding of four basic research projects:

PROPOSAL NO. 95-B-02, "A Study of Thermal Fluctuations," by Dr. C.B. Richardson of the University of Arkansas, Fayetteville, in the amount not to exceed \$54,599.00.

PROPOSAL NO. 95-B-03, "Distributed Approximating Functions in Signal Processing," by Dr. Mark Arnold of the University of Arkansas, Fayetteville, in the amount not to exceed \$11,843.00.

PROPOSAL NO. 95-B-05, "Algorithmic and Complexity Study of Discrete Optimization Problems in VLSI CAD & Design Automation," by Dr. Wing Ning Li of the University of Arkansas, Fayetteville, in the amount not to exceed \$30,579.00.

PROPOSAL NO. 95-B-08, "Partial Oxidation of Methane to Formaldehyde over Sodium-Promoted Manganese Molybdate," by Dr. Sharon A. Driscoll of the University of Arkansas, Fayetteville, in the amount not to exceed \$29,833.00.

Dr. Rayford made a motion for the approval of Draft Resolution 94-27. Dr. Pederson seconded the motion. Dr. Pederson stated that UAF was the institution of his affiliation. The Board gave its unanimous approval.

Draft Resolution 94-28 provides for the funding of 13 basic research projects. Dr. Rayford stated that the 13 proposals are for the DOE/EPSCoR traineeships that will be awarded, if additional research funds are available before the end of FY 1994.

PROPOSAL NO. 94-EB-01, "Structural Studies of Molecular Conductors," by Mr. Clinton Bryan, grant recipient, and Dr. A. Wally Cordes of the Department of Chemistry and Biochemistry, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-02, "Effect of MOCVD Reactant Feed System on the Composition and Structure of Superconducting Films and Associated Dielectrics," by Mr. David M. Nelms, grant recipient, and Dr. R.K. Ulrich of the Department of Chemical Engineering, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-03, "Building a Metallo-Organic Chemical Vapor Deposition (MOCVD) Reactor by Mr. James Dee Palmer, grant recipient, and Dr. R.K. Ulrich of the Department of Chemical Engineering, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-05, "Develop Instrumentation and Methodology for Inexpensive Detection of NOx and SO2 in the Flame of Burners," by Ms. Diana Lindquist, grant recipient, and Dr. Keith Hudson of the Department of Electronics and Instrumentation, University of Arkansas at Little Rock.

PROPOSAL NO. 95-EB-06, "Optical Characterization of High Temperature Superconductor Films," by Mr. Steven E. Elkins, grant recipient, and Dr. Greg Salamo of the Department of Physics, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-07, "Characterization of High Temperature Superconductor Films," by Mr. Steven E. Elkins, grant recipient, and Dr. W.F. Oliver

III of the Department of Physics, University of Arkansas Fayetteville.

PROPOSAL NO. 95-EB-08, "Design Studies for Investigating Coherent Pions," by Mr. Charles Byrd, grant recipient, and Dr. William J. Braithwaite of the Department of Electronics and Instrumentation, University of Arkansas at Little Rock.

PROPOSAL NO. 95-EB-09, "Instrumenting the STAR Detector for the Relativistic Heavy Ion Collider," by Mr. G. Douglas Mauldin, grant recipient, and Dr. Andre Rollefson of the Department of Electronics and Instrumentation, University of Arkansas at Little Rock.

PROPOSAL NO. 95-EB-10, "Assisting in the Design of the Solenoidal Tracker (STAR) to be Used at Relativistic Heavy Ion Collider (RHIC)," by Mr. Morgan Banks, grant recipient, and Dr. William J. Braithwaite and Dr. Andre Rollefson of the Department of Electronics and Instrumentation, University of Arkansas at Little Rock.

PROPOSAL NO. 95-EB-11, "Optical Characterization of Diamond Films for Superconductor Multichip Modules," by Ms. Diane Bootz, grant recipient, and Dr. Min Xiao of the Department of Physics, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-12, "The Harmonic Impact of Photovoltaic Inverter Systems Used for Bulk Power Generation in Electric Power Systems," by Mr. David G. Daniels, grant recipient, and Dr. Kraig Olejniczak of the Department of Electrical Engineering, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-13, "Study of Flourinated Hydrogenated Amorphous Silicon Germanium Alloy for High Efficiency Multijunction Solar Cells," by Mr. Warren K. Harper, grant recipient, and Dr. W.D. Brown of the Department of Electrical Engineering, University of Arkansas, Fayetteville.

PROPOSAL NO. 95-EB-14, "Study of Fluorinated Hydrogenated Amorphous Germanium Carbon Alloy for High Efficiency Multijunction Solar Cells," by Mr. Paul Moffitt, grant recipient, and Dr. Simon Ang of the Department of Electrical Engineering, University of Arkansas, Fayetteville.

Dr. Rayford made a motion for the approval of Draft Resolution 94-28. Mr. Troutt seconded the motion.

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

OLD BUSINESS

THE PLAN

Mr. Bridgforth made a motion to approve the Authority's Plan for the Next Biennium, which had been fully discussed at this and previous Board meetings, and to approve the specific amendments recommended by the Board. Dr. Pederson seconded the motion; the Board gave its unanimous approval.

Dr. Hendren thanked the staff for its work on the plan. He stated that it was more understandable and extremely valuable to the Board.

NEW BUSINESS

NOMINATING COMMITTEE

Mr. Webster appointed Dr. Hendren, Mr. Troutt and himself to the nominating committee. It will present its recommendations at the September 16 Board meeting.

Mr. Webster thanked Senator Kevin Smith for attending the meeting.

The Board asked that a letter be sent to ASMS thanking the school for its hospitality and conveying how impressed the Board members were with the school and its students. The Board also asked that a thank you letter be sent to Mr. Courtney Campbell, the student who served as their tour guide.

Mr. Webster reminded the Board that the next meeting will be September 16, 1994, with the location yet to be determined.

ADJOURNMENT

With no further business to conduct, the meeting was adjourned at 2:40 p.m.

Respectfully submitted,



Phillip L. Rayford, Ph.D.
Secretary
Board of Directors

APPROVED by the Board of Directors
on this 16th Day of September, 1994



Phillip L. Rayford, Ph.D.
Secretary
Board of Directors