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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 2011 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. To that end, the Authority Board and staff have labored to produce results that satisfy the strategic goals for the biennium and build a foundation of success for a new decade.

Our goals include ensuring the availability of the next generation of Arkansans with STEM (science, technology, engineering and mathematics) skills necessary for a competitive 21st century workforce. In Fiscal Year 2011, the Authority did this by supporting everything from solar powered boat race competitions for students to funding the Louis Stokes Alliance for Minority Participation, a program designed to steer underrepresented minorities to careers in STEM fields.

Our second goal is to maximize the production of scientific and engineering talent and research innovations as building blocks for the 21st century economy. This year the Authority took an important step in this process by launching the second phase of the Arkansas ASSET Initiative Grant. Over the next five years, the Authority will utilize a twenty million dollar award from the National Science Foundation to advance solar cell technology, plant-powered production and new power electronics at three research centers spread across seven Arkansas campuses.

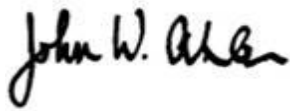
The third Authority goal is to invest in research innovations that build knowledge-based industries for Arkansas's 21st century economy. Over the last year, the Authority has invested in Arkansas-based companies developing innovations that range from nanotechnology that is improving the durability of components used by the U.S. Navy to pioneering technologies that will help in the fight against breast cancer.

Goal four is to strengthen Arkansas companies' capacity to innovate, create wealth, expand knowledge-based jobs and compete globally. To do this, in Fiscal Year 2011, the Authority supported companies striving for growth through innovation. Whether helping small start-ups to gauge the potential market impact of a product offering or commercializing products launched from new manufacturing facilities, the Arkansas Science & Technology Authority helped clients produce innovations that will meet the demands of the international marketplace.

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 the second year in a row, 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 second year, the Arkansas Science & Technology Authority supported the operation of the State Health Information Exchange Cooperative Agreement from the U.S. Department of Health and Human Services. The Arkansas Health Information Exchange Project is the collaborative effort of public and private stakeholders to plan a technology-based, secure health information exchange system which will improve the health care experience for patients, providers and insurers.

Moving boldly into a new decade, the Arkansas Science & Technology Authority has endeavored to prepare the state to meet the demands of a fast-paced global economy. By advancing the talent and innovation necessary for Arkansas to prosper, the Authority will continue to build on a firm foundation that was established over a quarter century ago, striving to ensure Arkansas' legacy as a major contributor to our great nation and, ultimately, the world.

A handwritten signature in black ink that reads "John W. Ahlen".

John W. Ahlen
President

A handwritten signature in blue ink that reads "Heartsill Ragon".

Heartsill Ragon, III
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 Board standing committees, comprised exclusively of members of the Board, make recommendations to the full Board. Advisory Committees, comprised of Board and non-Board members, offer additional input to the Authority.



In Fiscal Year 2011, the Authority operated in accordance with six values as the foundation for serving the state of Arkansas. The Authority will:

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.

SPONSORED PROJECTS



Governor Mike Beebe announces the launch of ASSET II during the 2010 EPSCoR Conference.

In Fiscal Year 2011, the Authority took steps to achieve its first goal of ensuring the availability of the next generation of Arkansans with STEM (science, technology, engineering and mathematics) skills necessary for a competitive 21st century workforce.

Over the last year, the Arkansas Science & Technology Authority approved the release of ASSET I funds to the University of Arkansas at Pine Bluff to support projects under the Arkansas Louis Stokes Alliance for Minority Participation.

The Alliance includes the University of Arkansas at Pine Bluff, Arkansas State University, Philander Smith College, Pulaski Technical College, Southeast Arkansas College, the University of Arkansas at Fayetteville, the University of Arkansas at Little Rock, and the University of Arkansas at Monticello. The goal of the Alliance is to increase the pool of well qualified graduates in STEM disciplines. Each campus in the Alliance focuses on steering underrepresented minorities into STEM professions or STEM graduate programs.

In addition, the Authority funded STEM professional development programs to help prepare teachers to instruct STEM subjects, as well as disbursed funds for various summer academies designed to get kids interested in everything from biotechnology to designing, building and racing solar boats. The Authority awarded \$60,000 to support undergraduate fellowship grants at four-year institutions around the state, and supported the transfer and development of a SMART Portal to be housed at Arkansas State University.

In Fiscal Year 2011, the Authority continued to focus on supporting Arkansas's most precious resource: our children. The Authority awarded 68 STEM enhancement grants to fund projects ranging from meteorology and physics to solar energy and electronics. The awards, totaling \$102,313, supported classroom activities in multiple elementary, junior and senior high in 27 cities around the state.

Fiscal Year 2011 saw the completion of the Arkansas ASSET I Initiative with the graduation of the WiNS Center, a team of nanotechnology researchers from the University of Arkansas at Fayetteville, the University of Arkansas at Little Rock, and Arkansas State University.

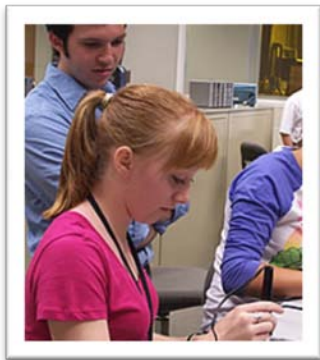
This led to what is, perhaps, the biggest sponsored project of the year as the Authority launched the Arkansas ASSET II Initiative. ASSET II will utilize a twenty million dollar cooperative agreement from the National Science Foundation over the next five years to advance solar cell technology, plant-powered production and new power electronics at three research centers spread across seven Arkansas campuses including the University of Arkansas at Little Rock, the University of Arkansas at Fayetteville, the University of Central Arkansas, Arkansas State University, the University of Arkansas at Pine Bluff, Philander Smith College, the University of Arkansas at Fort Smith.

As part of ASSET II, the GREEN Center will focus on development of solar cell technology, while the VICTER Center will concentrate on the creation of new power electronics that interface with the national energy grid. Both projects will be joining the P3 Center, which is a continuation of its research into cutting-edge application of plant-powered production that began in ASSET I. Closing out Fiscal Year 2011, the Authority's Board of Directors approved allocation of \$70,000 through ASSET II to fund the expansion of an E-Journal library program intended to aid researchers at multiple campuses around the state.



Teachers taking part in a professional development workshop.

SOLAR BOAT RACES SEND HIGH SCHOOL STUDENTS SPEEDING TOWARD STEM CAREERS



Summer Academy Student teams work on the construction of their solar boats.

In the early months of Fiscal Year 2011, 30 high school students from across the state of Arkansas participated in a week long residential camp entitled *the 2010 Alternative Energy Summer Academy*.

This project was funded through a grant to the Arkansas Science & Technology Authority from the Winthrop Rockefeller Foundation. The College of Engineering at the University of Arkansas at Fayetteville hosted the event, which introduced students to the rapidly growing fields of alternative energy, solar technology, and electrical engineering. The camp is designed to prepare students with the necessary scientific background for understanding practical applications of these fields. Students were split into teams to design, build, and race remote controlled solar powered boats.

The students stayed on the campus of the University of Arkansas at Fayetteville and participated in team building programs designed by the university's Office of Pre-College Programs. These programs built camaraderie among the students outside of their specific teams.

The teams themselves were split into two groups, one group learning the mechanical engineering side of designing the boat and the other learning the electrical engineering side. Students were mentored by UAF Engineering majors and taught the science behind the solar boat design process in a series of guest lectures from researchers and practitioners in each field. The mechanical engineering students learned how to properly design the boat's hull and motor while the electrical engineering students learned how to run circuits from fabricated solar panels to operate the mechanical equipment. The students then designed, cut, and tested their own boats and solar panel boards.

The week culminated in a competitive race among all of the teams. Each team was timed racing their boats through both a slalom course and a sprint at Lake Wedington outside of Fayetteville. The intense level of competition between the students was apparent as teams continued to test and tweak their boat designs up until race time.

While the students clearly had fun, Bryan Hill, Assistant Dean of Student Recruitment & International Programs at the University of Arkansas at Fayetteville, says the competition is about more than just who wins the race.

"We have a huge demand for engineers in the U.S. and especially in Arkansas. So the goal is to get the students interested and prepared to come into a rigorous engineering program, then, subsequently, enter the marketplace and do well."

Eric Speckling, Assistant Director of Recruitment with the College of Engineering, points out that despite the down economy, preparing students for careers in engineering has the potential to make them recession-proof. "On a national level, the salary of engineers is increasing instead of decreasing, which is not the case with most other fields."

"The goal is to prepare students for 21st century careers in engineering," Hill concluded, "The key is engaging students in a technology-rich setting that gets them thinking about their future. If this week proves anything, it's that we're right on track."



Students ready for the solar boat race in the waters of Lake Wedington.

SUPPORTING DIVERSITY: THE LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION

The Arkansas Science & Technology Authority places a high priority on supporting the growth and diversity of students being groomed for careers in STEM professions. To that end, the Authority has endeavored over the last three years to further this effort by supporting the Louis Stokes Alliance for Minority Participation.

The Arkansas Louis Stokes Alliance for Minority Participation (ARK - LSAMP) is a collaborative alliance of eight institutions across the state of Arkansas which has a goal of increasing the pool of well qualified baccalaureate, masters and doctoral degree graduates, with a focus on underrepresented minorities, in STEM disciplines in Arkansas' workforce.



UAPB Freshman Jarren Oates.

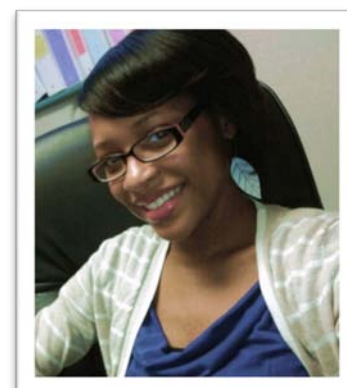
The purpose of this much needed Alliance is to help Arkansas join other states in the region and in the national initiative to strengthen America's competitiveness in science, technology, engineering and mathematics (STEM).

This is being achieved through a well-coordinated set of educational, research and training enrichment activities on each campus resulting from collaborative engagement in planning for curricula enhancement, internships, guest lecturers, attendance and presentations at professional meetings, and other STEM related activities.

With such a wealth of resources it is no wonder the program has become so popular on each campus.

A key component of the ARK - LSAMP is the Pre-First Year Summer Institute for incoming freshman students. It is an experience that according to Jarren Oates, a freshman biology major at the University of Arkansas at Pine Bluff, is invaluable.

"My first year ARK- LSAMP experience has been invigorating. It's good to have friends in the same major. We all met in the pre-first year summer institute so we know that we all have a similar mindset to be all we can be. We are there to motivate each other and push each other to the next level."



UAPB Junior Ashley Rich.

Though it started with a focus on freshmen and sophomores, the Alliance, now in its third year of implementation, is seeing such success that upper classmen are expressing interest as well. Thanks to a \$96,000 award from the Authority's ASSET II Initiative, those students are getting a chance to participate and flourish.

Ashley Rich is a junior biology major who credits her good fortune to the experiences that only the Alliance can provide.

"Working under the ASSET grant has been a privilege," she said, "because I was given the opportunity to work with post-graduate students in the lab, giving me a first-hand look at graduate level research. I also developed skills that will be necessary to reach my goals." After graduating from UAPB, Rich will set her sights on graduate school to study microbiology with the ultimate ambition of becoming a director of research in a medical center.

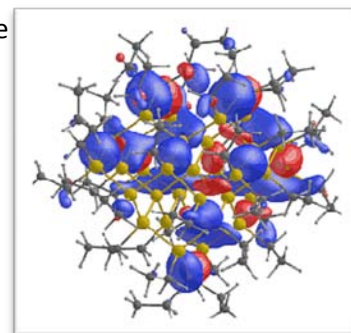
The LSAMP proposal was written as a National Science Foundation five-year project. Since 2008, the Arkansas Science & Technology Authority has provided ten percent matching funds (\$70,000 per year) to support the program. Additionally, ARK-LSAMP received \$30,000 from the Authority's ASSET I Initiative in August 2010 to support six junior and senior students on research assistantships, plus an additional \$96,000 in support for juniors and seniors from the ASSET II Initiative in 2011.

RESEARCH & COMMERCIALIZATION

The Authority has been busy fulfilling its third goal of investing in research innovations that build knowledge-based industries for Arkansas's 21st century economy. During the last year, the Authority Board voted to approve Technology Development Program investments in clients like Acetaminophen Toxicity Diagnostics and Mesolight.

Acetaminophen Toxicity Diagnostics is using the Technology Development Program investment to develop a device that incorporates a rapid and greatly improved method for diagnosing acetaminophen overdose. The company received a \$1.69 million STTR grant to test and commercialize the device.

Mesolight, LLC also received a Technology Development Program investment. The Little Rock-based company produces nanocrystals that are being used in applications ranging from LEDs to solar cells. The investment will be used for the development of cadmium-free nanocrystals capable of emitting red, blue and green light for use in flat panel displays. The company is also participating in the in-house R&D tax credit program and was awarded a tax credit for its third year in the program.



A graphic representation of the kind of nanocrystals being produced at Mesolight, LLC.

Companies also receiving R & D Tax Credits in Fiscal Year 2011 included Ocean Nanotech, Arkansas Power Electronics International, Incorporated; BioDetection Instruments, LLC; BlueInGreen, LLC; First Orion Corporation; Minotaur Technologies, LLC; InvoTek, Incorporated; Nutraceutical Innovations, LLC; Nutraceutical Innovations, LLC; SFC Fluidics, LLC; Vegrandis, LLC; Insight Ecosystems, LLC; Merchant View, LLC; Healthspan Solutions, LLC; LITMUS, LLC; Lynguent, Incorporated; and NN-Labs, LLC.



Dr. Daohong Zhou joined UAMS as an Arkansas Research Alliance Scholar.

The Authority also supported the commercialization of its client's offerings by providing \$350,000 in Seed Capital Investments in Fiscal Year 2011. The investments were to Ascendant Diagnostics, LLC (\$100,000); BioDetection Instruments, LLC (\$150,000) and TiFiber, LLC (\$100,000). All three companies are located within one of the technology incubators at the Arkansas Research and Technology Park.

In Fiscal Year 2011, the Authority recertified the three incubators of the Arkansas Research and Technology Park in Fayetteville; the GENESIS Technology Incubator, the Innovation Center and the Enterprise Center. The UAMS BioVentures incubator in Little Rock was also recertified. The recertification process allows investors to receive tax exemptions when they invest in certified technology incubator clients.

In Fiscal Year 2011, the Authority invested a million dollars to support the Arkansas Research Alliance, an organization dedicated to maximizing Arkansas' ability to participate in the 21st-century economy. The focus of the Alliance is to recruit university scholars with a track record of incubating and commercializing businesses. The ultimate goal of the organization is to increase the number of competitive high-tech, high-paying, knowledge-based jobs for Arkansans.

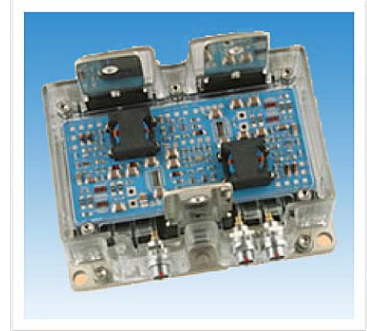
Such positions often grow out of research created at centers for applied technology. To that end, the Authority also released funding for CI-TRAIN, or the Cyberinfrastructure for Transformational Scientific Discovery in Arkansas and West Virginia, which is part of a broader award to create a research consortium between the two states. Researchers working in this center specialize in high-performance computing, visualization and modeling.

APEI: AT THE INTERSECTION OF RESEARCH, COMMERCIALIZATION AND INDUSTRY

Arkansas Power Electronics International, Incorporated (APEI) has been an Arkansas Science & Technology Authority client for the past decade. Utilizing Authority resources, like Technology Transfer Assistance Grant (TTAG) funding, APEI has been able to secure numerous federal Small Business Innovation Research (SBIR) Awards. These federal funds were combined with Technology Development Program (TDP) and Seed Capital Investment Program (SCIP) funding to successfully develop their silicon carbide-based electronics. This cutting-edge technology allows the production of light weight and reliable electronic systems that are resistant to temperature extremes. These advantages are why the Air Force has contracted with APEI to manufacture silicon carbide power modules for the F-35 Joint Strike Fighter.

According to Sharmila Mounce, business operations manager at Arkansas Power Electronics International, Incorporated, the company has grown from revenues of \$14,000 as part of a University of Arkansas Innovation Incubator grant in 2002 to \$5 million.

Mounce credits much of the company's early stage success to Small Business Innovation Research grants that the Arkansas Science & Technology Authority helped them to acquire. Authority TTAGs made it possible for APEI to pay for the writing of grant proposals that led to multiple SBIR Awards.



An integrated power control module manufactured at APEI.



Work in progress in one of APEI's new manufacturing labs.

With the aid of such funding and the addition of the new 8,000 square foot manufacturing facility, employees will now occupy 20,000 square feet of operating space in Fayetteville's University of Arkansas Technology Park, where they will manufacture the company's signature silicon carbide technology applications for the military, as well as commercial use.

Dr. Steve Stanley, Vice President Commercialization with the Arkansas Science & Technology Authority, says this is the kind of partnership that could be a game changer for Arkansas.

"APEI is a great example of how we carry out our mission to advance the talent and innovation necessary for Arkansas to prosper," said Dr. Stanley. "Supporting companies like APEI not only keeps Arkansas relevant in a fast-paced global economy, but it also boosts our state's economic growth by creating high-tech, high-paying jobs. This is the kind of success we want for all of our clients and we see a bright future for APEI."

INDUSTRY

Arkansas Manufacturing Solutions (AMS) spent Fiscal Year 2011 focused on the needs of their clients by assisting them in creating new strategic partnerships, increasing sales, improving operation efficiency and performance and development of exporting plans.



A worker at one of the many manufacturing plants using the Industrial Energy Clearinghouse applies learned principles to become more energy efficient.

In July 2010, AMS joined forces with the University of Arkansas at Fayetteville and the Arkansas Economic Development Commission's Energy Office to launch the Arkansas Industrial Energy Clearinghouse (AIEC). AIEC will support and promote industrial energy-efficiency developments in Arkansas. AMS received a \$217,740 grant to support the effort. One of the goals of the Clearinghouse is to assist Arkansas manufacturers in their efforts to adopt more energy efficient practices.

AMS collaborated with the Arkansas Institute of Performance Excellence (AIPE) to help promote and present two 2010 Manufacturing Challenge seminars.

AMS provided funding and worked with the Arkansas Aerospace Alliance and the Metro Little Rock Alliance to organize a delegation to attend the National Business Aviation Association (NBAA) Conference in Atlanta in October 2010. This collaboration allowed small Arkansas aerospace industry suppliers to pool resources and participate in an otherwise unaffordable event

where they had a chance to obtain sales from the aerospace customers. Ten small Arkansas manufacturers registered to participate at the conference. During the event AMS client Galley Support Innovations secured several million dollars in new business.

In November 2010, AMS hosted its first Innovation Engineering Leadership Institute (IELI) workshop, which was attended by over 100 participants from Arkansas and other states. All AMS staff members participated at the workshop along with attendees from Arkansas's economic development community, universities, incubators, and others including the Manufacturing Extension Partnership community. This program taught companies the process and tools to help them create, communicate and commercialize business growth ideas.

In Fiscal year 2011, AMS continued to work with interested Arkansas inventors and start-up businesses to list their inventions or products in the Innovation Marketplace, and provided them with various options to solicit capital and manufacturing opportunities. There are over 150 innovation listings in the Arkansas Innovation Marketplace.

As part of the Southeast Energy Efficiency Alliance (SEEA), AMS was awarded \$55,000 in funding to participate in the Department of Energy (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, including the implementation of ISO 50001 Energy Management Standard.

In August AMS conducted the inaugural session for ExporTech in Little Rock with four participating Arkansas companies. ExporTech is a "how to" program that assists manufacturing companies to develop a strategic international growth plan customized specifically for its business. One of the graduates, Power Technology of Alexander was honored later in the year at the second-annual Governor's Award for Excellence in Global Trade Program. The company, a high-tech laser manufacturer and design firm, was awarded technology exporter of the year.



William Burgess, Vice President of Operations for Power Technology, speaks at the Governor's Award for Excellence in Global Trade Program.

HOW A TTAG TURNED IT AROUND: THE STORY OF GALLEY SUPPORT INNOVATIONS

Galley Support Innovations (GSI), a California-based company that moved to Arkansas in 2005, manufactures galley locks and latches for original equipment manufacturers in the aerospace industry.

Despite the fact that the company reported its strongest year of business in 2009, GSI was hard hit by the economic downturn, and by 2010 became a struggling business that was forced to lay off all but one employee. As the situation became desperate, GSI sought help from AMS, a program of the Authority.

In 2010, GSI was awarded the first of two Technology Transfer Assistance Grants (TTAG) from the Authority, the second of which was awarded in mid Fiscal Year 2011. With assistance from AMS field staff, GSI used the money to set up a quality management system and to secure contracts with major aircraft manufacturers.



GSI's display featured at the NBAA Trade Show.



Gina Radke, CEO of Galley Support Innovations.

GSI participated in a joint program between AMS and the Arkansas Economic Development Commission (AEDC) that allowed Arkansas-based aerospace supplier companies the chance to participate in the National Business Aviation Association's (NBAA) annual trade show in October 2010.

As a result, GSI was able to secure a large multi-year contract with the aid of the TTAG funding. The results were dramatic, resulting in an estimated financial impact of \$5 million over six years and \$650,000 in first-year revenues. By participating in the NBAA trade show, GSI was able to receive a purchase order for an amount equaling their total sales for the first three quarters of 2010.

As a result of the increased business, GSI was able to hire back all employees previously laid off and hire an additional 10 new employees, a move that CEO Gina Radke said would not have been possible without Authority support.

"I truly believe that GSI would not be where it is today without the TTAGs we received and the opportunity to display at the NBAA provided by the Authority's AMS Program and AEDC."

Radke also credits TTAG funding for helping GSI to become the first lock and latch manufacturer to receive AS9100 certification. "It gave us an edge over our competitors," she said, going on to detail how the second TTAG enabled the company to land large contracts and display at the NBAA. "It was a huge opportunity to showcase our products to an international audience. This led to a jump in sales, allowing us to rehire all of the employees we had to let go during 2010."

To date, GSI is experiencing continued growth and expects to hire additional employees in the second quarter of 2011.

NEW GRANTS

In Fiscal Year 2011, the Authority received new grants that established resources in health and manufacturing.

Over the last year, the Authority witnessed the successful integration of the Office of Health Information Technology (OHIT) into the state system. Growing out of funding from a State Health Information Exchange Cooperative Agreement from the U.S. Department of Health and Human Services, the office was established when Governor Mike Beebe signed an executive order in 2010 placing it within the Arkansas Science & Technology Authority. Since that time, OHIT has expanded its staff, moved to its new offices in the Victory Building in downtown Little Rock and has established a web presence to allow access to program information at the click of a mouse.

During the 2011 Session, the Arkansas General Assembly enacted enabling legislation for the office, along with a 2012 appropriation totaling \$8,800,000 of which \$1,500,000 was granted from the state to match \$7,300,000 in federal funding. The Office of the National Coordinator for Health Information Technology approved the strategic and operational plans prepared by OHIT. Through the State Health Information Exchange Cooperative Agreement Program, OHIT will labor to establish health information exchange capacity for health care providers.

Fiscal Year 2011 also marked a turning point in the next phase of the Authority's ASSET II Initiative with a 20 million dollar cooperative agreement from the National Science Foundation. This project will introduce two new centers to the ASSET Initiative: the GREEN Center, focusing on development of solar cell technology, and the VICTER Center which will concentrate on the creation of new power electronics that interface with the national energy grid. The Center for Plant Power Production (P3 Center) will continue its research from the ASSET I Initiative by focusing on high-tech application of plant-based bioproduction.

The Authority also received two new grants focusing on assistance to manufacturers.

Arkansas Manufacturing Solutions (AMS), a program of the Authority, is one of 10 MEP (Manufacturing Extension Partnership) Centers included in a pilot project that both creates and demonstrates a methodology for deploying world class growth expertise within the MEP system. Through the Innovation Black Belt Program, AMS will leverage MEP's investment in growth services and innovation, and a program created through a partnership between the University of Maine and the Eureka! Ranch.

By practicing the skills and confidence needed to lead the creation, communication and commercialization of meaningfully unique ideas, clients will learn to lead profitability growth through innovations in new and improved products and services, new customers and markets, improved sales and marketing and process improvement innovations.

The other manufacturing grant was the NAICS Code Project. The primary purpose of this project is to develop a system of tools to help AMS engage Arkansas manufacturers in technology acceleration resulting in client company growth.

AMS will mine "hot technologies" to find resources that will ignite conversations with manufacturers about the use of technology acceleration as a business building tool. This process will involve matching the needs and capabilities of Arkansas manufacturers with the inventory of innovations and needs listed within both the Arkansas and USA National Innovation Marketplace platform.

COMMITTEE/BOARD AFFILIATIONS

Gubernatorial Appointments	Who Serves
Governor's Workforce Cabinet	President
Southern Technology Council	President
Statutory Affiliations	Who Serves
Arkansas Capital Corporation	President
Arkansas Tobacco Settlement Commission	President
Arkansas Biosciences Institute	President
Commission for the Coordination of Educational Efforts	President
Arkansas Broadband Council	President
Cyberinfrastructure Task Force	President
Information Network of Arkansas	Executive Vice President
Distance Learning Coordinating Council	Vice President Sponsored Projects
Arkansas School for Mathematics, Sciences and the Arts	Vice President Research
Arkansas Health Information Exchange Council	President
Other Professional Affiliations	Who Serves
Connect Arkansas	President
Venture Capital Investment Trust	President
NSF EPSCoR Program Director's Council, Chairman	Vice President Sponsored Projects
Steering Committee, Arkansas Technology Task Force	Vice President Sponsored Projects
Executive Committee, STEM Coalition	Vice President Sponsored Projects
College of Science and Mathematics Advisory Board, UALR	Vice President Sponsored Projects
Preparing For Tomorrow Curriculum Advisory Team	Vice President Sponsored Projects
Arkansas Space Grant Consortium	Vice President Research

How Do These Affiliations Benefit the State of Arkansas?

Authority staff members are using professional affiliations and government appointments to help meet the 21st century needs of Arkansans. One example is the push to provide broadband internet access to the people of Arkansas.

Broadband internet access is essential to economic development, job creation, modern education, health care, and overall quality of life. With that in mind, Authority President Dr. John Ahlen sits on the Board of Connect Arkansas, an organization that is implementing a community-based initiative to promote internet access and education.

The Authority's Executive Vice President, Chuck Myers, serves on the Board of the Information Network of Arkansas (INA) and this past year served as the Board chair. This organization not only maintains the state of Arkansas's web presence, but is also heavily involved in the mission to get broadband connectivity out to all corners of the state.

Dr. Ahlen is also a member of the Arkansas Broadband Council. This organization is helping to speed the establishment of fast and reliable broadband access to the people of Arkansas, thus making it possible for Arkansans to compete with any other place in the world.

In Governor Beebe's first State of the State address he said, "In today's world, just learning to type on the keyboard won't suffice. Our kids deserve broadband infrastructure that connects them to the Internet and provides technology equity." By serving on these various boards and committees, the Arkansas Science & Technology Authority staff is helping to meet this goal and the need of educational and economic development.

BOARD OF DIRECTORS

Heartsill Ragon, III - Chairman Attorney Gill Elrod Ragon Owen & Sherman, PA Term Expires 2015	Jim Purcell Ed.D. Director (left service during Fiscal Year 2011) Shane Broadway – Director Arkansas Department of Higher Education - Little Rock Term Permanent
Beverly Dawkins Lyn-Cook, Ph.D. Vice Chair Senior Research Scientist Division of Personalized Nutrition and Medicine Branch: Pharmacogenomics and Molecular Epidemiology National Center for Toxicological Research (NCTR) Term Expires 2013	Robert Hall President Hall Manufacturing (left service during Fiscal Year 2011) Term Expires 2012
Glen Jones, Jr., J.D. - Secretary Senior Associate Vice Chancellor For Academic Affairs and Research, Executive Associate to the Chancellor for Diversity Arkansas State University Term Expires: 2014	Cesar Compadre, Ph.D. UAMS Associate Professor Pharmacy and Public Health Term Expires 2015
Collis Geren Ph.D. <u>Authority Sponsored Projects Committee Chairman</u> Retired Term Expires 2015	George Williams Director of Business Development Intellimation Technologies Jonesboro Term Expires 2015
Paul Mastro Vice President - Manufacturing and Engineering George Fischer Sloane <u>Authority Industry Committee Chairman</u> Term Expires 2014	Carl Frederickson, Ph.D. Associate Professor Associate Dean College of Natural Science & Mathematics University of Central Arkansas Term Expires: 2014
Gary Campbell <u>Authority Research & Commercialization Chairman</u> Retired - IBM Corporation City Director/Vice Mayor, Fort Smith Term Expires 2013	Bradford Caldwell CEO Caldwell Media LLC Term Expires: 2012
Joel Harrison Nuclear Operations Manager, NDE for Washington Group Int'l. Term Expires 2012	Dennis Teague Owner Dennis Teague Chevrolet (left service during Fiscal Year 2011) Term Expires: 2011

NEW FACES

(From left to right)
Charles Appleby
Julianne Gonzalez
Marta Collier



(From left to right)
Alec Watson
Michael P. O'Bryan
Elza Albert



(From left to right)
Brandon Brown
Hunter Byrd
Ashley Spurr



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<p>Brandon Brown Business Development Specialist University of Arkansas - Fayetteville Engineering Research Center 700 Research Blvd Fayetteville, AR 72701 Phone: (479) 575-3190 cbb02@uark.edu</p>	<p>Bill Kraus Project Manager Delta Center for Economic Development 319 University Loop West Jonesboro, AR 72401 Phone: (870) 680-8275 Other Phone: (870) 897-5135 Fax: (870) 972-3806 wkraus@astate.edu</p>
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THE AUTHORITY BY THE NUMBERS

In Fiscal Year 2011, the Authority completed 210 Projects in 36 Counties, and approved \$11,117,886 in investments which includes the following:

Sponsored Projects

The Arkansas ASSET Initiative

The Arkansas ASSET Initiative is federally funded by the National Science Foundation's EPSCoR Program and managed at the state level by the Arkansas Science & Technology Authority. Leveraging funds from the Winthrop Rockefeller Foundation, the Authority coordinates the various programs available for Arkansas researchers, supports the activities of the Science Advisory Committee, and directly manages the state's National Science Foundation (NSF) EPSCoR Project.

Resolution Number	Resolution Date	Company/Organization	Project/Program	Total Dollar Amount
11-02	7-16-10	UALR	ASSET Accountant Internship	\$13,000
11-03	7-16-10	UAPB	Louis Stokes Alliance for Minority Participation	\$30,000
11-06	11-17-10	Multiple Universities	Undergraduate Fellowships	\$30,000
11-07	11-17-10	UALR	MBA Internship	\$4,545
11-08	11-17-10	ASU	SMART Portal	\$120,000
11-12	11-19	UAF/UALR/ASU/UAPB/ UCA	ASSET II Sub Agreements	\$4,000,000
11-14	11-19-10	UALR	MBA Internship	\$8,138
11-15	11-19-10	Multiple Universities	Research Experience for Undergraduate Fellowship Program	\$30,000
11-18	1-21-11	UCA	NSF EPSCoR Communications Intern	\$15,126
11-19	1-21-11	UAPB	Louis Stokes Alliance for Minority Participation	\$96,000
11-20	1-21-11	Minnick & Associates	ASSET II External Evaluator Contract	\$71,870
11-21	1-21-11	Multiple Universities	STEM Professional Development/Summer Academies	\$125,242
11-23	3-18-11	Teachers Statewide	STEM Grants (see index on page 26)	\$102,313
11-32	5-20-11	EPSCoR Science Information Group	ASSET II Library Grant	\$70,000

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 Dollar Amount
10-34	5-21-10	Multiple Companies (see index on page 29)	\$356,975
11-30	5-20-11	Approval for FY 12 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 Dollar Amount
11-01	7-16-10	Mesolight, LLC	\$110,535
11-01	7-16-10	Ocean Nanotech, LLC	\$173,304
11-22	3-18-11	Multiple Companies (see index on page 31)	\$1,024,566
11-31	5-20-11	Multiple Companies (see index on page 31)	\$485,990

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 Dollar Amount
11-04	9-17-10	Acetaminophen Toxicity Diagnostics, LLC	\$23,000
11-16	1-21-11	Mesolight, LLC	\$50,000

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 Dollar Amount
11-05	9-17-10	PerioSeal, LLC (withdrawn)	\$100,000
11-17	1-21-11	ABFIT, LLC (withdrawn)	\$100,000
11-27	5-20-11	Ascendant Diagnostics, LLC	\$100,000
11-28	5-20-11	BioDetection Instruments, LLC	\$150,000
11-29	5-20-11	TiFiber, LLC	\$100,000

Research & Commercialization (cont'd)

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 Dollar Amount
11-11	11-19-10	UAPB	Louis Stokes Alliance for Minority Participation	\$70,000

The Arkansas Research Alliance

Arkansas research universities will participate in identifying respected and esteemed candidates for the Arkansas Research Alliance Scholars program. Scholars will be experts in their respective fields and will be recognized as leaders with outstanding research credentials and entrepreneurial records. Scholars will oversee research programs that will bring economic vitality to Arkansas through commercialization and business development.

Resolution	Resolution Date	Company/Organization	Project/Program	Total Dollar Amount
11-24	03-18-11	The Arkansas Research Alliance		\$1,000,000

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 Dollar Amount
11-25	03-18-11	Cyberinfrastructure Center of Arkansas	\$465,460

Industry

Resolution	Resolution Date	Company/Organization	Total Dollar Amount
11-26	5-20-11	UAF, UALR, ASU, SAUT, Arkansas Institute for Performance Excellence, Arkansas Economic Development Commission, Winrock International	\$1,431,818

In Fiscal Year 2011, AMS field staff completed 237 projects and events, and served 278 manufacturing companies.

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Companies Assisted	96	65	61	56	278
Jobs Retained & Created	188	144	134	110	576

State Funding	Total Match	Match Breakdown					
		Federal	State Agencies		Universities	Non-Profits	Clients
			Authority	AEDC			
\$257,182	\$3,794,612	\$941,110	\$136,360	\$1,208,237	\$549,288	\$278,533	\$681,084
Leverage Ratio : 14.8							

AMS completed 237 projects in 32 counties totaling \$556,931 in gross projects and event fees.
For the full list of details, see page 32.

TABLE OF CONTENTS OPERATIONS REPORT

Fiscal Year 2011						
General Operations	Actual					
	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Regular Salaries	\$611,144	\$162,916	\$163,634	\$146,106	\$148,314	\$620,970
Extra Help	\$12,000				\$2,788	\$2,788
Maintenance and Operations	\$196,988	\$40,116	\$26,624	\$30,230	\$97,134	\$194,104
Fringe Benefits	\$188,204	\$46,962	\$49,086	\$45,845	\$46,343	\$188,236
Research						
(Reallocation)						
Conference Fees and Training	\$14,400	\$1,505	\$3,179	\$1,174	\$2,543	\$8,400
Professional Fees	\$12,800	\$1,774	\$2,263	\$2,066	\$2,198	\$8,300
Capital Outlay						
Marketing and Redistribution						
Technology Development	\$156,975	\$30,000	\$26,250	\$41,750	\$58,975	\$156,975
Research Matching Fund	\$292,653		\$70,000			\$70,000
Seed Capital Investments	\$292,653				\$292,653	\$292,653
TOTAL	\$1,777,817	\$283,273	\$341,035	\$267,171	\$650,947	\$1,542,427
AMS Support	Actual					
	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
AMS Support	\$257,182				\$257,182	\$257,182
Seed Capital Fund						
Seed Capital Fund Balance	\$1,900,000	\$250,000	\$25,000			\$275,000
AMS Operations	Actual					
	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Regular Salaries	\$146,194	\$31,250	\$33,730	\$35,034	\$36,280	\$136,295
Maintenance and Operations	\$174,976	\$28,450	\$48,783	\$35,819	\$28,900	\$141,952
Fringe Benefits	\$42,668	\$9,826	\$10,702	\$11,057	\$11,268	\$42,853
Grants	\$415,000	\$36,743	\$27,950	\$31,313	\$116,603	\$212,608
Conference Fees and Training	\$31,066	\$3,826	\$1,398	\$6,554	\$7,823	\$19,600
Professional Fees	\$55,000	\$2,500	\$14,900	\$16,050	\$6,225	\$39,675
Capital Outlay						
Field Services	\$1,122,849	\$23,014	\$161,588	\$288,198	\$60,767	\$533,567
Miscellaneous Fees						
TOTAL	\$1,987,753	\$135,608	\$299,051	\$424,025	\$267,867	\$1,126,552
Office of Health Information Technology	Actual					
	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Regular Salaries	\$68,000	\$11,465	\$22,804	\$19,937	\$19,937	\$74,143
Maintenance and Operations	\$4,801,215	\$25,437	\$36,314	\$965	\$3,323	\$66,038
Fringe Benefits	\$24,000	\$2,306	\$4,737	\$4,326	\$4,272	\$15,642
Grants	\$201,250		\$29,145			\$29,145
Conference Fees and Training	\$10,000					
Professional Fees	\$100,000	\$19,213	\$5,738			\$24,950
Capital Outlay	\$1,000,000		\$41,090			\$41,090
ARRA	\$1,706,151					
TOTAL		\$58,421	\$139,827	\$25,228	\$27,532	\$251,008
ARRA AIEC	Actual					
Character	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Maintenance and Operations	\$24,600			\$4,752		\$4,752
Grants	\$90,000	\$963	\$5,112	\$5,010	\$3,896	\$14,982
TOTAL	\$114,600	\$963	\$5,112	\$9,762	\$3,896	\$19,734

OPERATIONS REPORT

Fiscal Year 2011 (continued)						
ASSET I Operations	Actual					
	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Regular Salaries	\$155,363	\$41,829	\$29,878	-\$17,927		\$53,780
Maintenance and Operations	\$71,183	\$13,008	\$18,758	\$6,897	\$5,967	\$44,630
Fringe Benefits	\$42,654	\$10,799	\$8,901	\$1,664		\$21,363
Conference Fees and Training	\$3,333		\$3,333			\$3,333
Professional Fees	\$40,667	\$1,828	\$6,900	\$7,634		\$16,361
Grants	\$2,753,375	\$378,374	\$18,464	\$1,547,026	\$-2,125	\$1,941,739
TOTAL	\$3,066,575	\$445,838	\$86,234	\$1,545,294	\$3,842	\$2,081,206
ASSET II Operations	Actual					
Character	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Regular Salaries	\$917,737		\$11,951	\$54,719	\$38,928	\$105,598
Maintenance and Operations	\$804,400		\$83	\$25,173	\$14,168	\$39,423
Fringe Benefits	\$216,442		\$2,403	\$8,701	\$10,654	\$21,758
Conference Fees and Training	\$135,000			\$3,120	\$4,243	\$7,363
Professional Fees	\$559,000			\$12,750	\$9,267	\$22,017
Grants	\$17,367,421				\$1,307,717	\$1,307,717
Grants (GIF - Match)	\$800,000			\$96,000	\$208,135	\$304,135
TOTAL	\$20,800,000		\$14,438	\$200,462	\$1,593,111	\$1,808,010
General Improvement Funds						
Project	Released					
Centers for Applied Technology	\$465,460			\$465,460		\$465,460
Arkansas Research Alliance	\$1,050,000	\$174,652			\$167,000	\$341,652
ASSET Initiative	\$1,491,707	\$411,872	-\$13,919	\$767,650	\$15,126	\$1,180,729
Seed Capital Investment	\$700,000				\$57,347	\$57,347
TOTAL	\$3,107,167					\$2,045,187
Grants Received	Budget	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Winthrop Rockefeller Foundation Models for Growth Grant	\$21,600		\$1,666			\$1,666
Winthrop Rockefeller Foundation SMART Grant	\$180,886	\$6	\$49,131	\$42,345	\$45,684	\$137,166
Winthrop Rockefeller Foundation STEM Grant	\$284,750	\$1,209	\$6,489	\$127,081	\$108,843	\$243,622
WRF TOTAL	\$487,236	\$1,214	\$57,287	\$169,427	\$154,527	\$382,454
AEDC Energy Efficiency 2008 – AMS	\$176,000		\$24,931	\$15,428	\$33,982	\$74,341
AEDC Save Energy Now 2008 – AMS	\$25,000		\$351	\$1,125	-\$200	\$1,276

INDEX

STEM Empowerment

Number	School	Project Title	Total Dollar Amount
11-STEM-CE01	Judsonia Elementary School	"Look at This!" submitted by Tracey Ball	\$2,000
11-STEM-CE02	Newark Elementary	"Flip Out Over Science," submitted by Lisa Barber	\$2,000
11-STEM-CE03	Nettleton Junior High School	"Mashing Up Jonesboro," submitted by Anita Belew	\$1,976
11-STEM-CE04	Smackover High School	"Utilizing Analytical Probes in the Science Laboratory," submitted by Jonna Bradley	\$1,920
11-STEM-CE05	North Pulaski High School	"Acceleration of Science," submitted by Tammy Bray	\$2,000
11-STEM-CE06	Izard County Consolidated High School	"Teaching with Technology," submitted by Karen Brewer	\$2,000
11-STEM-CE07	Hector Elementary School	"Microscopic Investigations and Comparisons of Plant and Animal Cells," submitted by Kathryn Brunetti	\$2,000
11-STEM-CE08	Smackover High School	"The Horror of Wrapping and Filling 3-D and Walking in Graphing Brought to Life," submitted by Donna Chastain	\$2,000
11-STEM-CE09	Nettleton Middle School	"PODCASTS: Promoting or Developing Connections for all Students in Technology & Science," submitted by Kelli Cochran	\$2,000
11-STEM-CE10	Piggott High School	"Robotics in the Real World," submitted by Karen Coomer	\$2,000
11-STEM-CE11	Westside Consolidated High School	"Using Simulations to Power Understanding in Science," submitted by Melissa Cureton	\$1,840
11-STEM-CE12	Cabot High School	Enhancing Lab Activities With Technology," submitted by Dwight Daugherty	\$2,000
11-STEM-CE13	Alma Middle School	"Under Construction," submitted by Samantha Dooley	\$2,000
11-STEM-CE14	Cedar Ridge Junior High School	"Future Cell Challenge," submitted by Tina Foster	\$2,000
11-STEM-CE15	Southeast Middle School	"How's My Health & What Happened!" submitted by Sylvia Grady	\$1,900
11-STEM-CE16	Instructional Center, West Memphis	"Gaming to Learn," submitted by Victoria Greene	\$2,000
11-STEM-CE17	Blytheville Charter/ALE High School	"Cultivating Gardens Growing Futures," submitted by Sharon Hamilton	\$2,000
11-STEM-CE18	North Pulaski High School	"Acceleration of Science," submitted by Craig Hammaker	\$2,000
11-STEM-CE19	North Pulaski High School	"Motion In Action," submitted by Jackie Hill	\$1,775
11-STEM-CE20	Monticello Intermediate School	"My Place in Space," submitted by Michele Ikenberry	\$2,000
11-STEM-CE21	Dover Upper Middle School	"It's in the Air," submitted by Janet Kanady	\$1,997
11-STEM-CE22	Pinkston Middle School	"A Weighty Matter," submitted by Lynn Kelsh	\$2,000
11-STEM-CE23	Cedar Ridge Junior High School	"The Electricity & Electronics Challenge," submitted by Lindsey King	\$2,000

Number	School	Project Title	Total Dollar Amount
11-STEM-CE24	Hellstern Middle School	"Fair/Foe Weather Forecast!" submitted by Marla Kreider	\$2,000
11-STEM-CE25	Hellstern Middle School	"Newton's Laws Inquiry: Math and Science in Action," submitted by Kim Krueger	\$2,000
11-STEM-CE26	Piggott Elementary School	"Science Kits for Inquiring Minds," submitted by Veleda Langley	\$1,900
11-STEM-CE27	Hazen Middle School	"Labquest Technology -Enhancing Scientific and Mathematical Understanding," submitted by Tammie Lee	\$2,000
11-STEM-CE28	Kingsland Elementary School	"Growing Scientists," submitted by Rebecca McGee	\$1,400
11-STEM-CE29	Cedar Ridge High School	"Solar Energy House," submitted by Jim Miller	\$2,000
11-STEM-CE30	Monticello Intermediate School	"Physical Follies," submitted by Holly Montgomery	\$2,000
11-STEM-CE31	Stuttgart High School	"Forces & Motion - How are They Related?" submitted by Kathy Prislovsky	\$2,000
11-STEM-CE32	Hellstern Middle School	"Meteorology Comes Alive with Technology," submitted by Kathy Prophet	\$2,000
11-STEM-CE33	Smackover Elementary School	"My Students Respond, and I Monitor and Adjust," submitted by Dana Pyron	\$1,800
11-STEM-CE34	Smackover Elementary School	"Under a Microscope," submitted by Leslie Ragan	\$1,900
11-STEM-CE35	Dumas Junior High School	"The Changing Earth: Incorporating Physics, Biology, Environmental Science, and Ecology to Understand the Globe," submitted by Benjamin Schurhamer	\$1,900
11-STEM-CE36	Lavaca Middle School	"Excelling With Robotics," submitted by Nicole Shaffer	\$2,000
11-STEM-CE37	Vilonia High School	"Encouraging Cooperative Learning and Assessing Classroom Learning," submitted by Ronnie Simmons	\$1,600
11-STEM-CE38	Hellstern Middle School	"Digitally Investigating Science in the Microscopic World," submitted by Kristi Smith	\$2,000
11-STEM-CE39	Russellville Middle School	"Probing Students' Minds," submitted by Kolby Snellenberger	\$2,000
11-STEM-CE40	Melbourne Elementary School	"Quest" for Knowledge," submitted by Kelli Swaim	\$1,700
11-STEM-CE41	Nettleon Middle School	"Podcasts: Listeners to Creators," submitted by Tiffany Taylor	\$2,000
11-STEM-CE42	Nettleton High School	"Mashing Up Jonesboro," submitted by Sandra Taylor	\$1,855
11-STEM-CE43	Smackover High School	"Solar Homes," submitted by Gae Thornton	\$2,000
11-STEM-CE44	Hot Springs High School	"Hot Springs Solar Vehicle Project," submitted by Michael Vincent	\$1,900
11-STEM-CE45	Bryant Middle School	"Collecting and Analyzing Scientific Data With LabQuest," submitted by Greg Wertenberger	\$2,000
11-STEM-CE46	Smackover Schools	"Windows to the World around Us," submitted by Jeff Zachry	\$1,900

STEM Empowerment - Supplemental Mini-Grants

Number	School	Project Title	Total Dollar Amount
11-STEM-SM-01	Central Math and Science Magnet Elementary	"Let Your Science Project Explode With Knowledge!" submitted by Glenita Anderson	\$600
11-STEM-SM-02	Valley Springs High School	"U of A Physics Day Competitions," submitted by Angie Bogle	\$570
11-STEM-SM-03	Vilonia Junior High	"Quiz Bowl Buzzer System," submitted by April Burroughs	\$600
11-STEM-SM-04	Russellville High School	"Physics is Phun," submitted by Chuck Campbell	\$580
11-STEM-SM-05	Morrilton Intermediate School	"Science Fair - It's Not Just and Elementary Thing!" submitted by Jane Conley	\$600
11-STEM-SM-06	Norfork High School	"Science Fair 2011," submitted by Anita Cook	\$600
11-STEM-SM-07	Lead Hill School	"BEST Robotics Competition, 2010," submitted by Doyle DeWoody	\$600
11-STEM-SM-08	Greene County Tech High School	"Quiz Bowl Travel and Recognition," submitted by Michael Finch	\$600
11-STEM-SM-09	Alpena High School	"Alpena Pre-Collegiate Science Research Program," submitted by David Good	\$600
11-STEM-SM-10	Wilson Middle School	"Science Survivor Style," submitted by Eva Griffin	\$550
11-STEM-SM-11	Bismarck Middle School	"Middle School Rocket Club," submitted by Karen Hankins	\$600
11-STEM-SM-12	Mountain Home Junior High	"Mountain Home Junior High Quiz Bowl Team," submitted by Louise Hickey	\$550
11-STEM-SM-13	Timbo Elementary School	"2011 Quiz Bowl Competition," submitted by Michelle Gughes	\$600
11-STEM-SM-14	Poyen High School	"BEST (Boosting Engineering Science and Technology) Robotics - Team Robot Building Competition - Poyen Robotics," submitted by Amanda Jones	\$600
11-STEM-SM-15	Alpena High School	"BEST in East," submitted by Randy Lane	\$600
11-STEM-SM-16	Calico Rock High School	"Calico Rock BEST Robotics Team," submitted by Mike Mason	\$600
11-STEM-SM-17	eStem High Public Charter School	"eStem High Robotics Team: BEST Robotics Competition," submitted by Andrea Sadler	\$600
11-STEM-SM-18	Dumas Junior High School	"Dumas Junior High Science Fair," submitted by Ben Schurhamer	\$600
11-STEM-SM-19	Arkansas School for Mathematics and Sciences	"Offseason BEST Robotics," submitted by Nicholas Seward	\$600
11-STEM-SM-20	Mayflower Elementary School	"Quiz Bowl Buzzers Needed," submitted by Sally Stuart	\$600
11-STEM-SM-21	Stuttgart High School	"Ricebird Robotics Team (BEST Robotics)," submitted by Jonathan Watson	\$600
11-STEM-SM-22	Thomas C. Brunson Elementary School	"Quizamania," submitted by Rhonda Williams	\$600
Total (rounded)			\$102,313

Technology Transfer Assistance Program

Number	Reference	Company/Organization	Total Dollar Amount
1	11-TTAG-001	Grace Composites (AMS)	\$5,000
2	11-TTAG-002	Graphic Package International (AMS)	\$5,000
3	11-TTAG-003	PC Turnkey, Incorporated	\$5,000
4	11-TTAG-004	Magna IV Color Imaging, Incorporated (AMS)	\$5,000
5	11-TTAG-005	Biodetection Instruments, LLC	\$5,000
6	11-TTAG-006	Conway Machine, Incorporated (AMS)	\$5,000
7	11-TTAG-007	Vegrandis	\$5,000
8	11-TTAG-008	Nutraceutical-Innovations, LLC	\$5,000
9	11-TTAG-009	Molex Little Rock Connector (AMS)	\$5,000
10	11-TTAG-010	Robert Bosch Tool Corporation (AMS)	\$5,000
11	11-TTAG-011	SFC Fluidics, Incorporated	\$5,000
12	11-TTAG-012	BiologicsMD	\$5,000
13	11-TTAG-013	Algonquin Industries (AMS)	\$5,000
14	11-TTAG-014	Virtual Incubation Company, LLC	\$5,000
15	11-TTAG-015	Arkansas Power Electronics International, Incorporated	\$5,000
16	11-TTAG-016	Tocol Pharmaceuticals LLC	\$5,000
17	11-TTAG-017	Arkansas Power Electronics International, Incorporated	\$5,000
18	11-TTAG-018	FM Corporation (AMS)	\$5,000
19	11-TTAG-019	AGL Corporation (AMS)	\$5,000
20	11-TTAG-023	Sunrise Arkansas, Incorporated (AMS)	\$5,000
21	11-TTAG-024	Mesolight, LLC	\$5,000
22	11-TTAG-025	PhytoTEK, LLC	\$5,000
23	11-TTAG-026	Adan, Incorporated	\$5,000
24	11-TTAG-027	EquitNet, LLC	\$5,000
25	11-TTAG-028	SFC Fluidics, Incorporated	\$5,000
26	11-TTAG-029	Vegrandis, LLC (withdrawn)	\$5,000
27	11-TTAG-031	Ascendant, LLC	\$5,000
28	11-TTAG-032	Dermatex, LLC (withdrawn)	\$5,000
29	11-TTAG-033	Ed4U, LLC	\$5,000
30	11-TTAG-034	Poly Adaptive, LLC	\$5,000
31	11-TTAG-035	Aerotech Machine Corporation (AMS)	\$5,000
32	11-TTAG-037	Agri Turbines	\$5,000
33	11-TTAG-038	Ed4U, LLC	\$5,000
34	11-TTAG-039	Algonquin Industries (AMS)	\$5,000
35	11-TTAG-040	KMF, Incorporated (AMS)	\$5,000
36	11-TTAG-044	AGL Corporation (AMS)	\$4,875
37	11-TTAG-045	ASIG, LLC	\$1,475
38	11-TTAG-046	Cryovac, Incorporated (AMS)	\$5,000
39	11-TTAG-047	Molex High Performance Cable Assemblies (AMS)	\$5,000
40	11-TTAG-048	Preformed Line Products (AMS)	\$5,000
41	11-TTAG-049	Arcelor Mittal (AMS)	\$5,000
42	11-TTAG-050	American Tubing, Incorporated (AMS)	\$5,000
43	11-TTAG-053	Marshalltown (AMS)	\$5,000
44	11-TTAG-054	Superior Industries International, Incorporated (AMS)	\$5,000
45	11-TTAG-055	NanoWatt Design, LLC	\$5,000

Number	Reference	Company/Organization	Total Dollar Amount
46	11-TTAG-056	Ascendant, LLC	\$5,000
47	11-TTAG-057	Preformed Line Products (AMS)	\$5,000
48	11-TTAG-060	Magna IV Color Imaging, Incorporated (AMS)	\$5,000
49	11-TTAG-061	Sunrise Arkansas, Incorporated (AMS)	\$5,000
50	11-TTAG-062	H & T Truss Mill, Incorporated (AMS)	\$5,000
51	11-TTAG-063	Jevac Machine, Incorporated (AMS)	\$5,000
52	11-TTAG-064	Esterline Defense Technologies (AMS)	\$5,000
53	11-TTAG-065	Marshalltown (AMS)	\$5,000
54	11-TTAG-066	Sterling Machinery Company Incorporated (AMS)	\$5,000
55	11-TTAG-068	KMF Inc. (AMS)	\$5,000
56	11-TTAG-069	Esterline Defense Technologies (AMS)	\$5,000
57	11-TTAG-070	Cameron Valve & Measurments (AMS)	\$5,000
58	11-TTAG-071	Cameron Valve & Measurements (AMS)	\$5,000
59	11-TTAG-072	Caterpillar, Incorporated (AMS)	\$5,000
60	11-TTAG-073	Caterpillar, Incorporated (AMS)	\$5,000
61	11-TTAG-074	Pratt and Whitney (AMS)	\$5,000
62	11-TTAG-075	MCA Services, Inc. (Safe Foods) (AMS)	\$5,000
63	11-TTAG-076	Pratt and Whitney (AMS)	\$4,630
64	11-TTAG-077	B & B Elevator, Incorporated (AMS)	\$5,000
Total (rounded)			\$315,980

Research & Development Tax Credit Program

Resolution	Resolution Date	Company/Organization	Total Dollar Amount
11-01	7-16-10	Mesolight, LLC	\$110,535
11-01	7-16-10	Ocean Nanotech	\$173,304
11-22	3-18-11	Arkansas Power Electronics International, Incorporated	\$369,670
11-22	3-18-11	BioDetection Instruments, LLC	\$61,428
11-22	3-18-11	BlueInGreen, LLC	\$42,350
11-22	3-18-11	First Orion Corporation	\$173,860
11-22	3-18-11	Minotaur Technologies, LLC	\$46,586
11-22	3-18-11	InvoTek, Incorporated	\$77,027
11-22	3-18-11	Nutraceutical Innovations, LLC	\$27,041
11-22	3-18-11	SFC Fluidics, LLC	\$76,274
11-22	3-18-11	Vegrandis, LLC	\$34,390
11-22	3-18-11	Insight Ecosystems, LLC	\$73,016
11-22	3-18-11	Merchant View, LLC	\$42,922
11-31	5-20-11	BioBased Technologies, LLC	\$208,192
11-31	5-20-11	Healthspan Solutions, LLC	\$28,267
11-31	5-20-11	LITMUS, LLC	\$52,734
11-31	5-20-11	Lynguent, Incorporated	\$40,973
11-31	5-20-11	Mesolight, LLC	\$123,738
11-31	5-20-11	NN-Labs, LLC	\$32,086
Total (rounded)			\$1,794,393

AMS Projects for Fiscal Year 2011

County	Number of Projects and Events	Gross Project and Event Fees
Baxter	1	\$9,450
Benton	9	\$13,990
Boone	3	\$0
Clark	2	\$4,750
Columbia	2	\$1,250
Craighead	17	\$42,950
Crawford	4	\$2,500
Crittenden	1	\$1,250
Dallas	1	\$0
Faulkner	6	\$4,450
Garland	16	\$8,000
Greene	5	\$7,200
Hempstead	3	\$0
Hot Spring	1	\$0
Independence	6	\$1,250
Jackson	2	\$1,250
Jefferson	9	\$27,200
Johnson	1	\$0
Lawrence	2	\$3,000
Logan	5	\$5,600
Lonoke	3	\$1,250
Marion	2	\$0
Mississippi	3	\$2,500
Nevada	1	\$0
Ouachita	3	\$1,700
Polk	3	\$1,200
Pope	4	\$6,780
Pulaski	60	\$296,576
Saline	8	\$1,250
Sebastian	22	\$11,600
Washington	16	\$57,735
White	16	\$42,250
Totals	237	\$556,931

Note 1: Number of projects consists of Service Agreements, AMS Funded TTAGs, Open Enrollment/events and non-revenue activities.

Note 2: Fees comes from service agreements, client match from AMS funded TTAGs and registration fees for open enrollments and events.