#### **ARKANSAS Resources**

### 1. Girls of Promise; http://www.ngcproject.org/program/girls-promise

The Women's Foundation of Arkansas (WFA) Girls of Promise (GoP) program was established in 1999. Girls of Promise is a one-day conference hosted by a local college/university - has introduced over 3000 8th grade girls across Arkansas to information about careers in the STEM

**Program Contact Info** 

Lynnette Watts, Executive Director

Iwatts@womensfoundationarkansas.org

1202 S. Main Street, Suite 230 Little Rock, AR 72205

Phone: 501-537-0918; Fax: 501-537-0755

# 2. ARKANSAS STEM COALITION; <a href="http://arkansasstemcoalition.com/event/central-arkansas-regional-science-and-engineering-fair-carsef/">http://arkansasstemcoalition.com/event/central-arkansas-regional-science-and-engineering-fair-carsef/</a> and <a href="http://ualr.edu/cals/carsef/">http://ualr.edu/cals/carsef/</a>

The Central Arkansas Regional Science and Engineering Fair (CARSEF) is scheduled for Friday, February 20, 2015 at the Fitness Center inside UALR's Donaghey Student Center. Students in private schools, public schools, or who are home schooled are ALL eligible to compete at CARSEF. We limit our competition to students attending school in the following counties: Cleburne, Conway, Faulkner, Lonoke, Monroe, Perry, Pope, Prairie, Pulaski, Van Buren, White, Woodruff and Yell. If you do not attend school in one of these counties, then let us help you find the Regional Science Fair that serves your home county. CARSEF has two (2) levels of competition: The Junior Division is open to students in grades 4-8 and The Senior Division is open to students in grades 9-12.

Organizer: Keith Harris; 501-569-8149

### 3. University of Arkansas at Pine Bluffs STEM Academy;

http://www.uapb.edu/administration/research innovation and economic development /stem academy.aspx

Specific programs include:

Annual Science Fair Exposition (Expo)

STEM Saturday Academy for Area High School Science and Mathematics Teachers and Students (10-12th grades)

STEM Summer Academy (pre-college high school graduates)

STEM SCHOLARS INTERNSHIPS (undergraduates)

https://www.uapb.edu/sites/www/Uploads/Research%20and%20Innovation/2014%20Fall%20N

ewsletter%20FINAL.pdf a descriptive brochure of UAPB STEM resources

CONTACT: Division of Research, Innovation and Economic Development

University of Arkansas at Pine Bluff

1200 N. University Drive, Mail Slot 4791 Dr. Mary E. Benjamin, Vice Chancellor (870) 575-8216

4. The College of Engineering and Information Technology at the University of Arkansas at Little Rock; http://ualr.edu/eit/additonal-info/outreach/

Contact: George W. Donaghey College of Engineering and Information Technology 2801 S University Aven, Little Rock, AR 72204

Phone: (501)569-3333; Fax:501)569-8002 (fax); Email: ccshank@ualr.edu conducts a variety of outreach programs throughout the year designed to motivate students in grades six through twelve to pursue science, technology, engineering, and mathematics (STEM) degrees.

## Specific programs include:

Engineering Olympics; Junior Division (grades 6th-8th) Competition generally held in March During National Engineers Week, UALR hosts the Junior Engineering Technical Society's (TSA) Tests of Engineering Aptitude, Mathematics and Science (TEAMS) Competition. UALR is the only site in Arkansas hosting this national event (high school). TEAMS competitions are held nationwide on one day during the competition window of February 9 - March 21, 2015. Competitions held during that window determine local, division and state winners. The national TEAMS competition is held at the national TSA conference, June 28 - July 2, 2015 at the Gaylord Texan Resort, just outside of Dallas, Texas.

MATHCOUNT Competitions -- March 1-31, 2015 for State Competitions

High School Research Program (HSRP); This year's HSRP will be July 5-24, 2015 and all

application materials must be postmarked by April 18, 2015.

- Engineering Scholars Program (ESP) (college)
   Session 1: June 14-20, 2015
- Session 2: June 21-27, 2015
- Session 3: July 12 18, 2015

All application materials must be postmarked by April 18, 2015.

5. ARKANSAS Out of School Network; The Summer STEM Institute; http://www.aosn.org/about-aosn/aosn-advocacy-blog/nurturing-the-wonder-of-stemthe-summer-stem-institute.html (post graduate)

#### **AOSN Contact Information**

2222 Cottondale Lane, Suite 240

Little Rock, AR 72202

Arkansas Out of School Network: 501.660.1012

AOSN Network Coordinator-Laveta Wills-Ha: <a href="mailto:lwillshale@astate.edu">lwillshale@astate.edu</a>

- 6. Arkansas Junior Science & Humanities Symposium (AR JSHS) annual event that is designed to challenge and engage students (Grades 9-12) in science, technology, engineering or mathematics (STEM). Individual students compete for scholarships and recognition by presenting the results of their original research efforts before a panel of judges and an audience of their peers; will be held March 13-14, 2015 on the campus of Arkansas Tech University in Russellville, Arkansas; run by Dr. Jessica P.C. Young (Assistant Professor of Physics at Arkansas Tech University); <a href="https://www.atu.edu/jshs/">http://www.atu.edu/jshs/</a>
- **7. Local Girl Scouts To Pilot STEM Program;** <a href="http://bartlett-express.com/2014/10/09/area-girl-scouts-council-pilot-national-program-20k-grant/">http://bartlett-express.com/2014/10/09/area-girl-scouts-council-pilot-national-program-20k-grant/</a>

Girl Scouts Heart of the South was selected as one of five councils in the country to pilot a national program and has received a \$20,000 grant from Girl Scouts of the USA and Techbridge to introduce girls to the wonders of engineering and science.

"Engineer Your Journey" provides age-appropriate activities about STEM careers and corresponds with the Girl Scout Journey curriculum for girls in grades 4-5, 9-10 and 11-12. The grant will provide hands-on activity kits, books and resources for 100 girls in West Tennessee, North Mississippi and eastern Arkansas. Girls who complete the program will have the opportunity to visit local attractions to see how engineering is in action in their everyday lives.

"Engineer Your Journey" is open to Girl Scouts and non-Girl Scouts. Anyone interested in introducing engineering to girls through this program may contact <u>Lori Gilmore</u> at <u>EYJ@girlscoutshs.org</u>.

8. 2015 Arkansas Governor's School, June 14 - July 25; <a href="https://www.hendrix.edu/ags/">https://www.hendrix.edu/ags/</a> Six-week summer residential program for gifted and talented students who are upcoming high school seniors and residents of the state of Arkansas. Students are selected on the basis of their special aptitudes in one of eight fields: Choral Music, Drama, English/Language Arts, Instrumental Music, Mathematics, Natural Science, Social Science, or Visual Arts. Contact: Arkansas Governor's School

Hendrix College

1600 Washington Avenue Conway, Arkansas 72032

**501-450-1279 or 1-800-808-2944** (In Arkansas Only)

ags@hendrix.edu

### 9. University of Central Arkansas STEM Institute; http://uca.edu/steminstitute/

Provides high quality, innovative STEM educational opportunities through developing partnerships, professional development, research, K-12 outreach, and sharing of instructional resources.

Activities appear to be for teacher development. Includes directory- of AR STEM Centers:

### **Arkansas State University**

NEA Rural Institute Math/Science Jannie Trautwein, Director

jhuffman@astate.edu

Center for Excellence in Education

P.O. Box 2338 State University, AR 72467-2338

Phone: 870-897-5109 Fax: 870-972-3559

**Rural Institute Website** 

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### **University of Arkansas**

Center for Math and Science Education

Lynne H. Hehr, Director

Ihehr@uark.edu

WAAX 202, 1 University Fayetteville, AR 72701

Phone: 479-575-3875 Fax: 479-575-5680

http://www.uark.edu/~k12info/

#### Arkansas State University - East Arkansas Comm. College

NEA Delta Institute Math/Science

Dr. Cynthia Miller, Director

camiller@astate.edu

Center for Excellence in Education

P.O. Box 2338 State University, AR 72467-2338

Phone: 870-897-5124 Fax: 870-972-3559

Delta Institute Website

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### **University of Arkansas at Fort Smith**

Math and Science Education Partnership

Darlynn Cast, Director

## dcast@uafortsmith.edu

Echols 109 Fort Smith, AR 72913

Phone: 479-788-7257 Fax: 479-788-7779

http://uafs.edu/stem/stem-home

### **University of Arkansas at Little Rock**

Math and Science Education Partnership

College of Education Dickinson Hall 306, 2801 South University Little Rock, AR 72204

Phone: 501-569-3124 Fax: 501-569-8242

http://ualr.edu/stemcenter/

### **Harding University**

Center for Mathematics and Science Education

Dr. Tony Finley, Director

tfinley@harding.edu

Box 12254 Searcy, AR 72149

Phone: 501-279-4370 Fax: 501-279-5717 http://www.harding.edu/education/msc.html

### **University of Arkansas at Monticello**

Center for Math and Science Education

UAM P.O. Box 3308 Monticello, AR 71656 Phone: 870-460-1063 Fax: 870-460-1563

http://www.uamont.edu/education/math%20and%20science/

- 10. Girls In STEM Conference, Travis High School 1211 E. Oltorf, Austin, TX 78704, 10<sup>th</sup> Annual April 11, 2015; <a href="http://www.girlstart.org/our-programs/girls-in-stem-conference">http://www.girlstart.org/our-programs/girls-in-stem-conference</a>. Girls in 4<sup>th</sup>-5<sup>th</sup> & 6<sup>th</sup>-8<sup>th</sup> grades will discover the fun side of STEM careers at this unique annual conference just for them.
- 11. 100 Girls of Code to Offer Free Workshops to Central Arkansas Girls;
   http://www.littlerockfamily.com/post/103442/100-girls-of-code-will-offer-free-workshops-to-central-arkansas-girls

North Little Rock-based <u>Arkansas Regional Innovation Hub</u> and 100 Girls of Code, females 12-18. 100 Girls of Code is touring 8 states in the southeastern United States and opening chapters nationwide

'100 Girls Of Code' Opens Arkansas Chapter With Innovation Hub;

http://talkbusiness.net/2015/02/100-girls-of-code-opens-arkansas-chapter-with-innovation-hub/

- See more at: http://talkbusiness.net/2015/02/100-girls-of-code-opens-arkansas-chapter-with-innovation-hub/#sthash.Ca0x9MAu.dpuf

## 12. University of Arkansas, Fayetteville Engineering Girl Camp; <a href="http://engineering-camps.uark.edu/engineering-girl-camp.php">http://engineering-camps.uark.edu/engineering-girl-camp.php</a>

Girls entering the 8th or 9th grade during the 2015-2016 school year; July 13 - 17, 2015 contact Eric Specking, Director of Undergraduate Recruitment, at 479-575-7780 or especki@uark.edu.

Also STEM Preparation program; **STEM Preparation Program** (Students enrolled at any Arkansas two-year community college.\_

Contact Cassandra Ellington, Program Coordinator, at 479-575-7780 or email stemprep@uark.edu

### 13. Arkansas Museum of Discovery Summer Camps 2015;

https://www.museumofdiscovery.org/sites/default/files/2015%20Camp%20Flyer.pdf

In particular July 13-17 STEAMpunk Camp: Offered in 2 age groups: ages 6-8 and ages 9-13; however there are other science summer camps as well. Also:

Girls in STEM @ Museum of Discovery presented by Catepillar; <a href="https://www.museumofdiscovery.org/events/girls-stem">https://www.museumofdiscovery.org/events/girls-stem</a>

Hands-on STEM activities; for Girls 11-14; Interact with women in STEM careers; August 4-8<sup>th</sup>. Be one of the 40 applicants chosen to participate, complete and return the registration form along with an adult recommendation (cannot be related to the applicant) and a short essay by the applicant (75 words or less) as to why they want to attend Girls in STEM by July 18. For more information, contact Beth Nelsen at 501-537-3073 or bnelsen@museumofdiscovery.org

## 14. Rural and Delta STEM Education Centers;

http://www.astate.edu/college/education/services/rural-and-delta-stem-education-centers/index.dot

The purpose of the ASU Rural and Delta STEM Education Centers is to enrich the knowledge and teaching practices of teachers in Science, Technology, Engineering, and Mathematics by linking ASU to K-12 public schools, educational service cooperatives, and businesses, and providing services and resources for teachers, administrators, and students.

Contact Dr. Cynthia Miller

Cell: 870-897-5124 Fax: 870-972-3559 Postal Address: P.O. Box 2338

State University, AR 72467

### 15. Arkansas Tech University. Project Lead The Way (PLTW);

http://www.atu.edu/stem/pltw.php

is the nation's leading provider of STEM programs. Our world-class curriculum and high-quality teacher professional development model, combined with an engaged network of educators and corporate and community partners, help students develop the skills necessary to succeed in our global economy. (high school through educators)

## 16. AETN is a partner in the Professional Development Plan for STEM Foundations; http://www.aetn.org/educators

AETN produces video courses and maintain a website that hosts high-quality online professional development courses. These courses will be designed to help increase teacher efficacy across Arkansas, prepare students for STEM courses and promote mastery of the Common Core State Standards

## 17. Arkansas Girls to Women L.E.A.D. Initiative Project III: Girls to Women L.E.A.D. Initiative (Learn, Educate, Achieve and Develop)

The Girls to Women L.E.A.D. Initiative is a social initiative committed to narrowing the gender gaps in fields and industries where women continue to lag behind their male counterparts -e.g., finance, business ownership, civic leadership, and the STEM (Science, Technology, Engineering and Math) fields. The Girls to Women L.E.A.D. Initiative is comprised of four programs: the Girls to Women L.E.A.D. Mentorship Program, the Girls to Women L.E.A.D. Academy, the Girls to Women STEM Program, and the Girls to Women L.E.A.D. Economic Empowerment Program....

The Girls to Women STEM Program seeks to reverse women's historic underrepresentation in STEM education and careers through collaborative partnerships with private and non-profit stakeholders. Girls and women will be partnered with professionals within the STEM field who will help them develop their skills, understand their academic or career options, and provide substantive feedback on STEM-related projects and innovations. Girls and women may also be entered into state, national or global STEM competition, which offers them a chance to display their knowledge to a broader audience and network with other STEM girls and women; <a href="http://www.janusjustice.org/uploads/1/7/9/2/17927847/project\_iii\_revd.pdf">http://www.janusjustice.org/uploads/1/7/9/2/17927847/project\_iii\_revd.pdf</a>
Contact us at janus@janusjustice.org or call 800-624-1588, Ext. 101

### 18. Ozark Stem Foundation; http://www.ozarkstem.org/

The Ozark STEM Foundation's mission is to foster high-quality science, technology, engineering, and mathematics (STEM) opportunities for all students in grades K-16. We work with students, teachers, parents, and community organizations to build a sustaining and "maker" community equipped to challenge to meet the challenges around them. We serve as a connection point and a resource pool as we collaborate with internal and external partners on sponsored projects to improve STEM opportunities throughout the Northwest Arkansas area. Our goal is to help establish NWA as one of the premier STEM locations for students.

19. Ozark Education, Inc.; <a href="http://ozarkcca.org/summer-camp-success/">http://ozarkcca.org/summer-camp-success/</a>

Ozark Kids' Summer Technology Camp

**20. 2015 - Arkansas Department of Higher Education**; Report on STEM Graduation and Enrollment Trends

http://www.adhe.edu/SiteCollectionDocuments/ResearchAndPlanningDivision/Research\_an\_d\_Planning\_General/STEM/2015\_STEM\_Report.pdf

Pages 10 & 17 of 25 include a graph by gender

### 21. Arkansas Gov. Directs High Schools to Offer Computer Science Classes;

http://blogs.edweek.org/edweek/DigitalEducation/2015/02/arkansas gov directs high scho.html

HB1183 - TO REQUIRE EACH PUBLIC HIGH SCHOOL AND PUBLIC CHARTER SCHOOL TO OFFER A COURSE IN COMPUTER SCIENCE.

### 22. Arkansas Rock City FIRST Robotics Regional Conference - Event at Barton Coliseum;

http://www.chatterblock.com/events/156831/arkansas-rock-city-first-robotics-regional-conference/

The "Rock City Regional" will be a premier STEM event for high school students in Arkansas and the country and we are pleased to be able to bring this competition to the Central Arkansas area.

23. Arkansas Space Grant Consortium. University of Arkansas at Little Rock; http://www.nasa.gov/pdf/723728main 2011 HE AR Space Grant.pdf

The National Space Grant College and Fellowship Program consists of 52 state-based, university-led Space Grant Consortia in each of the 50 states plus the District of Columbia and the Commonwealth of Puerto Rico. Annually, each consortium receives funds to develop and implement student fellowships and scholarships programs; interdisciplinary space-related research infrastructure, education, and public service programs; and cooperative initiatives with industry, research laboratories, and state, local, and other governments. Space Grant operates at the intersection of NASA's interest as implemented by alignment with the Mission Directorates and the state's interests. Although it is primarily a higher education program, Space Grant programs encompass the entire length of the education pipeline, including elementary/secondary and informal education. The Arkansas Consortium is a Capability Enhancement Consortium funded a level of \$430,000for fiscal year 2011.

### 2 Specific STEM benefits or outcomes include:

Fund Guest Lecturers from STEM disciplines to make presentations for the General Public at affiliate campuses. (1)

Fund STEM/MSI Scholarship/Fellowships (10). Note: The STEM/MSI program implemented a few years ago has proven to be beneficial to our program. This year there were 11 awards and

12 travel awards made. This has doubled our participation from last year. This program specifically helps our underrepresented minority groups and female participation outreach.

Contact: Dr. M. Keith Hudson; (501) 569-8212; Asgc.ualr.edu; Grant Number: NNX01AL28H

## 24. The UCA Institute for STEM Professional Development and Education Research (UCA STEM Institute); <a href="http://uca.edu/steminstitute/">http://uca.edu/steminstitute/</a>

Plays a vital role in support of the University's [University of Central Arkansas] mission in teacher education in science and mathematics. The Institute provides "high quality," innovative STEM educational opportunities through developing partnerships, professional development, research, K-12 outreach, and sharing of instructional resources. These activities are aligned with state and national initiatives and contribute to the College of Natural Sciences and Mathematics' vision of being a national leader in STEM education.

### 25. LISA Academy; <a href="https://www.lisanorth.org/">https://www.lisanorth.org/</a>

LISA Academy is offering another fun-filled Leadership STEM Camp this summer at Arkansas 4-H Center. Students will enjoy fun outdoor activities and STEM projects like hands on experiments, archery, swimming, canoeing, high rope course, zip lining, camp fires, etc. The program is open to students in 7th through 11th grade, however students will be accepted on a first-come, first-served basis due to limited available places. The cost is \$250 for 5 days including meals and accommodations. In addition, both academic and discipline records will be reviewed for students interested in attending the camp. Please see Mr. Han for details.

2015 Leadership STEM Camp locations and dates are as follows:

Boys Camp: Arkansas 4H center Dates: May 29th - June 2nd, 2015

Girls Camp: TBA

### 26. Arkansas department of Education; Schools of Innovation Program;

http://www.arkansased.org/divisions/learning-services/schools-of-innovation 2014-2015 Schools of Innovation include:

LEVERETT ELEMENTARY SCHOOL. FAYETTEVILLE SCHOOL DISTRICT. Focused on Science, Technology, Engineering and Math (STEM)

RUSSELLVILLE JUNIOR HIGH SCHOOL. RUSSELLVILLE SCHOOL DISTRICT. Focused on enhancing the Science, Technology, Engineering and Math (STEM) initiative

CENTRAL JUNIOR HIGHSCHOOL. SPRINGDALE SCHOOL DISTRICT
GEORGE JUNIOR HIGH SCHOOL
HARBER HIGH SCHOOL
LAKESIDE JUNIOR HIGH SCHOOL
SOUTHWEST JUNIOR HIGH SCHOOL
SPRINGDALE HIGH SCHOOL

Focused on enhancing the Science, Technology, Engineering and Math (STEM) and hands-on learning that engage families and community. Providing an accelerated pathway for students to earn associate degrees and/or industry-level certifications, in addition to high school diplomas, by the end of the 12<sup>th</sup> grade

**27. 100** Women Leaders in STEM; a publication by STEMConnector; http://education.ti.com/images/in-the-news/pdf/100-Women-Leaders-in-STEM.pdf

Highlights several members from Arkansas.

28. Arkansas Science & Technology Authority (ASTA); Empowering Women in STEM. Assets of Arkansas February 2015;

http://www.asta.arkansas.gov/documents/asset\_newsletters/ASSETs\_Womens\_Issue\_feb\_ 15.pdf

A compilation of women and programs prepared for Women's History Month, March 2015

Arkansas STEAM website serves a key function in coordinating statewide initiatives that support the training and preparation of Arkansas students for the needs of the 21st century science, technology, engineering and mathematics workforce; <a href="http://www.asta.arkansas.gov/stem.html">http://www.asta.arkansas.gov/stem.html</a>

Business leaders in Arkansas have sounded an alarm. They cannot find the science, technology, engineering and mathematics (STEM) talent they need to stay competitive. Students' lagging performance in K-12 is a critical reason why. An analysis of the fundamental question CAN ARKANSAS MEET THE DEMAND FOR STEM SKILLS? Is provided.

 Southern Arkansas University STEM Center for K-12 Education; https://web.saumag.edu/science/stem/ Website describes its program and links to related resources such as: Friday, March 20, 2015 - Southwest Arkansas Regional Science Fair

Contact: Dr. Scott R. White Assistant Professor of Chemistry 870-235-4278 (Office) <a href="mailto:srwhite@saumag.edu">srwhite@saumag.edu</a>

P.O. Box 9181

Building/Office: Science Center 313E