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October 29, 2012

Ms. Marty Garrity Director Arkansas Bureau of Legislative Research State Capitol, Room 315 Little Rock, AR 72201

Dear Ms. Garrity:

The Arkansas Science & Technology Authority is pleased to submit to you its 2012 Annual Report. We hope you find this overview of the Authority's Fiscal Year 2012 activities and accomplishments informative.

As always, we appreciate your support.

Sincerely,

John W. Ahlen, Ph.D.

President

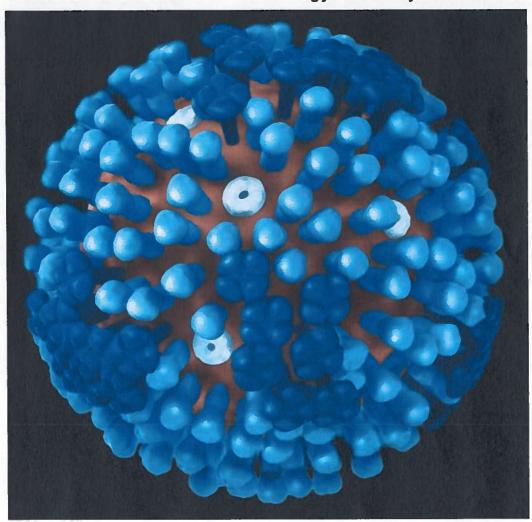
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Enclosure



ASTA

The Arkansas Science & Technology Authority



ANNUAL REPORT 2012



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LETTER FROM THE CHAIRMAN AND PRESIDENT

Dear Governor Beebe & Distinguished Legislators:

The Board of Directors and staff are pleased to submit to you the Authority's 2012 Annual Report. This report is a summary of the scientific and technological projects by which the Authority carries out its mission to advance the talent and innovation necessary for Arkansas to prosper.

Our goals include ensuring the next generation of Arkansans has sufficient science, technology, engineering and mathematics (STEM) skills to be competitive in the twenty-first century workforce. The Authority partnered with Governor Beebe to launch the STEM Works and UTEACH programs and supported the professional development of STEM teachers, projects at the Delta Technology Center in Dumas, the Louis Stokes Alliance for Minority Participation and the Arkansas Discovery Network.

Our second goal is to maximize the production of scientific and engineering talent and research innovations as building blocks for the twenty-first century economy. This year the Authority made substantial progress in achieving this goal by continuing support of the ASSET Initiative's National Science Foundation-funded research centers, VICTER, GREEN and P3.

The third Authority goal is to invest in research innovations that build knowledge-based industries for Arkansas's twenty-first century economy. Over the last year, the Authority has invested in Arkansas-based companies developing innovations that range from plant-made vaccines to chips that extend battery life in cell phones.

Goal four is to strengthen the capacity of Arkansas's companies to innovate, create wealth, expand knowledge-based jobs and compete globally. Whether helping small start-ups gauge the potential market impact of a product offering or commercializing the launch of a product line, the Authority helped clients produce innovations that will meet the demands of the international marketplace. Innovations ranged from mortgage software to nanocrystals used in electronics.

The Authority's fifth and final goal is to extend science and technology expertise to take advantage of emerging opportunities in partnership with other programs, services and organizations. For a third year, the Authority supported the Arkansas Innovation Marketplace to assist clients in marketing products and services, as well as making new strategic partnerships with potential investors.

Also for a third year, the Authority supported the operation of the Arkansas Office of Health Information Technology, an ARRA-funded effort to plan a secure health information exchange system.

The Arkansas Science & Technology Authority is working to prepare the state to meet the needs of our rapidly changing twenty-first century economy. By advancing the talent and innovation necessary for Arkansas to prosper, the Authority will ensure Arkansas's legacy as a major contributor to our great nation and, ultimately, the world.

John W. Ahlen

President

Bank D. Ly Got

Beverly Dawkins Lyn-Cook Chairman





ABOUT THE AUTHORITY

The Arkansas Science & Technology Authority (the Authority) was created by statute in 1983. The mission of the Authority is to advance the talent and innovation necessary for Arkansas to prosper.

With a vision to see Arkansas prepared to compete and prosper in the global economy, the Authority addresses strategies to promote scientific research, technology development, business innovation and math, science, and engineering education.

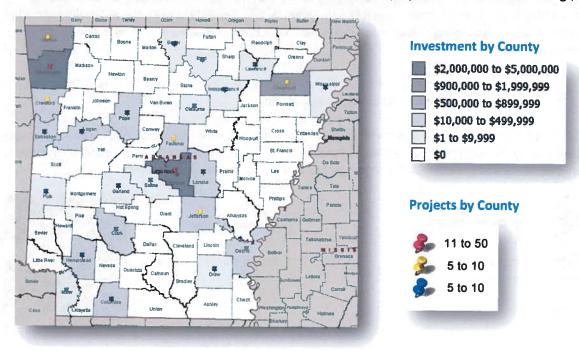
The Authority's staff is led by the President, the chief executive officer, who is responsible for the agency's programs, services and support functions. The Authority's activities are divided into three programmatic areas that include research and commercialization, sponsored projects and industry. The Board determines the allocation of funds to all projects supported by the Authority. Three standing committees, comprised exclusively of members of the Board, make recommendations to the full Board. The Executive Committee meets as necessary. Advisory Committees, comprised of Board and non-Board members, offer additional input to the Authority.

The Authority operates in accordance with six values as the foundation for serving the state of Arkansas. The Authority continues to:

- 1. Be accountable to Authority stakeholders.
- 2. Be honest and ethical.
- 3. Value and promote Authority products and services.
- 4. Be creative and objective in order to improve the organization and staff.
- 5. Treat all with respect and dignity.
- 6. Value diversity among Authority staff and our customers.

BOARD APPROVED INVESTMENTS- FISCAL YEAR 2012

In Fiscal Year 2012, the Authority's Board of Directors approved 145 projects in 26 counties totaling \$10,189,178:





SPONSORED PROJECTS

In Fiscal Year 2012, as part of the Governor's Workforce Cabinet, the Arkansas Science & Technology Authority supported Governor Mike Beebe in announcing STEM Works.

STEM Works is a pilot program focused on Science, Technology, Engineering, and Math (STEM) education in high schools and universities, so that the state's workforce will be able to meet the escalating demand for employees in high-tech fields. STEM Works specifically seeks to overhaul the ways in which Arkansas high school students receive STEM education and to increase the number of well-qualified STEM teachers. The Governor's Workforce Cabinet will be responsible for implementing STEM Works. In addition to the Authority, the Cabinet includes: the Governor's Office; the Departments of Education, Career Education, Higher Education, Workforce Services; the Arkansas Economic Development Commission; and the Arkansas Association of Two-Year Colleges.

During the past year, the Authority released \$85,000 to support the development and implementation of Arkansas UTeach projects. Assistance was provided to the University of Arkansas, Fayetteville, Arkansas State University, Arkansas Tech University, the University of Arkansas at Little Rock and the University of Central Arkansas, as well as the Arkansas STEM Coalition, to facilitate the planning activities.



- UTeach Campuses
- EAST Core Pioneer Schools
- Project Lead The Way High Schools
- New Tech High Schools

UTeach is a program to recruit, train, and prepare teachers with strong backgrounds in STEM subjects. The map shows these UTeach campuses as well as other similar initiatives.

The Authority approved \$4,000,000 in sub-agreements to the University of Arkansas, Fayetteville, the University of Arkansas at Little Rock, Arkansas State University, the University of Arkansas at Pine Bluff, the University of Central Arkansas, the University of Arkansas at Fort Smith, and Philander Smith College. The funding was used to support projects under ASSET II's Plant Powered Production (P3), Green Renewable Energy-Efficient Nanoplasmonic Solar Cells (GREEN) and the Vertical Integrated Center for Transformative Energy Research (VICTER) research centers.

The Authority awarded the VICTER Center \$32,000 to fund the VICTER Power Box Outreach Plan, which is a collaboration between the two ASSET campus centers located at the University of Arkansas, Fayetteville and the University of Arkansas at Little Rock.

Funding provided by the Arkansas ASSET Initiative (ASSET II) for K-8 outreach will be used to establish the VICTER Power Box program at both universities, creating a mechanism to actively integrate undergraduate STEM students into VICTER



which includes research opportunities and internships, and, finally, to provide professional development training to certify STEM teachers for VICTER Power Box use in their classrooms.

This project will serve as a pilot study to evaluate the undergraduate "science mentor" concept proposed and to provide feasibility data for expanding this mini-grant concept through future funding opportunities. VICTER's K-8 outreach project will focus on raising awareness of renewable energy and sustainability in rural regions throughout northwest and central Arkansas over the life of the VICTER Project by recruiting teachers from schools in these areas to participate in the professional development workshops.

For the second year in a row, the Authority awarded \$96,000 to the University of Arkansas at Pine Bluff to support junior and senior research assistantships under the Louis Stokes Alliance for Minority Participation. The Authority also provided funding for 16 ASSET Initiative Research Experience for Undergraduate Fellowships in partnership with the Arkansas Department of Higher Education. Fellowships were served at Arkansas State University, the University of Arkansas at Little Rock, the University of Central Arkansas, Henderson State University, the University of Arkansas at Monticello, the University of Arkansas, Fayetteville and the University of Arkansas at Fort Smith.

The Authority also approved funding for an Educational Outreach Coordinator, a STEM Internship Position with the Winthrop Rockefeller Foundation, an EPSCoR External Evaluator, projects at the Delta Technology Education Center in Dumas, and to support an NSF EPSCoR Grant program that will expand e-Journal access through campus libraries which will aid researchers across Arkansas.



(above) Participants take part in a Tinkering Studio Event at the Arkansas Discovery Museum. (Photo courtesy of Denny Grandle, copyright 2012)

The Authority supported interactive learning throughout the fiscal year by funding the "Tinkering Studios" Project at the Arkansas Discovery Network, and by launching Biotech in a Box, a program that is designed to increase twenty-first century skills of STEM teachers throughout the state. Additionally, the Authority appropriated funding of a Kit Replication Project at Arkansas State University and funded STEM Summer Academy proposals on the

campuses of Arkansas State University, Henderson State University, and the University of Arkansas, Fayetteville and provided a planning grant which

allowed Southern Arkansas University in Magnolia to participate in the Razorback Solar Boat STEM Academy, which was held in Fayetteville.



RESEARCH & COMMERCIALIZATION

The Authority fulfilled its third goal of investing in research innovations that build knowledge-based industries for Arkansas's twenty-first century economy.

During the last year, the Authority awarded a Technology Development Program investment to Jonesboro-based BioStrategies. The company will use the investment to develop a plant-made production system for Porcine IL-12. The IL-12 will be used as an adjuvant to improve swine vaccines. An important first target disease will be the H1N1 virus (swine flu) which poses a threat to both swine and human populations. Arkansas Biosciences International received a Technology Development Program investment to continue research on a vaccine platform targeting Avian Influenza.

The Board also approved Seed Capital Investments for multiple companies in Fiscal Year 2012. BRES Advisors will use their investment to commercialize a software package to the banking and mortgage industry. Fayetteville-based Nanowatt Design will use funds to develop and commercialize a new electronic circuit design that could significantly reduce the power consumption of electronic devices like cell phones and pacemakers. Unityware will use the Authority investment to continue development of their medical records software that will be marketed to the health care industry. BioDetection Instruments will use their Seed Capital Investment funds to finalize the design of their first product, the Aegis 1000. The Aegis 1000 was designed for the food industry to rapidly detect pathogens before they enter the food supply.

In the past year multiple companies received R & D Tax Credits including Ocean Nanotech, Superior Industries International, BlueInGreen, First Orion Corporation, Invotek, Merchant View, Minotaur Technologies, Nutraceutical Innovations, Rockline Industries, BioBased Technologies, and Mesolight.

Connect Arkansas received funding in the amount of \$7.8 million for their National Telecommunications and Information Administration (NTIA) Mapping and Planning Extension Grant proposal and NTIA Sustainable Broadband Adoption Grant. The Governor's Office released \$282,000 to the Authority for Connect Arkansas to use as cash-match to continue these projects.

The foundation for building a knowledge-based economy starts with a commitment to invest in high-tech, job-creating research. To that end, the Authority awarded the Cyberinfrastructure Center of Arkansas \$400,000 in Fiscal Year 2012. The Center is part of the Authority's Centers for Applied Technology Program, which is designed to support university participation in basic and applied research in technological areas having significant potential for economic growth in Arkansas. The Authority also supported the CI-Train Project. CI-Train is an NSF-funded partnership among multiple Arkansas and West Virginia institutions. The project builds on common research in nanosciences and geosciences.



In Fiscal Year 2012, the Authority helped facilitate the growth of new resources for research by approving the Arkansas State University Innovation Center's certification as the state's newest incubator supporting technology-based companies. The certification allows private investors to receive tax breaks for investments in the incubator's client companies. This

represents another strategy to encourage early stage investments in high-tech start-up companies. The ASU Innovation Center joins the Genesis Technology Incubator in Fayetteville and UAMS BioVentures in Little Rock as a qualified technology incubator.

As part of the Research Match Program, the Arkansas Science & Technology Authority also awarded \$70,000 to the University of Arkansas at Pine Bluff to fund the Louis Stokes Alliance for Minority Participation. The program is designed to steer underrepresented minorities to toward careers in STEM fields. Funding from the Arkansas Research Match Program also benefited two projects at the University of Arkansas at Little Rock. Funds were awarded for the Arkansas Space Grant Consortium and the Arkansas NASA EPSCOR Research Infrastructure Development Project.

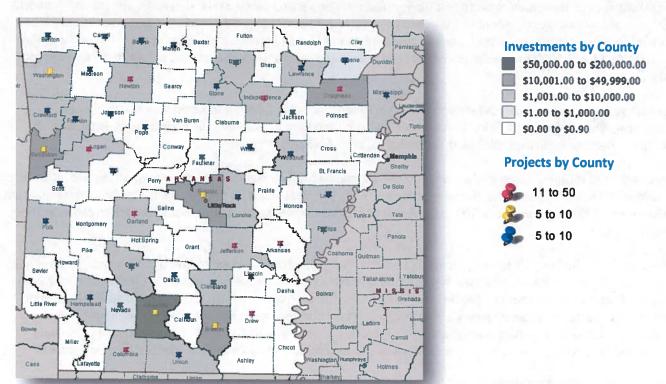


INDUSTRY

During Fiscal Year 2012, AMS provided consulting and training services to over 300 manufacturing companies and organized peer-to-peer events around the state on topics such as Training Within Industry, Innovation, and Lean. AMS awarded Technology Transfer Assistance Grants (TTAG) to clients seeking assistance from third party providers to implement technology improvements in their organizations.

Four AMS clients received recognition at the Arkansas Governor's Quality Award Banquet with Achievement Level and Challenge Awards. AMS teamed with the Arkansas Institute of Performance Excellence (AIPE), to promote and present at two 2011 Manufacturing Challenge seminars, a seminar focused on energy in Magnolia, and a seminar in Springdale focused on workforce development.

In Fiscal Year 2012, AMS activities included 238 projects in 48 counties and served 329 manufacturing companies, earning \$266,422 in revenue:



AMS also hosted the first state-wide Industrial Energy Conference. During Fiscal Year 2012, AMS, as part of Arkansas's Southeast Energy Efficiency Alliance (SEEA), participated in the Department of Energy's (DOE) Superior Energy Performance Program. The objective of the program is to provide industrial facilities with a road map for achieving continual improvement in energy efficiency while maintaining competitiveness. AMS's role was to identify a manufacturer as a pilot company to go through ISO 50001 implementation and to provide ISO 50001 assistance. During the fiscal year AMS also presented 14 energy training workshops utilizing the Energy Efficiency Arkansas (EEA) grant from the Arkansas Energy Office (AEO). As part of AMS's relationship with the AEO and the University of Arkansas, Fayetteville, AMS helped to maintain and promote the Arkansas Industrial Energy Clearinghouse (AIEC). The AMS Business Development team presented information about the AIEC at over 10 events around Arkansas, reaching nearly 200 participants. Work was completed on the production of an AIEC informational video which was distributed on over 500 flash drives and posted publicly on YouTube.



AMS expanded its staff expertise in Innovation and Growth Services during Fiscal Year 2012 by sending six members to multiple Innovation Engineering Black Belt trainings in Cincinnati and hosting its second Innovation Engineering Leadership Institute in November. AMS provided coaching and technical support to several startup companies by completing Merwyn Business Simulations, which measures the potential commercial value and success of a company's Intellectual Property, and by assisting numerous Arkansas companies in making business connections to further its commercialization efforts. AMS signed its first Innovation Engineering Management System (IEMS) client to a six month contract to develop new intellectual property for the firm.

Technology Development is a vital part of growth in any modern organization. Throughout the year AMS staff worked with several early stage companies that are developing technology-based projects. AMS also helped clients obtain large federal grants for their commercialization efforts including Acetaminophen Toxicity Diagnostics on a successful submission for an STTR Phase II proposal for \$1.69 million. AMS provided a letter of support to Poly Adaptive, another Arkansas-based firm that ultimately received a NASA SBIR Phase I grant to develop Poly Adaptive's EDS product, which reduces the level of dust buildup on NASA space equipment, solar panels and solar photovoltaic cells.

AMS supported its partner organizations through various outreaches and events. AMS was an event sponsor and provided funding for the Arkansas Aerospace Summit, which was presented by the Arkansas Aerospace Alliance. This supply chain event fostered connections between Arkansas businesses and aerospace original equipment manufacturers (OEM). AMS helped promote the event to Arkansas manufacturers through e-blasts and personal contacts. AMS also partnered with the University of Arkansas at Fort Smith to offer a public workshop on Robotic and Motion Control.

AMS conducted sessions on Lean 101 for Arkansas Department of Workforce Education (ADWE) staff members, including Career-Tech Coordinators from educational cooperatives around Arkansas. This was part of a continuing effort to provide the state educators an opportunity to learn about the challenges and opportunities their students will encounter in the workforce.



STATE HEALTH INFORMATION EXCHANGE

During Fiscal Year 2012, the Arkansas Office of Health Information Technology (OHIT) continued with the deployment of a statewide health information exchange (HIE) with Cooperative Agreement funds provided by the Office of the National Coordinator for Health Information Technology (ONC). The HIE Council, which is the advisory group established and defined via legislation, recently named David Miller, CIO at the University of Arkansas for Medical Sciences, as the Chair of the Council and Sandra Brown, Interim Executive Director of Jefferson Comprehensive Care, Inc., as Vice Chair. The Council provides stakeholder input and guidance on state-level HIE strategy and includes 19 representatives from different organizations appointed by the Governor.

The HIE, the State Health Alliance for Records Exchange (SHARE), is being deployed in a phased approach with Phase 1 including secure messaging with Phase 2 including more expanded exchange functionality. Phase 1 was launched in February 2012, which provides secure messaging services to health care and health services providers and hospitals throughout the state of Arkansas. The secure messaging is an encapsulated system which requires users to join SHARE, which includes user identity proofing and other security requirements based upon HIPAA and HITECH requirements.

This process has been successfully executed by developing a regional approach in order to connect communities of providers to SHARE to create a meaningful utility. OHIT also identified anchor institutions or "critical nodes" in each region, such as an area hospital or health care system. As those anchor institutions were added to SHARE, their referring physicians were also approached to join. Using this approach, OHIT has been able to secure many signups at one time and increase the utility and value of secure messaging for all participants. This approach has garnered success and there are currently 1150 users in SHARE.

For states that received the funds via the federal Cooperative Agreement, ONC established threshold numbers for users before each state received approval to move forward to Phase 2 deployment. Arkansas was the first state to receive approval from ONC to move to Phase 2 based upon the successful implementation of Phase 1 of SHARE. This accomplishment by the state was highlighted by ONC's State HIE Bright Spots Initiative.

As OHIT continues its efforts to expand the SHARE secure messaging user base, it is also turning attention to Phase 2 of SHARE. Phase 2 includes building out technical components, including a master person index (MPI), record locator service (RLS), and web-based portal. These are required for more robust HIE functionality in Arkansas. Those providers and other end users who choose not to participate in Phase 2 can still use the SHARE secure messaging feature. Phase 2 planning, implementation and deployment are currently underway with a target timeframe of early October, 2012.

OHIT will operate as a separate agency, independent of the Authority, after Fiscal Year 2012.



BOARD OF DIRECTORS

Beverly Dawkins Lyn-Cook, Ph.D. Chair

Senior Research Scientist

Division of Personalized Nutrition and Medicine

Branch: Pharmacogenomics and Molecular Epidemiology National Center for Toxicological Research (NCTR)

Term Expires: 2013

Cesar Compadre, Ph.D.

Secretary

Associate Professor

Pharmacy and Public Health

University of Arkansas for Medical Sciences (UAMS)

Term Expires: 2015

Collis Geren, Ph.D. Chair — Sponsored Projects Committee

Retired

Term Expires: 2015

Shane Broadway

Director

Arkansas Department of Higher Education - Little Rock

Term: Permanent

Carl Frederickson, Ph.D.

Associate Professor Associate Dean

College of Natural Science & Mathematics

University of Central Arkansas

Term Expires: 2014

J. Michael Nauman

President

Molex Global Integrated Products Division

Term Expires: 2016

Robert W. Sproles, Ph.D.

Conestoga-Rovers & Associates (CRA)

Term Expires: 2015

Gien Jones, Jr., J.D.

Vice Chair

President

Henderson State University

Term Expires: 2014

Gary Campbell

Chair - Research & Commercialization Committee

Retired - IBM Corporation

City Director/Vice Mayor, Fort Smith

Term Expires: 2013

Paul Mastro

Chair - Industry Committee

Vice President - Manufacturing and Engineering

George Fischer Sloane Term Expires: 2014

Bradford Caldwell

CEO

Caldwell Media Term Expires: 2016

Joel Harrison

Nuclear Operations Manager, NDE Washington Group International

Term Expires: 2016

Heartsill Ragon, III

Attorney

Gill Elrod Ragon Owen & Sherman, PA

Term Expires: 2015

George Williams

Director of Business Development

Intellimation Technologies

Term Expires: 2015





STAFF

John W. Ahlen, Ph.D. President

Blake Perry, Ph.D.Executive Vice President

Steve Stanley, Ph.D.Vice President Commercialization

Gail McClure, Ph.D.Vice President Sponsored Projects

Dan Curtis Vice President Industry

James Downs
Vice President Informatics

Melissa Adams
Executive Assistant to the President

Cathleen Bailey Fiscal Officer

Charles Appleby Manager of Client Services AMS

Elza Albert ASSET Accountant

Tovia Chan Operations Manager AMS

Marta Collier Education Outreach Coordinator **Chase Conyer** Information System Planner

Julianne Gonzalez Project Analyst AMS

Greg Henderson*Marketing Manager AMS

Andy Hendricks Research Program Manager

Stephanie Y. Johnson Finance Program Manager

Rachel Lee Accounting Supervisor Cathy Ma

EPSCoR Assistant Director

Annetta Massanelli*
Executive Secretary

Chris SniderCommunications Manager

Gregory WilliamsDatabase Analyst

* vacated position during fiscal year

AMS PROJECT MANAGERS

Loren Berry

Project Manager University of Arkansas – Fayetteville Engineering Research Center

Jim Lilly

Project Manager University of Arkansas at Little Rock Reynolds Business Center **Brandon Brown**

Business Development Specialist University of Arkansas – Fayetteville Engineering Research Center

Sherry Smith Project Manager University of Arkansas at Little Rock Reynolds Business Center **Scotty McKnight**

Project Manager University of Arkansas – Fayetteville Engineering Research Center

Bill Kraus

Project Manager Delta Center for Economic Development **Cecil Marion**

Project Manager Winrock International

HEALTH INFORMATION TECHNOLOGY STAFF

Ray Scott

Arkansas HIT Coordinator

Janis Chalmers Chief Legal Council Phil Mizell, MD, CPE

Chief Medical Officer

Vacant

Policy Analyst

Shirley Tyson

Chief Operations and Technical Officer

Vacant

Public Information Coordinator

Kathryn Hazelett

Director of Policy and Intergovernmental Affairs

Stephanie Jackson

Executive Assistant to Ray Scott

NEW FACES



James Downs



Andy Hendricks



Cecil Marion



COMMITTEE/BOARD AFFILIATIONS

Gubernatorial Appointments

Who Serves

Governor's Workforce Cabinet Southern Technology Council

President

Arkansas Health Information Exchange Council

Executive Vice President Executive Vice President

Statutory Affiliations

Who Serves

Arkansas Capital Corporation

Arkansas Tobacco Settlement Commission

Arkansas Biosciences Institute

Commission for the Coordination of Educational Efforts

Arkansas Broadband Council Cyberinfrastructure Task Force Information Network of Arkansas

Distance Learning Coordinating Council

Arkansas School for Mathematics, Sciences and the Arts

President

President

President

President

President President

Vice President Informatics

Vice President Sponsored Projects **Education Outreach Coordinator**

Other Professional Affiliations

Who Serves

Connect Arkansas **EAST Board**

Venture Capital Investment Trust

NSF EPSCoR Program Director's Council, Chair-Emeritus

Executive Committee, STEM Coalition

College of Science and Mathematics Advisory Board, UALR

Preparing For Tomorrow Curriculum Advisory Team

Arkansas Space Grant Consortium

President President President

Vice President Sponsored Projects Vice President Sponsored Projects

Vice President Sponsored Projects Vice President Sponsored Projects

Executive Vice President

Education Outreach Coordinator Marta Collier talks to students at Arkansas School for Mathematics, Sciences and the Arts about STEM career opportunities during the Central Arkansas Biotechnology STEM Academy, an event funded by the Winthrop Rockefeller Foundation.





THE AUTHORITY BY THE NUMBERS

In Fiscal Year 2012, the Authority completed 145 Projects in 26 Counties, and approved \$10,189,178 in investments which includes the following:

County	Number of Projects - ASTA	Board Approved Investments - ASTA	Number of Projects -	Gross Project & Event Fees -	Total Number of Projects	Total Amounts
			AMS	AMS	0,,,0,,0,0	
Arkansas	0	\$0	9	\$0	9	
Baxter	2	\$6,375	0	\$0	2	\$6,37
Benton	5	\$946,071	4	\$0	9	\$946,07
Boone	0	\$0	2	\$2,500	2	\$2,50
Bradley	Ō	\$0	14	\$20,565	14	
Calhoun	0	\$0	2	\$20,303	2	\$20,56
Carroll	0	\$0	1	\$0		
Clark	3	\$16,921	4		1	410.43
Cleburne	2			\$1,500	7	\$18,42
Cleveland	0	\$7,500 \$0	0	\$0	2	\$7,50
Columbia	3			\$2,250	3	\$2,25
		\$15,915	8	\$3,500	11	\$19,41
Craighead Crawford	9	\$1,064,972	9	\$13,250	18	\$1,078,22
	6	\$64,953	3	\$4,500	9	\$69,45
Dallas	0	\$0	1	\$0	1	\$
Desha	3	\$86,355	0	\$0	3	\$86,355.0
Drew	2	\$3,978	5	\$0	7	\$3,97
Faulkner	6	\$380,528	2	\$0	8	\$380,52
Franklin	0	\$0	2	\$5,000	2	\$5,00
Garland	1	\$3,750	7	\$1,250	8	\$5,00
Greene	0	\$0	2	\$1,000	2	\$1,00
Hempstead	3	\$11,250	1	\$1,250	4	\$12,50
Independence	1	\$3,750	8	\$1,250	9	\$5,00
Izard	1	\$3,750	1	\$1,250	2	\$5,00
Jackson	0	\$0	3	\$0	3	
Jefferson	6	\$398,964	8	\$8,750	14	\$407,71
Johnson	0	\$0	1	\$0	1	\$
Lawrence	1	\$3,750	2	\$2,500	3	\$6,25
Lee	0	\$0	1	\$1,250	1	\$1,25
Lincoln	0	\$0	3	\$0	3	\$
Logan	3	\$11,250	5	\$5,700	8	\$16,95
Lonoke	2	\$103,750	3	\$3,650	5	\$107,40
Madison	0	\$0	1	\$0	1	4
Marion	0	\$0	1	\$0	1	4
Miller	1	\$3,750	0	\$0	1	\$3,75
Mississippi	1	\$3,750	3	\$2,482	4	\$6,23
Nevada	0	\$0	2	\$570	2	\$57
Newton	0	\$0	5	\$3,252	5	\$3,25
Ouachita	0	\$0	44	\$106,384	44	\$106,38
Phillips	0	\$0	1	\$2,600	1	\$2,60
Polk	1	\$3,750	4	\$2,500	5	\$6,25
Pope	3	\$19,500	1	\$0	4	\$19,50
Pulaski	26	\$2,281,026	20	\$24,477	46	\$2,305,50
Saline	1	\$3,750	Õ	\$0	1	\$3,75
Scott	0	\$0	1	\$0	1	\$3,72
Sebastian	3	\$74,180	16	\$22,402	19	\$96,58
Stone	0	\$74,180	2	\$1,250	2	
Union	0	\$0	3		3	\$1,25
Washington	48	\$4,574,821	13	\$4,000		¢4 E79 01
White	0		13	\$4,090	61	\$4,578,91
Woodruff		\$0	2	\$0	2	42.00
Yeli	0	\$0	1	\$2,000	1	\$2,00
	0	\$0	2	\$0	2	\$
Other	2	\$90,870	2	\$9,500	4	\$100,37



Resolution Number	Resolution Date	Company/Organization	Project/Program	Total Approved Amount
12-05	7/15/11	UAF, UALR, ASU, UAPB, UCA, Philander Smith	University Sub-agreements	\$4,000,000
12-06	7/15/11	ASSET II	VICTER Center	\$32,000
12-09	9/16/11	ASSET II	Educational Outreach Coordinator	\$82,240
12-10	9/16/11	ASSET II	WRF STEM Internship	\$7,288
12-14	11/18/11	Multiple campuses	Research Experience for Undergraduate Fellowship Program	\$39,000
12-15	11/18/11	Arkansas Discovery Network	Tinkering Studios Project	\$27,857
12-16	11/18/11	ASU	BioTech in a Box	\$24,500
12-19	1/20/12	Minnick & Associates	EPSCoR External Evaluator	\$71,870
12-20	1/20/12	UCA	Communications Internship	\$15,600
12-25	3/16/12	UAPB	Louis Stokes Alliance for Minority Participation	\$96,000
12-34	5/18/12	UAF	E-Journal/NSF EPSCoR Grant	\$70,000

UTeach

As part of the Governor's Workforce Cabinet, the Authority is supporting a component of STEM Works called UTeach, an innovative teacher preparation program for students majoring in science, mathematics, and computer science.

Resolution Number	Resolution Date	Company/Organization	Project/Program	Total Approved Amount
12-11	9/16/11	UAF, UCA, UALR, ASU, ATU, Arkansas STEM Coalition	UTeach	\$85,000

The Delta Technology Education Center

The Delta Technology Education Center houses the Department of Workforce Services and Southeast Arkansas Workforce Investment Board, as well as a public computer lab, classrooms for use by colleges, entrepreneurial and youth services.

Resolution Number	Resolution Date	Project/Program	Total Approved Amount
12-07	7/15/11	Breakthrough Solutions	\$25,245
12-07	7/15/11	Summer Programs & Support	\$40,610
12-07	7/15/11	Summer Youth Program	\$20,500



Research & Commercialization

Technology Transfer Assistance Program

The Technology Transfer Assistance Grant Program (TTAG) assists Arkansas enterprises in developing or improving products or processes through the transfer of technical solutions to technology-based, industry-driven problems, thus enhancing that enterprise's market competitiveness.

Resolution	Resolution Date	Company/Organization	Total Approved
			Amount
11-30	5/20/11	Approved in Fiscal Year 2011	\$356,975
12-33	5/18/12	Approval for FY 2013 Allocation	\$356,975

Research & Development Tax Credit Program

The R&D Tax Credit Program provides incentives for university-based and in-house research, as well as research and development in start-up, technology-based enterprises.

Resolution	Resolution Date	Company/Organization	Total Approved Amount
12-01	7/15/11	Ocean NanoTech	\$192,743
12-28	1/20/12	Superior Industries, International, Inc.	\$828,151
12-22	3/16/12	BlueInGreen	\$38,007
12-22	3/16/12	First Orion Corporation	\$222,592
12-22	3/16/12	Invotek	\$47,203
12-22	3/16/12	Merchant View	\$106,920
12-22	3/16/12	Minotaur Technologies	\$42,280
12-22	3/16/12	Nutraceutical Innovations	\$27,368
12-22	3/16/12	Rockline Industries	\$491,681
12-30	5/18/12	BioBased Technologies	\$141,745
12-30	5/18/12	Mesolight	\$123,603

Technology Development Program

The Technology Development Program (TDP) provides assistance in the development and commercialization of new technology-based products and processes through innovative technology development projects.

Resolution	Resolution Date	Company/Organization	Total Approved Amount
12-03	9/16/11	BioStrategies	\$33,820
12-28	5/18/12	Arkansas Biosciences International, LLC	\$27,665

Seed Capital Investment Program

The Seed Capital Investment Program (SCIP) fosters the development of innovative technology-based businesses and projects that will stimulate economic growth and industrial competitiveness in Arkansas.

Resolution	Resolution Date	Company/Organization	Total Approved Amount*
12-02	7/15/11	BRES Advisors	\$100,000
12-08	9/17/11	NanoWatt Design	\$70,000
12-21	3/16/12	cycleWood	\$57,563
12-22	3/16/12	Unityware	\$100,000
12-29	5/18/12	BioDetection Instruments	\$100,000

^{*}actual amounts released totaled \$292,652.



The Research Match Program

The Research Match Program supports basic and strategic research by providing the state match for federal agency awards to Arkansas colleges and universities.

Resolution	Resolution Date	Company/Organization	Project/Program	Total Approved Amount
12-24	3/16/12	UAPB	Louis Stokes Alliance for Minority Participation	\$70,000
12-32	5/18/12	UALR	Arkansas Space Grant Consortium	\$200,000
12-32	5/18/12	UALR	Arkansas NASAS EPSCoR Research Infrastructure Development	\$22,653

The Arkansas Research Alliance

Arkansas research universities participate in identifying respected and esteemed candidates for the Arkansas Research Alliance Scholars program. Scholars are experts in their respective fields and are recognized as leaders with outstanding research credentials and entrepreneurial records. Scholars oversee research programs that will bring economic vitality to Arkansas through commercialization and business development. In Fiscal Year 2012, no funds were released to the Arkansas Research Alliance.

Centers For Applied Technology

The Centers for Applied Technology Program supports university participation in basic and applied research in technological areas having significant potential for economic growth in Arkansas.

Resolution	Resolution Date	Company/Organization	Total Approved Amount
12-04	7/15/11	Cyberinfrastructure Center of Arkansas	\$282,000
12-31	5/18/12	CI-TRAIN	\$400,000

Industry

Resolution	Resolution Date	Company/Organization	Total Approved Amount
12-27	5/18/12	UALR, ASU, UAF, SAU, Winrock International, AIPE, AEDC	\$1,467,552

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total Approved Amount
Companies Assisted	84	61	119	65	329
Jobs Retained & Created	1,681	140	120	35	1,976

	Total Match	Match Breakdown							
State Funding		Federal	State Agencies		Universities	Non Duckho	Clianta		
			Authority	AEDC	Universities	Non-Profits	Clients		
\$257,182	\$3,556,660	\$941,110	\$135,412	\$1,289,936	\$590,880	\$155,523	\$443,879		
	Ratio: 13.8	45 11/110	4100,112	¥2/205/550	4530,000	¥133,323			



OPERATIONS REPORT

ENERAL R	REVENUE	BUDGET	ADJUST			CTUAL		
	GENERAL OPERATIONS			1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
	Regular Salaries	686,400	-10,000	173,926	165,573	142,616	173,123	655,238
	Extra Help	12,000	-10,000	1,421	0	0	0	1,421
	Maintenance & Operations	155,154	57,778	40,669	31,977	31,078	93,624	197,347
	Fringe Benefits	206,725	-4,000 10 F00	52,161	50,165	45,613	51,763	199,702 15,229
	Conference Fees & Training Professional Fees	8,300 12,800	19,500	1,577 813	1,769 758	2,024 4,592	9,859	6,557
	Technology Development	156,975	0	47,500	63,070	15,000	31,405	156,975
	Research Matching	292,653	0	0	0	0	292,653	292,653
	Seed Capital Investments	292,653	0	100,000	35,000	0	157,653	292,653
	TOTAL	1,823,660	53,278	418,068	348,312	240,922	810,473	1,817,775
	AMS SUPPORT	257,182		0	0	0	257,182	257,182
	TOTAL	257,182		0	0	0	257,182	257,182
SH		BUDGET				CTUAL		
ın	SEED CAPITAL FUND	1,900,000		0	0	O	0	0
	TOTAL	1,900,000		0	0	0	0	0
	AMS CASH FUND							
	Regular Salaries	158,253		41,473	40,873	35,034	43,851	161,232
	Maintenance & Operations	50,393		23,024	23,700	38,473	13,618	98,815
	Fringe Benefits	47,463		12,748	12,143	10,979	12,714	48,584
	Grants Conference Fees & Training	182,818		25,906	81,767	42,032	66,019	215,724
	Professional Fees	24,300 75,000		7,290 6,650	1,835	3,908	9,851	22,885 6,650
	Field Services	351,708		0,030	8,628	46,178	2,594	57,401
	TOTAL	889,935	11111111	117,092	168,947	176,605	148,647	611,291
	OHIT STATE MATCH					2010		
	Regular Salaries			12,312	20,338	15,628	19,608	67,886
	Maintenance & Operations			4,113	10,863	11,247	16,027	42,249
	Fringe Benefits			3,958	5,958	5,159	5,979	21,054
	Conference Fees & Training			409	114	90	0	613
	Professional Fees TOTAL	1,500,000		7,325 28,117	23,791 61,065	511 32,635	1,114	32,742 164,544
	IOIAL	2,300,000		20,117	01,003	32,033	72,720	100,000
DERAL	GRANTS	BUDGET	727		C e a la la	ACTUAL		7 7
	AMS- NIST MEP							
	Maintenance & Operations	100,000		90	651	4,316	39,741	44,797
	Fleid Services	841,110		263,493	272,846	243,377	61,394	841,110
	TOTAL	941,110		263,583	273,497	247,692	101,135	885,907
	ASSET II- NSF EPSCoR		-	THE RESERVE				
	Regular Salaries	199,053		53,062	53,071	45,489	57,097	208,719
	Maintenance & Operations	545,465	e de la companya de	56,835	9,805	14,001	12,889	93,531
	Fringe Benefits	56,080		15,229	14,717	13,199	15,567	58,710
	Conference Fees & Training	108,000		7,477	19,559	6,723	8,829	42,589
	Professional Fees	431,000		26,240	51,619	25,160	15,944	118,963
	Grants	13,900,181		902,848	1,301,259	482,081	861,786	3,547,975
	TOTAL	15,239,779		1,061,692	1,450,030	586,653	972,112	4,070,487
	ARRA-OHIT				A. S. S. S.			
	Regular Salaries	702,844		115,785	128,874	93,733	117,608	456,000
	Maintenance & Operations	500,000		37,014	75,022	55,755 55,456	96,157	263,648
	Fringe Benefits	199,055		36,670	37,197	30,947	35,864	
	Conference Fees & Training	25,000		3,684	685	539	0	The second secon
	Professional Fees	100,000		65,926	214,122	-57,510		229,223
	Capital Outlay	100,000		0	0	0	0	0
	ARRA	5,644,900			400			. War with the same
	TOTAL	7,271,799		259,079	455,899	123,164	256,315	1,094,457
NERA	L IMPROVEMENT FUNDS	BUDGET				ACTUAL		
	ASSET II	708,284		102,400	367,829	26,292	236,891	733,413
	CyberInfrastructure Center	282,461		282,000	0	0		
	AR Research Alliance	1,701,948		333,334	0	202,615	0	The second secon
	Applied Research	400,000		0	0	0		
	Museum of Discovery Seed Capital Investment	27,857		0	27,857	0		
	NAME OF TAXABLE PARTY AND TAXA	642,653		717,734	205 606	220 007		
				/1/,/34	395,686	228,907	636,891	1,979,218
	TOTAL	3,763,203						
SC GE	TOTAL					ACTUAL		
ISC GR	TOTAL	BUDGET		61,110		ACTUAL 0	0	86.355
ISC GR	TOTAL			61,110 51,563	25,245 0			
ISC GR	TOTAL LANTS W Rockefeller Entre. Grant	BUDGET 139,000			25,245	0	0	
ISC GR	TOTAL ANTS W Rockefeller Entre. Grant W Rockefeller SMART Grant	BUDGET 139,000 51,563		51,563	25,245 0	0	68,475	76,075
ISC GR	TOTAL ANTS W Rockefeller Entre. Grant W Rockefeller SMART Grant W Rockefeller STEM Grant	139,000 51,563 125,000 85,000 97,000		51,563 10,992	25,245 0 7,444	0 0 156	68,475	76,075 85,000
ISC GR	TOTAL ANTS W Rockefeller Entre. Grant W Rockefeller SMART Grant W Rockefeller STEM Grant UTEACH Grants AEDC Energy Effeciency-AMS AEDC Save Energy Now-AMS	BUDGET 139,000 51,563 125,000 85,000 97,000 25,000		51,563 10,992 0 13,851 0	25,245 0 7,444 60,000 17,622 0	0 0 156 25,000 631 0	0 68,475 0 26,975	76,075 85,000 59,079
ISC GR	TOTAL VANTS W Rockefeller Entre. Grant W Rockefeller SMART Grant W Rockefeller STEM Grant UTEACH Grants AEDC Energy Effeciency-AMS	139,000 51,563 125,000 85,000 97,000		51,563 10,992 0 13,851	25,245 0 7,444 60,000 17,622	0 0 156 25,000 631	0 68,475 0 25,975 0 14,140	76,075 85,000 59,079 0



INDEX

Technology Transfer Assistance Grants

ID Number	Company	Total Project Amount
12-TTAG-001	Mitogene LLC	\$5,000
12-TTAG-002	EquityNet, LLC	\$5,000
12-TTAG-003	AGL Construction Lasers	\$5,000
12-TTAG-004	NanoWatt Design, LLC	\$5,000
12-TTAG-005	BioDetection Instruments, LLC	\$5,000
12-TTAG-006	Acetaminophen Toxicity Diagnostics	\$2,000
12-TTAG-007	RxResults, Inc.	\$2,000
12-TTAG-008	Unityware	\$2,000
12-TTAG-009	PhytoTEK, LLC	\$2,000
12-TTAG-010	Tocol Pharma, LLC	\$2,000
12-TTAG-011	Oxane Materials	\$5,000
12-TTAG-012	Arkansas Power Electronics International, Inc.	\$5,000
12-TTAG-012	Arkansas Power Electronics International, Inc.	\$5,000
12-TTAG-014	Poly Adaptive, LLC	\$5,000
12-TTAG-014	Ascendant, LLC	\$5,000
12-TTAG-015	SFC Fluidics, LLC	\$5,000
	BioDetection Instruments, LLC	\$5,000
12-TTAG-018	Ozark Integrated Circuits, Inc.	\$5,000
12-TTAG-019		\$5,000
12-TTAG-020	NanoWatt Design, LLC	\$3,500
12-TTAG-021	Agri Wind Turbines, LLC (aka AWT)	
12-TTAG-022	Bemco, Inc.	\$4,500
12-TTAG-023	Class A Tooling	\$5,000
12-TTAG-024	Oxane Materials	\$5,000
12-TTAG-025	Trane Customs	\$5,000
12-TTAG-027	Bishop Aviation, Inc.	\$5,000
12-TTAG-028	Bright Technology, LLC	\$5,000
12-TTAG-029	Cooling and Applied Technology, Inc. (C.A.T.)	\$5,000
12-TTAG-030	Legend Marine Management, LLC	\$5,000
12-TTAG-031	Cloyes Gear & Products Inc.	\$5,000
12-TTAG-032	MCA Services, Inc. (Safe Foods)	\$5,000
12-TTAG-033	Prospect Machine Company	\$5,000
12-TTAG-034	Jevac Machine, Inc.	\$5,000
12-TTAG-036	CardioWise, LLC	\$5,000
12-TTAG-037	Minotaur Technologies, LLC	\$5,000
12-TTAG-038	Ascendant, LLC	\$5,000
12-TTAG-039	BiologicsMD, LLC	\$5,000
12-TTAG-040	SFC Fluidics, LLC	\$5,000
12-TTAG-041	TiFiber	\$5,000
12-TTAG-042	Synanomet, LLC	\$5,000
12-TTAG-043	Pratt & Whitney	\$5,000
12-TTAG-044	Arcelor Mittal	\$5,000
12-TTAG-046	TWH Enterprises	\$5,000
12-TTAG-047	Berenfield Containers	\$5,000
12-TTAG-047	Industrial Metal Finishing	\$5,000
12-TTAG-048	Sunrise Arkansas, Inc.	\$5,000
12-TTAG-049	Amerities South LLC	\$5,000
	InvoTek, Inc.	\$5,000
12-TTAG-051	Pinnacle Foods Group LLC	\$5,000
12-TTAG-052		
12-TTAG-053	InvoTek, Inc.	\$5,000 #5,000
12-TTAG-054	Defiance Metal Products	\$5,000
12-TTAG-056	Broadwing Air Repair	\$5,000
12-TTAG-057	Mundo Tech, Inc.	\$5,000
12-TTAG-058	Danfoss Commercial Compressors	\$5,000
12-TTAG-059	Saint Jean Industries	\$5,000
12-TTAG-060	Cooling and Applied Technology, Inc. (C.A.T.)	\$5,000



Technology Transfer Assistance Grants (Continued)

TOTAL		\$330,750
12-TTAG-083	Rockline Industries	\$5,000
12-TTAG-082	Everett Plating Inc.	\$5,000
L2-TTAG-080	Cooper Tire & Rubber Company	\$5,000
12-TTAG-079	B & B Elevator, Inc.	\$2,750
12-TTAG-078	Klipsch LLC	\$5,000
12-TTAG-077	Klipsch LLC	\$5,000
12-TTAG-075	Galley Support Innovations, Inc.	\$5,000
2-TTAG-073	Bright Technology, LLC	\$5,000
2-TTAG-070	Sage V Foods, LLC	\$5,000
2-TTAG-067	Pratt & Whitney	\$5,000
12-TTAG-066	Rockline Industries	\$5,000
12-TTAG-065	American Tubing, Inc.	\$5,000
12-TTAG-064	Sterling Machine Company, Inc.	\$5,000
12-TTAG-063	Arcelor Mittal	\$5,000
L2-TTAG-061	cycleWood Solutions Inc.	\$5,000
D Number	Company	Total Project Amount

Cover Photo: Model of Influenza, NIH

