

Tuskegee University paving the way for the next generation in science and technology



Keynote speaker Dr. Ainissa G. Ramirez speaking to students and educators about life goals, opportunities and science.

MONTGOMERY, Ala. (February 8, 2016) — One of the greatest problems America faces is reducing the gap between the numbers of qualified workers and the increasing need to fill jobs in science and technology fields. Tuskegee University continues to be on the forefront of addressing the future of science, technology, engineering, and math (STEM) education and careers in underserved areas. For about 10 years, students and teachers from around the state have been invited to the annual Science and Technology Open House to be motivated to discover more about the possibilities in STEM.

“We need enough people to help us with research and enough people to add to the manpower,” said Dr. Shaik Jeelani, vice president for research and dean of graduate studies. “Math and science is so critical... Alabama is behind, but we are making progress.”

Held Friday and Saturday at the Renaissance Hotel & Spa at the Convention Center in Montgomery, Ala., the free event also provided an opportunity to highlight the research of post-secondary students in a poster competition and gave Alabama grade school teachers a chance to learn innovative hands-on activities to take back to their classrooms. Denise Barnes, section head for the National Science Foundation's Experimental Program to Stimulate Competitive Research, said it is critical to make sure that opportunities in STEM are available in every corner of the nation. She said many of those doors start to open or close in grade school.

"Middle school is that point where we start losing people. We have to continue to build on that inquisitive nature they have when they are young," Barnes said.

Students teaching educators

Friday, Tuskegee students worked with dozens of educators to train them to use modules for teaching science and technology. Created by Tuskegee students that are part of the Math and Science Partnership (MSP), the innovative games, exercises and crafts projects were aimed at breaking away from traditional lessons and getting young people involved in what they learn.

TU seniors Elijah Andrews and Tiffany Robinson challenged the mental and imaginative abilities of their group during a session on nature and environmental science. After playing a few rounds of competitive quiz games, the teachers had their creativity put to the test after being given a bag of craft items and limited time to create 3-D environmental models. Andrews and Robinson said it was an amazing opportunity to pass on knowledge that will improve learning for the next generation.

"The world we are living in is hands-on. We have to incorporate how the world actually works outside the classroom," Andrews said.



Educator training session.

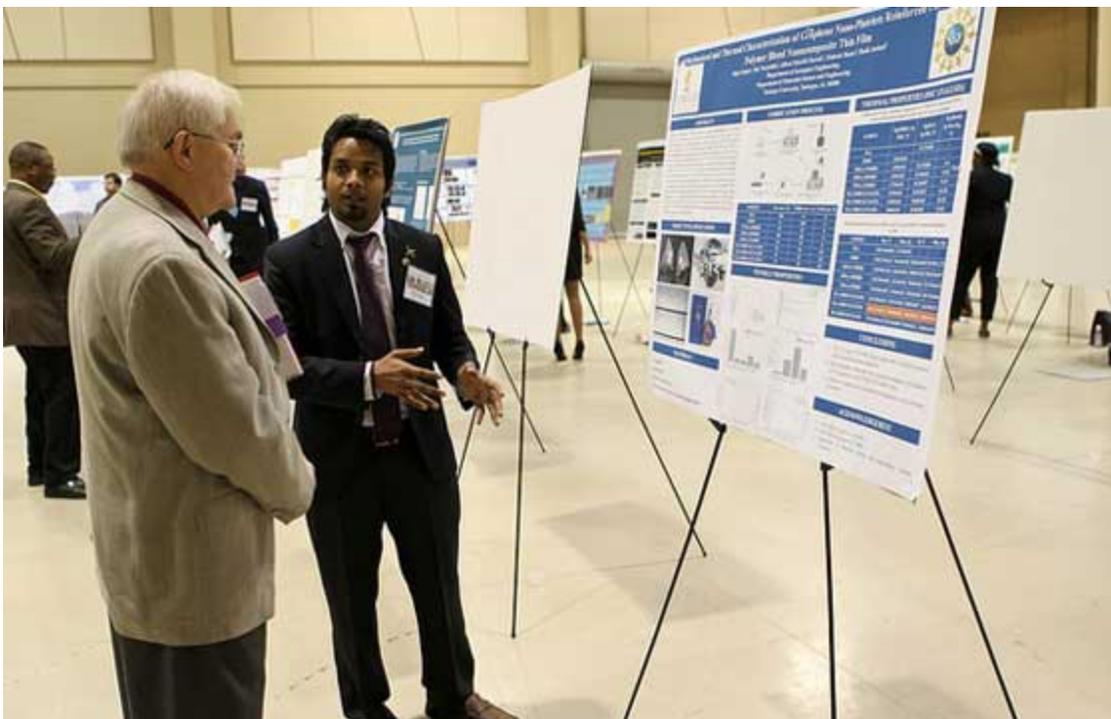
Sharing the research

Spreading knowledge for the good of the state is at the core of the open house's goals. Tuskegee is the lead institution for grants funded by the National Science Foundation and the Alabama Commission on Higher Education. The annual open house showcases the work done for two grant programs: Alabama Experimental Program to Stimulate Competitive Research (Alabama EPSCoR) and the Math and Science Partnership (MSP). Alabama EPSCoR is an integrated partnership among multiple academic institutions, including: Alabama A&M University, Auburn University, the University of Alabama, the University of Alabama at Birmingham, the University of Alabama in Huntsville, and the University of South Alabama. MSP partners with several Alabama school districts, community colleges, universities and science and technology-related organizations.

"To have an economic impact in the State of Alabama, we have to have new discoveries and new inventions and those are all based on math and science," Jeelani said,

To learn more about Alabama EPSCoR, [click here](#).

To learn more about MSP, [click here](#).



Tuskegee student presenting research poster during competition.



Environment model of rain forest made by educators.