

STEM Scholars Explore STEM Careers Through University of Florida's Immersion Experience

Participating School Districts



Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director

Calhoun

Franklin

Gadsden

Gulf

Holmes

Jackson

Jefferson

Liberty

Madison

Taylor

Wakulla

Walton

Washington



Heartland Educational Consortium

Dr. Debra Elliott, Executive Director

DeSoto

Glades

Hardee

Hendry

Highlands

Okeechobee



North East Florida Educational Consortium

James Surrency, Ph.D., Executive Director

Columbia

Flagler

Gilchrist

Lafayette

Levy

P.K. Yonge

Putnam

Union

Through the *FloridaLearns STEM Scholars* UF Immersion Experience talented and gifted high school students from small and rural districts across Florida participated in the 2014 STEM Immersion. These experiences were made possible through a partnership with the University of Florida's Center for Precollegiate Education and Training.



In the PAEC area, twenty-nine STEM Scholars and five teachers were able to participate in a variety of experiences at the University of Florida. For a realistic college experience, University officials assigned students to dorm rooms as well as their work groups for the week.



Mary Jo Koroly, Ph.D., Director for the Center for Precollegiate Education and Training welcomes the students to the University of Florida.

Participating School Districts



Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director

Calhoun

Franklin

Gadsden

Gulf

Holmes

Jackson

Jefferson

Liberty

Madison

Taylor

Wakulla

Walton

Washington



Heartland Educational Consortium

Dr. Debra Elliott, Executive Director

DeSoto

Glades

Hardee

Hendry

Highlands

Okeechobee



North East Florida Educational Consortium

James Surrency, Ph.D., Executive Director

Columbia

Flagler

Gilchrist

Lafayette

Levy

P.K. Yonge

Putnam

Union



Jared Standiford (Marianna HS), Lydia Wiedeman (Wakulla County HS) and Annalise Brockner (Marianna HS) listen to the requirements for acceptance into the University of Florida's Dental School.

One of the STEM Scholars first experiences included a STEM Healthscience Professions forum. This took place in the Health Science Center where STEM Scholars were able to interact with UF College of Medicine students and college faculty. The students were then able to visit various Biomedical Research Laboratories.



Lydia Wiedeman (Wakulla County HS), Chessa Goodman (Blountstown HS), Aaliyah West (Franklin County HS), Mary-Rosalyn Taylor (ChIPLEY HS) and Chelsea Horne (East Gadsden HS) have their gloves on as they prepare samples for further study in this Biomedical Research Laboratory.

STEM Scholars were exposed to a variety of STEM career options throughout the university. The Chemistry department shared information about career options in their specific field and provided hands-on activities working with nanotechnology. The students then traveled to the Computer Science Department where they were able to "build" a Virtual Patient and practice with diagnosis of that patient's illness.

Participating School Districts



Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director

- Calhoun
- Franklin
- Gadsden
- Gulf
- Holmes
- Jackson
- Jefferson
- Liberty
- Madison
- Taylor
- Wakulla
- Walton
- Washington



Heartland Educational Consortium

Dr. Debra Elliott, Executive Director

- DeSoto
- Glades
- Hardee
- Hendry
- Highlands
- Okeechobee



North East Florida Educational Consortium

James Surrency, Ph.D., Executive Director

- Columbia
- Flagler
- Gilchrist
- Lafayette
- Levy
- P.K. Yonge
- Putnam
- Union



Courtney Strickland (Madison County HS), Carley Mead (Chipley HS), Ashley Archer (Freeport HS), Krysten Pazik and Noaah Cole (Freeport HS) celebrate their success with the nanotechnology

The STEM Scholars' experiences included conducting DNA Extraction and PCR on plants in the Interdisciplinary Center for Biotechnology Research. This lengthy process required the students to return to the laboratory to conduct gel electrophoresis and to construct morphological and molecular phylogenies.



Timothy Walker (Taylor County HS) Nic Smalal (Wakulla HS), Rebekah Fielder (Wakulla HS) and Stefan Roberts (Jefferson County HS) prepare their sample to run a PCR.

STEM Scholars were able to get a feel for scientific research at the Entomology and Nematology Department as they were able to assist in collecting data on the effects of fruit flies (*Drosophila*) that had been anesthetized. Students were also able to take advantage of this department's outside classroom as they waded through the wetlands and worked with university faculty and graduate students to explore Florida ecosystems.

FloridaLearns STEM Scholars

STEM Brief

Summer 2014

Participating School Districts



Panhandle Area Educational Consortium

Patrick L. McDaniel, Executive Director

Calhoun

Franklin

Gadsden

Gulf

Holmes

Jackson

Jefferson

Liberty

Madison

Taylor

Wakulla

Walton

Washington



Heartland Educational Consortium

Dr. Debra Elliott, Executive Director

DeSoto

Glades

Hardee

Hendry

Highlands

Okeechobee



North East Florida Educational Consortium

James Surrency, Ph.D., Executive Director

Columbia

Flagler

Gilchrist

Lafayette

Levy

P.K. Yonge

Putnam

Union



Hunter Chason (Altha School) and Lindsay Furr (Port St. Joe HS) patiently record the time as anesthetized fruit flies wake from their slumber.



Haley Anderson (Port St. Joe HS), Lydia Wiedeman (Wakulla HS), Timothy Walker (Taylor County HS), Anthony Carter (Taylor County HS) and Carley Mead (Chipley HS) prepare to collect samples from the wetlands.

Students finished their week of activities by exploring a cave to get an authentic picture of the Floridan Aquifer and visiting Blue Springs to see the water emerge from the Floridan Aquifer.

The week was packed full of fun experiences and the students went home with new friends and an expanded outlook on their future careers.

