

**Georgia Science Teachers Association  
Annual Conference  
at  
The Hyatt Regency  
Atlanta, GA • February 17-19, 2011**  
[www.georgiascienceteacher.org](http://www.georgiascienceteacher.org)

## **Conference Leadership Team**

**Ann Collins, Conference Chair**

Fayette County Schools

**Nancy Brim, Local Arrangements Co-Chair**

DeKalb County Schools

**Kathy Switzer, Local Arrangements Co-Chair**

DeKalb County Schools

**Kelly Price, Conference Program Chair**

Forsyth County Schools

## **Conference Committee**

Sharon Boyer	Exhibits
Rie Cowan	Registration
Kelly Price, Rie Cowan	Signs
Sally Creel	Awards
Jamie Carson, Gina McMillan	Field Trips
Lisa Alexander	Volunteer Coordinator

## GSTA Executive Board 2009-10

President	Chris Kennedy
Vice President	Tammy Shiflett
President-elect	Dr. Kelly Price
Director	Ann Collins
Secretary	Zoe Evans
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District XII Director	Jennifer Burley
Foundation Co-Chairs	Dr. George Stickel & Zoe Evans
Awards Chair	Sally Creel
Conference Exhibitor Chair	Dr. Sharon Boyer
Conference Registration Chair	Rie Cowan
GYSTC Representative	Angela Guilford
Nominations Chair	Dr. George Stickel
<i>E-Observations</i> , Editor	Zoe Evans
<i>The Georgia Science Teacher</i> , editors	Joseph Covert & Dr. Reagan Biwott

Look for members of the GSTA Board throughout the conference. They will be wearing orange conference shirts and available to listen and help.

### Special Acknowledgements:

We extend special thanks to Dixie Fanning for her creativity in the design of the 2011 GSTA Conference logo. Dixie is a scientist at heart having earned a Microbiology degree from Clemson University and working as a microbiologist for thirty years in South Carolina. She currently runs her own graphic arts business called Design from Dixie. <http://designfromdixie.com/>

Thank you for setting the stage for the 2011 GSTA conference with a very engaging logo.



**Got a GREAT idea to share at  
the 2012 Conference?  
Submit a Proposal to Present!  
Presentation proposals will be  
accepted from July 2011 until  
September 2011. Look for the  
Call for Proposals on the GSTA  
webpage.  
[www.georgiascienceteacher.org](http://www.georgiascienceteacher.org)**

# GEORGIA BIO™

## The Life Sciences Partnership

**Georgia Bio is pleased to partner with the GSTA to present a special Biotechnology Strand for its 2011 conference.**

### About Georgia's life science industry

Georgia Bio is a private, nonprofit membership-based industry association, and is the champion for the life sciences industry in Georgia. Georgia has a robust, diverse life science industry, including companies improving healthcare, agriculture, bioenergy, industrial applications and environmental management.

Georgia's life sciences industry and university research have an annual economic impact of \$17.3 billion. The life sciences industry is comprised of more than 340 companies in the state with over \$8 billion in annual sales, and is responsible for 62,000 direct and industry jobs.

### How do we support K-12 life science education?

Georgia Bio launched an education and workforce development initiative in 2007 to accelerate the alignment of Georgia's current and future workforce with the needs of its life sciences industries. Our activities include:

- Championing the development and implementation of a new high school biotechnology curriculum taught as a science elective or as a career and technical education career pathway, depending on the schools' needs.
- Partnering with the state Department of Education to integrate biotechnology into Georgia's middle and high school science courses.
- Promoting interactions between working scientists and the educational community through an annual Workforce Forum, Visiting Scientist program, and mentoring/internship opportunities.
- Sponsoring a state competition as part of the International BioGENEius Challenge.

Visit [www.georgiabiomed.org](http://www.georgiabiomed.org)

or contact [cinda.king@gabio.org](mailto:cinda.king@gabio.org) for more information

## Conference at a Glance

### GSTA Science and Leadership Conference

#### Wednesday, February 16, 2010

6:00-8:00                      Registration

#### Thursday, February 17, 2010

7:00 AM – 5:00 PM              Registration  
 8:00 AM – 5:00 PM              Exhibit Hall Open  
 8:00 AM – 5:00 PM              Field Trips  
 9:30 AM – 5:00 PM              Concurrent Sessions/Workshops  
 10:30 – 12:00PM                General Session, GSTA Annual Meeting  
    Steve Rich, West GA GYSTC and NSTA Press Author  
    Introduction of Candidates for GSTA Office  
 6:30 – 9:00 PM                 Tastin' Atlanta with GSTA Board of Directors

#### Friday, February 18, 2011

7:00 AM – 5:00 PM              Registration  
 8:00 AM – 6:00 PM              Field Trips  
 8:00 AM – 5:00 PM              Exhibit Hall Open  
 8:00 AM – 4:50 PM              Concurrent Sessions/Workshops  
 9:00 AM – 9:50 AM              Biotechnology Strand presents  
    The Honorable Louis W. Sullivan, M.D.  
 12:00PM –12:50 PM              Biotechnology Strand presents  
    Dr. Steven Stice  
 3:00 PM -- 3:50 PM              District Meeting and Greet in the Exhibit Hall  
 3:30 PM – 4:00 PM              Exhibit Hall Door Prize Drawings  
 6:00 PM -- 10:00 PM            Awards Banquet  
    The Georgia Aquarium – Tickets Required

#### Saturday, February 19, 2011

7:30 AM -- 9:30 AM              Registration  
 8:30 AM – 3:30 PM              Concurrent Sessions/Workshops

## GSTA Presidents

<b>Name</b>	<b>Years of Service</b>	<b>Conference Location</b>
Chris Kennedy	2010-2011	Atlanta
Ann Collins	2009-2010	Savannah
Wendy Joiner	2008-2009	Savannah
Gail Sinkule	2007-2008	Athens
Marion Reeves	2006-2007	Athens
Steve Rich	2005-2006	Columbus
Gail Marshall	2004-2005	Columbus
Venetia Butler	2003-2004	Atlanta – NSTA National
Karol Stephens	2002-2003	Jekyll Island
Judy Godfrey	2001-2002	Jekyll Island
Ellen Roach	2000-2001	Macon
Mary Atwater	1999-2000	Macon
Mark Stallings	1998-1999	Atlanta
Sharon Boyer	1997-1998	Atlanta
Bob Moore	1996-1997	Augusta
Joe Moore	1995-1996	Augusta
Francis Gardner	1994-1995	Savannah
Mary Wilde	1993-1994	Savannah
Ellen Averill	1992-1993	Atlanta Airport
Linda Bostick	1991-1992	Atlanta Airport
Melody Hall	1990-1991	Columbus
Margaret Eidson	1989-1990	Atlanta – NSTA National
Linda Mitchell	1988-1989	Savannah
Daisy Waldrep	1987-1988	Savannah
John Finley	1986-1987	Peachtree City
Kathy O'Neil	1985-1986	Peachtree City
Don Berkowitz	1984-1985	Rock Eagle
Judy Dennison	1983-1984	Rock Eagle
Carol Rutland	1982-1983	Rock Eagle
Jaunita Chitwood	1981-1982	Callaway Gardens
Jaunita Chitwood	1980-1981	Callaway Gardens
Betty Higgins	1979-1980	Woodward Academy
Kathryn Garrard	1978-1979	NSTA Regional
William Barrow	1977-1978	Athens History Village
James Coleman	1976-1977	Holiday Inn Locust Grove
Odell Owens, Jr.	1975-1976	NSTA Regional
Connie McNeil	1974-1975	Macon
Wayne Edwards	1973-1974	Savannah
Willis Brown, Jr.	1972-1973	
Lonnie Love	1971-1972	
Richard Johnson	1970-1971	
Lucy Smith	1969-1970	
Helen Carter	1968-1969	
Tully Pennington	1967-1968	
Montine Wilson	1966-1967	
Charles Coleman	1965-1966	
H.V. Bullock	1964-1965	
Al Woodard	1963-1964	
Bill Leach	1962-1963	
Dallas Stewart	1961-1962	
Cora Middleton	1960-1961	
Betty Cheek	1959-1960	
Uley Calhoun	1958-1959	

## **Wednesday-Sunday FIELD TRIPS for February 16-20, 2011**

### **Georgia Aquarium General Admission Ticket**

**Date:** Wednesday-Sunday, February 16-20, 2011

**Time:** anytime from 10:00 am until 5:00 pm

**Fee:** \$15.00 per person

**Transportation:** on your own

For GSTA participants and their families, we have set up discounted general admission tickets for you to tour the world's largest Aquarium and let your imaginations play. The general admission tickets are good Wednesday Feb 16<sup>th</sup>, 2011 – Sunday Feb 20<sup>th</sup>, 2011 and the cost is \$15 per person. The daily hours of operation for the Aquarium are 10:00 am until 5:00 pm. Please click on this link [www.georgiaaquarium.org/gsta](http://www.georgiaaquarium.org/gsta) to purchase tickets and book your tour. Tickets at this special rate must be purchased in advance; they cannot be purchased at the aquarium. Tickets are only valid February 16<sup>th</sup>- 20<sup>th</sup>, 2011.

### **Georgia Aquarium Education Behind-the-Scene Tour**

**Date:** Wednesday-Sunday, February 16-20, 2011

**Time:** 12:45 pm, 1:45 pm, 2:45 pm

**Fee:** \$15.00 per person, plus aquarium general admission above

**Group Size:**

**Meet:** 12:00 for 12:45, 1:00 for 1:45, or 2:00 for 2:45 at the field trip table

**Transportation:** on your own

For those who want to explore the Aquarium a little more, we are hosting Education Behind-the-Scenes Tours Wednesday Feb 16<sup>th</sup>, 2011 – Sunday Feb 20<sup>th</sup>, 2011 at 12:45 pm, 1:45 pm, and 2:45pm. The cost for this additional 50 minute program option is \$12 per person, minimum age to participate is 5 years old.

Please click on this link [www.georgiaaquarium.org/gsta](http://www.georgiaaquarium.org/gsta) to purchase tickets and book your tour.

Tickets at this special rate must be purchased in advance; they cannot be purchased at the aquarium. Tickets are only valid February 16<sup>th</sup>- 20<sup>th</sup>, 2011.

## **THURSDAY TRIPS for February 17, 2011**

### **Center for Disease Control**

**Date:** Thursday, February 17, 2011

**Time:** 10:00-11:30 am or 12:30-2:00 pm

**Fee:** \$18 per person

**Group Size:** 25-30

**Meet:** Field Trip Table at 9:00 AM for 10:00 AM or 11:30 AM for 12:30 PM

**Transportation:** included

Ever wonder how CDC scientists merge old-fashioned detective work with high-tech science to crack the cases of mystery diseases? Get the Story! Visit the Global Health Odyssey Museum (GHO) at CDC Headquarters. This unique museum features award-winning permanent and changing exhibitions that focus on a variety of public health topics, as well as the history of CDC.

### **Civil Air Patrol TOP Flights**

**Date:** Thursday, February 17, 2011

**Time:** 8:00-noon or 12:00-4:00 pm

**Fee:** \$17.50 per person payable at [www.capmembers.com/joinaem](http://www.capmembers.com/joinaem)

**Group Size:** 20

**Meet:** Field Trip Table at 8:00 AM or 12:00 PM

**Transportation:** included



Civil Air Patrol (CAP) will transport you to and from Peachtree DeKalb Airport for a special teacher orientation airplane flight in one of their Cessna airplanes. While at the airport, you will receive hands-on activities and free resources. If not already a member of CAP, you will need to join by Monday, February 14, in order to be eligible to take the TOP Flight. The cost is a special ½ price rate for any attendee of the GSTA Conference- **only \$17.50!** With the membership, you will receive over 20 *free* educational resources to use in your classroom, as well as the opportunity for awards, grants, and other CAP flights in your local community. To join CAP, go to [www.capmembers.com/joinaem](http://www.capmembers.com/joinaem) and use Coupon Code GSTA10a for the morning flight session and GSTA10b for the afternoon flight session. For any GSTA Conference attendee who wants to join, but will not be flying, use Coupon Code GSTA10 for this special rate and benefits. For more information, contact [ae@capnhq.gov](mailto:ae@capnhq.gov).

### **Bio-Bus Program “DNA is Elementary” Module**

**Date:** Thurs, 2/17

**Time:** 9AM – 11:30AM

**Fee:** FREE

**Group Size:** 9

**Meet:** At the main entrance to the Hyatt Regency

**Transportation:** provided by Bio-Bus for FREE

See biotech lesson in action with elementary students. This trip is for K-5 teachers interested in visiting a local elementary school to observe the Bio-Bus Program teaching the “DNA is Elementary” module. Preregistration is required. Go to this link to register:

<http://www.surveymonkey.com/s/biobus>

### **Bio-Bus Program “Biotechnology and Forensics” Module**

**Date:** Thurs, 2/17

**Time:** 9AM – 12PM

**Fee:** FREE

**Group Size:** 9

**Meet:** At the main entrance to the Hyatt Regency

**Transportation:** provided by Bio-Bus for FREE

See biotech lesson in action with high school students. This trip is for middle and high school teachers interested in visiting a local high school to observe the Bio-Bus Program teaching the “Biotechnology and Forensics” module.

Preregistration is required. Go to this link to register: <http://www.surveymonkey.com/s/biobus>

### **Yerkes National Primate Research Center, Emory University**

**Date:** Thursday, February 17, 2011

**Time:** 10:30-2:00 pm

**Fee:** \$17.00 per person

**Group Size:** 20

**Meet:** Field Trip Table at 9:45

**Transportation:** included

Discover how scientists at Emory University’s Yerkes National Primate Research Center are seeking ways to: develop vaccines for infectious and noninfectious diseases, including AIDS; treat drug addiction; interpret brain activity through imaging; increase understanding of progressive illnesses such as Alzheimer’s and Parkinson’s diseases; unlock the secrets of memory; determine how the interaction between genetics and society shape who we are; and advance knowledge about the evolutionary links between biology and behavior. The tour begins at the Yerkes Main Center on the Emory University campus where you will meet researchers, tour biomedical research laboratories, and see capuchin monkeys. Then travel to the Yerkes

Field Station in Lawrenceville, where scientists conduct behavioral studies of primate social groups, for an outdoor tour of three nonhuman primate species: chimpanzees, rhesus macaques and sooty mangabeys. Yerkes researchers will lead the tours and answer your questions throughout the day. We will stop on the way to the Field Station for lunch on your own. Portions of the tour will be outdoors; dress appropriately. In partnership with the Emory College Center for Science Education.

### **Bio-Bus Program “DNA is Elementary” Module**

**Date:** Thurs, 2/17

**Time:** 11:30AM – 2PM

**Fee:** FREE

**Group Size:** 9

**Meet:** At the main entrance to the Hyatt Regency

**Transportation:** provided by Bio-Bus for FREE

See biotech lesson in action with elementary students. This trip is for K-5 teachers interested in visiting a local elementary school to observe the Bio-Bus Program teaching the “DNA is Elementary” module. Preregistration is required. Go to this link to register:

<http://www.surveymonkey.com/s/biobus>

### **Bio-Bus Program “Biotechnology and Forensics” Module**

**Date:** Thurs, 2/17

**Time:** 1PM – 4PM

**Fee:** FREE

**Group Size:** 9

**Meet:** At the main entrance to the Hyatt Regency

**Transportation:** provided by Bio-Bus for FREE

See biotech lesson in action with high school students. This trip is for middle and high school teachers interested in visiting a local high school to observe the Bio-Bus Program teaching the “Biotechnology and Forensics” module.

Preregistration is required. Go to this link to register: <http://www.surveymonkey.com/s/biobus>

### **Fernbank Museum**

**Date:** Thursday, February 17, 2011

**Time:** 1:00-4:00 pm

**Fee:** \$24.00 per person

**Group Size:** 15-30

**Meet:** Field Trip Table at 12:15

**Transportation:** included

Join Fernbank educators for an in-depth discussion of how to integrate the museum’s exhibitions and films into your classroom curriculum. Also, learn more about the cross-disciplinary approach that will help you address science, social studies, language arts and math standards. Participants will tour permanent exhibitions, see an IMAX film, meet with educators, and get a sneak peak at what is on the horizon for Fernbank Museum of Natural History.

### **Tellus Science Museum**

**Date:** Thursday, February 17, 2011

**Time:** 1:00-3:00 pm

**Fee:** \$25.00 per person

**Group Size:** 10-30

**Meet:** Field Trip Table at 12:00

**Transportation:** included

Tellus is a world-class, 120,000 square foot science museum located just off I-75 in Cartersville, GA, 30 minutes north of Atlanta. The museum excites visitors with amazing exhibits while opening minds and igniting a passion for science. Tellus features four main galleries: Weinman Mineral Gallery, Fossil Gallery, Science in Motion and Collins Family My Big Backyard. You can take an incredible "trip" in the Tellus planetarium or become a paleontologist in the Fossil Dig. Who knows what semi-precious gemstones you might find in our gem panning area! And of course, all K-12 programs are based upon Georgia Performance Standards. Please check out our website at [www.tellusmuseum.org](http://www.tellusmuseum.org) for more details!

## **Friday TRIPS for February 18, 2011**

### **Atlanta Botanical Garden**

**Date:** Friday, February 18, 2011

**Time:** 10:00 – 11:30 am

**Fee:** \$27.00 per person

**Group Size:** 10-45

**Meet:** Field Trip Table at 9:15

**Transportation:** included

The Atlanta Botanical Garden was incorporated in 1976 to develop and maintain plant collections for the purpose for display, education, research, conservation, and enjoyment. The Garden features 15 acres of outdoor display gardens, the Upper Woodland showcasing five acres of shade-loving ornamentals from around the world, and the 10-acre Storza Woods with natural undergrowth and walking trails. Across the Flower Bridge is the two-acre Children's Garden, which has been designed as a "wellness" garden. The Dorothy Chapman Fuqua Conservatory house rare and endangered plants from tropical rain forests and desert regions. The Fuqua Orchid Center house a High Elevation House, a Tropical Display House, and A Center for Education and Conservation.

### **Center for Disease Control**

**Date:** Friday, February 18, 2011

**Time:** 10:00-11:30 am or 12:30-2:00 pm

**Fee:** \$18 per person

**Group Size:** 25-30

**Meet:** Field Trip Table at 9:00 AM for 10:00 AM or 11:30 AM for 12:30 PM

**Transportation:** included

Ever wonder how CDC scientists merge old-fashioned detective work with high-tech science to crack the cases of mystery diseases? Get the Story! Visit the Global Health Odyssey Museum (GHO) at CDC Headquarters. This unique museum features award-winning permanent and changing exhibitions that focus on a variety of public health topics, as well as the history of CDC.

### **Zoo Atlanta - Behind-the-Scenes Tour: Animal Nutrition Kitchen & Zoo Tour**

**Date:** Friday, February 18, 2011

**Time:** 1:30-3:00 pm Tour lasts 90 minutes and includes a one hour Zoo Tour and 30 minutes behind-the-scenes in the Zoo's kitchen

**Fee:** \$29.00 per person; price includes Zoo admission

**Group Size:** 10-45

**Meet:** Field Trip Table at 12:15

**Transportation:** included

Discover what Zoo animals eat! Learn how we prepare animal diets and see some of the unusual treats our animals enjoy that you might like too! A Zoo Tour is a good way to navigate the Zoo in a limited time period and behind-the-scenes opportunities provide teachers and students with a fun, exclusive educational experience. All of our school programs come with [grade-specific activities](#) to use at the Zoo and before and after your visit!

#### About Zoo Atlanta

Stand eye-to-eye with nearly 1,000 of the world's most amazing animals at one of Georgia's most beloved destinations. Zoo Atlanta is one of four zoos in the U.S. with giant pandas, has one of the nation's most recognized collections of great apes, and is a global center of excellence for the care and reproduction of vanishing amphibians and reptiles. Award-winning education programs offer exciting opportunities for hands-on learning, nature exploration and animal adventures.

Book a program at [zooatlanta.org](http://zooatlanta.org) or call 404.624.WILD to learn more.  
800 Cherokee Avenue SE, Atlanta, GA 30315

#### **Zoo Atlanta – The Overnight Experience...Group Nightcrawler**

**Date:** Friday, February 18, 2011 – Saturday, February 19, 2011

**Time:** 6:00 pm (Friday) – 9:00 am (Saturday)

**Fee:** \$70.00 per person

**Group Size:** 10-25

**Meet:** Field Trip Table at 5:15

**Transportation:** included

As the sun sets and the animals settle in for the night, the fun is just beginning for NightCrawlers! Your group will never forget this unique overnight program packed with themed activities, behind-the-scenes experiences and up-close encounters with animals. Sleep in climate-controlled facilities, enjoy a continental breakfast and take a guided tour of Zoo Atlanta. Review the [GPS information](#) to find out if this program would be fitting for your students.

#### About Zoo Atlanta

Stand eye-to-eye with nearly 1,000 of the world's most amazing animals at one of Georgia's most beloved destinations. Zoo Atlanta is one of four zoos in the U.S. with giant pandas, has one of the nation's most recognized collections of great apes, and is a global center of excellence for the care and reproduction of vanishing amphibians and reptiles. Award-winning education programs offer exciting opportunities for hands-on learning, nature exploration and animal adventures.

Book a program at [zooatlanta.org](http://zooatlanta.org) or call 404.624.WILD to learn more.  
800 Cherokee Avenue SE, Atlanta, GA 30315

### **Saturday TRIPS for February 19, 2011**

#### **Stone Mountain Park – Confederate Hall Historical & Environmental Education Center**

**Date:** Saturday, February 19, 2011

**Time:** 10:00 am -12:00 pm

**Fee:** \$17 per person

**Group Size:** 10-30

**Meet:** Field Trip Table at 9:15

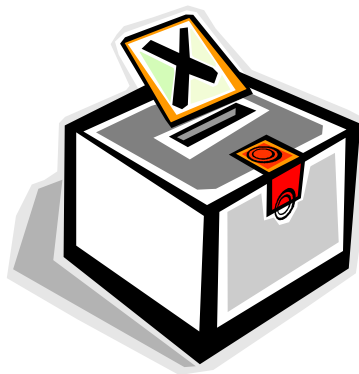
**Transportation:** included

Explore the geology museum and learn about the GPS aligned, free education classes offered throughout the year. Participants take a guided geology hike onto the mountain after touring the Education Center.

# GSTA Board Elections

## Attention GSTA Members

- **Meet the candidates at the conference, look for signs and come to the first general session to put a face with the name.**
- **Vote at the conference by the Registration area.**



## Social Events



Thursday, February 17, 2011

**"Tastin' Atlanta"**  
**with the GSTA Board**

Do you have dinner plans for Thursday evening? If not, join one of the GSTA Board dinner groups. Sign up near the Registration Area  
 6:30 - 9:00pm

Friday, February 18, 2011

**2011 GSTA Awards Banquet**

Join us as we honor the best and brightest science instructors in the state of Georgia.

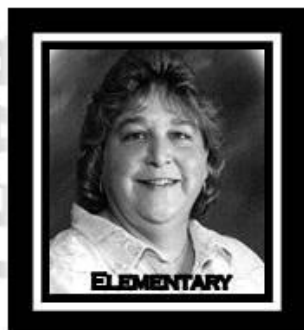
The Georgia Aquarium  
 Ocean Ballroom  
 Dinner by Wolfgang Puck Catering  
 6:00pm-10:00pm

**Tickets Required**

*(Tickets may be purchased online prior to the conference or at the registration desk on-site. Awards ticket provides admission to the aquarium on Friday from 3 pm -6pm)*



# TEACHERS OF THE YEAR



**Pamela Parks**  
Oglethorpe County Schools



**Blair Inabinet**  
Walton County Schools



**Jeremy Peacock**  
Walton County Schools



**Greg Rushton, Ph.D.**  
Kennesaw State University

# TEACHERS OF PROMISE



**Janice Belcher**  
Cobb County Schools



**Julie Castellanos**  
Butts County Schools



**Carron Carr**  
Burke County Schools



## ADMINISTRATOR OF THE YEAR

**Nancy DiPetrillo, Ed.D.**  
Russell Elementary School  
Cobb County Schools



## SCIENCEQUEST TEACHER SCHOLARSHIP

**Jeanne Arnold**  
Paulding County Schools  
*Scholarship to attend a Forensic Science Workshop Summer 2011*



For more information about the awards offered by The Georgia Science Teachers Association visit [www.georgiascienceteacher.org/awards.htm](http://www.georgiascienceteacher.org/awards.htm)

**Alex Alvarez**  
Rockdale County Schools

*"Growing" Real-World Educational Experiences through a Community-Based Greenhouse Service Project*



**Judy Osborne**  
Kennesaw Charter School

*"4<sup>th</sup> Grade Science Supplies"*



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**Teresa Barr**  
Coweta County Schools

*"Exploring Electricity & Magnetism"*



**Rachael Parr**  
Jackson County Schools

*"Green Energy"*



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**Sherrie Chovanec**  
Paulding County Schools

*"Strengthening Science Literacy for the MID Classroom"*



**Melanie Peterson**  
Paulding County Schools

*"The Magiscope Literacy Center"*



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**Ashley Cody**  
Lowndes County Schools

*"Differentiating Instruction Through Video Technology"*



**Donna Smith**  
Cobb County Schools

*"NASA Limited – Teamwork Unlimited"*



# MINI-GRANT WINNERS

## SPECIAL THANKS TO OUR SPONSORS



GSTA Awards Banquet

Friday, February 18<sup>th</sup>

GA Aquarium Oceans Ballroom

6:30 Reception 7:00 Dinner  
*Cocktail Attire Requested*

Special Guest Speaker – Dr. Sharon Boyer

Tickets Available at Registration. Ticket includes complimentary admission to the GA Aquarium.

Sally Creel - GSTA Awards Chair

Hope to see you there!

G



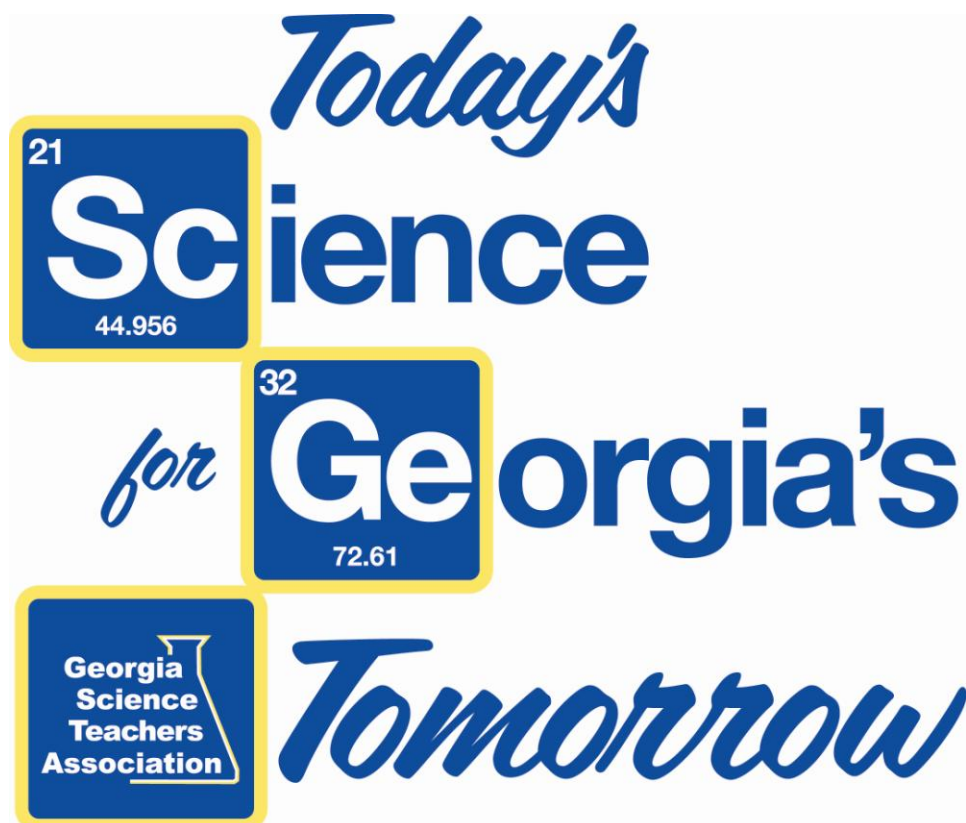


2009	Rachael Parr, Jefferson , (7-12)	
2008	Halley Page, Athens (K-6)	
2007	Donna Governor, Cumming (7-12)	
2006	Pamela Krohne-Googe, Dallas (K-6)	
2005	Zoe Evans, Carrollton (7-12)	
2004	Vicki Jacobs, Morrow (K-6)	
2003	Janice Hudson, Columbus (7-12)	
2002	Terrie Kielborn, Carrollton (K-6)	Wynn Mott, Woody Gap (7-12)
2001	Clelia Scott, Brunswick (K-6)	Steve Rich, Douglasville (7-12)
2000	Jane Moore, Gwinnette (K-6)	Tina Cross, Columbus (7-12)
1999	Amanda Buice, Barnesville (K-6)	Amy Denty, Jesup (7-12)
1998	Marlee Tierce, Conyers (K-6)	Sandra Eidson, Oakwood (7-12)
1997	Rhonda Toon, Barnesville (K-6)	Marsha Hood, College Park (7-12)
1996	Sylvia Dee Shore, Columbus (K-6)	Roger Wesley McCoy, Kennessaw (7-12)
1995	Rita VanFleit, Lithonia (K-6)	Barbara Cornelius, Winder (7-12)
1994	Teresa Jordan Gruendl, Savannah (K-6)	Phyllis Rump, Woodstock (7-12)
1993	Betty Ann Ingram Smith, Newnan (K-6)	Thomas E. Hall, Moultrie (7-12)
1992	Barbara G. Piper, Austell (K-6)	Lynda H. Peterson, Marietta (7-12)
1991	Cathy Rich Robinson, Savannah (K-6)	Trissa Luftig, Norcross (7-12)
1990	Carol Burbilis, Winder (K-6)	Sandra J. Rhoades, Kennessaw (7-12)
1989	Michael Edmondson, Columbus (7-12)	
1988	Jeffrey D. Cramer, Atlanta (7-12)	
1987	Daniela M. Taylor, Norcross (7-12)	
1986	Beverly S. Lang, Newnan (7-12)	
1985	Lila Kathryn McGahee, Adair (7-12)	
1984	Annie Laura Pace, Athens (7-12)	
1983	Richard R. Bell, Lithia Springs (7-12)	

The Presidential Award for Excellence in Science Teaching is the Nation's highest honor for teachers of science and mathematics. It is awarded annually by the White House and administered by the National Science Foundation. One Georgian is honored annually in Washington, DC during a week-long celebration featuring visits to the White House and a State Dinner. More information is available at [www.paemst.org](http://www.paemst.org).

In Georgia, the award is administered through the Georgia Department of Education.

# Georgia Science Teachers Association 2011 Science & Leadership Conference

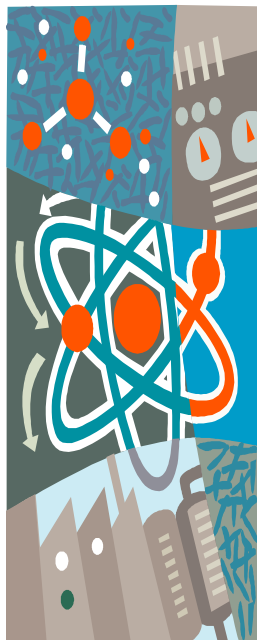


**Concurrent Session Schedule**

**Schedule of Sessions & Workshops**

# GSSA Strand

## Georgia Science Supervisors Association



Thursday, Feb 17 2011  
Hong Kong

1:30pm

*GSSA Finding the Chemistry in 8th Grade Physical Science*

2:30pm

*GSSA Catch the Wave!*

3:30pm

*GSSA Teaching GPS electricity and magnetism in 8th grade physical science*

4:30pm

*GSSA Extreme Forces*

## Save the Dates!

### 2011-2012 School Year

2012 GSTA Annual Conference

Feb 16-18, 2012

Hyatt Regency

Atlanta, GA

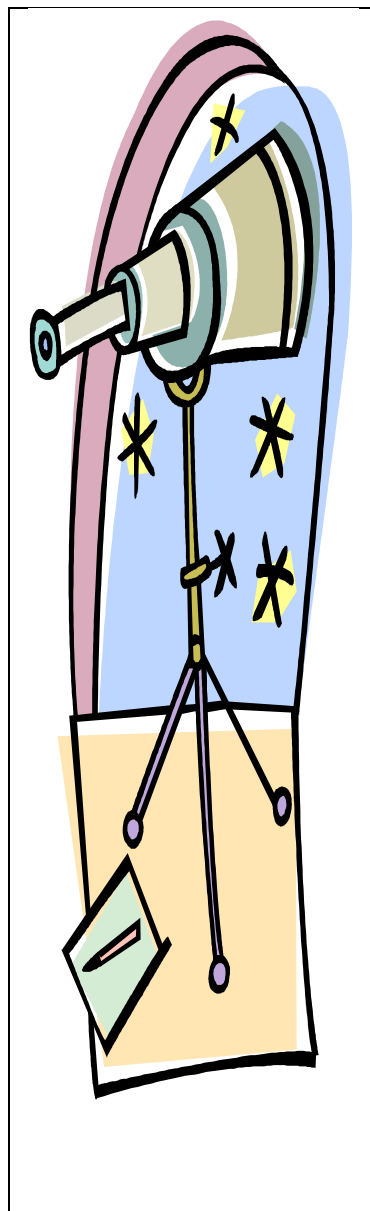
### 2012-2013 School Year

GSTA partners with NSTA to host the Southern NSTA  
Regional Conference!

Nov 1-3, 2012

Atlanta, GA

# GEARS Strand



Thursday, Feb 17 2011  
International Ballroom  
International Tower

Digitarium;  
More than a Planetarium

Multiple Presentations:  
(Portable Planetarium or Star Lab)

1:30pm

2:30pm

3:30pm

4:30pm

Thursday, February 17, 2011

## Exhibit Hall Opens at 8:30AM

*Please visit the GSTA Exhibits in the Grand Hall on the Exhibit Level of the Hyatt.*

Thursday 2/17  
9:30AM

**Title: Evaluating the Routes of Vaccine Immunization**

**Presenters:** Samantha Andrews, Nicholas Parnell, Gustavia Evans

**Description:** This activity will use ELISA to assess the effectiveness of influenza vaccine when delivered using different routes of administration.

**Level/Content:** High

Biology (Life Science)

**Day:** THURS 2/17

**Room:** Inman

**Time:** 9:30-10:20AM

**Title: AUTOPSY: Forensic Dissection Featuring Carolina's Perfect Solution® Pigs**

**Presenters:** Carolina Teaching Partner

**Description:** Engage students and revitalize your instruction of mammalian structure and function with a "real" classroom autopsy! Participants dissect a Carolina's Perfect Solution® fetal pig using human autopsy protocols.

**Level/Content:** High

Biology (Life Science)

**Day:** THURS 2/17

**Room:** Kennesaw

**Time:** 9:30-10:20AM

**Title: Shoe Box Chemistry**

**Presenters:** Rita Mitchell, Karen Dickens

**Description:** Simple Chemistry Demos and Labs that will engage the students and give them a better understanding of the concepts. Use of common household products and items that can be purchased at the Dollar Stores.

**Level/Content:** High

Chemistry

**Day:** THURS 2/17

**Room:** Spring

**Time:** 9:30-10:20AM

**Title: Clouds and Other Wonderful Things**

**Presenters:** Marlee Tierce

**Description:** Look into the sky and think about the wonders of the clouds. Let's explore the man who named the clouds and how we think about them now.

**Level/Content:** Elementary

Earth/Space Science

**Day:** THURS 2/17

**Room:** Piedmont

**Time:** 9:30-10:20AM

**Title: Differentiation That Works**

**Presenters:** Ashley Cody, Rhonne McBride, Wanda Rice

**Description:** "Differentiation that Works" A presentation of instructional strategies to increase student learning. The strategies are practical for all science classes. Sort cards, carousels, cubing, choice boards, and pre-assessments are included.

**Level/Content:** Middle

General Science

**Day:** THURS 2/17

**Room:** Edgewood

**Time:** 9:30-10:20AM

<p><b>Title: When Maximum class size = Maximum learning. Strategies for teaching science to large classes.</b></p> <p><b>Presenters:</b> Tiffany Barnett, Rachael Parr</p> <p><b>Description:</b> Strategies for teaching science to large classes. Participants will leave with examples of stations, centers, and labs for a standards based classroom that at maximum class size.</p> <p><b>Level/Content:</b> Middle General Science</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Lenox</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: Formation of the Solar System from a middle schooler's perspective</b></p> <p><b>Presenters:</b> Stephen Ramsden</p> <p><b>Description:</b> Stephen W. Ramsden (sramsdn@solarastronomy.org) will provide a one hour lecture as if you were a group of middle school students in order to give you the experience of his solar astronomy outreach program (<a href="http://www.charliebates.org">www.charliebates.org</a>) from their perspective.</p> <p><b>Level/Content:</b> Middle Earth/Space Science</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Williams</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: Introducing Inquiry Investigations™</b></p> <p><b>Presenters:</b> Amy Smith</p> <p><b>Description:</b> Explore the new hands-on, active learning</p> <p><b>Level/Content:</b> K-8 General Science</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Montreal</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: Science Notebooks in the Elementary Class</b></p> <p><b>Presenters:</b> Rosalita Kennedy, Stacey Gracia</p> <p><b>Description:</b> Want to discover fun ways for your students to learn Science? Come and see how your elementary students can blossom as learners through the use Science notebooks.</p> <p><b>Level/Content:</b> Elementary General Science</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Vinings</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: The Best 3rd Grade Show and Share Lessons from Paulding County MSP</b></p> <p><b>Presenters:</b> Tom Brown, 3rd Grade Teachers from Paulding County</p> <p><b>Description:</b> Come and see 3rd grade teachers share their best science lessons. These super science lessons have been tested and perfected on real Georgia 3rd graders :) Helpful tips and copies of lessons provided.</p> <p><b>Level/Content:</b> Elementary Interdisciplinary</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Cairo</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: SMaRTER Science Curricula for the Elementary Grades!</b></p> <p><b>Presenters:</b> Verilette Hinkle, Brian Gerber, Jennifer Lukens</p> <p><b>Description:</b> Learn about the Teacher Quality grant proposal, the SMaRTER Project, and participate in some of the SMaRTER Project's GPS-focused, inquiry-based, integrated science lessons for the elementary grades.</p> <p><b>Level/Content:</b> Elementary Interdisciplinary</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Hong Kong</p> <p><b>Time:</b> 9:30-10:20AM</p>

<p><b>Title: Simple Methods for Improving Motivation 3.0</b></p> <p><b>Presenters:</b> Donald White</p> <p><b>Description:</b> Discover some simple, low-cost/no-cost methods for improving student engagement, motivation, and performance in the science classroom. Guaranteed to get immediate results! Session will demonstrate resources available FREE to all Georgia teachers.</p> <p><b>Level/Content:</b> 6-12 Interdisciplinary</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Manila</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: Engage and Inspire Diverse Classrooms with Hands-on Learning</b></p> <p><b>Presenters:</b> Johnny Robinson</p> <p><b>Description:</b> Qwizdom's Interactive Learning System combines advanced student response technology with online assessment, standards based curriculum and content sharing software to provide a complete instructional solution for any classroom.</p> <p><b>Level/Content:</b> 6-12 Interdisciplinary</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Singapore</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: Investigating the water cycle with technology: Elementary Teachers</b></p> <p><b>Presenters:</b> Dori Haggerty</p> <p><b>Description:</b> Teachers will investigate the effects of temperature on the gaseous state of the water cycle by using digital probe ware and SPARK science technology.</p> <p><b>Level/Content:</b> Elementary Interdisciplinary</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Techwood</p> <p><b>Time:</b> 9:30-10:20AM</p>
<p><b>Title: Ocean Literacy: What is it and why should we care? Teacher's Thoughts and Professional Development Opportunities</b></p> <p><b>Presenters:</b> Catherine Linsky</p> <p><b>Description:</b> 75% of Earth's surface is covered in oceans, but the majority of Environmental Education concerns terrestrial issues. This program will help you counteract this imbalance and foster Ocean Literacy.</p> <p><b>Level/Content:</b> 6-12 Interdisciplinary</p> <p><b>Day:</b> THURS 2/17 <b>Room:</b> Vancouver</p> <p><b>Time:</b> 9:30-10:20AM</p>

**SPECIAL THANKS TO OUR AWARD SPONSORS**

 <p><b>ETA</b> Cuisenaire</p> <p>Stephanie Shultz <a href="mailto:sshultz@etacuisenaire.com">sshultz@etacuisenaire.com</a> 404-308-2174</p>	 <p><b>Coach</b> <i>America's Best for Student Success</i></p> <p>Petra Griffin <a href="mailto:pgriffin@earthlink.com">pgriffin@earthlink.com</a> 770-835-0233</p>	
 <p><b>WARD'S</b> Natural Science</p> <p>Joe Iacono <a href="mailto:Joe.Iacono@vvreducation.com">Joe.Iacono@vvreducation.com</a> 770-826-4060</p>	 <p><b>Sargent-Welch</b> VWR INTERNATIONAL</p>	 <p><b>SK</b> Science Kit &amp; Boreal Laboratories</p>

# GSTA General Session and Annual Meeting

Thursday 2/17

10:30 AM

International Ballroom-International Tower

## "Reflections on the State of Science Education in Georgia"

Speaker: **Steve Rich**



Savannah native Steve Rich taught elementary and middle grades science in Georgia for 15 years, earning National Board Certification, two NSTA teaching awards, and the Presidential Award for Excellence in Science Teaching. After leaving the classroom, Steve served as Georgia's Science Specialist for grades K-5 and later K-8 at the Department of Education in Atlanta. He is currently coordinator of the West Georgia Youth Science and Technology Center. He holds degrees from Georgia State University and the University of Georgia.

He is the author of three books for teachers including the 2010 NSTA Press bestseller, *Outdoor Science: A Practical Guide*. He was GSTA president in 2005-2006, and editor of the *Georgia Science Teacher Journal* for 8 years. He was a district director of NSTA, and served on the 2010 NSTA Review Panel for the Draft Framework to guide the new National Science Education Standards. He is currently president of the Society of Elementary Presidential Awardees, and a member of the selection committee for the Children's Book Council national list of Outstanding Science Trade Books.

**Georgia  
Science  
Teachers  
Association**



**Thursday 2/17****12:30 pm****Title: Quantitative trait locus mapping: discovering the genomic regions controlling traits****Presenters:** Nicholas Parnell, Samantha Andrews, Gustavia Evans**Description:** Participants will conduct a genetic mapping activity using the association of genotype and phenotype to realize the genomic regions controlling several traits.**Level/Content:** High

Biology (Life Science)

**Day:** THURS 2/17**Room:** Kennesaw**Time:** 12:30-1:20PM**Title: What to do with garbage****Presenters:** Lindy Moot, Judy Osborne**Description:** Teach your children to be environmentally responsible. Ways to teach about recycling, reducing, and reusing trash will be presented. You will see how to compost biodegradable garbage from your cafeteria.**Level/Content:** Elementary

Biology (Life Science)

**Day:** THURS 2/17**Room:** Piedmont**Time:** 12:30-1:20PM**Title: Music in Science!****Presenters:** April Rouser**Description:** In this session learn how to use one of the multiple intelligences to engage students in science. Come enjoy observing science in motion! Earth science curriculum will be the focus, but other sciences will be incorporated too.**Level/Content:** Middle

Earth/Space Science

**Day:** THURS 2/17**Room:** Manila**Time:** 12:30-1:20PM**Title: Earth to Mercury, Come In Please****Presenters:** Annette Pearson**Description:** A NASA MESSENGER Educator Fellow will present hands-on, inquiry-based education modules developed in conjunction with NASA's current mission to Mercury. The focus will be comparative planetology and mission design.**Level/Content:** 6-12

Earth/Space Science

**Day:** THURS 2/17**Room:** Vancouver**Time:** 12:30-1:20PM**Title: How can I make my physical science class a SBC?****Presenters:** Tracy Robinson, Sean Vandenhouten**Description:** The down and dirty of a middle school teacher's perspective on how to increase student achievement by utilizing the concepts of a standard based classroom (SBC).**Level/Content:** Middle

General Science

**Day:** THURS 2/17**Room:** Inman**Time:** 12:30-1:20PM**Title: Turtle(r)s Rock!, The St. Catherines Sea Turtle Program****Presenters:** Gale Bishop, Kelly Vance, Lindsay Linsky**Description:** A 40-minute illustrated PowerPoint(TM) presentation and demonstration of materials available for collection on St. Catherines Island highlight this presentation, which will be followed by brief testimonial(s) from former interns.**Level/Content:** K-8

General Science

**Day:** THURS 2/17**Room:** Montreal**Time:** 12:30-1:20PM

<p><b>Title: Fabulous 5th Grade Science Activities from the Paulding County Math-Science Partnership</b>  <b>Presenters:</b> Tom Brown, 5th Grade Teachers from Paulding County  <b>Description:</b> Come and see our favorite 5th grade science activities that are proven to engage your students and add excitement to your science teaching. Handouts and helpful tips will be provided.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Cairo  <b>Time:</b> 12:30-1:20PM</p>
<p><b>Title: Vocabulary Strategies in the Science Classroom</b>  <b>Presenters:</b> Betsy Sanford, Dianne Cellini  <b>Description:</b> Vocabulary strategies to help your students succeed in the middle school science classroom.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Hong Kong  <b>Time:</b> 12:30-1:20PM</p>
<p><b>Title: GEARS Using a Galileoscope to Teach Lenses and Nature of Science</b>  <b>Presenters:</b> Zodiac Webster, GEARS Team  <b>Description:</b> Activities for using your Galileoscope and Galileo's story in class. Activities will span elementary to high school. Limited numbers of tripods raffled for those who bring their Galileoscopes.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Singapore  <b>Time:</b> 12:30-1:20PM</p>
<p><b>Title: Reading and Writing Strategies for Science</b>  <b>Presenters:</b> Larry Zimmerman  <b>Description:</b> Learn quick and easy strategies for building reading and writing skills in your science classroom. Participate in activities that will bolster your students' content knowledge, comprehension and content-area vocabulary. Attendees will receive a CD handout with templates, lessons, and activities from the presentation.  <b>Level/Content:</b> K-12 General  <b>Day:</b> THURS 2/17 <b>Room:</b> Williams  <b>Time:</b> 12:30-1:20PM</p>
<p><b>Title: Utilizing Plant Pathology and Entomology in the Science Classroom</b>  <b>Presenters:</b> Kisha Shelton  <b>Description:</b> Presentation and hands on activities related to the use of plant diseases and insects to impact student's learning in science.  <b>Level/Content:</b> K-8 Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Edgewood  <b>Time:</b> 12:30-2:20PM</p>
<p><b>Title: Geology of Georgia: Hands-on Learning Stations Workshop</b>  <b>Presenters:</b> Olga Jarrett, Robert Jarrett  <b>Description:</b> This workshop includes hands-on learning stations on the geology of Georgia with cross-curriculum integration. Participants will receive a handout on 15 learning stations and samples of a few Georgia rocks.  <b>Level/Content:</b> Elementary Earth/Space Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Vinings  <b>Time:</b> 12:30-2:20PM</p>

<p><b>Title: Language of Science</b>  <b>Presenters:</b> Barbara Rascoe  <b>Description:</b> Science teachers will interactively analyze science terms relative to how each science term is defined scientifically and how each science term may be defined in students' everyday lives.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Lenox  <b>Time:</b> 12:30-2:20PM</p>
<p><b>Title: Making Friends with Unfriendly Science Textbooks</b>  <b>Presenters:</b> Lisa Alexander, Ginger Harbin  <b>Description:</b> This presentation will provide a broader view of science literacy and how to manage science textbooks in that context.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Spring  <b>Time:</b> 12:30-2:20PM</p>
<p><b>Title: Using Oceanographic Data to Increase the Quantitative Thinking of Your Science Students</b>  <b>Presenters:</b> Martha Muir, Theresa Pinilla, Courtney Wade  <b>Description:</b> This session gives participants the opportunity to work through lessons that use oceanographic data to teach common science concepts and explore websites that can be used to expand these lessons.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Techwood  <b>Time:</b> 12:30-2:20PM</p>
<p><b>Thursday 2/17</b>  <b>1:30 pm</b></p>
<p><b>Title: Ecology of a freshwater swamp: Using the Okefenokee to teach Georgia standards</b>  <b>Presenters:</b> Missy Bennett, Ashley Crosby, Bradley Ward  <b>Description:</b> Do your students suffer from "nature deficit disorder"? This presentation describes how teachers can use a local resource such as the Okefenokee Swamp to teach science standards.  <b>Level/Content:</b> High Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Inman  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Amplify Your Genetics Class with the Inquiries in Science® Series</b>  <b>Presenters:</b> Carolina Teaching Partner  <b>Description:</b> Increase student achievement by using guided-inquiry approach. Carolina's Inquiries in Science® Biology units provide hands-on activities to make teaching challenging topics effortless. Free door prizes!  <b>Level/Content:</b> High Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Kennesaw  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: NASA Powers of Ten: Scaling the Universe</b>  <b>Presenters:</b> Tyson Harty, Ph.D.  <b>Description:</b> How big is big? How small is small? Students often have difficulty comprehending orders of magnitude. "Scale the Universe" as we investigate the powers of ten with free NASA materials.  <b>Level/Content:</b> 6-12 General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Piedmont  <b>Time:</b> 1:30-2:20PM</p>

<p><b>Title: Applying for the Presidential Award</b>  <b>Presenters:</b> Amanda Buice, Juan Carlos Aguilar, Steve Rich  <b>Description:</b> You can win the Nation's highest honor for science teaching, including a trip for two to Washington and \$10,000. Get hints for successful applications &amp; Q/A's with past awardees.  <b>Level/Content:</b> 6-12 General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Vancouver  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Team Marine: A model for engagement in service learning through science outreach</b>  <b>Presenters:</b> Catherine Teare Ketter, Kenneth Leach  <b>Description:</b> Team Marine! is a service educational learning course offered to undergraduate students at the University of Georgia during spring semesters through the School of Marine Programs . The course goal is to provide non-education majors opportunity to share their science knowledge with area public school students.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Cairo  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Outdoor Science</b>  <b>Presenters:</b> Steve Rich, Petra Griffin  <b>Description:</b> No teacher gets left inside with these lesson ideas featuring birds and butterflies. Get practical ideas for teaching and learning in the school yard and free seeds.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Montreal  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: GSSA - Finding the Chemistry in 8th Grade Physical Science</b>  <b>Presenters:</b> Karol Stephens  <b>Description:</b> Make the chemistry happen with 8th grade students as they start to process the abstract concepts in chemistry with these simple, hands-on activities to illustrate 8th grade standards.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Hong Kong  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: GEARS Digitalarium; More than a Planetarium</b>  <b>Presenters:</b> Max McKelvey  <b>Description:</b> The Digitalarium portable planetarium is suitable for teaching diverse topics to all grade levels. Capabilities for use in teaching science, math, social studies, art and music will be explored  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> International Ballroom South-Int Tower  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Strategies for Building Academic Vocabulary in Science</b>  <b>Presenters:</b> Larry Zimmerman  <b>Description:</b> In the content areas, and specifically science, vocabulary becomes an impediment to learning and understanding. Attendees will experience easy-to-implement strategies for building academic vocabulary in the area of mathematics. Attendees will receive a CD handout with templates, lessons, and activities from the presentation.  <b>Level/Content:</b> K-12 General  <b>Day:</b> THURS 2/17 <b>Room:</b> Williams  <b>Time:</b> 1:30-2:20PM</p>

<p><b>Title: NASA's Lunar Certification Program</b>  <b>Presenters:</b> Dr. Lester Morales  <b>Description:</b> Bring a piece of History into your classroom as NASA's lunar samples can open the door of our universe. Study how our Moon gives us clues into the origins of the Earth.  <b>Level/Content:</b> 6-12 Earth/Space Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Manila  <b>Time:</b> 1:30-3:20PM</p>
<p><b>Title: Home and School Science Activities</b>  <b>Presenters:</b> Bernie Horvath  <b>Description:</b> Grades 4-9. Promote literacy in physical science using a backdrop of everyday events and common materials in understandable language. Includes air pressure, gravity, friction, inertia, centripetal force, atoms, molecules and Periodic Table.  <b>Level/Content:</b> Middle Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Singapore  <b>Time:</b> 1:30-3:20PM</p>
<p><b>Thursday 2/17</b>  <b>2:30 pm</b></p>
<p><b>Title: Red Algae is Growing in my Classroom! Use Red Algae to teach Scientific Research Skills and Biotechnology to your students</b>  <b>Presenters:</b> Alan Gorlin  <b>Description:</b> Red Algae is Growing in my Classroom! Use Red Algae to motivate your students to learn Scientific Research Skills and Biotechnology  <b>Level/Content:</b> High Biotechnology  <b>Day:</b> THURS 2/17 <b>Room:</b> Inman  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Chemistry Inquiry Learning</b>  <b>Presenters:</b> Tommy Molden  <b>Description:</b> Chemistry Inquiry Learning is a GPS driven professional development that will primarily focus on the development of inquiry learning opportunities involving: instructional strategies, laboratory activities, investigational activities, literacy integration and recommended assessments.  <b>Level/Content:</b> High Chemistry  <b>Day:</b> THURS 2/17 <b>Room:</b> Kennesaw  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Real Chemistry for All Students, but How?</b>  <b>Presenters:</b> Amy Kezman, Kevin McReynolds  <b>Description:</b> What are the barriers to teaching real, quantitative chemistry to all students? Keven McReynolds, will lead a hands-on exploration that will touch the areas of greatest student difficulty and show you many intuitive and practical solutions that will help your students engage with chemistry and learn.  <b>Level/Content:</b> High Chemistry  <b>Day:</b> THURS 2/17 <b>Room:</b> Techwood  <b>Time:</b> 2:30-3:20PM</p>

<p><b>Title: Rock Labs That Work</b>  <b>Presenters:</b> Michael Eby  <b>Description:</b> Presentation of several operational labs involving igneous, metamorphic, and sedimentary rock. Fun and interactive labs will be discussed and shared. Teachers will participate in lab involving creation of metamorphic rock. Participants will receive take home "idea" handouts and will have the opportunity to win teaching supplies.  <b>Level/Content:</b> Middle Earth/Space Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Piedmont  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Using Gizmos in the Science 6-8 Science</b>  <b>Presenters:</b> Barbara Quarles  <b>Description:</b> Gizmos offers the world's largest library of interactive online simulations for math and science education in grades 3-12. Gizmos are fun, easy to use, and help students develop a deep understanding of challenging concepts through inquiry and exploration.  <b>Level/Content:</b> Middle Earth/Space Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Vinings  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Electives with Ease</b>  <b>Presenters:</b> Lauren Horton, Tasha Young  <b>Description:</b> Do you need help with your science electives? Help is on the way! This workshop offers interactive lessons for Anatomy and Physiology, Environmental Science, Forensic Science, and Oceanography. Packets will be given to the first 25 participants!!!  <b>Level/Content:</b> High General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Edgewood  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Formation of the Solar System from a middle schooler's perspective</b>  <b>Presenters:</b> Stephen Ramsden  <b>Description:</b> Stephen W. Ramsden (sramsdn@solarastronomy.org) will provide a one hour lecture as if you were a group of middle school students in order to give you the experience of his solar astronomy outreach program (www.charliebates.org) from their perspective.  <b>Level/Content:</b> Middle Earth/Space Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Spring  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Using Digital Media to Produce Creative Student Summative Assessments in Science</b>  <b>Presenters:</b> Kelly Stewart  <b>Description:</b> I will discuss how my students created completely original documentaries and musical compositions to demonstrate their understanding of the standards for the units we study in Life and Physical Science.  <b>Level/Content:</b> K-8 General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Vancouver  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Team Marine: A model for engagement in service learning through science outreach.</b>  <b>Presenters:</b> Catherine Teare Ketter, Kenneth Leach  <b>Description:</b> Program will discuss a successful service learning model to engage students in the teaching of science through service learning.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Cairo  <b>Time:</b> 2:30-3:20PM</p>

<p><b>Title: Invasive Species &amp; EDDMapS: Hands On Science with Real World Applications</b>  <b>Presenters:</b> Karan Rawlins  <b>Description:</b> An interdisciplinary approach which uses computer science, biology, ecology and land management to learn about invasive species and how you can help fight them in a hands on learning experience.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Montreal  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: GSSA Catch the Wave!</b>  <b>Presenters:</b> Terri George, Kimberly Emanuel, Lisa Alexander  <b>Description:</b> This session will explore lab activities and strategies to help physical science students with standards to address wave mechanics.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Hong Kong  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Big Ideas about Tiny Things-Lessons for Grades K-5</b>  <b>Presenters:</b> Joyce Palmer, Nancy Healy, Katie Hutchison  <b>Description:</b> Come and have fun exploring through hands-on activities how teaching about small scale objects can fit into your science curriculum. The lessons shared address Georgia Performance Standards.  <b>Level/Content:</b> Elementary General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Williams  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: GEARS Digitalium; More than a Planetarium</b>  <b>Presenters:</b> Max McKelvey  <b>Description:</b> The Digitalium portable planetarium is suitable for teaching diverse topics to all grade levels. Capabilities for use in teaching science, math, social studies, art and music will be explored  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> International Ballroom South-Int Tower  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: The Science Teachers Toolkit: Everything you need from notebooks, to labs, to hands-on activities.</b>  <b>Presenters:</b> Malissa Summers, Deanna Boyd, Nayati Harris  <b>Description:</b> Science Teachers Toolkit is a teacher's one stop shop to Interactive Notebook, Problem-Based Learning (PBL), best teaching strategies, quick formative assessments, hands-on activities and much more  <b>Level/Content:</b> Middle Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Lenox  <b>Time:</b> 2:30-4:20PM</p>
<p><b>Thursday 2/17</b>  <b>3:30 pm</b></p>
<p><b>Title: Improving Content Accessibility for English Language Learners</b>  <b>Presenters:</b> Ginger Harbin, Lisa Alexander  <b>Description:</b> Come prepared to learn about learning and what you can do to help ELLs improve their understanding of science and performance on assessments – applicable to all grade levels.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Williams  <b>Time:</b> 3:30-4:20PM</p>

<p><b>Title: An Astrobiology Inquiry-Based Activity: What is Life?</b>  <b>Presenters:</b> Janetta Greenwood, Krista Staskevicius, Jamila Cola  <b>Description:</b> Inspire students with an astrobiology inquiry based activity that explores the characteristics of life on Earth and the universe.  <b>Level/Content:</b> High Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Inman  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: Inquiry Learning in the High School Classroom</b>  <b>Presenters:</b> Rhoda Rush  <b>Description:</b> Process Oriented Guided Inquiry Learning is a great method to reach and teach students science concepts. Experience several POGIL activities for the High School level.  <b>Level/Content:</b> High Chemistry  <b>Day:</b> THURS 2/17 <b>Room:</b> Kennesaw  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: The Solar System and Beyond with NASA's Education Resources</b>  <b>Presenters:</b> Les Gold  <b>Description:</b> Exploration of the Solar System and beyond using NASA's Education Resources  <b>Level/Content:</b> Middle Earth/Space Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Edgewood  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: Making the most out of your Atlanta fieldtrip</b>  <b>Presenters:</b> Cindy Sheehy, Stacy Graison  <b>Description:</b> Hands-on experiential learning help students build for transfer. Learn to integrate Georgia Performance Standards into field experience, and discover resources available to educators at Atlanta's informal education sites.  <b>Level/Content:</b> K-8 General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Vancouver  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: The Gulf Oil Spill, Dead Zones and Hydrothermal Vents: Real hot topic science, real research data and real inquiry</b>  <b>Presenters:</b> Vicki Soutar, Ken Leach, Catherine Teare Ketter  <b>Description:</b> Ocean to classroom: Use today's headlines and research data to create scientific inquiry lessons for your students.  <b>Level/Content:</b> High Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Singapore  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: Myths of Science and Science Misconceptions</b>  <b>Presenters:</b> Barbara Rascoe  <b>Description:</b> Activities in this session will help science teachers examine and/or re-examine myths of science and science misconceptions.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Spring  <b>Time:</b> 3:30-4:20PM</p>



<p><b>Title: Getting Down &amp; Dirty</b>  <b>Presenters:</b> Tammy Shiflett, Pam Googe Melanie Peterson, Pepper Misinco  <b>Description:</b> Dig through four dirt filled discovery destinations driven by elementary performance standards. Be dazzled by dirt &amp; decomposition to develop your dirty mind. First 50 participants receive CD w/handouts &amp; activities.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Vinings  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: GSSA Teaching GPS electricity and magnetism in 8th grade physical science</b>  <b>Presenters:</b> George Stickel  <b>Description:</b> How to teach and assess electricity and magnetism will be shown through hands-on activities. Additionally, what should be taught, and what can and should be omitted will be discussed.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Hong Kong  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: GEARS Digitarium; More than a Planetarium</b>  <b>Presenters:</b> Max McKelvey  <b>Description:</b> The Digitarium portable planetarium is suitable for teaching diverse topics to all grade levels. Capabilities for use in teaching science, math, social studies, art and music will be explored  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> International Ballroom South-Int Tower  <b>Time:</b> 3:30-4:20PM</p>
<p><b>Title: Project-Based Inquiry Launcher Units: Sustaining the Start of the Year All Year Long</b>  <b>Presenters:</b> Mike Ryan, Marion Usselman  <b>Description:</b> We present "Launcher Units": project-based inquiry learning units, where students develop science process skills, perspectives, and practices. We will demonstrate some hands-on activities and distill the critical features of a Launcher Unit.  <b>Level/Content:</b> 6-12 General Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Piedmont  <b>Time:</b> 3:30-5:20PM</p>
<p><b>Title: Team Marine: The Best of the Best -- classroom tested hands-on lab activities for science grades 6-12</b>  <b>Presenters:</b> Catherine Teare Ketter, Kenneth Leach  <b>Description:</b> The Ocean in Action: Classroom-tested interdisciplinary hands-on science activities for grades 6-12.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Cairo  <b>Time:</b> 3:30-5:20PM</p>
<p><b>Title: A S.T.E.P. in the right direction for Sea Turtle Conservation</b>  <b>Presenters:</b> Alicia Marin, Teddy Ivey  <b>Description:</b> The Sea Turtle Education Project (STEP) is 3-part series has been specifically designed for 2nd-4th grade students and teachers. This unique program combines outreach and field trip programs for you and your class to become sea turtle experts!  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Montreal  <b>Time:</b> 3:30-5:20PM</p>

<p><b>Title: A Class Called SECME: A Daily Lesson in Project-based Learning</b>  <b>Presenters:</b> Lynda Byrne, Mark Eyerman,  <b>Description:</b> Rigorous and Relevant? Motivating? Differentiated Instruction? Join us for this practical guide to creating a “culture of change” using GPS infused project-based learning curriculum that includes realistic classroom management...and fun!  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Techwood  <b>Time:</b> 3:30-5:20PM</p>
<p><b>Title: Experimental Data Collection using LEGO Mindstorm NXT</b>  <b>Presenters:</b> Jeffrey Rosen, Fred Stillwell, Roger Collier  <b>Description:</b> Engage students in science experimentation, data collection and data analysis using the LEGO Mindstorm NXT. Participants will learn how to use the NXT brick and sensors as a data-logging system.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Manila  <b>Time:</b> 3:30-5:20PM</p>
<p><b>Thursday 2/17</b>  <b>4:30 pm</b></p>
<p><b>Title: Stimulating Excitement for Science: Using Inquiry to Foster a Love for Science</b>  <b>Presenters:</b> Alfred Porter  <b>Description:</b> Stimulating Excitement for Science: Using Inquiry to Foster a Love for Science  <b>Level/Content:</b> High Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Inman  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: Hands On: Real World Lessons for Middle School Classrooms</b>  <b>Presenters:</b> Jennifer Richards, Erica Picard  <b>Description:</b> This session presents a FREE, ready-to-use interdisciplinary curriculum integrating experiential learning in core subject areas with food science through the study of microbiology. Lab supplies for implementation are also FREE.  <b>Level/Content:</b> Middle Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Singapore  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: Observations Through the Seasons</b>  <b>Presenters:</b> Anne Seemann, Ruth Martin  <b>Description:</b> Integrate science, technology, and writing as you and your students observe the changes and life cycles in nature throughout a school year using photography, journals, and an interactive bulletin board.  <b>Level/Content:</b> Elementary Biology (Life Science)  <b>Day:</b> THURS 2/17 <b>Room:</b> Spring  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: Explore Acid/Base Science through inquiry: Middle School Teachers</b>  <b>Presenters:</b> Dori Haggerty  <b>Description:</b> Teachers will engage in real-time data collection using digital probe ware and SPARK science software to explore acid/base science. Inquiry-based methods, predictions, data collection, graph analysis and evaluation are part of this investigation.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Edgewood  <b>Time:</b> 4:30-5:20PM</p>

<p><b>Title: Science Fair and Georgia Performance Standards: Flip Sides of the Same Coin</b>  <b>Presenters:</b> Donna Governor  <b>Description:</b> Find out how you can use science fair to teach Nature of Science GPS standards.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Lenox  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: Creating a Community Cohort of Learners by Using a Wiki</b>  <b>Presenters:</b> Kathy Shields  <b>Description:</b> Participants will learn how a wiki can help galvanize a diverse community of learners by focusing on collaborative efforts. The wiki allows for rewarding reflection on the process of building content knowledge in the area of science and math integration.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> Vancouver  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: Inquiry Teaching and Learning: The Periodic Table</b>  <b>Presenters:</b> Amy Kezman, Peggy Bailey  <b>Description:</b> This middle level activity series is taken from the Master unit from the SEPUP Issues and Physical Science course, developed with support from the National Science Foundation and used in classrooms across the country. Take away handouts and materials to use in class next week!  <b>Level/Content:</b> Middle Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Kennesaw  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: GSSA-Extreme Forces</b>  <b>Presenters:</b> Katrina Ford, Sally Creel  <b>Description:</b> Come and explore the science behind forces and motion through a variety of simple hands-on labs sure to engage your students.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> THURS 2/17 <b>Room:</b> Hong Kong  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: Differentiation Strategies for Science 101: Meeting the Needs of ALL Learners</b>  <b>Presenters:</b> Larry Zimmerman  <b>Description:</b> Learn the nuts and bolts of differentiation while experiencing how to differentiate your science content to meet the varying learning needs, styles, and levels of your students. Attendees will receive a CD handout with templates, lessons, and activities from the presentation.  <b>Level/Content:</b> K-12 General  <b>Day:</b> THURS 2/17 <b>Room:</b> Williams  <b>Time:</b> 4:30-5:20PM</p>
<p><b>Title: GEARS Digitalium; More than a Planetarium</b>  <b>Presenters:</b> Max McKelvey  <b>Description:</b> The Digitalium portable planetarium is suitable for teaching diverse topics to all grade levels. Capabilities for use in teaching science, math, social studies, art and music will be explored  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> THURS 2/17 <b>Room:</b> International Ballroom South-Int Tower  <b>Time:</b> 4:30-5:20PM</p>

**Title: Science is STEM-ulating!****Presenters:** Patti Grammens, Kathy Mellette**Description:** Two dynamic teachers will present ways to incorporate STEM disciplines into the curriculum in order to excite our students about their future jobs in these disciplines.**Level/Content:** 6-12

General Science

**Day:** THURS 2/17**Room:** Vinings**Time:** 4:30-5:20PM

Share-A-Thons  
Saturday, February 19  
1:30-2:20

Elementary School – Hong Kong Room

Middle School – Vinings Room

High School – Vancouver Room

## Friday is Biotechnology Day at the GSTA Conference!

Special Thanks to GA Bio for their partnership.

Review the Friday schedule for special guest speakers, 16 concurrent presentations including an expert panel discussion, unique field trip opportunities, a Biotech Alley full of free resources and special short courses on Saturday 2/19 at Georgia State University.

### **Biotechnology Strand Saturday Short Courses**

*Limited to 24 attendees for each short course*

*NO charge for these short courses but you must sign up early to obtain a ticket for these courses. Sign up early at the following link:*

<http://www.surveymonkey.com/s/biotechshortcourses>

*Check with the registration desk to see if any tickets remain.*

#### Ion Exchange Chromatography to Study and Isolate Proteins

Ellyn Daughtery

9AM-12PM

Participants will learn how to run an ion-exchange column to separate and study the proteins, lysozyme and amylase. Protein fractions will be collected and analyzed using indicators and spectrophotometry.

#### Pig IgG ELISA – Biotechnology in the Food Industry

Amy Naum

9AM-12PM

Learn how a diagnostic procedure used by biotechnologists in many industries called ELISA detects protein presence and concentration by using antibody-antigen technology.

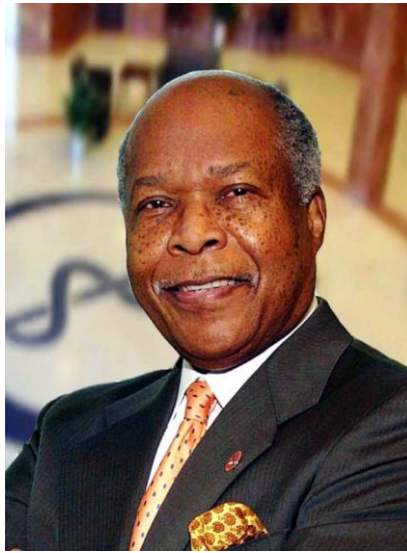
#### Taking the Mystery Out of PCR

Sherri Andrews

9AM-12PM

How do you amplify a gene if you don't know the sequence? How do you design primers for student driven research? How is quantitative PCR (Real Time) different than traditional PCR? This workshop will answer these questions and make you more of an expert on PCR. You will learn what degenerative primers are, how to design primers, and learn how to run a Real Time PCR reaction.

## Biotechnology Strand Special Guest Speaker



**The Honorable Louis W. Sullivan, M.D.**  
Biotechnology Strand General Session  
International Ballroom South – Int Tower  
9:00 AM Friday, 2/18

Louis W. Sullivan, M.D., is chairman of the board of the National Health Museum in Atlanta and chairman of the Washington, D.C.-based Sullivan Alliance to Transform America's Health Professions. Dr. Sullivan served as Secretary of the U.S. Department of Health and Human Services under former President George H. W. Bush from 1989 to 1993. He was the founding dean of what became the Morehouse School of Medicine, and served for more than two decades as its President. He served as chair of the President's Commission on Historically Black Colleges and Universities from 2002-2009, and was co-chair of the President's Commission on HIV and AIDS from 2001-2006.

A native of Atlanta, Dr. Sullivan graduated magna cum laude from Morehouse College, and earned his medical degree, cum laude, from Boston University School of Medicine. His postgraduate training included internship and residency in internal medicine at New York Hospital – Cornell Medical Center, a clinical fellowship in pathology at Massachusetts General Hospital, and a research fellowship in hematology at the Thorndike Memorial Laboratory of Harvard Medical School, Boston City Hospital.

Dr. Sullivan is the recipient of more than 55 honorary degrees, and serves on numerous corporate boards. He is a tireless advocate for enhancing health literacy and advancing healthy behaviors, for improved health promotion and disease prevention activities, gender and ethnic diversity, food and drug safety, and medical research.

## Biotechnology Strand Special Guest Speaker



**Dr. Steven Stice**  
University of Georgia  
Biotechnology Strand Lunch and Learn  
International Ballroom South – Int Tower  
12:00 PM Friday, 2/18  
“Demystifying Cloning and Stem Cells”

Dr. Stice is recognized as one of the world’s most innovative scientists and entrepreneurs. He produced the first cloned rabbit in 1987 and the first cloned transgenic calves in 1998. In 1997 his group produced the first genetically modified embryonic stem cell derived pigs and cattle. This research led to publications in *Science* and *Nature* journals, national news coverage (CBS, NBC, ABC and CNN) and the first US patents on cloning animals and cattle embryonic stem cells. In 2007, he developed neural stem cells, the first product commercialized from human embryonic stem cells. IN 2010, his lab discovered how to incorporate pluripotent stem cells — cells that can develop into any other kind of cells — into embryos that grow into pigs.

Steven Stice is a professor and director of the University of Georgia Regenerative Bioscience Center. He is a Georgia Research Alliance Eminent Scholar endowed chair and professor of animal science in the UGA College of Agricultural and Environmental Sciences. He was named one of the 100 Most Influential Georgians by *Georgia Trend* magazine.

Stice founded Aruna Biomedical, Inc., the first company in the world to produce a marketed product derived from human embryonic stem cells in 2007. The product is a neural progenitor cell line used to research neurological diseases and disorders, ranging from Parkinson’s disease to depression. Prior to joining the University of Georgia, Stice was a co-founder and chief scientific officer at Advanced Cell Technology, Inc., a stem cell company.

Stice received a B.S. at the University of Illinois. He received his M.S. degree from Iowa State University and his Ph.D. from the University of Massachusetts in Amherst.

## Biotechnology Strand

In partnership with GA Bio

8:00AM

***Vancouver***

GABIO Using Biotechnology: Science for a New Millennium, 2nd Ed.

9:00AM

***International Ballroom South – International Tower  
General Session***

***The Honorable Louis W. Sullivan, M.D.***

10:00AM

***Cairo***

GABIO Disorder Detectives

***Hong Kong***

GABIO Including Nanoscale Science in your Science Classroom-Results from a Summer Research Experience

***Montreal***

GABIO DNA is Elementary (2 hour session)

***Vancouver***

GABIO Nanoscale Applications in Environmental Technologies

11:00AM

***Cairo***

GABIO In vitro Gas Suppression: Beano®--Enzymes to the Rescue

***Vancouver***

GABIO Connecting Nanotechnology Applications in Healthcare with Middle/High School

12:00PM

***International Ballroom South – International Tower  
Lunch and Learn Session***

***Dr. Steven Stice, UGA***

***Grab your lunch to go and join us!***



## Biotechnology Strand

In partnership with GA Bio

1:00PM

*Cairo*  
GABIO DNA Length Change Predicts Number of Proteins  
*Montreal*  
GABIO Care and Feeding of the Microscope  
*Vancouver*  
GABIO Problem-Based Learning for Middle and High School Science  
(2 Hour Session)

2:00PM

*Cairo*  
GABIO Introducing Epidemiology through a Foodborne Outbreak  
Demonstration: Who Ate the Potato Salad?  
*Montreal*  
GABIO Evaluating the Routes of Vaccine Immunization

3:00PM

*Exhibit hall Door Prizes and GSTA District Director  
Meet and Greet*

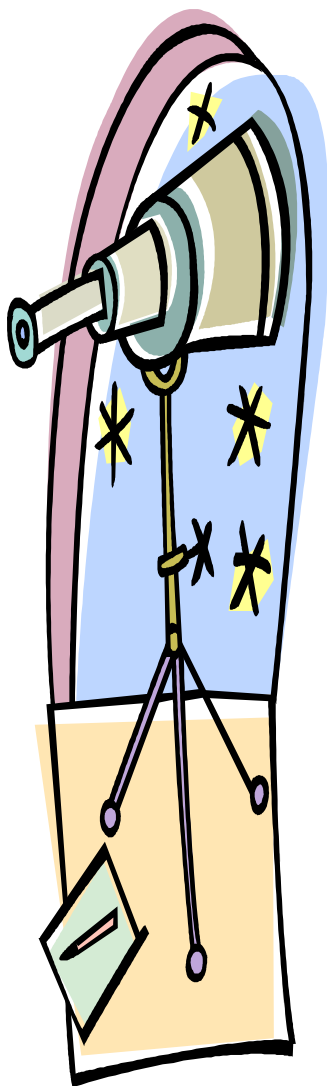
4:00PM

*Cairo*  
GABIO CDC Career Paths: Introducing Public Health Science Education  
*Montreal*  
GABIO A 3-week unit of Biotech for Any Biology Class  
*Vancouver*  
GABIO HANDS ON Science: Reinforce Curriculum with Engaging Activities  
*Int Ballroom South*  
GABIO Bioscience Curriculum Resources for Your Classroom

4:50PM

*International Ballroom South – International Tower  
Door prize drawing for the Biotech Strand  
Make sure to bring your Biotech Strand Passport with  
you for the drawing. You must be present to win!*

# GEARS Strand



Friday, Feb 18, 2011

Vinings Room

8:00am

*GEARS What's that Constellation?*

9:00am

*GEARS Investigates Dark Matter in Galaxies*

10:00am

*GEARS Hands-on Astronomy for 6 – 12*

11:00am

*GEARS Building your Galileoscope*

1:00pm

*GEARS Bringing E.T into Your Classroom*

2:00pm

*GEARS Hi-Tech Astronomy: Using Technology to Engage Students in High Level Data Analysis*

4:00pm

*GEARS Windows in the Atmosphere: Radiation sources, detectors and shields*

# GYSTC Strand

Georgia Youth Science Technology Centers



Friday, Feb 18, 2011

Piedmont Room

8:00am

*GYSTC All in the Family*

9:00am

*GYSTC 6th Grade Mini-Conference Show & Share Best Practice Lessons*

10:00am

*GYSTC - Teaching Science with Children's Literature*

11:00am

*GYSTC: Teach Writing Using Science*

12:00pm

*GYSTC: Lunch and Learn*

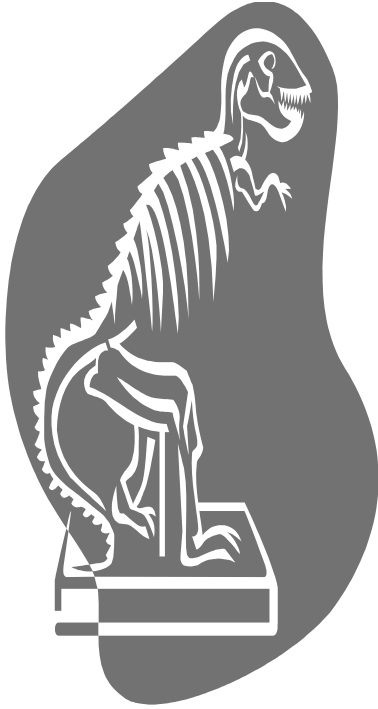
1:00pm

*GYSTC: Science and Storytelling*

2:00pm

*GYSTC: Teaching Science with Children's Literature*

# Fernbank Museum Strand



Friday, Feb 18, 2011  
Hong Kong Room

11:00am

*FERNBANK What is the MESSENGER  
Spacecraft?*

12:00pm

*FERNBANK Reaching the 3-5 Science  
Student*

1:00pm

*FERNBANK 6th Grade GPS On The  
Rocks*

2:00pm

*FERNBANK The Zero G Experience*



## Solar Telescope Presentation

12:30pm – 3:30pm

Weather permitting Stephen W., Ramsden ([sramsden@solarastronomy.org](mailto:sramsden@solarastronomy.org)) will be setup outside of the Hyatt at the corner of Peachtree and Baker streets to provide hands on viewing of our beautiful home star in three wavelengths of light. You will see firsthand through his eyepieces Solar Prominences and flares, active magnetic regions and sunspots. Free NASA/JPL solar system ambassador goodies to all attending as well as your own pair of solar viewing glasses for you to keep.



**Title: GEARS What's that Constellation?****Presenters:** Jamie Akin**Description:** Build your own walk-in planetarium for \$50!! Handouts will be provided and someone will walk away with a planetarium!!**Level/Content:** 6-12

Earth/Space Science

**Day:** FRI 2/18**Room:** Vinings**Time:** 8-8:50AM**Title: Georgia 4-H Environmental Education: A Tradition of Excellence****Presenters:** Melanie Biersmith, Jaclyn Holt, Matt Hammons**Description:** Georgia 4-H EE has provided high quality field studies for over 30 years. Come learn how this program can complement Georgia's Performance Standards in the context of real world environments.**Level/Content:** K-8

General Science

**Day:** FRI 2/18**Room:** Edgewood**Time:** 8-8:50AM**Title: Using Formative Assessments in Science Instruction****Presenters:** Tracy Altherr**Description:** Formative assessments are important tools for informing teachers what their students know or what misconceptions they hold about content matter. This presentation will provide teachers with research supporting the use of formative assessments and will also give teachers ideas of assessments to employ in their classrooms.**Level/Content:** K-8

General Science

**Day:** FRI 2/18**Room:** Lenox**Time:** 8-8:50AM**Title: GYSTC All in the Family****Presenters:** Angela Guilford, Debbie Stuckey, Lynn Larsen**Description:** Attend this session to receive the tools you need to implement a successful Family Science Night at your school. This hands-on session is hosted by GYSTC coordinators from around the state.**Level/Content:** Elementary

General Science

**Day:** FRI 2/18**Room:** Piedmont**Time:** 8-8:50AM**Title: AP Science: Participation and Excellence are not Mutually Exclusive****Presenters:** Joe Cox**Description:** Participants will be exposed to a program that more than tripled student participation, while simultaneously raising the passing percentage by over 20%.**Level/Content:** High

Interdisciplinary

**Day:** FRI 2/18**Room:** Hong Kong**Time:** 8-8:50AM**Title: Bring the Mountain to the Science Learner****Presenters:** Kimberly Loomis**Description:** Economy and liability issues can prohibit taking your class on a field trip. Online resources developed by the National Park Service can bring the field trip to the class instead.**Level/Content:** Middle

Interdisciplinary

**Day:** FRI 2/18**Room:** Spring**Time:** 8-8:50AM

<p><b>Title: Collaborative hands-on labs for ESEP Physical Science Part 1</b>  <b>Presenters:</b> Sherrie Chovanec, Peter Fischer, Chris Kennedy  <b>Description:</b> Cost effective hands-on labs used successfully in a unique collaborative blended setting of ESEP self-contained Physical Science and AP Physics. Experience enriching labs for all level of learners.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Cairo  <b>Time:</b> 8-8:50AM</p>
<p><b>Title: Understanding the Periodic Table</b>  <b>Presenters:</b> Heather Brasell  <b>Description:</b> A series of activities helps students (grades 8-10) helps develop conceptual understanding of periodicity, periodic patterns, organization of periodic tables, and relationship between atomic structure and the Periodic Table.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Manila  <b>Time:</b> 8-8:50AM</p>
<p><b>Title: Ecology: Interdependence and interactions in dynamic ecosystems</b>  <b>Presenters:</b> Barbara Nagle, Laura Lenz  <b>Description:</b> Interdependence and interactions between organisms are critical for the functioning of dynamic, sustainable ecosystems. Enhance student interest in learning about dynamic ecosystems by integrating sustainability issues such as fisheries management and invasive species into standards-based lessons using hands-on activities.  <b>Level/Content:</b> High Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> Williams  <b>Time:</b> 8-8:50AM</p>
<p><b>Friday 2/18</b>  <b>9:00 am</b></p>
<p><b>Title: Butterflies in the Classroom</b>  <b>Presenters:</b> Carolina Teaching Partner  <b>Description:</b> Butterflies bring classroom excitement! The Painted Lady butterfly's perfect for student observation and meets National Science Standards. Butterfly care sessions. Free activities and living sample.  <b>Level/Content:</b> 6-12 Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 9-9:50AM</p>
<p><b>Title: Cancer Biology Made Easy</b>  <b>Presenters:</b> Gregg Orloff  <b>Description:</b> Cancer Biology Made Easy: Presentation of the educational materials (videos, animations, curricula and games) available on the CancerQuest website.  <b>Level/Content:</b> High Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> Singapore  <b>Time:</b> 9-9:50AM</p>
<p><b>Title: The Zoo Connection - Let Your Students Go Wild!</b>  <b>Presenters:</b> Francine Gebus  <b>Description:</b> Meet live animals. Examine skulls and biofacts. Discover how animals are adapted to their place in a food web. Learn how the zoo can be a resource for your curriculum.  <b>Level/Content:</b> Middle Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> Techwood  <b>Time:</b> 9-9:50AM</p>

<p><b>Title: Case Studies in Chemistry</b>  <b>Presenters:</b> Sarah Eales, Christine Wahl  <b>Description:</b> Case studies in high school science increase student involvement and help students to see relevancy. See examples of cases and demonstrations and take home examples for use in your classroom.  <b>Level/Content:</b> 6-12  <b>Day:</b> FRI 2/18  <b>Time:</b> 9-9:50AM</p>	<p>Chemistry  <b>Room:</b> Inman</p>
<p><b>Title: Reptile Wranglers</b>  <b>Presenters:</b> Ken Panse, Zack Panse  <b>Description:</b> Join us for an engaging look into the lives of snakes, lizards, turtle/tortoises, toads/frogs and a few giant arthropods. Feel free to interact with the Reptile Wranglers Ken and Zack as they share interesting facts about their critters!  <b>Level/Content:</b> K-12  <b>Day:</b> FRI 2/18  <b>Time:</b> 9-9:50AM</p>	<p>Biology (Life Science)  <b>Room:</b> Manila</p>
<p><b>Title: GYSTC 6th Grade Mini-Conference Show &amp; Share Best Practice Lessons</b>  <b>Presenters:</b> Angela Guilford  <b>Description:</b> Mini-Conference with 6th Grade Teachers sharing Best Practice lessons and resources. Presentors are from KSU MSP Grant Cohorts from North Georgia and Cobb County Schools. All 6th grade GPS will be presented.  <b>Level/Content:</b> Middle  <b>Day:</b> FRI 2/18  <b>Time:</b> 9-9:50AM</p>	<p>Earth/Space Science  <b>Room:</b> Piedmont</p>
<p><b>Title: GEARS Investigates Dark Matter in Galaxies</b>  <b>Presenters:</b> Sarah Higdon, James Higdon, GEARS Team  <b>Description:</b> Ever wondered what Galaxies are made of? Using NASA data and hands-on demos we will infer the presence of dark matter. 20 kits will be given away.  <b>Level/Content:</b> 6-12  <b>Day:</b> FRI 2/18  <b>Time:</b> 9-9:50AM</p>	<p>Earth/Space Science  <b>Room:</b> Vinings</p>
<p><b>Title: Hot Air Balloon with Hair dryer</b>  <b>Presenters:</b> Hong Kim  <b>Description:</b> Let's make a vinyl balloon and launch it with hot air by a hair dryer. It is an exciting, hands-on, safe, and easy science project for a class.  <b>Level/Content:</b> K-8  <b>Day:</b> FRI 2/18  <b>Time:</b> 9-9:50AM</p>	<p>General Science  <b>Room:</b> Edgewood</p>
<p><b>Title: Begged, Borrowed, and Stolen ~ MORE of the best middle school activities we've ever used!</b>  <b>Presenters:</b> Zoe Evans, Ann Cook, Tina Denney  <b>Description:</b> Need a great activity to use in your science class? No time to search the internet for ideas? Tired of doing the same thing year after year? If so, check out all of the fantastic ideas and activities that we've begged, borrowed, or stolen over the years!  <b>Level/Content:</b> Middle  <b>Day:</b> FRI 2/18  <b>Time:</b> 9-9:50AM</p>	<p>General Science  <b>Room:</b> Hong Kong</p>



<p><b>Title: How to CAP your frustrations and TRADE your Disruptions</b>  <b>Presenters:</b> Mark Knox  <b>Description:</b> Teachers know the frustration of losing instruction time to matters of discipline. Time to Teach is a set of strategies proven to reduce classroom discipline problems and restore that time.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Lenox  <b>Time:</b> 9-9:50AM</p>
<p><b>Title: Collaborative Hands-On Labs for ESEP Physical Science Part 2</b>  <b>Presenters:</b> Sherrie Chovanec, Peter Fischer, Chris Kennedy  <b>Description:</b> Cost effective hands-on labs used successfully in a unique collaborative blended setting of ESEP self-contained Physical Science and AP Physics. Experience enriching labs for all level of learners.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Cairo  <b>Time:</b> 9-9:50AM</p>
<p><b>Title: Integrating Engineering and Robotics to Teach Science</b>  <b>Presenters:</b> Fred Stillwell, Jeffrey Rosen  <b>Description:</b> This session describes a middle school course, Applied Concepts of Engineering and Science, that integrates science, mathematics, language arts and social studies using engineering and robotics in a problem-based setting.  <b>Level/Content:</b> Middle Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Spring  <b>Time:</b> 9-9:50AM</p>
<p><b>Title: The Station Approach: Scaffolded Inquiry and Brain-based Learning Activities</b>  <b>Presenters:</b> Dr. Cherry C. Brewton, Graduate Students  <b>Description:</b> Let's implement the Station Approach! Get basics, then rotate through a series of science centers (stations) that allows teachers to differentiate instruction and scaffold science inquiry through brain-based activities. Collect data; make scientific claims and support them with evidence.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Williams  <b>Time:</b> 9-9:50AM</p>
<p><b>Friday 2/18</b>  <b>10:00 am</b></p>
<p><b>Title: GABIO Disorder Detectives</b>  <b>Presenters:</b> Neil Lamb, Jennifer Carden, Madelene Loftin  <b>Description:</b> Diagnosing chromosomal disorders has never been so easy! Come see a new no mess approach to karyotyping. Engaging, Active, Affordable!  <b>Level/Content:</b> 6-12 Biotechnology  <b>Day:</b> FRI 2/18 <b>Room:</b> Cairo  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: GABIO Nanoscale Applications in Environmental Technologies.</b>  <b>Presenters:</b> Joyce Palmer, Nancy Healy, Katie Hutchison  <b>Description:</b> Come and explore through hands-on activities how nanotechnology is being used in the field of environmental technologies. The lessons shared address Georgia Performance Standards as well as National Science Standards.  <b>Level/Content:</b> 6-12 Biotechnology  <b>Day:</b> FRI 2/18 <b>Room:</b> Vancouver  <b>Time:</b> 10-10:50AM</p>

<p><b>Title: Georgia's Scientific Tomorrow: Unknowable but Not Unthinkable</b>  <b>Presenters:</b> Rosalind Watson  <b>Description:</b> Integrating science GPS and thinking skills via read-aloud books in K-3 has positively affected student achievement in our school. Receive handouts and explore how these strategies can make a difference in your school.  <b>Level/Content:</b> Elementary Earth/Space Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Techwood  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: Our Top Ten Energy Sources</b>  <b>Presenters:</b> Rebecca Lamb, Karen Reagor  <b>Description:</b> Energy is a hot topic! Learn about the sources we use, and take home curriculum you can use in your classroom! NEED materials are correlated to the Louisiana state standards.  <b>Level/Content:</b> Elementary General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Edgewood  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: The Sky's The Limit</b>  <b>Presenters:</b> Carolina Teaching Partner  <b>Description:</b> Participants will practice with activities from some of your favorite STC kits, add non-fiction literacy, notebooking strategies, technology and assessments to maximize student learning and performance.  <b>Level/Content:</b> Elementary General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: Fourth Grade Share-a-thon KSU MSP Cohorts</b>  <b>Presenters:</b> Marlee Tierce  <b>Description:</b> Fourth Grade teachers from North Georgia and Cobb County will share activities and ideas.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> International Ballroom North-Int tower  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: Teaching Energy Conservation with an emphasis on Bio-Fuels</b>  <b>Presenters:</b> Sue Kral  <b>Description:</b> Teachers participate in activities that explain the development of non-food sources of biofuels as a renewable source of fuel for transportation, the carbon cycle and the human impact on it.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Lenox  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: Science and Poetry</b>  <b>Presenters:</b> Jessica Kirkham, Kim Hembree  <b>Description:</b> Poetry is about details, science is about details. Wow! Why can't we join the act of investigation in science with the structure of poetry? We will use scientific investigation standards as we "explore" an experiment and write them as a poem in order to meet ELA standards.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Manila  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: GYSTC - Teaching Science with Children's Literature</b>  <b>Presenters:</b> Steve Rich, Pattie Morton, Lynn Larsen  <b>Description:</b> Be ahead of the game when science becomes part of AYP. Integrate the Outstanding Science Tradebooks into your reading lessons, and get the science behind them to share with your students. Door prizes!!  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Piedmont  <b>Time:</b> 10-10:50AM</p>

<p><b>Title: Inquiry Invitations in the Science Classroom</b>  <b>Presenters:</b> Jennifer "Jaye" Thiel  <b>Description:</b> This session will explain how to design and implement GPS related Inquiry Invitations in the science classroom. Participants will receive sample Inquiry Invitations.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Singapore  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: Snacking Your Way Through Science</b>  <b>Presenters:</b> Stacey Osborne, Jennifer Baker, Jennifer Reardon  <b>Description:</b> Looking for engaging ways to formally assess students? In "Snacking Your Way Through Science," you will have opportunities to assess students through hands-on, standards-based activities integrating science, math, and technology.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Spring  <b>Time:</b> 10-10:50AM</p>
<p><b>Title: GEARS Hands-on Astronomy for 6 – 12</b>  <b>Presenters:</b> Lindsay Bearden, Jamie Akin  <b>Description:</b> Come join us as we use hands-on to determine the radius and the color of our sun using very inexpensive materials!! We'll also show you a way to demonstrate how scientists find planets around other stars in our universe. Give-aways and handouts for activities will be provided.  <b>Level/Content:</b> 6-12 Earth/Space Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Vinings  <b>Time:</b> 10:00-10:50AM</p>
<p><b>Title: Reaching out to Multiple Intelligences: Using Songs to Teach Science</b>  <b>Presenters:</b> Donna Governor, Larry Morris  <b>Description:</b> Discover how science content songs can be used to teach concepts and engage students in learning.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Inman  <b>Time:</b> 10:00-10:50AM</p>
<p><b>Title: GABIO DNA is Elementary</b>  <b>Presenters:</b> Chandan M. Robbins, Michelle Ventura, Dana Brown  <b>Description:</b> Georgia State University's Bio-Bus Program is a free science outreach program dedicated to bringing fun and engaging science activities into the K-12 classroom.  <b>Level/Content:</b> Elementary Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> Montreal  <b>Time:</b> 10-11:50AM</p>
<p><b>Title: GABIO Including Nanoscale Science in your Science Classroom-Results from a Summer Research Experience</b>  <b>Presenters:</b> Joey Nunn, Marie J. Cabrices, Pamela Gilbert-Smith  <b>Description:</b> Come learn how teachers spent their summer and how they are using nanoscale lessons in their classes. Find out how you can be a participant in the summer of 2011.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Hong Kong  <b>Time:</b> 10-10:50AM</p>



<p><b>Title: GEARS Building your Galileoscope</b>  <b>Presenters:</b> Zodiac Webster, GEARS Team  <b>Description:</b> Learn how to put together the Galileoscope you received from teachingwithtelescopes.org  <b>Level/Content:</b> 6-12 Earth/Space Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Vinings  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: SENSEable GA Science-Yesterday, Today and Tomorrow</b>  <b>Presenters:</b> Ruby Ashley, Dr. Sophia Kent  <b>Description:</b> Project SENSE has, since 1989, provided P-8 science teachers with resources for hands-on, minds-on instruction in the classroom. This session will highlight sample lessons from elementary and middle grades standards.  <b>Level/Content:</b> K-8 General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: TI Tools for the Science Classroom</b>  <b>Presenters:</b> Ned Colley  <b>Description:</b> Come see what's new from TI for the 6-12 science classroom. Hear about STEM, GPS and more. Take home materials will be provided and a few door prizes too!  <b>Level/Content:</b> 6-12 General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Manila  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: The "Write" Stuff: Incorporating Writing in the Science Classroom</b>  <b>Presenters:</b> Zoe Evans, Carol Turner  <b>Description:</b> "Writing Across the Curriculum" is a charge we've been given by both our school and district. Come see the activities we've used to address this area of our school improvement plan and assess our student's science content knowledge.  <b>Level/Content:</b> Middle General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Singapore  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: Tracks of a Thief</b>  <b>Presenters:</b> Lynn Larsen, Dean Laskey  <b>Description:</b> Solve a crime and see how to determine a thief! Characteristics of Science Standards for middle school will be investigated.  <b>Level/Content:</b> Middle General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Techwood  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: Science Olympiad Foundations</b>  <b>Presenters:</b> Scott Cole, Penni Johnson, Flavia Bitussi  <b>Description:</b> Learn how to start a SO program at your school and learn how to run a program that will challenge the most gifted students at your school in all sciences.  <b>Level/Content:</b> High Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Lenox  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: GYSTC: Teach Writing Using Science</b>  <b>Presenters:</b> Angela Guilford  <b>Description:</b> Sharing strategies and examples on how to teach science through writing.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Piedmont  <b>Time:</b> 11-11:50AM</p>

<p><b>Title: A Closer Look at Careers in Science</b>  <b>Presenters:</b> Ashley Carter  <b>Description:</b> Do you want to know more about current science careers? This session will share resources that are easy to use with your students. It will also include hands-on activities to engage your middle school students and help them consider healthcare careers.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Spring  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: FERNBANK What is the MESSENGER Spacecraft?</b>  <b>Presenters:</b> April Whit  <b>Description:</b> It's been over 30 years since Mariner sent back the first pictures of Mercury's surface. NASA's MESSENGER space craft goes into orbit around Mercury next month (March 2011). This presentation provides an overview of the mission, some questions it hopes to answer, and classroom activities for elementary school teachers.  <b>Level/Content:</b> K-8 Earth/Space Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Hong Kong  <b>Time:</b> 11-11:50AM</p>
<p><b>Title: Visual Literacy for Science</b>  <b>Presenters:</b> Larry Zimmerman  <b>Description:</b> This presentation will provide an introduction to visual literacy as a strategy for building key literacy and higher-order thinking skills using science content. Strategies demonstrated will be practical and easy to implement in any elementary classroom.  <b>Level/Content:</b> Elementary General  <b>Day:</b> FRI 2/18 <b>Room:</b> Williams  <b>Time:</b> 11-11:50AM</p>
<p><b>Friday 2/18</b>  <b>12:00 pm</b></p>
<p><b>Title: GABIO Lunch and Learn</b>  <b>Presenters:</b> Dr. Steven Stice  <b>Description:</b> Bring your lunch and join this Biotechnology Strand Speaker from UGA for an update on Stem Cell research.  <b>Level/Content:</b> K-12 Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> International Ballroom South – Int Tower  <b>Time:</b> 12-12:50PM</p>
<p><b>Title: GYSTC: Lunch and Learn</b>  <b>Presenters:</b> Angela Guilford  <b>Description:</b> Bring your lunch and join GYSTC for an informal sharing of some of our best hands-on activities. You will leave with lots of lesson plans!  <b>Level/Content:</b> K-8 General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Piedmont  <b>Time:</b> 12-12:50PM</p>
<p><b>Title: Lunch &amp; Learn with the GA DOE Science</b>  <b>Presenters:</b> Juan Carlos Aguilar  <b>Description:</b> Attend to get the latest news about Science Education in Georgia!  <b>Level/Content:</b> General  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 12-12:50PM</p>

**Friday 2/18****1:00 pm****Title: Exploring a Hidden World: Middle School Microbiology****Presenters:** Theresa Pinilla**Description:** The world of microorganisms frequently goes unnoticed, though we are surrounded by them. In these labs, developed in a GIFT internship, students will become aware of the activities of microbial organisms.**Level/Content:** 6-12

Biology (Life Science)

**Day:** FRI 2/18**Room:** Edgewood**Time:** 1-1:50PM**Title: Students Modeling A Research Topic (S.M.A.R.T). Teams and Scientific Teaching****Presenters:** John Finley, John Bauer**Description:** The program will focus molecular modeling and scientific teaching using the S.M.A.R.T (Students Modeling A Research Topic) team program as the vehicle for promoting inquiry and scientific teaching.**Level/Content:** 6-12

Biology (Life Science)

**Day:** FRI 2/18**Room:** Inman**Time:** 1-1:50PM**Title: Genetics: Crazy Traits and Adaptation Survivor****Presenters:** Chris Neill, Wendy Delano, Alen Brown**Description:** Genetics terms such as traits, alleles, phenotypes and genotypes come alive as you create crazy creatures using a unique kit and study the resulting population.**Level/Content:** 6-12

Biology (Life Science)

**Day:** FRI 2/18**Room:** Lenox**Time:** 1-1:50PM**Title: GABIO Care and Feeding of the Microscope****Presenters:** Richard Brown**Description:** Proper alignment, cleaning and specimen preparation skills to obtain high quality images with the microscope including handouts with references for further study. Mock forensic investigation using common kitchen ingredients included.**Level/Content:** High

Biology (Life Science)

**Day:** FRI 2/18**Room:** Montreal**Time:** 1-1:50PM**Title: GABIO: DNA Length Change Predicts Number of Proteins****Presenters:** Brian Heglund**Description:** Biophysicists can manipulate DNA and study how these changes affect DNA operation. The objective is to determine the number of proteins bound to DNA by analyzing changes in force-extension data.**Level/Content:** High

Biotechnology

**Day:** FRI 2/18**Room:** Cairo**Time:** 1-1:50PM**Title: Using Digital Media to Teach Literacy Skills through Science****Presenters:** Janet Jones, Mike Whalen**Description:** By using Ignite! Science digital curriculum to teach necessary English language arts and literacy skills, science teachers can prepare middle school students to meet the challenges of high school literacy.**Level/Content:** Middle

General Science

**Day:** FRI 2/18**Room:** Spring**Time:** 1-1:50PM

<p><b>Title: Engaged Kids are Focused on Science</b>  <b>Presenters:</b> Lynda Pollock  <b>Description:</b> Using mini labs to promote engagement. Keep your students' minds on science by getting their attention. Hands on and demo activities to excite student learning.  <b>Level/Content:</b> Middle General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Techwood  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: Training Teachers to Apply Inquiry in K-12 Science</b>  <b>Presenters:</b> Dr. Gail Marshall, Judy Cox, Dr. Sharmistha Basu-Dutt, Dr. Heidi Banford, Dr. Joy Black, Dr. Tim Chowns, Stephanie Miles, Brandie Freeman  <b>Description:</b> This presentation will provide examples and data from five successful programs designed to train elementary, middle, and secondary teachers to use inquiry-based science instruction.  <b>Level/Content:</b> College Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: High Incidence Disabilities in the Science Classroom</b>  <b>Presenters:</b> Lisa Alexander, Ed.D, Ginger Harbin, Ed.D  <b>Description:</b> Ever taught students with ADD, Autism, and Learning Disabilities? This workshop provides you with an opportunity to learn how to reach these students while still meeting the GPS.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Manila  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: GYSTC: Science and Storytelling</b>  <b>Presenters:</b> Paula Chambers, Ph.D., Lynn Larsen  <b>Description:</b> Come learn about using storytelling to teach science standards.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Piedmont  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: GEARS Bringing E.T into Your Classroom.</b>  <b>Presenters:</b> Gary Lawhon, Dave Baltenberger  <b>Description:</b> Strategies for incorporating methods of detection of extrasolar planets into the classroom. Participants will assemble visual demonstrators that can be taken home and used in their classroom.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Vinings  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: Physical Science Big 20s</b>  <b>Presenters:</b> Sheila Sholtis  <b>Description:</b> Monitoring student progress results in significant student improvement. Come see one teacher's method of allowing students to gather and graph their own performance data. Students willingly become data driven learners.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Singapore  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: FERNBANK Reaching the 3-5 Science Student</b>  <b>Presenters:</b> Nathaniel Haeck  <b>Description:</b> Having struggles reaching your classes for science? If so, come see these hands on activities that are sure to hook your students into science.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Hong Kong  <b>Time:</b> 1-1:50PM</p>



<p><b>Title: Alternative Energy for Transportation: Hydrogen and Fuel Cells</b>  <b>Presenters:</b> Barbara Nagle, Laura Lenz  <b>Description:</b> Learn about a curriculum module that includes the production of hydrogen, chemistry of hydrogen fuel cells, stoichiometry and energy considerations, and trade-offs of hydrogen fuel cells for transportation. Take home an activity that includes both web-based and hands-on models of the fuel cell redox reaction.  <b>Level/Content:</b> High Chemistry  <b>Day:</b> FRI 2/18 <b>Room:</b> Williams  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: 8th Grade Mini-Conference Show &amp; Share Best Practice Lessons</b>  <b>Presenters:</b> Dr. Greg Rushton  <b>Description:</b> Mini-Conference with 8th Grade Physical Science Teachers sharing Best Practice lessons and resources. Presentors are from KSU MSP Grant Cohorts from North Georgia and Cobb County Schools.  <b>Level/Content:</b> Middle Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> International Ballroom North-Int Tower  <b>Time:</b> 1-1:50PM</p>
<p><b>Title: GABIO: Problem-Based Learning for Middle and High School Science</b>  <b>Presenters:</b> Jordan Rose, Patricia Marsteller  <b>Description:</b> Experience best practices in PBL instruction, access over 200 free PBL lessons, and transform your students into motivated investigators, self-directed and life-long learners, critical thinkers and keen problem solvers.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Vancouver  <b>Time:</b> 1-2:50PM</p>
<p><b>Friday 2/18</b>  <b>2:00 pm</b></p>
<p><b>Title: Garden Earth Naturalists- Exploring Earth's Ecosystems</b>  <b>Presenters:</b> Carol Hoffman, Anne Shenk  <b>Description:</b> The Garden Earth program helps youth investigate earth's ecosystems as citizen scientists and take positive actions through service learning. We present a program overview and activities from science night kits.  <b>Level/Content:</b> Elementary Biology (Life Science)  <b>Day:</b> FRI 2/18 <b>Room:</b> Inman  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: GABIO Evaluating the Routes of Vaccine Immunization</b>  <b>Presenters:</b> Samantha Andrews, Nicholas Parnell, Gustavia Evans  <b>Description:</b> This activity will use ELISA to assess the effectiveness of influenza vaccine when delivered using different routes of administration  <b>Level/Content:</b> High Biotechnology  <b>Day:</b> FRI 2/18 <b>Room:</b> Montreal  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: GABIO Introducing Epidemiology through a Foodborne Outbreak Demonstration: Who Ate the Potato Salad?</b>  <b>Presenters:</b> Ralph Cordell  <b>Description:</b> This session demonstrates an activity centered around a mock outbreak of food poisoning. Students collect, analyze, and interpret data using the same methods used by CDC epidemiologists in conducting these investigations.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Cairo  <b>Time:</b> 2-2:50PM</p>

<p><b>Title: Baby, You Move Me!</b>  <b>Presenters:</b> Sharon Golden, Jenny Hohn  <b>Description:</b> Make learning about Simple Machines and Force &amp; Motion FUN for your students! Come try a variety of hands-on, inquiry based performance activities that will enhance your teaching.  <b>Level/Content:</b> Elementary Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> International Ballroom North-Int tower  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: GEARS Hi-Tech Astronomy: Using Technology to Engage Students in High Level Data Analysis</b>  <b>Presenters:</b> Michelle Davis  <b>Description:</b> Dust off your technology! Get ready to engage students in data analysis with graphing calculators, computers, and CBLs. Adaptable lesson plans, labs and activities will be provided.  <b>Level/Content:</b> High Earth/Space Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Vinings  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: Let's Get Vertical! Using Vertical Teams to Help Improve Student Success</b>  <b>Presenters:</b> Alfred Porter  <b>Description:</b> Session participants will be able to use strategies discussed in this presentation to create K-12 Vertical Teams within their District.  <b>Level/Content:</b> 6-12 General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Spring  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: Saving Energy at Home and School</b>  <b>Presenters:</b> Rebecca Lamb, Karen Reagor  <b>Description:</b> Lessons and activities teach energy efficiency and conservation at home and school. Receive sample materials and innovative ideas to implement an energy management program in your classroom or school.  <b>Level/Content:</b> Middle General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Techwood  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: Emotions and neurocognition: Bridging the gap for science success</b>  <b>Presenters:</b> Marilyn Simmons Bowe  <b>Description:</b> This presentation will demonstrate the link between learning styles and emotional pathways and how they may impact academic achievement for African Americans in Science, Technology, Engineering, and Mathematics (STEM) Disciplines.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Edgewood  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: Laminated Assessment</b>  <b>Presenters:</b> Judy Ward  <b>Description:</b> Ideas will be presented to help with assessing and monitoring student learning of science standards with a concentration in physical science and biology using laminated hands-on activities.  <b>Level/Content:</b> College Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 2-2:50PM</p>
<p><b>Title: Writing to Learn in Science</b>  <b>Presenters:</b> Amy Kezman, Peggy Bailey  <b>Description:</b> Our session focuses on using journals in the science classroom. Journals promote written and oral literacy, reading and vocabulary development, and help identify misconceptions for more effective teaching and learning. This workshop will inspire your teaching.  <b>Level/Content:</b> High Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Lenox  <b>Time:</b> 2-2:50PM</p>

**Title: The NSTA Learning Center--Online Content Building Resources for Teachers of Science****Presenters:** Ed Rock**Description:** NSTA's Learning Center (<http://learningcenter.nsta.org>) provides thousands of standards-aligned science resources and tools 24/7 for teachers.**Level/Content:** K-8

Interdisciplinary

**Day:** FRI 2/18**Room:** Manila**Time:** 2-2:50PM**Title: GYSTC: Teaching Science with Children's Literature****Presenters:** Lynn Larsen, Steve Rich**Description:** Come learn strategies and examples for using children's literature to teach science standards.**Level/Content:** Elementary

Interdisciplinary

**Day:** FRI 2/18**Room:** Piedmont**Time:** 2-2:50PM**Title: Inquiry Hands on Labs for Physics and Physical Science****Presenters:** Alfred Porter**Description:** How do you turn traditional physics classroom into an inquiry based environment without reinventing the wheel.**Level/Content:** High

Physical Science

**Day:** FRI 2/18**Room:** Singapore**Time:** 2-2:50PM**Title: FERNBANK 6th Grade GPS On The Rocks****Presenters:** Dr. Bill Witherspoon**Description:** Lab activities, developed by a Fernbank Science Center geologist for use with the 6th grade GPS, help students connect rock textures to their igneous, sedimentary, or metamorphic origins. Further computer-based activities help them connect rock origins to plate tectonic-driven Earth processes.**Level/Content:** Middle

Earth/Space Science

**Day:** FRI 2/18**Room:** Hong Kong**Time:** 2-2:50PM**Title: Folding for Lasting Understanding: Notebook Foldables® in the K-8 Classroom****Presenters:** Nancy Wisker**Description:** Recharge your students' interactive notebooks and turn on the motivation factor with Dinah Zike's Foldables®. Discover how to morph student notebooks into dimensional, individualized, and brain-smart tools.**Level/Content:** K-8

Interdisciplinary

**Day:** FRI 2/18**Room:** Williams**Time:** 2-2:50PM

**Exhibit Hall Door Prize Give Away &  
GSTA District Director Meet and Greet  
Friday 2/18 3:00-3:50 pm**

## Friday 2/18

### 4:00 pm

**Title: GABIO HANDS ON Science: Reinforce Curriculum with Engaging Activities**

**Presenters:** Domonique Lemon

**Description:** GABIO: Get your students' HANDS ON the science material to reinforce lessons taught. Use our healthcare camp activities in the classroom to create a fun and engaging learning environment.

**Level/Content:** 6-12 Biology (Life Science)

**Day:** FRI 2/18

**Room:** Vancouver

**Time:** 4-4:50PM

**Title: GABIO A 3-week unit of Biotech for Any Biology Class**

**Presenters:** Amy Naum

**Description:** Learn how to implement a 3-week unit to introduce biology students to the science and business of biotechnology including hand on activities that investigate how biotechnology has impacted research, manufacturing, and diagnostics in today's society.

**Level/Content:** High Biotechnology

**Day:** FRI 2/18

**Room:** Montreal

**Time:** 4-4:50PM

**Title: GABIO CDC Career Paths: Introducing Public Health Science Education**

**Presenters:** Candace Kirksey Jones, Esther M. Shisoka

**Description:** This session introduces public health, public health careers, and integrating public health science education into the middle and high school curriculum. We will explore CDC's public health education programs, resources, and activities that promote careers in public health.

**Level/Content:** 6-12 Interdisciplinary

**Day:** FRI 2/18

**Room:** Cairo

**Time:** 4-4:50PM

**Title: GABIO Bioscience Curriculum Resources for Your Classroom (Panel Discussion)**

**Presenters:** Tony Beck, Ralph Cordell

**Description:** Need new ideas and resources for teaching Bioscience? A wealth of resources have been developed with federal funding, but searching through the materials and websites may be daunting. Join a panel of experts as they guide you to new resources for elementary, middle and high school science teaching, and highlight their favorite sites and materials to bring to your classroom.

**Level/Content:** K-12 Biology (Life Science)

**Day:** FRI 2/18

**Room:** International Ballroom South-Int Tower

**Time:** 4-4:50PM

**Title: Rock Roulette**

**Presenters:** James Morris

**Description:** How can we make rocks "rock"? If we make the students "be" the rock, then they will have a better understanding of how the rocks flow through the rock cycle.

**Level/Content:** 6-12 Earth/Space Science

**Day:** FRI 2/18

**Room:** Lenox

**Time:** 4-4:50PM

**Title: GEARS Windows in the Atmosphere: Radiation sources, detectors and shields**

**Presenters:** Kevin McReynolds

**Description:** This hands-on workshop is designed to provide a logical extension of the electromagnetic (EM spectrum) discussions. We will test common materials for properties of transmission or absorption

**Level/Content:** 6-12 Earth/Space Science

**Day:** FRI 2/18

**Room:** Vinings

**Time:** 4-4:50PM

<p><b>Title: Formative and Summative Foldables for 4th and 5th</b>  <b>Presenters:</b> Jamie Lattimore, Catherine Leftwich  <b>Description:</b> We will provide exciting new methods for assessment so that your teaching can be more precisely targeted and differentiated for your student population. We will also provide some summative options as well. 4th and 5th grade teachers - you are NOT going to want to miss this one!  <b>Level/Content:</b> Elementary General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Manila  <b>Time:</b> 4-4:50PM</p>
<p><b>Title: Taking Turtles to Your Classroom</b>  <b>Presenters:</b> Marti Schriver, Karen Chassereau  <b>Description:</b> Learn how teachers have taken their experiences at the Georgia Sea Turtle Center and developed activities you can take back to your classroom.  <b>Level/Content:</b> K-8 General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Kennesaw  <b>Time:</b> 4-4:50PM</p>
<p><b>Title: Educating Students for a Sustainable World</b>  <b>Presenters:</b> David Messer  <b>Description:</b> Turn today's global challenges into thought-provoking lessons with hands-on activities that explore world population growth, natural resource use, climate change and social justice. Free CD-ROMs of lesson plans.  <b>Level/Content:</b> Middle General Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Techwood  <b>Time:</b> 4-4:50PM</p>
<p><b>Title: Treasures in the Classroom: Geocaching</b>  <b>Presenters:</b> Cynthia Wolfe  <b>Description:</b> Excite your students by turning learning into a game. Sneak in some skills. Geocaching is a way to integrate multiple disciplines and just have fun  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Edgewood  <b>Time:</b> 4-4:50PM</p>
<p><b>Title: Spectacular Science Fair Fun</b>  <b>Presenters:</b> Anna Stanfield  <b>Description:</b> Do you want to learn the secrets of a fantastic science fair project? Then check out the Spectacular Science Fair Fun program. You will learn where to find the latest news, rules, and help along the way.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Piedmont  <b>Time:</b> 4-4:50PM</p>
<p><b>Title: Igniting Excitement in Science through an Electric Vehicle Program</b>  <b>Presenters:</b> Rachael Parr, Luis Romo, Tiffany Barnett  <b>Description:</b> Ignite students excitement for learning by organizing an Electric Vehicle Club!  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> FRI 2/18 <b>Room:</b> Spring  <b>Time:</b> 4-4:50PM</p>
<p><b>Title: Optics with Light and Color: A Series of EnLIGHTening Experiments!</b>  <b>Presenters:</b> Chris Neill, Wendy Delano, Alen Brown  <b>Description:</b> Experience Light &amp; Color using LED flashlights, filters, lasers and more! Try color mixing, view light spectra with diffraction glasses and explore reflection, refraction, and internal reflection with lasers and prisms.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> FRI 2/18 <b>Room:</b> Singapore  <b>Time:</b> 4-4:50PM</p>

**Title: Succession: The Journey****Presenters:** Carol Potter**Description:** Learn while they play. This fun board game takes students on a journey from bare rock to climax community.**Level/Content:** High

Biology (Life Science)

**Day:** FRI 2/18**Room:** Inman**Time:** 4-4:50PM**Title: FERNBANK The Zero G Experience****Presenters:** Dr. Debi Huffman, Nathaniel Haeck**Description:** Ever wondered what it is like in a Zero Gravity environment? Come see a team that worked with NASA last spring and went to Houston, TX and flew an experiment on the Zero-G Flight.**Level/Content:** 6-12

Physical Science

**Day:** FRI 2/18**Room:** Hong Kong**Time:** 4-4:50PM**Title: A Proactive/Reactive Approach to Helping Students Pass the GHSGT in Science (2011 Version)****Presenters:** Bronwyn Hogan, Stephen Beall, Joe Cox**Description:** Collecting resources to help your students on the HSGT. Join us as we share our strategies and materials to increase success on the HSGT.**Level/Content:** High

Interdisciplinary

**Day:** FRI 2/18**Room:** Williams**Time:** 4-4:50PM**2011 GSTA Awards Banquet**

The Georgia Aquarium Ocean Ballroom  
 Dinner by Wolfgang Puck Catering  
 Friday, February 18, 6:00pm-10:00pm

Speaker: Dr. Sharon Boyer  
 Fayette County Schools  
 "The Problems and Possibilities of Letters"

The Georgia Science Teacher Association would like to invite you to attend the Georgia Science Teacher Association Award Celebration at the Georgia Aquarium. Our guest speaker will be Dr. Sharon Boyer. Dr. Boyer holds a B.S. Natural Resources in Environmental Education from Ohio State University, Masters in Education in Science Education from the University of Georgia, and her Doctorate of Education in Educational Leadership from the University of Georgia. She is currently the Coordinator of Science, Elementary Technology, and High School Remediation Programs in Fayette County. Over her educational career, Dr. Boyer has served on the Board of numerous organizations, including the Environmental Education Alliance, Fayette Clean and Beautiful, Georgia Youth for Science and Technology Council, and Southern Preservation Trust, Inc.. She is currently serving on the Board for the Georgia Science Supervisors Association and is the Exhibits Chair for the Georgia Science Teacher Association. Dr. Boyer has been actively involved with the Board of the Georgia Science Teacher Association since 1981. She has served as Director, President, President-Elect, Science Supervisors Representative, District Representative. Dr. Boyer has received the Dallas Steward Award from the Georgia Science Teacher Association and the Project WET Facilitator of the Year Award. Sharon Boyer, Ed.D. will be a dynamic speaker at the Georgia Science Teacher Association Award Program at the Georgia Aquarium. You will not want to miss this opportunity to share with the Georgia Science Teacher Association Board as we recognize amazing people who are influencing science education across Georgia.



**Title: Differentiating Instruction in Reg & Gifted Classrooms Using Menus and Projects for Assessments**

**Presenters:** Jean Reeves, Anita McWhorter

**Description:** Engage students by implementing Choice in your lessons! Students are given Menus and decide how they will produce a product that shows what they have learned. It gives them ownership in their learning and assessment while allowing them to use creativity and have fun.

**Level/Content:** Middle Physical Science

**Day:** SAT 2/19

**Room:** Kennesaw

**Time:** 8:30-9:20AM

**Title: Using Online Simulations to Improve Conceptual Understanding in Science**

**Presenters:** Dr. Trinna McKay

**Description:** Learn how online simulations help teachers take advantage of research proven instructional strategies and help students develop conceptual understanding in science. Teachers can supplement and enhance instruction with interactive visualizations of concepts. Students can manipulate key variables, and engage in extensive "what-if" experimentation.

**Level/Content:** 6-12 Interdisciplinary

**Day:** SAT 2/19

**Room:** Piedmont

**Time:** 8:30-9:20AM

**Title: Fueling the Future: Energy Interconnections and Sustainable Choices**

**Presenters:** Thomas Allison

**Description:** Experience hands-on lessons that demonstrate the interconnections between energy sources, human choices, economic challenges, and environmental impacts. Think critically about the science behind the headlines. Includes free curriculum!

**Level/Content:** 6-12 General

**Day:** SAT 2/19

**Room:** Techwood

**Time:** 8:30-9:20AM

**Title: Why Does The Water Rise? Science and Inquiry**

**Presenters:** Francis Gardner

**Description:** Experience an innovative activity that will introduce students to inquiry techniques necessary to any scientific investigation using materials obtained at the grocery store while demonstrating principles achievable by all students.

**Level/Content:** 6-12 General Science

**Day:** SAT 2/19

**Room:** Manila

**Time:** 8:30-10:20AM

**Title: CLEAN UP OR PAY UP!**

**Presenters:** Terri George, Nancy Adgate, Terry Belflower

**Description:** Come clean-up or pay-up! This is a 6-12 integrated environmental studies pollution unit. Activity based workshop involving government, economics, math, earth science, chemistry, ecology, and environmental science.

**Level/Content:** 6-12 Interdisciplinary

**Day:** SAT 2/19

**Room:** Cairo

**Time:** 8:30-10:20AM

**Title: Building Steamboats: Hands on exploration of energy transformations**

**Presenters:** Brian Post, Jamila Cola, Gustavia Evans

**Description:** This hands-on activity will investigate enabling technology of the industrial revolution by creating simple steam boats. Participants will build steam boats and learn about energy transformation

**Level/Content:** Middle Physical Science

**Day:** SAT 2/19

**Room:** Singapore

**Time:** 8:30-10:20AM



**Saturday 2/19**  
**9:30 am**

**Title: Data, Data Everywhere – What Do You Know About Your Students**

**Presenters:** Ginger Harbin, Lisa Alexander

**Description:** Applicable to all grades- this presentation will explore how to interpret data from a variety of sources and make that knowledge work for you and your students.

**Level/Content:** K-8 Interdisciplinary

**Day:** SAT 2/19

**Room:** Lenox

**Time:** 9:30-10:20AM

**Title: Passing Science Assessments with ABC & Techno Textbooks**

**Presenters:** Michelle Gunter

**Description:** ABC's e-books and digital flashcards utilize interactive whiteboards to display and manipulate information in your classroom. Participants will receive free digital sample materials.

**Level/Content:** 6-12 Interdisciplinary

**Day:** SAT 2/19

**Room:** Vinings

**Time:** 9:30-10:20AM

**Title: Introducing Simple Electrical Circuits**

**Presenters:** Scott Thompson

**Description:** In this hands-on session, participants will use inexpensive materials to construct and investigate the properties of simple electrical circuits containing batteries and light bulbs.

**Level/Content:** 6-12 Physics

**Day:** SAT 2/19

**Room:** Spring

**Time:** 9:30-10:20AM

**Title: Academic Exploration of Antarctic Peninsula**

**Presenters:** Susan Kramer

**Description:** Visual presentation and discussion of the exploration of the Antarctic Peninsula. Will include wildlife studies and connections to earth science, environmental science, conservation and natural history as seen through the camera and experiences of the participant.

**Level/Content:** 6-12 Interdisciplinary

**Day:** SAT 2/19

**Room:** Piedmont

**Time:** 9:30-10:20AM

**Title: Engaging Students with Climate Change: Global Connections and Sustainable Solutions**

**Presenters:** Thomas Allison

**Description:** Climate change as an interdisciplinary teaching tool. Experience hands-on lessons that demonstrate the interconnections between natural systems and human actions using carbon footprint, emissions trading and energy policy. Free curriculum!

**Level/Content:** 6-12 General

**Day:** SAT 2/19

**Room:** Techwood

**Time:** 9:30-10:20AM

**Title: Learning to Play or Playing to Learn**

**Presenters:** Virginia Wilcox

**Description:** We'll take a look at the learning that can occur as children are allowed to simply 'play' with a variety of materials.

**Level/Content:** Elementary General Science

**Day:** SAT 2/19

**Room:** Montreal

**Time:** 9:30-11:20AM

<p><b>Title: Growing the Outdoor Learning Movement</b>  <b>Presenters:</b> Karen Garland  <b>Description:</b> Creating places of educational value that foster creative play, inspire a sense of wonder, and encourage learning is a no-risk investment. Connections will be made to the natural world through hands-on activities. Resources provided.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Vancouver  <b>Time:</b> 9:30-11:20AM</p>
<p><b>Title: Teaching Academic Vocabulary Using Dinah Zike's Foldables®</b>  <b>Presenters:</b> Nancy Wisker  <b>Description:</b> In this fast-paced, make-and-take session, learn how three-dimensional graphic organizers known as Foldables® can help enrich your instruction of, and student retention of, science academic vocabulary.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Kennesaw  <b>Time:</b> 9:30-11:20AM</p>
<p><b>Title: Teaching Our Hominin Past in the Context of Climate Change in Georgia Schools</b>  <b>Presenters:</b> Dr. Norm Thomson  <b>Description:</b> Teachers are invited to participate in a hands-on workshop using hominid skulls to help interpret how climate change has affected our evolution over the past 6-7 million years. Participants will receive relevant cross-subject area curriculum materials that compliment the unit - all relevant to the GPS.  <b>Level/Content:</b> 6-12 Biology (Life Science)  <b>Day:</b> SAT 2/19 <b>Room:</b> Inman  <b>Time:</b> 9:30AM-11:20PM</p>
<p><b>Saturday 2/19</b>  <b>10:30 am</b></p>
<p><b>Title: Taking Advantage of Opportunities in Science</b>  <b>Presenters:</b> Michael Mahan  <b>Description:</b> Opportunities for learning through announcements from science agencies and national organizations.  <b>Level/Content:</b> College Biology (Life Science)  <b>Day:</b> SAT 2/19 <b>Room:</b> Lenox  <b>Time:</b> 10:30-11:20AM</p>
<p><b>Title: Engaging Students in Science Content through Global Issues &amp; Sustainability</b>  <b>Presenters:</b> Thomas Allison  <b>Description:</b> Bring global issues to your classroom using ecological footprint, renewable resources, and sustainability audits. Experience standards-based, engaging, hands-on lessons that bring science content to life. Free curriculum!  <b>Level/Content:</b> 6-12 General  <b>Day:</b> SAT 2/19 <b>Room:</b> Techwood  <b>Time:</b> 10:30-11:20AM</p>
<p><b>Title: Hosting a Student-Led Family Science Night Event</b>  <b>Presenters:</b> Donna Governor  <b>Description:</b> Come learn some tips and strategies for developing a successful student-run family science night at your school.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Hong Kong  <b>Time:</b> 10:30-11:20AM</p>

<p><b>Title: Using Inflatables To Enhance Science Instruction</b>  <b>Presenters:</b> Joey Nunn  <b>Description:</b> Session focuses on using large and small scale inflatables to support science instruction in most grade levels. Inexpensive methods will be illustrated to promote this highly engaging learning tool.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> International Ballroom South-Int Tower  <b>Time:</b> 10:30-11:20AM</p>
<p><b>Title: Educators Unite: Development of a Professional Learning Community</b>  <b>Presenters:</b> Essie Smith, Maher Atteya, Ilse Ricketts, Tanya Wall, Sherri Sewall, Yolanda Dixon, Ruth Small, Carolyn Dupree, Myrna Nicholas  <b>Description:</b> This session will describe the PLC formed between Georgia Perimeter College science faculty and teachers from various DeKalb County elementary schools. They shared content lessons and instructional strategies to promote K-12 student preparation for and interest in majoring in STEM in college.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Vinings  <b>Time:</b> 10:30-11:20AM</p>
<p><b>Title: Reptile Wranglers</b>  <b>Presenters:</b> Ken Panse, Zack Panse  <b>Description:</b> Join us for an engaging look into the lives of snakes, lizards, turtle/tortoises, toads/frogs and a few giant arthropods. Feel free to interact with the Reptile Wranglers Ken and Zack as they share interesting facts about their critters!  <b>Level/Content:</b> K-12 Biology (Life Science)  <b>Day:</b> SAT 2/19 <b>Room:</b> Piedmont  <b>Time:</b> 10:30-11:20AM</p>
<p><b>Title: The Origins of Life from Chemical Inventory</b>  <b>Presenters:</b> Lakshmi Anumukonda, Ragan Buckley, Jamila Cola  <b>Description:</b> Teachers will have a chance to incorporate thin layer chromatography, a separation technique, to teach Evolution in Biology and Properties of matter in Chemistry to motivate and inspire student learning  <b>Level/Content:</b> High Chemistry  <b>Day:</b> SAT 2/19 <b>Room:</b> Spring  <b>Time:</b> 10:30AM-12:20PM</p>
<p><b>Title: Case Based Learning on a Time Budget</b>  <b>Presenters:</b> Melanie Snow  <b>Description:</b> Science classrooms are encouraged to teach using standards, inquiry, real world scenarios, and differentiated instruction, while engaging students. Case based learning can roll it all into one within the time constraints of your class.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Manila  <b>Time:</b> 10:30AM-12:20PM</p>
<p><b>Title: Fun for All Ages with Sound and Waves</b>  <b>Presenters:</b> Lila Adair, Garry Loveless  <b>Description:</b> Looking for fun hands-on activities and demos for teaching sound and waves? Come try our best discovery-based teaching ideas. Lesson plans for all grade levels.  <b>Level/Content:</b> 6-12 Physical Science  <b>Day:</b> SAT 2/19 <b>Room:</b> Cairo  <b>Time:</b> 10:30AM-12:20PM</p>

<p><b>Title: Forms of Energy and Energy Transformations</b>  <b>Presenters:</b> Rebecca Lamb, Karen Reagor  <b>Description:</b> Confidently teach important science concepts with center-based, hands-on activities that investigate forms of energy: motion, sound, thermal, radiant, electrical and chemical energy, and the energy transformations between them.  <b>Level/Content:</b> Middle Physics  <b>Day:</b> SAT 2/19 <b>Room:</b> Singapore  <b>Time:</b> 10:30AM-12:20PM</p>
<p><b>Saturday 2/19</b>  <b>11:30 am</b></p>
<p><b>Title: Butterflies! Engage students, teach GPS, do real science</b>  <b>Presenters:</b> Donna Gast, Rachel Small  <b>Description:</b> Engage students from the first day with butterflies and caterpillars! Learn about Project MonarchHealth (citizen science), monarch tagging, GPS activities, tips for inexpensively attracting and raising butterflies. Lesson plans. Freebies.  <b>Level/Content:</b> K-8 Biology (Life Science)  <b>Day:</b> SAT 2/19 <b>Room:</b> Vinings  <b>Time:</b> 11:30AM-12:20PM</p>
<p><b>Title: Teaching Engineering in the High School Classroom</b>  <b>Presenters:</b> Linda Patterson  <b>Description:</b> At Wheeler we have been able to provide courses in chemical, material, civil, aeronautical, and biomedical engineering. Learn what works and where our challenges have been. We'll provide you with a blueprint for starting something similar at your school.  <b>Level/Content:</b> High Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Hong Kong  <b>Time:</b> 11:30AM-12:20PM</p>
<p><b>Title: The Gulf Oil Spill: An Inquiry Based Activity</b>  <b>Presenters:</b> Brian Post, Jamila Cola  <b>Description:</b> Teachers will participant in inquiry-based hands on activity to discuss the causes, and investigate the science behind and efforts to clean up the Gulf of Mexico Oil Spill.  <b>Level/Content:</b> Middle Physical Science  <b>Day:</b> SAT 2/19 <b>Room:</b> Lenox  <b>Time:</b> 11:30AM-12:20PM</p>
<p><b>Title: Hands-On Science</b>  <b>Presenters:</b> Stephanie Shultz  <b>Description:</b> Using all process skills, participants will be engaged in a variety of activities that are applied to physical, life and earth science. Participants will leave with a variety of lesson ideas.  <b>Level/Content:</b> Elementary General Science  <b>Day:</b> SAT 2/19 <b>Room:</b> Montreal  <b>Time:</b> 11:30-1:20PM</p>
<p><b>Title: 4-H Green Thumb Garden Club of Putnam Co. Elementary</b>  <b>Presenters:</b> Lillian Johnston Butterworth, Linda Jorgensen, Keith Fielder  <b>Description:</b> Science concepts are being taught through an afterschool Garden Club where students start plants in the greenhouse, grow vegetables to eat, and create a habitat for butterflies and birds.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Vancouver  <b>Time:</b> 11:30-1:20PM</p>

**Saturday 2/19**  
**12:30 pm**

**Title: ELLs in the Science Classroom**

**Presenters:** Penni Johnson, Angela Reed

**Description:** The presentation will demonstrate strategies used in an ELL inclusion on-level Biology course.

**Level/Content:** High

Biology (Life Science)

**Day:** SAT 2/19

**Room:** Cairo

**Time:** 12:30-1:20PM

**Title: Professor Boggs writes and performs original songs about science!**

**Presenters:** Larry Morris

**Description:** His tunes are geared towards the middle grades curriculum, and cover a mix of earth/space, life and physical science topics. These fun, engaging, witty songs not only entertain, but actually teach and motivate core science content directly aligned to GPS. Come Sing-a-long!

**Level/Content:** Middle

General

**Day:** SAT 2/19

**Room:** Singapore

**Time:** 12:30-1:20PM

**Title: Classrooms Without Walls: Wetlands & Forest & Critters, Oh! My!**

**Presenters:** Randall Spaid, Sumitra Himangshu

**Description:** In this session we will share three outdoor classroom curriculum modules 1300 7th grade students and teachers used to explore river, forest and wetland ecosystems with digital cameras and probeware.

**Level/Content:** Middle

Biology (Life Science)

**Day:** SAT 2/19

**Room:** Vinings

**Time:** 12:30-1:20PM

**Title: From the Sun to Pluto and Beyond**

**Presenters:** Nancy Sills

**Description:** Activities, multimedia resources, lesson plan will be presented as we travel from the Sun to the outer reaches of Our Solar System. Free resources from NASA, etc.

**Level/Content:** Middle

Earth/Space Science

**Day:** SAT 2/19

**Room:** Lenox

**Time:** 12:30-1:20PM

**Title: Once Upon a Science Book: Develop successful science readers!**

**Presenters:** Jodi Wheeler-Toppen

**Description:** Let the author of NSTA Press' "Once Upon a Life Science Book" show you how to create lessons that teach science and reading at the same time. Take home a complete lesson to use with your classes!

**Level/Content:** Middle

General Science

**Day:** SAT 2/19

**Room:** Hong Kong

**Time:** 12:30-1:20PM

**Title: Chemistry and the Atom: Fun with Atom Building Games!**

**Presenters:** Chris Neill, Wendy Delano, Alen Brown

**Description:** Experience innovative games and activities that give students with different learning styles opportunities to explore and grasp atomic structure and the periodic table.

**Level/Content:** 6-12

General Science

**Day:** SAT 2/19

**Room:** Spring`

**Time:** 12:30-1:20PM

<p><b>Title: How can elementary science activities be more inquiry-based?</b>  <b>Presenters:</b> Glenda Ogletree  <b>Description:</b> Participate in changing ordinary science activities into inquiry-based experiences for elementary students using a learning cycle format.  <b>Level/Content:</b> Elementary General Science  <b>Day:</b> SAT 2/19 <b>Room:</b> Manila  <b>Time:</b> 12:30-2:20PM</p>
<p><b>Saturday 2/19</b>  <b>1:30 pm</b></p>
<p><b>Title: Plate Tectonics</b>  <b>Presenters:</b> Carolina Teaching Partner  <b>Description:</b> Participants will use a model volcano to explore shield volcanoes and investigate viscosity, temperature, and speed of lava flow. We will also explore literacy and technology connections.  <b>Level/Content:</b> Middle Earth/Space Science  <b>Day:</b> SAT 2/19 <b>Room:</b> Singapore  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Improving Students' Scientific Discourse Through Academic Language Learning</b>  <b>Presenters:</b> Dr. Sharan R. Crim  <b>Description:</b> This symposium will focus on utilizing science teaching strategies to improve English Language Learners' scientific discourse by connecting students' acquisition of science content to academic language learning.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Cairo  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Elementary Share-a-thon</b>  <b>Presenters:</b> Tracey Rivers  <b>Description:</b> Join your colleagues to share their Best and Brightest Elementary Science Instructional Strategies.  <b>Level/Content:</b> Elementary Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Hong Kong  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Middle School Share-a-thon</b>  <b>Presenters:</b> Jan Rebel  <b>Description:</b> Join your colleagues to share their Best and Brightest Middle School Science Instructional Strategies.  <b>Level/Content:</b> Middle Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Vinings  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: High School Share-a-thon</b>  <b>Presenters:</b> Dr. Warren Barnard  <b>Description:</b> Join your colleagues to share their Best and Brightest High School Science Instructional Strategies.  <b>Level/Content:</b> High Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Vancouver  <b>Time:</b> 1:30-2:20PM</p>

<p><b>Title: Physics of Fluids</b>  <b>Presenters:</b> Jaclyn Murray  <b>Description:</b> Revamp your forces curriculum by incorporating the buoyant force. Labs/activities will be shared.  <b>Level/Content:</b> High Physics  <b>Day:</b> SAT 2/19 <b>Room:</b> Spring  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Title: Science Literacy in the 21st Century</b>  <b>Presenters:</b> Paula Fowler , Christopher Zornes  <b>Description:</b> The NGHS Physics students are improving their literacy skills and science knowledge with: peer-led presentations through electronic journaling as a replacement of lab notebooks, and engineering journals that document the design, construction, testing, design changes, and principles of physics associated with their mousetrap cars.  <b>Level/Content:</b> High Physics  <b>Day:</b> SAT 2/19 <b>Room:</b> Lenox  <b>Time:</b> 1:30-2:20PM</p>
<p><b>Saturday 2/19</b>  <b>2:30 pm</b></p>
<p><b>Title: Using Interactive Notebooks to integrate across the curriculum</b>  <b>Presenters:</b> Janice Belcher, Sally Creel  <b>Description:</b> Make your student notebooks come alive! Interactive notebooks promote organization, engage students, and encourage students to process information, combine words and visuals, become a working portfolio, and demonstrate critical thinking.  <b>Level/Content:</b> K-8 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Cairo  <b>Time:</b> 2:30-3:20PM</p>
<p><b>Title: Integrating Science, Math and Agriculture; The STEM Program in Madison County</b>  <b>Presenters:</b> Andy Felt, Cindy Jones  <b>Description:</b> This session will focus on how Madison County is leveraging technology to fulfill Title IID STEM grant outcomes. These outcomes include creating interdisciplinary projects, teaching 21<sup>st</sup> century skills, promoting long-term economic growth, community partnerships, and stimulating interest in STEM careers.  <b>Level/Content:</b> 6-12 Interdisciplinary  <b>Day:</b> SAT 2/19 <b>Room:</b> Hong Kong  <b>Time:</b> 2:30-3:20PM</p>

# GSTA Exhibitors

<b>Booth#</b>	<b>Exhibitor</b>	<b>Website</b>
806	AIMS Education Foundation	<a href="http://www.aimsedu.org">www.aimsedu.org</a>
907	American 3B Scientific	<a href="http://www.3bscientific.com">www.3bscientific.com</a>
1104	American Book Company	<a href="http://www.americanbookcompany.com">www.americanbookcompany.com</a>
404	Blue Ridge Outdoor Education Center	<a href="http://www.blueridgeoec.com">www.blueridgeoec.com</a>
801-802	Capital Microscope Services, Inc.	<a href="http://www.microscopesandmore.com">www.microscopesandmore.com</a> , <a href="http://www.swift-">www.swift-</a>
905-906	Carolina Biological Supply Co.	<a href="http://www.carolina.com">www.carolina.com</a>
200	Centers for Disease Control and Prevention	<a href="http://www.cdc.gov/EXCITE">www.cdc.gov/EXCITE</a>
201	Charlie Elliott Wildlife Center/GA-DNR	<a href="http://www.georgiawildlife.com">www.georgiawildlife.com</a>
606	Chattahoochee Nature Center	<a href="http://www.chattnaturecenter.org">www.chattnaturecenter.org</a>
503	Cochran Mill Nature Center	<a href="http://www.cochranmillnaturecenter.org">www.cochranmillnaturecenter.org</a>
304	Conserve Georgia / Dept of Natural Resources	<a href="http://www.conservegeorgia.org">www.conservegeorgia.org</a>
300/400	CPO Science	<a href="http://www.cposcience.com">www.cposcience.com</a>
401-402	Delta Education	<a href="http://www.deltaeducation.schoolspecialty.com">www.deltaeducation.schoolspecialty.com</a>
105-106	Dinah-Might Adventures, LP	<a href="http://www.dinah.com">www.dinah.com</a>
1205	Elachee Nature Science Center	<a href="http://www.elachee.org">www.elachee.org</a>
407	Environmental Education Alliance of Georgia	<a href="http://www.eealliance.org">www.eealliance.org</a>
1003	ETA/Cuisenaire	<a href="http://www.etacuisenaire.com">www.etacuisenaire.com</a>
804	ExploreLearning	<a href="http://www.explorelearning.com">www.explorelearning.com</a>
805	Fisher Science Education	<a href="http://www.fisheredu.com">www.fisheredu.com</a>
704	Flinn Scientific, Inc.	<a href="http://www.flinnsci.com">www.flinnsci.com</a>
301-302	Frey Scientific	<a href="http://www.freyscientific.com">www.freyscientific.com</a>
505	Georgia 4-H Environmental Education	<a href="http://www.georgia4h.org/ee">www.georgia4h.org/ee</a>
405	Georgia Aquarium	<a href="http://www.georgiaaquarium.org">www.georgiaaquarium.org</a>
100	Georgia Bioscience Technology Institute	<a href="http://www.gabioscience.org">www.gabioscience.org</a>
1004	Georgia Farm Bureau Fed/Ag in the Classroom	<a href="http://www.gfb.org">www.gfb.org</a>
1107	Georgia Mineral Society	<a href="http://www.gamineral.org">www.gamineral.org</a>
604	Georgia Museum of Natural History	<a href="http://naturalhistory.uga.edu">http://naturalhistory.uga.edu</a>
605	Georgia Project Learning Tree	<a href="http://www.georgiaplt.org">www.georgiaplt.org</a>
1007	Georgia Southern Museum Outreach Programs	<a href="http://ceps.georgiasouthern.edu/museum/education/Outreach.html">http://ceps.georgiasouthern.edu/museum/education/Outreach.html</a>



<b>Booth#</b>	<b>Exhibitor</b>	<b>Website</b>
303	Georgia Youth Science & Technology Centers, Inc.	<a href="http://www.gystc.org">www.gystc.org</a>
406	Georgians Experience Astronomy Research in Schools	<a href="http://cheller.phy.georgiasouthern.edu/">http://cheller.phy.georgiasouthern.edu/</a>
1005	Glencoe/McGraw-Hill	<a href="http://www.glencoe.com">www.glencoe.com</a>
902	Grand Classroom	<a href="http://www.grandclassroom.com">www.grandclassroom.com</a>
807	Great Source Rigby Steck-Vaughn	<a href="http://www.greatsource.com">www.greatsource.com</a>
500/600	GSTA Store	<a href="http://www.georgiascienceteacher.org">www.georgiascienceteacher.org</a>
1105	HolbrookTravel	<a href="http://www.holbrooktravel.com">www.holbrooktravel.com</a>
803	It's About Time	<a href="http://www.its-about-time.com">www.its-about-time.com</a>
602-603	Lab-Aids, Inc.	<a href="http://www.lab-aids.com">www.lab-aids.com</a>
1207	Lasting Impressions	<a href="http://www.lastingimpressionsjewelry.com">www.lastingimpressionsjewelry.com</a>
107	Lesley University	<a href="http://www.lesley.edu/georgia">www.lesley.edu/georgia</a>
203	Linking the Language	<a href="http://www.linkingthelanguage.org">www.linkingthelanguage.org</a>
1106	Little Scientists	<a href="http://www.little-scientists.com">www.little-scientists.com</a>
1103	McWane Science Center	<a href="http://www.mcwane.org">www.mcwane.org</a>
703	Nasco	<a href="http://www.enasco.com">www.enasco.com</a>
501-502	National Geographic School Publishing & Dodge Learning Resources	<a href="http://www.dodgelearning.com">www.dodgelearning.com</a>
705	National Nanotechnology Infrastructure Network	<a href="http://www.mirc.gatech.edu">www.mirc.gatech.edu</a> , <a href="http://www.nnin.org">www.nnin.org</a>
904	National Weather Service	<a href="http://www.weather.gov/atlanta">www.weather.gov/atlanta</a>
706-707	Online Science Mall	<a href="http://www.onlinescience.com">www.onlinescience.com</a>
1001	PASCO scientific	<a href="http://www.pasco.com">www.pasco.com</a>
1102	Pearson Curriculum Group	<a href="http://www.pearsonschool.com">www.pearsonschool.com</a>
1101	Pearson Curriculum Group - Prentice Hall	<a href="http://www.pearsonschool.com">www.pearsonschool.com</a>
701	Petra, Inc.	<a href="http://www.nsta.org">www.nsta.org</a> , <a href="http://www.tcmpub.com">www.tcmpub.com</a> , <a href="http://www.coachbooks.com">www.coachbooks.com</a>
1006	Qwizdom, Inc.	<a href="http://www.qwizdom.com">www.qwizdom.com</a>
903	Sargent Welch - Science Kit - Wards Natural Science	<a href="http://www.sargentwelch.com">www.sargentwelch.com</a> <a href="http://www.sciencekit.com">www.sciencekit.com</a>
206-7/306-7	Science First/Starlab	<a href="http://www.sciencefirst.com">www.sciencefirst.com</a> , <a href="http://www.starlab.com">www.starlab.com</a>
305	SECME, Inc.	<a href="http://www.secme.org">www.secme.org</a>
1002	Space Camp/Aviation Challenge	<a href="http://www.spacecamp.com">www.spacecamp.com</a>
506	Stone Mountain Memorial Association	<a href="http://www.stonemountainpark.org">www.stonemountainpark.org</a>
901	Sundance/Newbridge	<a href="http://www.sundancepub.com">www.sundancepub.com</a> , <a href="http://www.newbridgeonline.com">www.newbridgeonline.com</a>

<b>Booth#</b>	<b>Exhibitor</b>	<b>Website</b>
601	Texas Instruments	<a href="http://www.education.ti.com">www.education.ti.com</a>
507	The Clean Air Campaign, Inc.	<a href="http://www.cleanaircampaign.org">www.cleanaircampaign.org</a>
702	Triumph Learning - Coach	<a href="http://www.triumphlearning.com">www.triumphlearning.com</a>
1205	U.S. EPA SunWise Program	<a href="http://www.epa.gov/sunwise">www.epa.gov/sunwise</a>
204-205	University of Georgia - Entomology Dept & Plant Pathology Dept	<a href="http://plantpath.caes.uga.edu">http://plantpath.caes.uga.edu</a>
403	University of Georgia - Warnell School	<a href="http://www.warnell.uga.edu">www.warnell.uga.edu</a>
504	University of Georgia Marine Extension Service	<a href="http://www.marex.uga.edu/aquarium">www.marex.uga.edu/aquarium</a>
102-104	Valdosta State University Teacher Quality Grant	<a href="http://www.valdosta.edu/biology/jones.shtml">www.valdosta.edu/biology/jones.shtml</a>
202	Walden University	<a href="http://www.waldenu.edu">www.waldenu.edu</a>
607	Zoo Atlanta	<a href="http://www.zooatlanta.org">www.zooatlanta.org</a>

## Personal Conference Schedule

### Thursday Planner

Time	Room	Session
8:30		Visit the Exhibit Hall
9:30		
10:30		General Session: Steve Rich - Featured Speaker – International Ballroom
12:30		
1:30		
2:30		
3:30		
4:30		
6:30		“Tastin’ Atlanta” with GSTA Board of Directors

### Friday Planner

Time	Room	Session
8:00		
9:00		
10:00		
11:00		
12:00		Lunch and Learns and visit Exhibit Hall
1:00		
2:00		
3:00		Exhibit Hall Door Prizes and GSTA District Director Meet and Greet
4:00		
7:00		Awards Banquet Georgia Aquarium *Tickets Required

### Saturday Planner

Time	Room	Session
8:30		
9:30		
10:30		
11:30		
12:30		
1:30		
2:30		



