

# MS EPSCoR Education and Outreach

Katie Echols Education and Outreach Coordinator 2010 Mississippi EPSCoR State Meeting April 15, 2010



## **Education and Outreach Team**

- Ms. Katie Echols, Ed & Outreach Coordinator, MSU
- Ms. Pamala Heard, Ed & Outreach Liaison, JSU
- Ms. Mary Canterbury, Ed & Outreach Liaison, UMMC
- Dr. Greg Tschumper, Research Group Leader, UM
- Dr. Sherry Herron, Ed & Outreach Liaison, USM







### www.msepscor.msstate.edu

- Website Goal: Valuable source of information about research efforts and accomplishments for members of the EPSCoR team as well as the public.
- News page highlights accomplishments of faculty and students
- Events page provides information about upcoming programs
- Resource page provides information of specific use to faculty and students
- Links provided on the home page to each university's website as well as to the NSF home page.
- Transferring to new url: <u>www.msepscor.org</u>











**Research Areas** 

Education & Outreach

**Project Lead Personnel** 

**Current NSF Project** 

MSEPSCoR News

Biology Certificates

Award

MSU Students Awarded Computational

Changhe Yuan Receives NSF Career

Dr. Hester article from Technology Alliance magazine

P Copeland Receives Leadership Award

Hammer Receives NSF CAREER Award

Hester: MSU alumnus honored as distinguished faculty

Presentations

Publications

Resources

Events

News

The Mississippi EPSCoR/IDeA program identifies, develops, and uses academic science and technology resources to increase Mississippi's research and development competitiveness and support economic growth. through the state's colleges and universities, their science and engineering faculty, and their students. The Mississippi EPSCoR program is enhancing valuable resources that can influence Mississippi's research capacity in the 21st century.

Increasing Mississippi's scientific and technological research competitiveness is critical. The EPSCoR program utilizes the science and technology resources at <u>Mississippi State University</u>, the <u>University</u> of <u>Mississippi</u>, the <u>University</u> of <u>Southerm Mississippi</u>, and <u>Jackson State</u> <u>University</u> to stimulate sustainable science and technology infrastructure improvements at these institutions to accelerate the ability of their researchers to compete for federal and private sector research and development funding.



2010 Mississippi EPSCoR Annual Meeting

Jackson State University, E-Center Jackson, Mississippi

Jackson State University EPSCoR
 Personnel Selected for MARC Travel









Research Areas News Education & Outreach Project Lead Personnel Presentations Current NSF Project Publications Events Resources

### News <u>Amsu str</u>

- MSU Students Awarded Computational Biology Certificates
   MSU Changhe Yuan Receives NSF Career Award
- JDr. Hester article from Technology Alliance magazine
- Copeland Receives Leadership Award
- Jester: MSU alumnus honored as distinguished faculty
- Hammer Receives NSF CAREER Award
- Jackson State University EPSCoR Personnel Selected for MARC <u>Travel Awards</u>
- Nississippi NSF EPSCoR Announces Six Research Grants
- Mississippi Universities Take Near-Sweep of Student Awards at MCBIOS
- Num's Stoddard selected to attend Meeting of Nobel Laureates
- EPSCoR Faculty selected as Bagley College's Academy of Distinguished Teachers - February 2010
- State Snapshot Future Engineers Keisha Walters, an MSU assistant professor of chemical engineering, calls on a student to answer a question at Ward-Stewart Elementary School in Starkville,
- O MSU, MUW faculty work to help 'stem' science perceptions
- O Program encourages minority and female students to pursue science careers
- 2007 EPSCoR National Conference
- NSF New Merit Review Website
- NSF program director visits MRC

Internet







### **2010 EPSCoR State Meeting - Student Emphasis**

- Create an opportunity for students to network
- Highlight and reward student research through poster competition
- Educate students on relevant career information
  - Career panel representing industry, government, academia and research
- Provide an opportunity for students to form their own leadership team
  - Student representatives from each institution/research focus area
  - Will work to form the student modeling and simulation network as well as the fall research forum









## **STEM Study**

- Collaboration with Mississippi State University, Mississippi University for Women, EPSCoR and the Starkville Public School District
- EPSCoR faculty members Robert Hester (UMMC), Keisha Walters (MSU) and student Sheneka Simmons (JSU) participated in the study
- Funded by NASA and the American Association of University Women



- Evaluate the impact of mentors from underrepresented groups on student interest in STEM
- Moving forward: Repeat study with modifications or redirect study to evaluate teacher impact

# **EPSCOR** Experimental Program to Stimulate Competitive Research

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ard Stewart Elementary fifth-grader Alka Temu examines physical properties of water, canola oil, and corn syrup during a science lab strunk's classroom on Monday. / Megan Bean/MSU University Relations

TIM PRATT (contact)
There are more photos with
this story. Click to view
ohoto gailery.
TAPKVITIE \_\_\_\_\_A = fifth or

 $\label{eq:starkville} STARKVILLE — As fifth-graders Kelsey Jones, James Travis and Matt Hutchinson sat together Monday morning in Nancy Sistrunk's class at Ward-Stewart Elementary School, all three had smiles on their faces.$ 

Megan Rowe I teach gifted at Ward Stewart, and serve that particular class. Those kids were WILD about that lesson...they especially loved the happy/sad balls. We had a fifteen minute discussion on how they worked! Awesome!!

#### Ina Bishop | 2/10/2010 6:33 PM

Wonderful article to give incentive to anyone who works with children, including parents and the children themselves that no goal is too high if you have the interest and drive to go for it. We need to see more schools and educators, such as Mississippi State University and Doctor Walters step up to encourage our future adults.

Nancy Bryan Being a 5th grade teacher and a graduate of MSU, I would love to know what lessons she taught....We are always trying to spark the interest in science !!....great job, Keisha !













### 2010 Computational Sciences Teacher Workshop

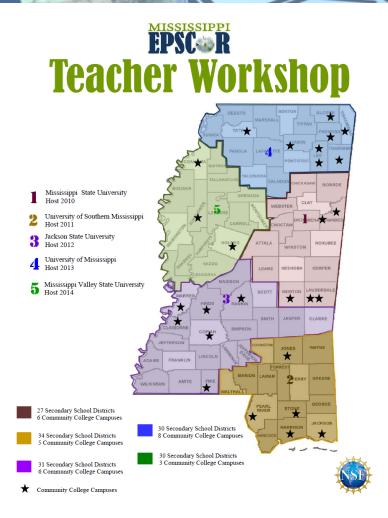
- June 21-25, 2010
- Rotate among the universities each year.
- First day focuses on how computational science fits into the MS curriculum
- One day devoted to each of the three research areas
- Lessons will directly tie back to the curriculum frameworks
- Final day will focus on careers and realistic application of computational sciences

















# **Upcoming Projects**

- Research Forum
  - Fall 2010 at University of Mississippi
  - Student driven
- Legislative Day
  - Student/Research centered
  - January of 2011









## **Other Activities**

- JSU (Isokpehi and Simmons) taught Overview of Bioinformatics to elementary and secondary students as part of JSU NASA Educator Resource Workshop.
- JSU (Isokpehi and Cohly) video conferenced with a USM night class.
- USM (Herron) Co-instructor of Research Ethics and Skills course.
- USM (Zhang) started the International Joint Conferences on Bioinformatics, Systems Biology and Intelligent Computing which was converted to ACM- Bioinformatics and Computational Biology Conference
- MSU (Thompson) Science Fair Judge for MS Region V
- MSU (Walters, Keisha) Introducing Talented High School Students to Engineering Via Fluid Mechanics, 2010 ASEE National Conferences.
- UM (Wilkins and Nan) UM Women in STEM Roundtable
- UM (Ritchie) Taught *Collaborating Across Boundaries,* ACS-Washington D.C. and ACS Leadership Institute, Ft. Worth TX; Meeting, *Coaching and Feedback,* Central Texas Local Section of the ACS and ACS-San Francisco Meeting
- UM (Hammer and Scardino) Regional Science Fair Judges
- UM (Hollis) volunteered at the Lafayette Upper Elementary School Fair Day, April 1, 2010.





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