

**MINUTES OF THE 136TH MEETING OF THE
ARKANSAS SCIENCE & TECHNOLOGY AUTHORITY
BOARD OF DIRECTORS
LITTLE ROCK, AR
JANUARY 16, 2009**

CALL TO ORDER

The meeting was called to order by Mr. Paul Mastro, Chairman of the Board, in the Authority's conference room, located at 423 Main Street in Little Rock.

A quorum of Board members was present and included: Dr. Cesar Compadre, Dr. Collis Geren, Mr. Robert Hall (via phone), Mr. Wayne Hartsfield (via phone), Dr. Glen Jones (via phone), Dr. Beverly Lyn-Cook, Dr. Gary Phillips, Dr. Jim Purcell, Mr. Heartsill Ragon, Dr. Stephen Seidman and Mr. George Williams (via phone).

APPROVAL OF MINUTES

Mr. Mastro presented for approval the minutes from the November 21, 2008 Board meeting. Dr. Geren made a motion for the approval of the minutes as presented. Dr. Purcell seconded the motion; the Board gave its unanimous approval.

PRESIDENT'S REPORT

Dr. Ahlen reviewed the Operating Report.

Dr. Ahlen presented for the Board's information copies of the final report of the Task Force for the 21st Century Economy and the Strategic Plan from the Arkansas Economic Development Commission.

Dr. Ahlen stated that one of the recommendations that came out of the Task Force for the 21st Century report was co-locating the three economic development agencies, ASTA, Arkansas Economic Development Commission (AEDC) and the Arkansas Development Finance Authority (ADFA). Dr. Ahlen reported that the proposed co-location is moving forward. Floor plans for the move have been delivered and the agencies are reviewing them. Chuck Myers is coordinating the move for the agency.

Dr. Ahlen shared a brochure from Accelerate Arkansas outlining its legislative agenda for the current session.

Dr. Ahlen reported that the Governor's Workforce Cabinet met this week for the first time in one year. In that meeting, the cabinet was given a list of bullet items important to the Governor. One item is a STEM Initiative. A new project will be undertaken by the workforce cabinet in regards to STEM and the Authority will take the lead on this project.

Dr. Ahlen stated he has had conversations with several Board members concerning the Authority's processes and it has been observed that the way the agency does things now is different from previous years. For this reason, the Authority will undertake a two-year planning process after the end of the legislative session. The planning process will begin with the Board.

Dr. Ahlen stated that the staff anticipates that a funding resolution will be presented to the Board in March involving Arkansas Manufacturing Solutions and the MEP Innovation Marketplace. In the last two months, interest at the national level in small and medium size manufacturers has increased. NIST, along with Eureka Ranch, have announced that they are interested in working with five states that understand innovation to roll out something called "Innovation Marketplace". The marketplace will be designed to match company needs to available technologies and encourage commercialization of new technologies. In order to participate, the agency must secure \$150,000 in funding. AMS will provide in-kind for the project. Dan Curtis is working with AMS partners and stakeholders about funding; he has received a good response from those he has contacted. The roll out is scheduled for April.

INDUSTRY COMMITTEE REPORT

Mr. Robert Hall presented the Industry Committee Report.

AMS revenue is down compared to this time last year. Staff is working on plans to deal with the shortfall in client revenue.

AMS worked with Cooper Tire in Texarkana on a Retention Assessment. Cooper Tire had plans to close one of its four U.S. plants. AMS staff met with AEDC and other state officials to review the retention assessment report and provide input for Cooper Tire. The state's efforts were successful and the company decided not to close the Texarkana plant. AMS will continue to work with Cooper Tire in the coming months and expects to secure a \$175,000 service agreement with the plant to work on cost reduction projects.

The AMS annual review with NIST MEP went well. This was a joint review with Minnesota. AMS staff was able to share best practices with the Minnesota MEP Center. Impact numbers for AMS are better than the Minnesota MEP even though Minnesota has more revenue and staff. Mr. Hall stated that the state of Arkansas getting more bang for the buck from AMS.

Mr. Hall stated that the committee was briefed on the Innovation Marketplace opportunity discussed earlier and they felt it would be a good investment for the state.

INVESTMENT COMMITTEE REPORT

Mr. Heartsill Ragon presented the Investment Committee Report.

The Investment Committee reviewed five proposals at its December 29 meeting and chose to forward two to the full Board for consideration.

Draft Resolution 09-15

Draft Resolution 09-15 would provide funds under the Technology Development Program for the following project:

Application No. 09-TDP-04, “Scenario Analysis Module (SAM)” by EquityNet, LLC, in an amount not to exceed \$25,000.

EquityNet plans to develop additions and improvements to its Enterprise Analyzer (EA) technology. The Scenario Analysis Module (SAM) is in response to suggestions from EquityNet customers. SAM will convert EA into an interactive tool that can be used to test different business scenarios by allowing the entrepreneur or investor to change the assumptions used by EA to calculate a company’s risk adjusted IRR, probability of success, fair-market valuation and other business outcomes.

EquityNet proposes to do most of the development in-house.

Mr. Ragon, on behalf of the Investment Committee, moved approval of Draft Resolution 09-15. Dr. Geren abstained from voting. The motion passed.

Draft Resolution 09-16

Draft Resolution 09-16 would provide funds under the Technology Development Program for the following project:

Application No. 09-TDP-05, “CFO Nursing Home FACTS” by CFO Network, LLC, in an amount not to exceed \$50,000.

CFO Network proposes to develop a database and reporting engine called CFO Nursing Home Financial Analysis and Consulting Tool Suite (FACTS). The technology is designed to serve as an analysis tool to analyze the financial and operating activities of nursing homes.

Mr. Ragon, on behalf of the Investment Committee, moved approval of Draft Resolution 09-16. The Board gave its unanimous approval.

Best Practices

Mr. Ragon reported that the Investment Committee is working on the development of a “Best Practices” criteria, which will outline the criteria for reviewing funding proposals that come before the committee. He stated that at some point the Investment Committee may have a working session with the Executive Committee to discuss this process.

RESEARCH COMMITTEE REPORT

Dr. Collis Geren presented the Research Committee Report.

Arkansas EPSCoR has partnered with West Virginia on a Track II proposal. The proposal, which covers cyberinfrastructure, was submitted to NSF on January 9.

The EPSCoR Committee selected eight white papers for the NSF EPSCoR RII 2009 submission. The eight semifinalists will make presentations at a February 2 EPSCoR Committee meeting. Final proposals are due to the Authority on February 16.

Draft Resolution 09-17

Draft Resolution 09-17 would provide funding for the NSF EPSCoR Round Two Seed Grant applications.

The following seven seed grant applications were evaluated in accordance with National Science Foundation Project Number EPS-0701890 for the RII: Arkansas ASSET Initiative:

- (1) “Determination of Factors Affecting High-Level Protein Accumulation in Transgenic Maize Seed,” submitted by Dr. Elizabeth Hood (ASU) and Xiuzhen Huang (ASU) in the amount not to exceed \$150,000;
- (2) “Regulation of Specialized (“Secondary”) Metabolism in Tomato by Genetic Manipulation of the Phosphoinositol Pathway,” submitted by Mariya Khodakovskaya (UALR), Stephen Grace (UALR), Nawab Ali (UALR) and Fabricio Medina-Bolivar (ASU) in the amount not to exceed \$149,928;
- (3) “Perception & Modification of Bio-polymers by Filamentous Fungi: Towards Metabolic Engineering of Fungi to Complement Plant-Based Bioproduction Strategies,” submitted by Drs. Burton Bluhm (UAF) and Jackson Lay (UAF) in the amount not to exceed \$107,858;
- (4) “Photoregulation of Phenylpropanoid Antioxidant Production in Tomato,” submitted by Drs. Stephen Grace (UALR), Mariya Khodakovskaya (UALR) and JD Swanson (UCA) in the amount not to exceed \$100,292;

(5) “Enabling Crop Deregulation with Software: A Prototype,” submitted by Drs. Daniel Berleant (UALR), Richard Segall (ASU) and Elizabeth Hood (ASU) in the amount not to exceed \$91,571;

(6) “Cardiovascular Response to Plant-Based Anti-Inflammatory Agents,” submitted by Drs. Latha Devareddy (UAF) and Anne Grippo (ASU) in the amount not to exceed \$107,964; and

(7) “Pave the Way for Deciphering the Development of Transfer Cells in Economically Important Crop Plants,” submitted by Drs. Hong Li Wang (UALR); J. D. Swanson (UCA) in the amount not to exceed \$145,995; and

The total for the twenty-two month awards for the seven seed grant applications to the respective campuses conducting the research are:

Award No. 09-EPSCoR-0081 to Dr. Keith Hudson in the amount not to exceed \$392,939 for UALR researchers participating in approved Seed Grant proposals; and

Award No. 09-EPSCoR-0082 to Dr. Elizabeth Hood in the amount not to exceed \$270,553 for ASU researchers participating in approved Seed Grant proposals; and

Award No. 09-EPSCoR-0083 to Dr. John Hehr in the amount not to exceed \$174,416 for UAF researchers participating in approved Seed Grant proposals; and

Award No. 09-EPSCoR-0084 to Dr. J. D. Swanson in the amount not to exceed \$15,700 for UCA approved Seed Grant proposals; and

Draft Resolution 09-17 provides awards to the following campus administrators for the identified individual researchers of the seven seed grant proposals an amount not to exceed \$324,371 and are as follows:

Award No. 09-EPSCoR-0081 to Dr. Keith Hudson in the amount not to exceed \$147,649 for UALR researchers participating in approved Seed Grant proposals;

Award No. 09-EPSCoR-0082 to Dr. Elizabeth Hood in the amount not to exceed \$93,160 for ASU researchers participating in approved Seed Grant proposals;

Award No. 09-EPSCoR-0083 to Dr. John Hehr in the amount not to exceed \$75,712 for UAF researchers participating in approved Seed Grant proposals; and

Award No. 09-EPSCoR-0084 to Dr. J. D. Swanson in the amount not to exceed \$7,850 for UCA approved Seed Grant proposals.

Dr. Geren, on behalf of the Research Committee, moved approval of Draft Resolution 09-17. Dr. Seidman abstained from voting. The motion passed.

Draft Resolution 09-18

Draft Resolution 09-18 would provide EPSCoR Research Experience for undergraduate fellowships for the following proposals:

09-EPSCoR-0065, "Computer Simulation Study of Confidence Intervals for Intraclass Correlation Coefficients," submitted by Shauna Leonard, Arkansas State University, in the amount not to exceed \$2,650.

09-EPSCoR-0066, "Can the caval region of the common dolphin (*Delphinus delphis*) diaphragm regulate vascular pressure during dives to depth?", submitted by Jennifer Cooper, Hendrix University, in the amount not to exceed \$2,650.

09-EPSCoR-0067, "Identification of genes that act downstream of neurogenin1 in nociceptive neuron development," submitted by Lin Poff, Hendrix University, in the amount not to exceed \$2,650.

09-EPSCoR-0068, "Efficient and innovative solar water heater," submitted by Kathryn Sesler, John Brown University, in the amount not to exceed \$2,650.

09-EPSCoR-0069, "Non-Natural Protein Mimetics for the Treatment of Alzheimer's Disease," submitted by Jennifer Herrera, University of Arkansas, Fayetteville, in the amount not to exceed \$2,650.

09-EPSCoR-0070, "The exotic Eurasian Collared Dove (*Streptopelia decaocto*) in Arkansas: dispersal, basic ecology, and effects of native species," submitted by Mike Fielder, University of Arkansas at Fort Smith, in the amount not to exceed \$2,600.

09-EPSCoR-0071, "12-Volt Solar Powered Portable Refrigerator," submitted by Ashley Brown, University of Arkansas at Little Rock, in the amount not to exceed \$2,650.

09-EPSCoR-0072, "Transesterification Reaction of Triglycerides in sCO₂ using Soluble Tin Catalysts for Biodiesel Production," submitted by Samuel Collom, University of Arkansas at Little Rock, in the amount not to exceed \$2,650.

09-EPSCoR-0073, “Tracing Organic Carbon Sources in Lake Maumelle,” submitted by Dawn Johnson, University of Arkansas at Little Rock, in the amount not to exceed \$2,450.

09-EPSCoR-0074, “DC Electric Power Systems for Residential Applications,” submitted by Laura Lawson, University of Arkansas at Little Rock, in the amount not to exceed \$2,025

09-EPSCoR-0075, “Epigenetic Effects and Behavioral Consequences of Prenatal Stress,” submitted by Amrit Anand, University of Arkansas for Medical Sciences, in the amount not to exceed \$2,650.

09-EPSCoR-0076, “Analysis of B-cell Antibody Gene Segment Use in Response to Mercury Treatment,” submitted by Heather Clarke, University of Central Arkansas, in the amount not to exceed \$2,641.

09-EPSCoR-0077, “The role of NHE1, NHE2, and NHE3 isoforms in MCF-7 breast cancer cell survival in the tumor microenvironment,” submitted by Kevin McElhanon, University of Central Arkansas, in the amount not to exceed \$2,650.

09-EPSCoR-0078, “Automated Recognition of Recovery of Potential Drowning Victims,” submitted by Steven Nelson, University of Central Arkansas, in the amount not to exceed \$1025.

09-EPSCoR-0079, “Changes in calcium and vitamin-D in armadillo milk during the course of lactation in relation to the growth of the neonates' carapaces,” submitted by Suzanne M. Watts, University of the Ozarks, in the amount not to exceed \$2,250.

09-EPSCoR-0080, “Biofuel from Algae: Maximizing lipid production from *Dunaliella salina*,” submitted by Kristen Kahler, Southern Arkansas University, in the amount not to exceed \$2,650.

Dr. Geren, on behalf of the Research Committee, moved approval of Draft Resolution 09-18. Drs. Geren, Compadre and Seideman stated that funds were being awarded to UAF, UAMS and UCA, of which they are affiliated. The motion passed.

Draft Resolution 09-19

Draft Resolution 09-19 would provide funds for the Arkansas Research Alliance in an amount not to exceed \$250,000. Staff reported that the agency had received the Research Alliance's quarterly report.

Dr. Geren, on behalf of the Research Committee, moved approval of Draft Resolution 09-19. The Board gave its unanimous approval.

NEW BUSINESS**EPSCoR Advisory Committee**

Dr. Ahlen presented a proposed change to the EPSCoR Advisory Committee. The change would be adding Dr. Blake Perry as the alternate for Dr. Ahlen. Dr. Perry would replace Dr. Gail McClure as the alternate.

Dr. Geren made a motion to approve Dr. Blake Perry as an alternate for Dr. John Ahlen. Dr. Seidman seconded the motion; the Board gave its unanimous approval.

Expense Reimbursement Authorization

Dr. Ahlen reviewed the Expense Reimbursement Authorization for Board members. The Board must at the beginning of each calendar year authorize expense reimbursement for Board members.

Dr. Seidman made a motion to approve the expense reimbursement for Board members. Dr. Purcell seconded the motion; the Board gave its unanimous approval.

Review of Attendance Policy

Dr. Ahlen reviewed the attendance policy for Board members.

Statement of Financial Interest

Dr. Ahlen reminded members to complete and return their Statement of Financial Interest forms to the Secretary of State's office by January 31.

Next Meeting Date

The next Board meeting is scheduled for March 20, 2009.

ADJOURNMENT

There being no further business to conduct, the meeting was adjourned.

Respectfully submitted,

Heartsill Ragon, III
Secretary
Board of Directors

Approved by the Board of Directors
on this 20th day of January, 2009.

Heartsill Ragon, III
Secretary
Board of Directors