GOVERNOR’S SCHOOL

For Scientific Models and Data Analysis

Summer 2008

June 1-July 3

Sponsored by:

The Center of Excellence in Mathematics and Science Education
East Tennessee State University
P.O. Box 70301* Johnson City, Tennessee 37614

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Second row: Clarissa Casey, Angie Tsay, Jessica McAmis, Ashley Tipton, Zoe Petropolous, Brittany Hale, Andrew Wade, Rafey Feroze

Third row: Nikhil Holla, Kyoungho Cho, Victoria Vineyard, Sheridan Smith, Pooja Jagadish, Patrick Compton, Krystie Burk

Back row: Daniel Kasper, Corey Carter, Ruoke Yang, Richard Diegan III, Pedro Figueroa, Daniel McGregor, Oliver Wang, Nick Cross
Students moving into the dorm

Getting to meet all the new faces from across Tennessee. Everyone checked into their rooms and got their first college dorm experience.
Experimental Design at the Gray Fossil Site

Our students got a glimpse into the past. Dr. Steven Wallace led our students while they worked with paleontology specialists, toured the Natural History Museum, and viewed the amazing discoveries at the digging site.
Dr. Thomas TJ Jones took the students to Warriors Path State Park to hunt spiders and conduct important research. The students saw huge spider webs and had a great time on the water.
Counselor, Aprele, led a nature hike in the woods of Warrior’s Path. She pointed out different organisms we encountered like birds, plants, and animals. The scenery was beautiful!
Tour of the ETSU Medical School Labs

The other part of our tour (not pictured) allowed the students to work with human organs. They got to examine human lungs, kidneys, hearts, arms, stomachs, and more. One of the medical students even dissected a human heart for the students to see. It was a once in a lifetime experience!

Brittany Hale got to practice on one of the simulators at the Quillen College of Medicine. She had to resuscitate the simulator back to life by moving his tongue aside to open his airways and vocal cords. This future surgeon did an excellent job!
Paleontology Dig at the Gray Fossil Site

Dr. Zavada led this tour of the rhino pit. Here the students are sifting through some of the additional material surrounded by the new fossils found.

One of the volunteer paleontologists discovered an alligator bone right in front of our eyes! We were curious and excited to be part of the discovery!

Dr. Zavada was pointing out how the land has changed over the years. He explained how the Gray Fossil Site was a sinkhole millions of years ago, which is why the area is so rich with fossils.
Tour of Oak Ridge National Laboratories

A History of Great Science
Oak Ridge National Laboratory is the Department of Energy’s largest science and energy laboratory. Managed since April 2000 by a partnership of the University of Tennessee and Battelle, ORNL was established in 1943 as a part of the secret Manhattan Project to pioneer a method for producing and separating plutonium. During the 1950s and 1960s, ORNL became an international center for the study of nuclear energy and related research in the physical and life sciences. With the creation of DOE in the 1970s, ORNL’s mission broadened to include a variety of energy technologies and strategies. Today the laboratory supports the nation with a peacetime science and technology mission that is just as important as, but very different from, its role during the Manhattan Project.

Neutron Science Biological Systems Energy Advanced Materials National Security Supercomputing Additional Research Areas

Oak Ridge National Laboratories, a two-hour trip from ETSU, was very educational and stimulating! We saw a super computer, a graphite nuclear reactor, the Spallation Neutron Source, and the National Center for Computational Sciences. The amount of technology was amazing!

The students also learned about materials, energy, climate, and biology. They learned that Oak Ridge is responsible for discovering new research used for education to innovate and impact the world.
Trip to Historic Jonesborough in Jonesborough TN

Activities around Jonesborough: The students shopped in various stores, and visited the Jonesborough/Washington County History Museum, the International Storytelling Center and the Historic Jonesborough Visitors Center.

Live music on the square: Jonesborough is considered the birthplace of country music and there are free concerts downtown every Friday night from May through December.
Historic Jonesborough
Roan Mountain State Park, Roan Mountain, TN

Roan Mountain State Park encompasses 2,006 acres of southern Appalachian forest at the base of 6,285 foot Roan Mountain. Park elevation ranges from 3,000 feet in the valley to around 3,700 feet on surrounding ridges. Rich hardwood forests allow for a great diversity of life and a wide range of outdoor activities. Park guests have opportunities to hike along creeks and ridges, fish for trout, play tennis, swim, tour a century old farmhouse, join rangers and naturalists for educational programs, and enjoy mountain music concerts.

History of the area fauna and flora

Activities Include: Cabins, Hiking Trails, Fishing, Swimming, Camping,

Park Features: Carver’s Gap & Miller’s Homestead

Carver’s Gap  (Carver’s Gap, a low point in the ridgeline of Roan Mountain, is 8 miles past the park on highway 143. As you drive up the road you leave Roan Mountain State Park and enter Cherokee National Forest, which is under the jurisdiction of the U.S. Forest Service (USFS). The parking lot at the gap provides access to the Appalachian Trail (AT). To the north, the AT crosses a series of grassy balds, virtually treeless areas that offer unobstructed views of the Blue Ridge Mountains in Tennessee and North Carolina. This 10 mile stretch of balds is touted by many AT thru hikers as one of the most beautiful sections of the entire trail. To the south, the AT climbs to the high point of the Roan Mountain ridge - 6,285 foot Roan High Knob.)

Miller’s Homestead  (The Miller House was built in 1909 and is now preserved as a reminder of the way folks used to live in these mountains. A barn, corn crib, hog pen, root cellar, smoke house, chicken house, spring house and, of course, an outhouse surround the old frame house.)
Pictures
Tour of Biotech Lab, Polymer Synthesis Lab, and the Physical Testing Lab

Eastman Chemical Company is responsible for creating the following:

- Adhesives & Sealants, Appliances
- Biodiesel & Agriculture, Building and Construction, Cleaners, Displays
- Fixtures & POP, Coatings, Electrical & Electronics, Fashion, Food & Beverage, Housewares, Graphic Arts
- & Printing Inks, Medical, Nonwovens
Basler Challenge Course Program

ETSU Center for Physical Activity

Repelling

Ropes Course

Army obstacles (logs, walls)
Bays Mountain State Park in Kingsport, TN

Wolves habitat
Raptors habitat

White-tail Deer Habitat  Bobcat Habitat  Raccoon Habitat

Ampitheatre
Barge ride

Nature Program

Hike
The Carter Family Memorial Music Center, a non-profit organization, serves fans and supporters of old-time country and folk music through the presentation of weekly performances at the Carter Family Fold, in Hiltons, Virginia. It also honors the memory of the first family of country music, the legendary Carter Family (A.P. Carter, Sara Carter, and Maybelle Carter), whose first recordings (in 1927) are credited with giving birth to the commercial country music industry. The Carter Family Memorial Music Center was founded and is directed by Janette Carter, daughter of A.P. and Sara, who with Sara's cousin Maybelle, comprised the original Carter Family.
Getting to Know You

Settling into the dorms was tough for everyone. Leaving the comforts of home was a challenge, not to mention getting to know our room and suite mates. But, as the weeks went by and everyone became familiar, living in the dorms became an adventure instead of a nightmare.

Catching up with friends and taking a break from our homework and papers were some of our favorite pastimes. On the weekends we enjoyed field trips and down time.
Staff

Counselors

Kylee Merendino-Lead Counselor
Rachael Griffin
Adam Parks
Aprele Fitzgerald
Leah Darnell

Director

Dr. Jack Rhoton
Dr. Karl Joplin
Dr. Jeff Knisley

Bus Driver

Godfrey Stout
The Inaugural Class

Kristie Arrison  Rhyann Bennett  Krystie Burk

Corey Carter  Clarissa Casey  Kyoungho Cho

Patrick Compton  Nick Cross  Richard Diegan III

Rafey Feroze  Pedro Figueroa  Amie Guo

Brittany Hale  Rebekah Herrman  Nikhil Holla
The Inaugural Class

Pooja Jagadish

Daniel Kasper

Jessica McAmis

Daniel McGregor

Marion Michieka

Zoe Petropoulos

Sheila Shanmugan

Tara Shen

Sheridan Smith

Ashley Tipton

Angie Tsay

Victoria Vineyard

Andrew Wade

Oliver Wang

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Autographs
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Rachael Griffin & Aprele Fitzgerald
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