

Georgia Science Teachers Association

Annual Conference

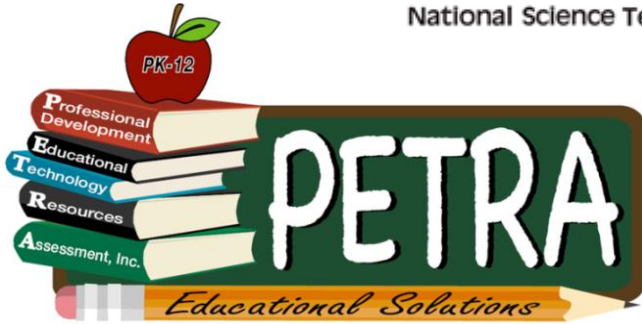
At

The Hyatt Regency

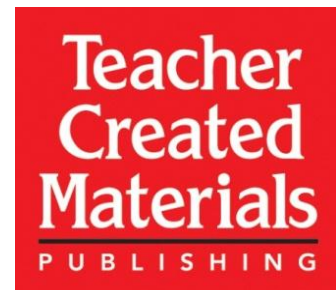
Atlanta, GA • February 16-18, 2012

www.georgiascienceteacher.org

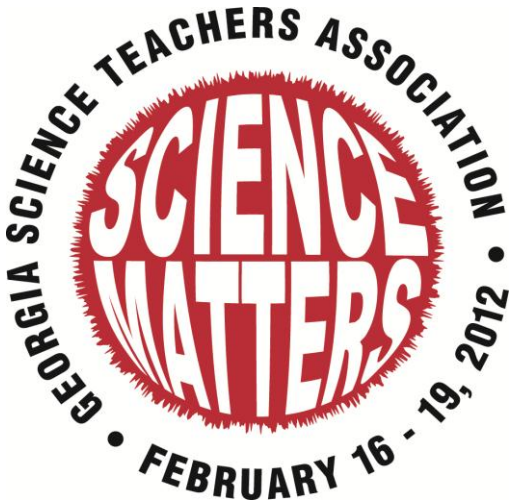
Conference Sponsors



Glencoe



GSTA Conference Leadership Team



Chris Kennedy, Conference Chair
Paulding County Schools

Sally Creel, Conference Program Chair
Cobb County Schools

Nancy Brim, Local Arrangements Co-Chair
DeKalb County Schools

Kathy Switzer, Local Arrangements Co-Chair
DeKalb County Schools



Exhibits

**Dr. Sharon
Boyer**



Registration

**Rie
Cowan**



Awards

**Sally
Creel**



Field Trips

**Tammy
Shiflett
& Mike
Kirkland**



*Volunteer
Coordinator*

**Dr. Lisa
Alexander**

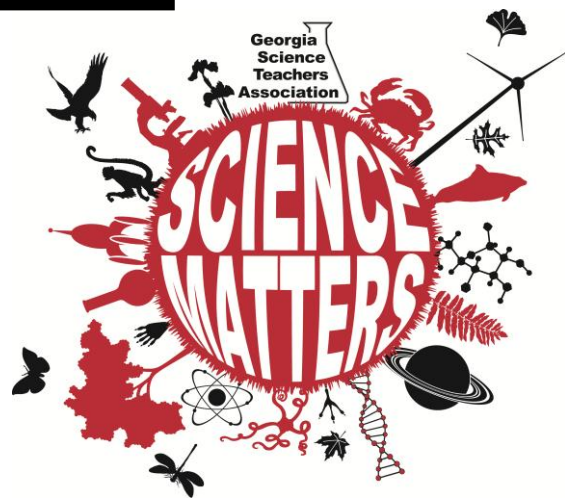


GSTA Executive Board 2011-2012

| | |
|-------------------------------|---|
| President | <i>Dr. Kelly Price</i> |
| Vice President | <i>Zoe Evans</i> |
| President-elect | <i>Sally Creel</i> |
| Director | <i>Chris Kennedy</i> |
| Secretary | <i>Joey Nunn</i> |
| Executive Secretary/Treasurer | <i>Karol Stephens</i> |
| Elementary Representative | <i>Tracey Rivers</i> |
| Middle School Representative | <i>Michael Eby</i> |
| High School Representative | <i>Jeremy Peacock</i> |
| College Representative | <i>Dr. Lisa Martin-Hansen</i> |
| Supervisors Representative | <i>Dr. Jo-ne Bourassa</i> |
| Legislative Representative | <i>Steve Rich</i> |
| District I Director | <i>Joe Baker</i> |
| District II Director | <i>Dr. Donna Governor</i> |
| District III Director | <i>Dr. Tom Brown</i> |
| District IV Director | <i>Steven King</i> |
| District V Director | <i>Carol Turner</i> |
| District VI Director | <i>Lynn Larson</i> |
| District VII Director | <i>Brian Butler</i> |
| District VIII Director | <i>Kimberly Boucher</i> |
| District IX Director | <i>Vacant</i> |
| District X Director | <i>Patricia DuBose</i> |
| District XI Director | <i>Lauren Baker</i> |
| District XII Director | <i>Jennifer Burley</i> |
| Foundation Co-Chairs | <i>Dr. George Stickel & Zoe Evans</i> |
| Awards Chair | <i>Sally Creel</i> |
| Conference Exhibitor Chair | <i>Dr. Sharon Boyer</i> |
| Conference Registration Chair | <i>Rie Cowan</i> |
| GYSTC Representative | <i>Julia Celebi</i> |
| Nominations Chair | <i>Dr. Kelly Price</i> |
| E-Observations, Editor | <i>Zoe Evans</i> |
| GSTA Website Designer | <i>Dr. Donna Governor</i> |

Look for members of the GSTA Board throughout the conference.

Conference at a Glance



Wednesday, February 15, 2012

6:00-8:00 PM Registration

Thursday, February 16, 2012

7:00 AM – 5:00 PM Registration
8:00 AM – 5:00 PM Exhibit Hall Open
8:00 AM – 5:00 PM Field Trips
8:00 AM – 5:00 PM Concurrent Sessions/Workshops
4:00 PM – 4:50 PM District Meet & Greet in the Exhibit Hall

Friday, February 17, 2012

7:00 AM – 5:00 PM Registration
8:00 AM – 5:00 PM Exhibit Hall Open
8:00 AM – 5:00 PM Field Trips
8:00 AM – 5:00 PM Concurrent Sessions/Workshops
12:00 PM – 1:15 PM General Session, GSTA Annual Meeting
Introduction of Candidates for GSTA Office
Keynote Speaker Dr. Stephen Pruitt, VP Achieve &
Leading the Development of the Next Generation
Science Standards
4:30 PM – 5:00 PM Exhibit Hall Door Prize Drawings
6:00 PM – 10:00 PM Awards Banquet
The Georgia Aquarium – Ocean's Ballroom
Tickets Required

Saturday, February 18, 2012

8:03 AM – 9:30 AM Registration
8:30 AM – 12:30 PM Concurrent Sessions/Workshops

GSTA Presidents

| Name | Years of Service | Conference Location |
|-------------------|------------------|--------------------------|
| Kelly Price | 2011-2012 | Atlanta |
| 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 | |



| | | |
|------|--|--------------------------------------|
| 2010 | Amanda McGehee, DeKalb (K-6) | |
| 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.

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

TEACHERS OF THE YEAR



ELEMENTARY
Kelly Bodner
Cobb County Schools



HIGH SCHOOL
Jennifer Forsyth
Cherokee County Schools

TEACHERS OF PROMISE

ELEMENTARY SCHOOL



Jessie Kelly
Gwinnett County Schools

MIDDLE SCHOOL



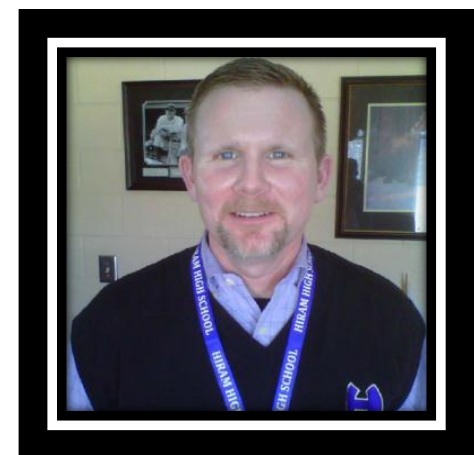
Soomy Sim
Gwinnett County Schools

HIGH SCHOOL



Tara Jones-Lawrence
Bibb County Schools

ADMINISTRATOR OF THE YEAR



Jason Freeman
Hiram High School
Paulding County Schools



Janice Belcher
Cobb County Schools
MarineLab Coastal Ecology Workshop - Summer 2012

SCIENCEQUEST TEACHER SCHOLARSHIP

Janice Belcher
Cobb County Schools

CONFERENCE GRANT



Sherrie Chovanec
Paulding County Schools



Peter Fischer
Paulding County Schools



2012

MINI-GRANT WINNERS

Amanda Camp
Paulding County Schools

*"Electric Extremes,
Marvelous Magnetism,
Entangled Earth Science"*



Regina Ahmann
Coweta County Schools

*"Outdoor Classroom
Organic Garden"*



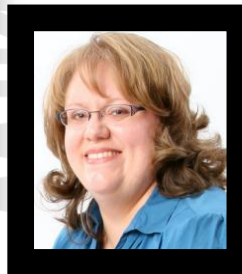
Janice Belcher
Cobb County Schools

*"Science from the
Classroom to the
Living Room"*



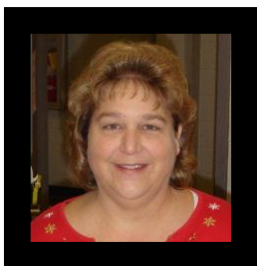
Jennifer Abdich
Paulding County Schools

*"Teaching Science
Through Reading in EIP"*



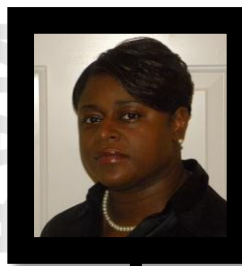
Pamela Parks
Oglethorpe County Schools

*"If You Build It,
They Will Learn"*



Margrite Wimbash
Fayette County Schools

"Garden of Hope"



Gail Marshall
University of West GA

*"Physical Experiences
with the Physics of
Simple Machines"*



Tonya Rogers
Bleckley County Schools

*"Central Georgia Critters
& Creepers"*



STUDENT ADVENTURE SCHOLARSHIP WINNER

Alixé Lyon
Forsyth County Schools

*Funding to attend Cub Creek
Science Camp in Rolla, Missouri
Summer 2012*

GSTA Awards Banquet

Hope to see you there!

Friday, February 17th
GA Aquarium Oceans Ballroom

6:30 Reception 7:00 Dinner
Cocktail Attire Requested



Special Guest Speaker – Dr. Stephen Pruitt

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

Sally Creel - GSTA Awards Chair



GSTA Field Trips

GSTA is please to offer an interesting selection of field trips for this year's conference. Space is limited, so reserve your ticket early. Field trip participants should meet at the field trip table at least 15 minutes before the scheduled trip departure time.

Thursday, February 16, 2012

Problem Solving with the Light Microscope

Date: Thursday, February 16, 2012

Time: 8:00-1:15

Cost: Free

Group limit: 14

Transportation: Included

This 4 hour workshop requires travelling to MVA Scientific Consultants www.mvainc.com a state of the art microscopy laboratory that uses light and electron microscopy to solve problems in research and industry located in Duluth Georgia. A continental breakfast will be provided. Topics will include: 1) Making temporary and permanent specimen mounts for observation and comparison to reference materials, 2) Proper use of the light microscope by maximizing illumination and alignment, 3) Converting a transmitted light microscope into a polarizing light microscope for under \$20, 4) An introduction to attaching video and still cameras to the microscope to create photographic documentation for classroom projects. Teachers attending will take home a micro-aquarium that can be used to observe pond life with the microscope, permanent mounts that they create during the workshop and practical exercises that they can use in the classroom to promote student interest in microscopy and problem solving using the scientific method.

Atlanta Motor Speedway

Date: Thursday, February 16, 2012

Time: 9:00-1:00

Cost: \$20

Group limit: 56

Transportation: Included

Do you love NASCAR? Then you'll love this tour of the Atlanta Motor Speedway where you will learn about the science behind auto racing. Walk through pit row. Get a grand view of the track from the corporate suites. Depending on the track schedule, see racecars in action or take a high-speed run around the racetrack in one of the speedway vans - as a passenger of course. Rev up your science lessons with high-speed activities for your classroom.

The Geology of Downtown Atlanta

Date: Thursday, February 16, 2012

Time: 12:00-2:00

Cost: Free

Group limit: 20

Transportation: Walking tour

Mixed among the concrete, steel and glass of Atlanta's buildings, one can find great examples of the use of natural stone. Architects often try to make their designs memorable by using natural materials as accents and attention-grabbers. Join Bill Waggener, President of the Georgia Mineral Society on a walk through the streets of downtown Atlanta. Examine some of the city's historic and modern structures exploring the geology of the urban environment. Dress in layers for the weather. Bring your camera and a lunch.

Atlanta Botanical Garden

Date: Thursday, February 16, 2012

Time: 1:45-5:00

Cost: \$12

Group limit: 56

Transportation: Included

Come explore the Atlanta Botanical Garden. The garden offers over 30 acres of unmatched beauty in the heart of Atlanta, featuring breathtaking gardens, woodlands and more. Stimulate your senses as you stroll through one of the world's largest permanent orchid displays. View rare and endangered plants from tropical rain forests and desert regions. Take delight in the interactive children's garden. Walk high above the trees canopy at the Keneda Canopy walk, the only tree canopy-level walkway of its kind in the United States.



GSTA Field Trips

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

Date: Thursday, February 16, 2012

Time: 2:30-6:00

Cost: \$23

Group Limit: 25

Transportation: Included

Discover what zoo animals love to eat! Learn how zoologists prepare animal diets and see some of the unusual treats the animals enjoy. After the “kitchen tour”, take a stroll through the zoo grounds and exhibits. 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 only four zoos in the U.S. with giant pandas. It has one of the nation’s most recognized collections of great apes. Zoo Atlanta is a global center of excellence for the care and reproduction of vanishing amphibians and reptiles.

Fernbank Science Center at Night

Date: Thursday, February 16, 2012

Time: 7:00–10:30

Cost: \$16

Group limit: 56

Transportation: Included

Fernbank Science Center is a unique science education center located on a woodland complex in northeast Atlanta. As night falls, the science experience at Fernbank Science Center becomes even more interesting. View the wonders of the universe during at the planetarium show in the Celestial Theater. Take a peek at our solar system and beyond through the Fernbank observatory telescope. Tour the museum, which houses the Apollo 6 spacecraft and other fascinating exhibits. Hoot with the owls on a nocturnal “owl prow!” through the urban woodland. Enjoy dessert and coffee at the evening’s conclusion.

Friday, February 17, 2012

**Georgia Tech Campus and Robert
C. Williams Paper Museum**

Date: Friday, February 17, 2012

Time: 9:30–1:00

Cost: \$17

Group limit: 25

Transportation: Included

Follow the history of papermaking from its beginnings in ancient China to the technologically advanced processes of today! Discover the art, science, history, and geography of paper and papermaking. This field trip experience includes a guided tour of the Robert C Williams Paper Museum, as well as a hands-on papermaking workshop. In addition to learning the process of papermaking, participants will tour portions of the beautiful Georgia Tech campus including the Georgia Tech Library, the Clough Learning Commons, and science labs for chemistry, biology, and physics. Dress for comfort and for the weather since a portion of the trip will be outside.

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

Date: Friday, February 17, 2012

Time: 1:30-6:00

Cost: \$29

Group Size: 27

Transportation: Included

Learn how scientists at Emory University’s Yerkes National Primate Research Center are seeking ways to develop vaccines for infectious and noninfectious diseases, treat drug addiction, 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. Meet researchers, tour biomedical research laboratories, and visit with capuchin monkeys. Next, travel to the Yerkes Field Station in Lawrenceville, where scientists conduct behavioral studies of primate social groups. The outdoor tour will allow visitors to talk with Yerkes researchers and observe three non-human primate species: chimpanzees, rhesus macaques, and sooty mangabeys. Portions of the tour will be outdoors; dress appropriately for the weather.



GSTA Field Trips

Fernbank Natural History Museum

Date: Friday, February 17, 2012

Time: 2:30–5:30 pm

Cost: \$22

Group limit: 56

Transportation: Included

Fernbank Museum isn't just another museum-it's a journey to another time and place. A visit to the Museum brings a unique opportunity to explore cultural treasures, experience the thrill of a film in the IMAX® Theatre, enjoy science interactives and marvel at the largest dinosaurs ever discovered. And thanks to a stunning line-up of special exhibitions, special events for adults, families and children, and ground-breaking research projects-there's always something new to discover! 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.

Georgia Aquarium, Behind-the-Scenes Tour

Date: Friday, February 17, 2012; 3:00-6:00

Cost: \$15

Group limit: Unlimited

Transportation: On your own.

The Georgia Aquarium offers an amazing view of some of the world's most interesting aquatic creatures. GSTA members can get a behind-the-scenes tour of some of the aquariums most popular exhibits. This tour has been designed specifically for GSTA members. Get close to the stars of the aquarium (the animals) and learn what it takes to keep the world's largest aquarium running. Participants may walk or provide their own transportation to the aquarium. Maps will be available at the field trip table.

Saturday, February 18, 2012

Fossil Dig Experience with the Tellus Science Museum

Date: Saturday, February 18, 2012

Time: 8:30–5:30

Cost: \$59, Lunch included

Group Size: 27

Transportation: Included

Travel back in time as you search for and discover fossils with geology experts from the Tellus Science Museum. The plant and animal fossils are yours to keep and share with your students. This all-day excursion will take participants to Durham Coal Mine and Lula Lake Land Trust, to collect plant fossils from the Pennsylvania period. Next, travel to Trenton, GA to collect marine life fossils from the Ordovician period. This trip involves moderate physical effort including activities such as hiking, lifting, carrying/backpacking tools, supplies and specimens, and climbing up and down steep slopes. The areas that will be visited are safe, but can be physically demanding. Please dress comfortably. Wear layers of weather appropriate clothing that will not be an issue to get worn, torn or dirty. Hats, sunglasses, gloves, sunscreen, and hiking boots or sturdy shoes are suggested. **Suggested equipment and supplies to bring:** Container (ex.-bucket, GSTA bag, or backpack), plastic bags, newspaper, and permanent marker for labeling and carrying specimens; digging tools such as a flat screwdriver, putty knife, or garden trowel; small hammer; safety goggles. Lunch is included. **Reserve your lunch choice at the field trip table by noon on Friday.**

Georgia Aquarium, Behind-the-Scenes Tour

Date: Saturday, February 18, 2012;
9:00-11:00

Cost: \$15

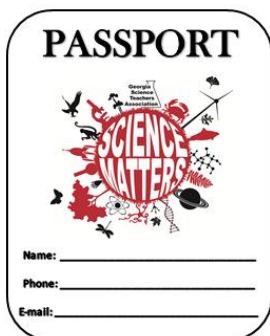
Group limit: Unlimited

Transportation: On your own.

The Georgia Aquarium offers an amazing view of some of the world's most interesting aquatic creatures. GSTA members can get a behind-the-scenes tour of some of the aquariums most popular exhibits. This tour has been designed specifically for GSTA members. Get close to the stars of the aquarium (the animals) and learn what it takes to keep the world's largest aquarium running. Participants may walk or provide their own transportation to the aquarium.

Thursday – 8:00-9:00 No Sessions

Exhibit Hall Open – Visit our wonderful vendors!



- Several of our wonderful vendors have donated door prizes to be given away. To be included in the prize drawing, pick up your GSTA Vendor Passport in the Exhibit Hall. As you visit with the various vendors, have them give your passport a stamp.
- Once you have at least 15 stamps, drop your passport in the door prize box at the Exhibit Hall Registration Desk, by 3:00 PM on Friday.
- A Door Prize drawing will be held on Friday, Feb. 17th @ 4:30 in the Exhibit Hall . **Must be present to win.**

Thursday – 9:00-9:50 Sessions

Day: THURS, 2/16 **Time:** 9:00-9:50 **Level:** K-8 **Room:** Montreal

Title: Science matters: Materials, Assessments, Techniques, Technology, Experiences, Research, Strategies with GYSTC

Presenters: Julia Celebi, Angela Guilford, Steve Rainey

Description: The regional coordinators of 13 GYSTC's will present a wide range of best practices activities in all areas of K-8 science. Activities, materials, and pedagogical strategies will be modeled.

Content: General Science



Day: THURS, 2/16 **Time:** 9:00-9:50 **Level:** K-8 **Room:** Manila

Title: Georgia 4-H Environmental Education: we have a fish (print) for you.

Presenters: Donna Stewart, Paul Coote, Dawn Zenkert

Description: Experience hands-on learning with the staff of the Georgia 4-H Environmental Education Program. Learn about the exciting programs available while creating a fish print shirt to take home.

Content: Life Science

Day: THURS, 2/16 **Time:** 9:00-9:50 **Level:** 6-12 **Room:** Grand Hall East B

Title: Forensics on a Shoe String Budget

Presenters: Anthony Bertino, Patricia Bertino

Description: Increase interest/knowledge in math, science, literacy, technology. Topics: evidence, fingerprinting, impressions and making a comparison microscope. Receive presenters' textbook Forensic Science: Fundamentals & Investigations and free CD of resources.

Content: Interdisciplinary

Day: FRI, 2/17 **Time:** 8:00-8:50 **Level:** 6-12 **Room:** Hong Kong

Title: Infusing engineering concepts into the national science curriculum to improve student understanding and applications

Presenters: Randy Emert

Description: We transform the world around us by the use of machines. You can teach your students to program manufacturing machines using computer numerical control software downloaded for free.

Content: General/Engineering

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| <p>Day: THURS, 2/16 Time: 9:00-9:50 Level: K-8 Room: Vancouver</p> <p>Title: <u>Surviving the AYP Crunch</u></p> <p>Presenters: Lynn Larsen</p> <p>Description: Are you and your students ready for AYP? Learn the past, present and future standards for AYP survival. Understanding the scaffolding of the standards is the key!</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 9:00-9:50 Level: 6-12 Room: Grand Hall East C</p> <p>Title: <u>Energy Transfer: Waves, Sound and Light</u></p> <p>Presenters: Peggy Bailey</p> <p>Description: In this series of activities from a new LAB-AIDS® kit, students produce both longitudinal and transverse mechanical waves and compare their similarities and differences. As an introduction, students use water and springs to observe wavelength and frequency and discover the relationship between them. They then read about the wave nature of different energy forms, including light and sound, and are introduced to the fundamental features common to all waves.</p> <p>Content: Physical Science</p> |
| <p>Day: THURS, 2/16 Time: 9:00-9:50 Level: High Room: Cairo</p> <p>Title: <u>Centers in High School Science? Yes, They Can Work!</u></p> <p>Presenters: Jo-ne Bourassa</p> <p>Description: Using different centers or stations of learning in the high school science classroom can increase student engagement and increase student learning. This presentation will give participants some tried and true techniques for rotating students through different learning centers and will model various management strategies.</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 9:00-9:50 Level: High Room: Inman</p> <p>Title: <u>Surviving in a Standards-Based High School Science Classroom</u></p> <p>Presenters: Pamela Crawford, Michael Owens</p> <p>Description: Using formative assessment, differentiated instruction, flexible grouping, and self-assessment strategies to ensure student mastery in a standards-based high school science classroom.</p> <p>Content: Interdisciplinary</p> |
| <p>Day: THURS, 2/16 Time: 9:00-9:50 Level: 6-12 Room: Roswell</p> <p>Title: <u>The Madison County STEM Program - Soil and Water Quality Projects</u></p> <p>Presenters: Andy Felt, Cindy Jones</p> <p>Description: The Madison County STEM Program uses soil and water quality projects for interdisciplinary teaching. Participants will use probeware devices to engage in hands-on activities that demonstrate student work.</p> <p>Content: Interdisciplinary</p> |
| <p>Day: THURS, 2/16 Time: 9:00-9:50 Level: 6-12 Room: University</p> <p>Title: <u>Exploring Exploring: Lessons in Mission Design</u></p> <p>Presenters: Annette Pearson</p> <p>Description: Make a model of "MESSENGER," NASA's Mercury mission, and experience the "Mission Design" module, which integrates solar system science with STEM activities, exploring the process of mission design. Free materials.</p> <p>Content: Earth/Space Science</p> |

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|---|--------------------------|--------------------------|-------------------------------------|--|
| Day: THURS, 2/16 | Time: 9:00-9:50 | Level: K-12 | Room: Spring | |
| <u>Title: Teaching Writing in the Science Class</u> | | | | |
| Presenters: Ollie Manley | | | | |
| Description: Teachers teach science to students who struggle with writing. This workshop will focus on differentiated instruction with emphasis on writing. | | | | |
| Content: General Science | | | | |
| Day: THURS, 2/16 | Time: 9:00-9:50 | Level: 6-12 | Room: Grand Hall East A | |
| <u>Title: Distance Learning at the Georgia Sea Turtle Center</u> | | | | |
| Presenters: Teddy Ivey, Rebecca Funk, Leandra Darden | | | | |
| Description: The Georgia Sea Turtle Center is extending our "flippers" beyond the coast! Come learn how we can bring sea turtles into YOUR classroom through our NEW distance learning programs! | | | | |
| Content: Life Science | | | | |
| Day: THURS, 2/16 | Time: 9:00-9:50 | Level: Middle | Room: Piedmont | |
| <u>Title: Interdisciplinary Marine Science Instruction through Student Centered Service Learning Projects</u> | | | | |
| Presenters: Timothy Goodale | | | | |
| Description: This paper presentation provides formative findings of a United States Department of Education funded project aimed at broadening in-service teacher content knowledge in marine sciences and environmental sustainability through curricular design and K-8 classroom application of meaningful service-learning projects (S-L). | | | | |
| Content: Interdisciplinary | | | | |
| Day: THURS, 2/16 | Time: 9:00-9:50 | Level: HS | Room: International Ballroom | |
| <u>Title: Skull Evolution</u> | | | | |
| Presenters: Norm Thompson | | | | |
| Description: Come join a group of teachers interested in teaching human evolution using replica skulls and lots of other lessons to share. | | | | |
| Content: Biology | | | | |
| Thursday – 10:00-10:50 Sessions | | | | |
| Day: THURS, 2/16 | Time: 10:00-10:50 | Level: K-12 | Room: Montreal | |
| <u>Title: Technology Performance Learning Tasks - K-12</u> | | | | |
| Presenters: Todd Nickelsen | | | | |
| Description: Teachers will gain an understanding of a variety of technology applications that can be used to enhance science teaching and learning. | | | | |
| Content: General Science | | | | |
| Day: THURS, 2/16 | Time: 10:00-10:50 | Level: Elementary | Room: Manila | |
| <u>Title: Creative Writing in Science</u> | | | | |
| Presenters: Kristen Lyle, Andrea Post | | | | |
| Description: Join us for writing in science. Learn strategies for teaching creative writing within the science curriculum. Leave the presentation with writing topics, writing rubrics, and writing organizers | | | | |
| Content: Interdisciplinary | | | | |



Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-8 **Room:** Piedmont

Title: Effective Vocabulary Activities to Get Kids Talking Science

Presenters: Julie Celebi

Description: Session will feature a variety of research based effective strategies to help in the development and increased literacy of students in the science classroom through interactive activities.

Content: General Science

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** 6-12 **Room:** Vancouver

Title: Science & The Common Core

Presenters: Sally Creel

Description: Explore the role science plays in the roll out of the new Common Core standards during this session. See concrete examples of how the Literacy standards for the CCGPS can easily be incorporated into everyday instruction.

Content: General Science/Interdisciplinary



Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-5 **Room:** Singapore

Title: Rocket Science – It’s Elementary!

Presenters: Pepper Misinco, Pam Googe, Melanie Peterson, Lisa Whelan, Tammy Shiflett

Description: Participants will be involved in 4 rotations experiencing hands-on activities designed to enhance earth science space standards in Kindergarten through 5th grade.

Content: Earth Science

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-12 **Room:** Hong Kong

Title: Power Tools for Powerful Teachers - SLDS

Presenters: Hubert Bennett

Description: Would you like to know the strengths and weaknesses of every student on your Roster? Find out how use the Statewide Longitudinal Data System (SLDS) to UNLOCK every child's potential. Now at your fingertips, you will find up to six years worth of information on your students (Assessment, Enrollment, Attendance, Previous Class Grades, Instructional Programs, etc...).

Content: General Science



Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-12 **Room:** Spring

Title: What is Science Olympiad and how do I start at team at my school?

Presenters: Kelly Price

Description: This session will provide full details on what Science Olympiad competition looks and feels like. All details about how to start a team, register a team, suggestions for running team practices/schedules and much more will be shared.

Content: Interdisciplinary

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-5 **Room:** Grand Hall East C

Title: Technology With Science

Presenters: Michelle Moday, Scott Monroe, Erin Harris

Description: Do you want to integrate technology and science? Join this presentation to learn more about teaching with technology and integrating technology in your elementary science classroom.

Content: General

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** 6-12 **Room:** Cairo

Title: Cheap and Easy Field Research: DiscoverLife.org

Presenters: Jonathan Lochamy

Description: Nothing in the classroom can replace authentic field research. See how photographing, uploading, and identifying GA wildlife can both teach your students real science and help serious environmental research.

Content: Biology (Life Science)

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-5 **Room:** Roswell

Title: Using Hip Hop Music to Contextualize the Science Experiences of Urban Elementary School Students

Presenters: Neporcha Cone, Charlease Kelly-Jackson

Description: The purpose of this session is to present teachers with a strategy, e.g., hip hop music, that can be used as a vehicle to enhance the science experiences of urban youth.

Content: General Science

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** High **Room:** Inman

Title: Forensic Science - Going beyond textbook science

Presenters: Rebecca Austin

Description: Teaching Forensic Science enables a teacher to show students the true applicability of science concepts previously studied. Handouts! Freebies! Door prizes!

Content: Interdisciplinary

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** 6-12 **Room:** University

Title: Learning and teaching mineral properties using a self-guided STEM mineral kit

Presenters: Dion Stewart

Description: Using STEM generated mineral kits, participants will learn a teaching method integrating a mineral ID flow chart with a crossword puzzle to teach mineral properties

Content: Earth/Space Science

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** Middle **Room:** Techwood

Title: Making the Most of the Periodic Table

Presenters: Betsy Sanford, Dianne Hough

Description: Teachers will participate in differentiated lessons with visual organizers and inquiry labs that help 8th grade students understand the Periodic Table of the Elements.

Content: Physical Science

Day: THURS, 2/16 **Time:** 10:00-10:50 **Level:** K-8 **Room:** Grand Hall East A

Title: Hands-On Science with Classroom Critters

Presenters: Carolina Teaching Partner

Description: Bring excitement and interest into your classroom by using live organisms! Participate in fun, simple hands-on activities with termites, isopods, and beetles. Free samples provided.

Content: Life Science

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| Day: THURS, 2/16 | Time: 10:00-10:50 | Level: K-12 | Room: Grand Hall East B |
| Title: <u>Exciting news from Project Learning Tree!!</u> | | | |
| Presenters: Jan Kent | | | |
| Description: New Module...FOCUS ON FORESTS!! This new secondary module is filled with new activities of discovery about our natural resources. | | | |
| Content: Life Science | | | |
| Day: THURS, 2/16 | Time: 10:00-10:50 | Level: High | Room: Grand Hall East D |
| Title: <u>Physics Reveals Truth</u> | | | |
| Presenters: Steven Thedford | | | |
| Description: Overall, the NanoTeach presentation will demonstrate to high school science teachers how to integrate nanotechnology into their classrooms in a way that will deepen student understanding of science concepts. of the Georgia Performance Standards | | | |
| Content: General Science | | | |
| Thursday – 10:00-11:50 Sessions | | | |
| Day: THURS, 2/16 | Time: 10:00-11:50 | Level: K-12 | Room: International Ballroom |
| Title: <u>Science Trifecta: Effectively Combining Foldables®, Children’s Literature, and Science Curriculum Standards</u> | | | |
| Presenters: Nancy Wisker | | | |
| Description: Participants will learn by doing in this fast-paced workshop aimed at teaching science curriculum via children’s literature and 3-D graphic organizers (Foldables®). Cut, fold, and more as you make & take. | | | |
| Content: General Science | | | |
| Thursday – 11:00-10:50 Sessions | | | |
| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: Elementary | Room: Manila |
| Title: <u>Don't Fear! Young Learners + Hands On = Success!</u> | | | |
| Presenters: Jessie Kelly | | | |
| Description: Learn strategies for using inquiry-based, hands-on science with even the youngest elementary students in a budget friendly, safe, content rich, and enormously successful way! | | | |
| Content: General Science | | | |
| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: K-5 | Room: Vancouver |
| Title: <u>Connecting Science with the Whole Curriculum</u> | | | |
| Presenters: Karol Stephens | | | |
| Description: Use integrating experiences to connect science content to standards across the curriculum and teach in a meaningful way that excites students and provides for more retention of skills and content. | | | |
| Content: General Science/Interdisciplinary | | | |
| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: K-12 | Room: Inman |
| Title: <u>The Missing Link: Inquiry Helps Resistant Students Study Evolution!</u> | | | |
| Presenters: Lee Meadows | | | |
| Description: You're teaching in a public school where religious students object to evolution. Hear an approach that engages them in understanding the evidence, but minimizes conflict. | | | |
| Content: Biology | | | |



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| <p>Day: THURS, 2/16 Time: 11:00-11:50 Level: K-5 Room: Montreal</p> <p>Title: <u>GYSTC AIMS to Please!</u></p> <p>Presenters: Paula Chambers, Debbie Stuckey</p> <p>Description: Implement AIMS activities in your classroom and master multiple standards. Minimize your efforts and maximize your effectiveness by choosing AIMS with GYSTC. Remember, GYSTC AIMS to please!</p> <p>Content: General Science</p> |  |
| <p>Day: THURS, 2/16 Time: 11:00-11:50 Level: K-12 Room: Hong Kong</p> <p>Title: <u>Teaching Fish</u></p> <p>Presenters: Amy Warnock, Kim Morris-Zarneke,</p> <p>Description: Informal "science cafe" discussion of whale shark and manta ray training with a Georgia Aquarium biologist.</p> <p>Content: General Science</p> | |
| <p>Day: THURS, 2/16 Time: 11:00-11:50 Level: High Room: Cairo</p> <p>Title: <u>Supermarket Science: Investigating genetically modified organisms</u></p> <p>Presenters: Samantha Andrews</p> <p>Description: This activity will explore and identify commonly consumed genetically modified plants using a mock gel electrophoresis exercise.</p> <p>Content: Life Science</p> | |
| <p>Day: THURS, 2/16 Time: 11:00-11:50 Level: Middle Room: Singapore</p> <p>Title: <u>Enhancing Science Understanding Through Literacy Strategies</u></p> <p>Presenters: Rachael Parr, Ruth Collins, Jennifer Cox</p> <p>Description: This presentation will show you how to embed literacy strategies to increase your students' understanding of science, improve their critical thinking skills, foster motivation, and create stronger readers, writers, and speakers.</p> <p>Content: Interdisciplinary</p> | |
| <p>THURS, 2/16 Time: 11:00-11:50 Level: High Room: Spring</p> <p>Title: <u>Transitioning to the New AP Biology Curriculum</u></p> <p>Presenters: Jeremy Peacock</p> <p>Description: Learn about an evolution-based approach to the new curriculum and a technology-based unit on genetic disorders and protein function. Come prepared to share your ideas.</p> <p>Content: Life Science</p> | |
| <p>Day: THURS, 2/16 Time: 11:00-11:50 Level: 6-12 Room: Grand Hall East A</p> <p>Title: <u>STEM and the Next Generation Framework</u></p> <p>Presenters: Carolina Teaching Partner</p> <p>Description: Come experience hands on activities that integrate STEM and language arts to invigorate your classroom.</p> <p>Content: General Science</p> | |

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| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: 6-12 | Room: Grand Hall East B |
| Title: <u>Scholar Chemistry: We've got chemistry in the bag!</u> | | | |
| Presenters: George Stickel | | | |
| Description: Feel the heat and join the fun in our chemistry lab with fast, easy, and safe chemical reactions in a ziplock bag. Perform hands-on thermochemistry and chemical stoichiometry lab activities. | | | |
| Content: Chemistry | | | |
| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: K-8 | Room: Grand Hall East C |
| Title: <u>Animal Adaptation</u> | | | |
| Presenters: Linda Bishop, Tom Kopp | | | |
| Description: How animals have adapted to their environment and the importance of these adaptations to the ecosystem. | | | |
| Content: Biology (Life Science) | | | |
| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: K-5 | Room: Grand Hall East D |
| Title: <u>Pandamonium: Teaching with black & white bears</u> | | | |
| Presenters: Francine Gebus, Erin Delahunty, Lani Schoedler | | | |
| Description: Are you wild about pandas? This is the workshop for you. Teachers will discover great lesson plans and activities for the classroom that will make your students panda fans. | | | |
| Content: Life Science | | | |
| Day: THURS, 2/16 | Time: 11:00-11:50 | Level: High | Room: Techwood |
| Title: <u>Differentiation in the Science Classroom</u> | | | |
| Presenters: Donna Barrett | | | |
| Description: This session will outline recommended differentiation strategies based on differentiating the content, process, and product through formative assessments, RAFTs, tiered tasks, centers and stations. A focus of the session will include strategies to manage the differentiated classroom. | | | |
| Content: General Science | | | |
| Day: THURS, 2/16 | Time: 11:00-12:50 | Level: Middle | Room: University |
| Title: <u>NASA Lunar Certification</u> | | | |
| Presenters: Lester Morales | | | |
| Description: NASA Lunar samples can be shared with teachers across the nation. This is an official NASA session with a certification to borrow samples at the end. Bring the Apollo lunar samples into your classroom. | | | |
| Content: Earth /Space Science | | | |
| Thursday – 12:00-12:50 Sessions | | | |
| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: K-5 | Room: Vancouver |
| Title: <u>Making Meaning With the Nouns and Verbs of Science</u> | | | |
| Presenters: Lisa Alexander | | | |
| Description: Participants will learn how to improve instructional strategies and hands on activities by examining and highlighting the nouns and verbs of science. | | | |
| Content: Interdisciplinary | | | |



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| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: K-2 | Room: Montreal |
| Title: <u>Teaching Science with Children's Literature K-2</u> | | | |
| Presenters: Angela Guilford, Cindy Green | | | |
| Description: This session will focus on primary grades with particular applications for grade two standards. Resources will include a variety of science trade books and the Picture Perfect teacher resource books. | | | |
| Content: General Science | | | |
| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: K-8 | Room: Grand Hall East C |
| Title: <u>Building Effective Classroom Chemistry - It's All About the Elements!</u> | | | |
| Presenters: Cheryl Fox Weber | | | |
| Description: Build knowledge of effective researched-based classroom management strategies, which immediately empowers your classroom to increase academic performance, decrease discipline challenges, and gain parental support! Take back the Time To Teach! | | | |
| Content: Interdisciplinary | | | |
| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: 6-12 | Room: Spring |
| Title: <u>Best Practices: Implementing a "Flipped" Science Classroom</u> | | | |
| Presenters: Jennifer Douglass, Jennifer Hulgan, Meredith Wood | | | |
| Description: We will discuss the 'best practices' we have developed for implementing and managing a 'flipped' classroom – including managing a self-paced classroom, online discussion boards, online testing, and content videos. | | | |
| Content: General | | | |
| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: Elementary | Room: Manila |
| Title: <u>Who Polluted the Chattahoochee?</u> | | | |
| Presenters: Jamie Lattimore, Catherine Leftwich | | | |
| Description: How do you help students to understand how the actions of just a few can affect the lives of many? In this interactive session we will share a hands on demonstration about river pollution and give a variety of assessment and extension options to connect this science topic to a variety of other subject areas. | | | |
| Content: Interdisciplinary | | | |
| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: High | Room: Cairo |
| Title: <u>Using Inquiry to Demonstrate Enzyme Function in Potato</u> | | | |
| Presenters: Amy Slack | | | |
| Description: Come see an inquiry twist on the old potato and hydrogen peroxide lab! We will conduct a lab to demonstrate enzyme function and design experiments. Great for CP biology. | | | |
| Content: Biology (Life Science) | | | |
| Day: THURS, 2/16 | Time: 12:00-12:50 | Level: Middle | Room: Singapore |
| Title: <u>Utilizing a garden to enhance science and math learning</u> | | | |
| Presenters: Julie Self, Myffy Hopkins, Rachel Ammirati | | | |
| Description: Discover how science and math learning can be enhanced with garden-themed, problem-based learning methods. Garden-learning is a practical yet exciting way to stimulate student interest while teaching core academic standards. | | | |
| Content: Interdisciplinary | | | |



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| <p>Day: THURS, 2/16 Time: 12:00-12:50 Level: High Room: Inman</p> <p>Title: <u>Using student led show-and-tell for engagement in chemistry</u></p> <p>Presenters: Becky Bundy</p> <p>Description: Learn how to use the “Minute of Chemistry” to get your students to start class while you take roll, come to class on-time, be excited, and remain engaged!</p> <p>Content: Chemistry</p> |
| <p>Day: THURS, 2/16 Time: 12:00-12:50 Level: High Room: Roswell</p> <p>Title: <u>Light’s Properties Using Your Own Eye</u></p> <p>Presenters: Ann Robinson, Sharon Kirby, Dave Todd</p> <p>Description: Seeing light’s properties such as reflection, refraction, dispersion, absorption, polarization and scattering in your own eye makes this presentation personal, fun, and exciting for students.</p> <p>Content: Physical Science</p> |
| <p>Day: THURS, 2/16 Time: 12:00-12:50 Level: Elementary Room: Grand Hall East A</p> <p>Title: <u>Family Science Nights (grades K-5)</u></p> <p>Presenters: Stephanie Shultz</p> <p>Description: You will learn how to set up a successful Family Science Night for your classroom, school or system. Participants will have the opportunity to make and take a couple of standards-based games and</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 12:00-12:50 Level: K-12 Room: Grand Hall East B</p> <p>Title: <u>The Naturalist’s Journal: Teaching Tool to Study the Environment</u></p> <p>Presenters: Tom Howick, Joe Dirnberger</p> <p>Description: This hands-on session for teachers will demonstrate how to use the naturalist’s journal as a teaching tool in your classroom.</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 12:00-12:50 Level: High Room: Piedmont</p> <p>Title: <u>Trivial pursuit, or large picture Biology?</u></p> <p>Presenters: Marion Reeves, Jennifer Lance</p> <p>Description: Teaching biology conceptually allows students to connect the terminology to their learning. Come consider ways of structuring a biology course around student experiences that lead to conceptual understanding.</p> <p>Content: Biology (Life Science)</p> |
| <p>Day: THURS, 2/16 Time: 12:00-12:50 Level: Elementary Room: Techwood</p> <p>Title: <u>Science with Toys</u></p> <p>Presenters: Frank Mann, Carl Davis</p> <p>Description: This workshop focuses on the use of toys to demonstrate scientific concepts such as magnetism, motion, sound, electrostatics, Newton's laws and air pressure.</p> <p>Content: General Science</p> |

Day: THURS, 2/16 **Time:** 12:00-12:50 **Level:** Middle **Room:** International Ballroom

Title: All Aboard! Come Along on the Interactive Science Voyage

Presenters: Audrelyn Watkins, Antione Ford, Julie Hodges

Description: Come join us in our interactive world of 8th grade Physical Science where we will create sunsets, generate power in a house, and explore sports.

Content: Physical Science

Day: THURS, 2/16 **Time:** 12:00-12:50 **Level:** K-8 **Room:** Grand Hall East D

Title: Differentiate for exceptional students

Presenters: Felicia Poole

Description: Differentiate instructions to middle grade science students. Explain how to reach students that are SEBD and learning disabilities

Content: General Science

Thursday – 1:00-1:50 Sessions

Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** High **Room:** Vancouver

Title: Simple Methods for Improving Student Performance and Motivation

Presenters: Donald White

Description: Discover some simple, low cost/no cost methods for improving student performance and motivation in the science classroom.

Content: General Science



Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** 3-5 **Room:** Montreal

Title: Teaching Science with Children's Literature 3-5

Presenters: Suzanne Bellflower, Elaine Whitten

Description: Resources for this session will include a variety of science trade books and the Picture Perfect teacher resource books. Hands on activities will be paired with books to meet state and national standards.

Content: General Science



Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** 6-12 **Room:** Piedmont

Title: Introducing Public Health Education

Presenters: Esther Shisoka

Description: Epidemiology, the basic science of public health, provides a compelling and relevant context for teaching science and mathematics. The integration of epidemiologic applications in existing frameworks for math and science teaching both fosters an opportunity for multidisciplinary learning around specific problems and is an avenue for enabling students to grasp the relevance of the real-world application of mathematics and science. This session will demonstrate how to integrate public health science education into the middle and high school curriculum. We will explore CDC's public health education programs, resources and activities.

Content: Life Science



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| Day: THURS, 2/16 | Time: 1:00-1:50 | Level: 6-12 | Room: Hong Kong |
| Title: <u>Literacy and Science Success: What is the Connection?</u> | | | |
| Presenters: Brian Butler, Lisa Thompson | | | |
| Description: Do you have struggling readers in your classroom? We have proven tactics to help your struggling readers comprehend science content. You will leave with easy to follow time-saving strategies! | | | |
| Content: General | | | |
| Day: THURS, 2/16 | Time: 1:00-1:50 | Level: 6-12 | Room: Grand Hall East A |
| Title: <u>Scholar Chemistry: We've got chemistry in the bag!</u> | | | |
| Presenters: George Stickel | | | |
| Description: Feel the heat and join the fun in our chemistry lab with fast, easy, and safe chemical reactions in a ziplock bag. Perform hands-on thermochemistry and chemical stoichiometry lab activities. | | | |
| Content: Chemistry | | | |
| Day: THURS, 2/16 | Time: 1:00-1:50 | Level: 6-8 | Room: Spring |
| Title: <u>Inquiry Matters</u> | | | |
| Presenters: Katherine Armstrong, Jane Sharp, Steve Jones | | | |
| Description: Students learn Science by DOING Science. Using best practices that incorporate inquiry and literacy in a research based program. Receive workshop materials from Delta Education. | | | |
| Content: Physical Science | | | |
| Day: THURS, 2/16 | Time: 1:00-1:50 | Level: 6-12 | Room: Cairo |
| Title: <u>Using red algae as a model organism to enhance mastery of the Georgia Performance Biology Standards</u> | | | |
| Presenters: Dr. Alan Gorlin, Jenny Hedges | | | |
| Description: Teachers will learn how to grow the unicellular red algae Porphyridium cruentum and use it to design inquiry experiments that will enhance mastery of all the GPS Biology State Standards. | | | |
| Content: Biotechnology | | | |
| Day: THURS, 2/16 | Time: 1:00-1:50 | Level: K-5 | Room: Singapore |
| Title: <u>Pine Cones: An engaging Inquiry</u> | | | |
| Presenters: Jane Metty, Joan Baldrige | | | |
| Description: Participants will engage in a 5E model of inquiry using Pine Cones and will construct a clever graphic organizer to place in science journals as an alternative assessment of student learning. | | | |
| Content: General Science | | | |
| Day: THURS, 2/16 | Time: 1:00-1:50 | Level: 6-12 | Room: Roswell |
| Title: <u>Electricity-Circuitry In Action</u> | | | |
| Presenters: Laura Hendrix, Lori Hughes | | | |
| Description: Presenting demonstrations and engaging circuitry laboratories that promote inquiry and discovery, while allowing for differentiation. Misconceptions are dispelled, while confronting confusing concepts | | | |
| Content: Physical Science | | | |

Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** K-5 **Room:** University

Title: Science "Literacy" Matters: Enriching Science through Literacy Integration

Presenters: Charlease Kelly-Jackson, Maria Shaheen

Description: This session will provide an alternative approach to teaching elementary science. Presenters will offer sample inquiry-based, GPS aligned science lessons that integrate children's literature.

Content: General Science

Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** High **Room:** Techwood

Title: Edible electronics: Using nanotechnology to fabricate integrated circuits

Presenters: Samantha Andrews, Joyce Allen, Nancy Healy

Description: Participants will learn about the process of photolithography and use it to fabricate an edible integrated circuit.

Content: Physical Science

Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** K-5 **Room:** Manila

Title: Applying for the Presidential Award

Presenters: Juan-Carlos Aguilar, Amanda Buice

Description: This year K-6 teachers can win the Nation's highest honor for science teaching, including a trip to Washington and \$10,000. Get tips and have a Q & A with past awardees.

Content: General Science



Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** K-5 **Room:** Grand Hall East B

Title: High Touch High Tech and YOU - Science Made Fun! K-5

Presenters: Beverly Graham, Perry Cantrell

Description: Find out how the professional instructional staff of High Touch High Tech can enhance your current science curriculum with hands on experiences without ever leaving campus!

Content: General Science

Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** Elementary **Room:** Grand Hall East D

Title: Science Power by World Book Web Classroom

Presenters: Katherine Jenkins, Donna Ellers

Description: Science Power receives all A's on the Report Card from Internet@Schools (Jan/Feb 2011) for installation, content/features, ease of use, and product support.

Content: Interdisciplinary

Day: THURS, 2/16 **Time:** 1:00-1:50 **Level:** 6-12 **Room:** Grand Hall East C

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.

Content: Biology (Life Science)

Thursday – 1:00-2:50 Sessions

Day: THURS, 2/16 **Time:** 1:00-2:50 **Level:** 6-12 **Room:** Inman

Title: Radioactivity and Radiation - Demonstrations for Teachers and Students

Presenters: Michael Nichols, Joe Shonka,

Description: This workshop provides a training and hands-on demonstration material enabling students to distinguish the characteristics and components of radioactivity.

Content: Physical Science

Day: THURS, 2/16 **Time:** 1:00-2:50 **Level:** 6-12 **Room:** International Ballroom

Title: Bugs, Pathogens, and Plants

Presenters: Kisha Shelton, Marianne Schockley,

Description: Join us to learn how to use insects and plant disease to teach different biological principles.

Content: Biology (Life Science)

Thursday – 2:00-2:50 Sessions

Day: THURS, 2/16 **Time:** 2:00-2:50 **Level:** Middle **Room:** Vancouver

Title: Using Student Engagement to Make Class Time More Meaningful

Presenters: Jo-ne Bourassa

Description: What would happen if the teacher spent less time teaching, but the students spent more time learning? This can happen through the use of student engagement activities.

Content: General Science



Day: THURS, 2/16 **Time:** 2:00-2:50 **Level:** 6-12 **Room:** Piedmont

Title: Public Health and Public Health Careers

Presenters: Dr. Lynderia Cheevers

Description: Never has there been a more exciting time to pursue a career in public health. Why? Most experts agree that advances in improvement of health over the next several decades will come from the broader development and application of population-based prevention programs. This session provides an overview of the core disciplines within the field of public health and public health positions with critical workforce shortages. Educators are encouraged to attend this session so that they can provide information to their students about the large variety of enjoyable, rewarding public health careers that confront complex and challenging health issues in our society.

Content: Interdisciplinary



Day: THURS, 2/16 **Time:** 2:00-2:50 **Level:** Middle **Room:** Grand Hall East B

Title: High Touch High Tech and YOU - Science Made Fun! 6-8

Presenters: Beverly Graham, Perry Cantrell

Description: Find out how High Touch High Tech can easily enhance your science curriculum with hands-on inschool field trips.

Content: General Science

Day: THURS, 2/16 **Time:** 2:00-2:50 **Level:** K-5 **Room:** Manila

Title: STEM in Georgia

Presenters: Gilda Lyon, Dr. Juan Carlos Aguilar

Description: Learn what STEM is & what is going on in Georgia around STEM.

Content: General Science



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| Day: THURS, 2/16 | Time: 2:00-2:50 | Level: K-5 | Room: Montreal |
| Title: <u>K5 Science Endorsement at Metro RESA</u> | | | |
| Presenters: Donna Barrett | | | |
| Description: This session will provide an overview of the Metro RESA K-5 science endorsement. The endorsement includes 4 courses and an authentic residency. Candidates become certified in K-5 science upon completion. | | | |
| Content: Interdisciplinary | | | |
| Day: THURS, 2/16 | Time: 2:00-2:50 | Level: High | Room: Cairo |
| Title: <u>Ten Tried and True High School Biology Lessons</u> | | | |
| Presenters: Michael Dias, Wes McCoy | | | |
| Description: 12 Bio-lessons all mapped onto the Benchmarks (AAAS) and Inquiry Features (NRC). Instructional files for implementing these lessons are provided to all participants. Represented GPS include SCSh1&8, SB1b&c, SB2b&c, SB5d. | | | |
| Content: Biology (Life Science) | | | |
| Day: THURS, 2/16 | Time: 2:00-2:50 | Level: 6-12 | Room: Roswell |
| Title: <u>Acoustics: Do You Hear What I Hear?</u> | | | |
| Presenters: Ann Robinson, David Todd, Sharon Kirby | | | |
| Description: Relating the properties of sound to everyday objects can be exciting and fun. Teachers will get inquiry activities and other resources on resonance, sound waves, musical instruments and the ear. | | | |
| Content: Physical Science | | | |
| Day: THURS, 2/16 | Time: 2:00-2:50 | Level: Middle | Room: University |
| Title: <u>Impact of a Content Area Practicum Experience on Pre-Service Science Teacher Content and Pedagogical Efficacy</u> | | | |
| Presenters: Timothy Goodale | | | |
| Description: The Content Area Practicum Experience (CAPE) places middle grades science teacher candidates in science organizations and government agencies. This session will outline the framework of this experience, the process of networking and developing partnerships with local organizations and initial outcomes. | | | |
| Content: General Science | | | |
| Day: THURS, 2/16 | Time: 2:00-2:50 | Level: K-12 | Room: Techwood |
| Title: <u>Rivers to Reefs: the Inside Scoop (and Dip!)</u> | | | |
| Presenters: Kim Morris-Zarneke, Cathy Sakas | | | |
| Description: Get the inside scoop about Rivers to Reefs through video, personal testimonials on the value of professional development experiences, and a hands on watershed activity. | | | |
| Content: Life Science | | | |
| Day: THURS, 2/16 | Time: 2:00-2:50 | Level: High | Room: Spring |
| Title: <u>Including nanotechnology in you Science Classrooms-Results from a Summer Research Experience</u> | | | |
| Presenters: Nicole Harper | | | |
| Description: Nanotechnology in the high school science classroom. Come learn how teachers spent their summer and how they are using nano in their classes. Find out how you can participant summer of 2012 | | | |
| Content: General Science | | | |

Day: THURS, 2/16 **Time:** 2:00-2:50 **Level:** 6-12 **Room:** Grand Hall East A

Title: Family Science Nights (CSI Style) (grades 6-12)

Presenters: Stephanie Shultz

Description: In conjunction with a state-wide effort to improve test scores, you will learn how to set up a successful Family Science Night (CSI style) for your classroom, school or system.

Content: General Science

Thursday – 2:00-3:50 Sessions

Day: THURS, 2/16 **Time:** 2:00-3:50 **Level:** Middle **Room:** Singapore

Title: Using Food Science as a Learning Tool in Biology

Presenters: Joseph Nunn

Description: This workshop is being presented by past attendees of the FDA/NSTA Science and our Food Supply Workshop held in Washington D.C. A sampling of hands-on labs will be conducted that illustrate the science behind food safety.

Content: Biology (life science)

Day: THURS, 2/16 **Time:** 2:00-3:50 **Level:** 6-12 **Room:** Grand Hall East C

Title: Initiating, Engaging, and Completing a STEM Unit

Presenters: Holly Vida

Description: PASCO's STEM Modules guide students through the multi-step engineering design process. Students work individually and in groups to design, build, test, and evaluate their engineering prototype. As you engage in this workshop you will experience the STEM process of inquiry utilizing a pre-designed but open ended format, including quick and easy data collection. Thus ensuring a true STEM experience for each participant. This workshop will address the following GPS standards; SCSh3-9.c and d, which deal with inquiry based learning, analysis skills, and students' ability to quickly address misconceptions.

Content: Interdisciplinary

Day: THURS, 2/16 **Time:** 2:00-3:50 **Level:** Middle **Room:** Grand Hall East D

Title: Preparing Georgia's Middle School Science Teachers to Integrate Inquiry-based, Hands-on Research Modules in the Classroom

Presenters: Chandan Morris Robbins, Middle School Educators

Description: Improving Teacher Quality State Grant, through Georgia State University's Bio-Bus Program, focuses on three areas, earth, life, and physical sciences, particularly suitable for incorporating teaching strategies that stimulate student interest in science.

Content: Interdisciplinary

Day: THURS, 2/16 **Time:** 2:00-3:50 **Level:** 6-12 **Room:** Hong Kong

Title: Best Practices: Making Content Videos that are Instructional AND Entertaining

Presenters: Jennifer Douglass, Jennifer Hulgan, Meredith Wood

Description: After a brief "best practices" discussion, participants will be guided through the process (hands-on) of making, editing and producing an instructional and engaging content video of their own.

Content: General

Thursday – 3:00-3:50 Sessions

Day: THURS, 2/16 **Time:** 3:00-3:50 **Level:** Middle **Room:** Vancouver

Title: STEM Internships for High School Students



Presenters: Donald White

Description: Come discover how to answer “Why do I have to learn this?!” while leveraging community resources. Session will describe how to establish STEM internships for HS students.

Content: General Science

Day: THURS, 2/16 **Time:** 3:00-3:50 **Level:** 6-12 **Room:** Piedmont

Title: Introducing Epidemiology through a Food borne Outbreak Demonstration:



Who Ate the Potato Salad?

Presenters: Dr. Ralph Cordell

Description: Outbreaks of listeria and other serious illnesses linked to tainted food are becoming more common, partly because much of what we eat takes a long and winding road from farm to fork. This session demonstrates an activity centered on a mock outbreak of food poisoning. Participants collect, analyze, and interpret data using the same methods used by CDC epidemiologists in conducting these investigations.

Content: Interdisciplinary

Day: THURS, 2/16 **Time:** 3:00-3:50 **Level:** K-8 **Room:** Inman

Title: The 5 E's (Engage, Explore, Explain, Elaborate, Evaluate)

Presenters: Lynn Larsen, Debbie Stuckey

Description: Apply the 5E method as you create your lesson. See science lessons come alive through the water cycle.

Content: General

Day: THURS, 2/16 **Time:** 3:00-3:50 **Level:** 6-12 **Room:** Cairo

Title: 7 Billion and Counting: Lessons for Our Planet's Future

Presenters: Bonita Flournoy

Description: Engage in innovative activities to explore connections between human population growth, resource consumption and the changing face of our planet. Free CD-ROM of activities.

Content: Life Science

Day: THURS, 2/16 **Time:** 3:00-3:50 **Level:** 6-12 **Room:** Grand Hall East A

Title: Mastering the Chemical Formula: an Exceptionally Effective Way to Teach Subscripts and Coefficients

Presenters: Larry Banowsky

Description: What is the difference between subscripts and coefficients? What does “balancing” a chemical equation mean? Many students have trouble with these fundamental concepts in chemistry and this prevents them from reaching the next level of learning. If a student does not fully understand the chemical formula, moles, reactions and stoichiometry are hopelessly confusing. This hands-on session will give you some elegant, intuitive, and well-differentiated lessons that show students of all ability levels to master the chemical formula and therefore move confidently into deeper understanding of chemistry.

Content: Chemistry

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| <p>Day: THURS, 2/16 Time: 3:00-3:50 Level: High Room: Roswell</p> <p>Title: <u>Laser Madness</u></p> <p>Presenters: Lee Wheeler</p> <p>Description: See what students can do with Pangolin software and a Skywriter RGB Laser.</p> <p>Content: Physics</p> |
| <p>Day: THURS, 2/16 Time: 3:00-3:50 Level: 6-12 Room: University</p> <p>Title: <u>Powers of Ten: Scaling the Universe with NASA</u></p> <p>Presenters: Tyson Harty, Ph.D</p> <p>Description: How big is big? How small is small? "Scale the Universe" as we investigate the powers of ten with free NASA materials.</p> <p>Content: Earth/Space Science</p> |
| <p>Day: THURS, 2/16 Time: 3:00-3:50 Level: K-8 Room: Spring</p> <p>Title: <u>Teaching Engineering Design in Science Classrooms</u></p> <p>Presenters: Donna Governor</p> <p>Description: How are engineering and science alike? How are they different? Discover how to teach the engineering cycle with your students.</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 3:00-3:50 Level: Elementary Room: Manila</p> <p>Title: <u>Plastic Awareness Week</u></p> <p>Presenters: Jim Ries, Carter Ries, Olivia Ries</p> <p>Description: The purpose is to provide factual information about the all types of plastic pollution and to suggest simple changes students can incorporate into their daily lives which will have an immediate impact on our environment.</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 3:00-3:50 Level: K-8 Room: Grand Hall East B</p> <p>Title: <u>Bringing Outdoor Science In</u></p> <p>Presenters: Steve Rich</p> <p>Description: Join NSTA Press bestselling author Steve Rich to discover how to bring the school yard indoors with lessons from the brand new title "Bringing Outdoor Science In - Thrifty Classroom Lessons."</p> <p>Content: Interdisciplinary</p> |
| <p>Thursday – 3:00-4:50 Sessions</p> |
| <p>Day: THURS, 2/16 Time: 3:00-4:50 Level: K-5 Room: Montreal</p> <p>Title: <u>Bridging the Gap- Collaborative Strategies for Teaching Third and Fifth Grade Science</u></p> <p>Presenters: Michelle Bergozza, Phillip Burns</p> <p>Description: Become a human circuit and test conductors! Play with macro-invertebrates while using a dichotomous key! Get your hands dirty to explore weathering, erosion and deposition! Designed for 3rd and 5th grade.</p> <p>Content: General Science</p> |

Day: THURS, 2/16 **Time:** 3:00-4:50 **Level:** K-5 **Room:** Techwood

Title: How to Keep Every Student Engaged In Elementary Science

Presenters: Dr. Rita Bailey, Tanisha Johnson

Description: This training is designed with engaging the whole student in mind. We will demonstrate how quality questioning, daily assessments, and student reflection, can be used enhance science learning.

Content: General Science

Day: THURS, 2/16 **Time:** 3:00-4:50 **Level:** 6-8 **Room:** International Ballroom

Title: Understanding Atomic Structure & Periodicity

Presenters: Jane Metty, Katrina Hammonds

Description: This several page foldable makes an excellent artifact demonstrating student understanding as well as keep 8th grade students engaged while they learn these concepts.

Content: Chemistry

Thursday – 4:00-4:50 Sessions

Day: THURS, 2/16 **Time:** 4:00-4:50 **Level:** K-5 **Room:** Vancouver

Title: Picture-Perfect Science, Grades 3–5

Presenters: Alfred Porter

Description: Learn how to use nonfiction books to guide inquiry in the upper elementary classroom.

Content: General Science



Day: THURS, 2/16 **Time:** 4:00-4:50 **Level:** 6-12 **Room:** Hong Kong

Title: How to Engage Students from Day 1 with Science Olympiad Activities used for instruction

Presenters: Kelly Price

Description: Use Science Olympiad activities for the first 1-2 weeks of your science class instead of the typical Chapter 1. Engaging methods for instructing the nature of science, measurement, etc. will be shared.

Content: General Science

Day: THURS, 2/16 **Time:** 4:00-4:50 **Level:** 6-12 **Room:** Singapore

Title: Connecting AYP to the Content in the Classroom

Presenters: Michael Mahan

Description: A study on the CRCT indicators for Science scores in all grades

Content: General Science

Day: THURS, 2/16 **Time:** 4:00-4:50 **Level:** High **Room:** Inman

Title: Chemistry Demos, labs, and Projects

Presenters: Nancy Brim

Description: I will take you through a series of demos, labs, and projects that I do with my high school chemistry students.

Content: Chemistry

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| <p>Day: THURS, 2/16 Time: 4:00-4:50 Level: Elementary Room: Manila</p> <p>Title: <u>Easy Elementary STEM Day</u></p> <p>Presenters: Yvonne Baxter, Sarah Milligan, Melissa Ladd, Alicia Porras</p> <p>Description: A STEM Day is an easy way to encourage student excitement and exploration. This session will provide low cost/no cost methods for putting on a successful STEM event. Sample schedules, activities, and insight will be shared.</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 4:00-4:50 Level: 6-12 Room: University</p> <p>Title: <u>Ramping Up Inquiry: 5 Key Questions</u></p> <p>Presenters: Lee Meadows</p> <p>Description: Learn five questions that raise the bar on inquiry-based teaching and develop classrooms where students are engaged, understand science, and see its relevance.</p> <p>Content: General Science</p> |
| <p>Day: THURS, 2/16 Time: 4:00-4:50 Level: 6-12 Room: Cairo</p> <p>Title: <u>Pirates of Puerto Rico</u></p> <p>Presenters: Lawrence Harris</p> <p>Description: This is a PBL based on research that i observed this summer in the biochemistry labs at Emory University dealing With Fluorescence.</p> <p>Content: Chemistry</p> |
| <p>Day: THURS, 2/16 Time: 4:00-4:50 Level: High Room: Grand Hall East B</p> <p>Title: <u>Forensics, Flowers and Pollen</u></p> <p>Presenters: Anthony Bertino, Patricia Bertino</p> <p>Description: Increase student interest/knowledge in math, literacy, technology. Discover how pollen solves crime. Participants receive Power Point, activities, 5E, case studies and presenters' textbook, Forensic Science: Fundamentals & Investigations.</p> <p>Content: Interdisciplinary</p> |
| <p>Day: THURS, 2/16 Time: 4:00-4:50 Level: High Room: Roswell</p> <p>Title: <u>Putting the Spark Back into Chemistry: Using Music to Engage Students in Chemistry</u></p> <p>Presenters: Karen Jones</p> <p>Description: During this presentation, the presenter will address using music in Chemistry to engage students. Through the incorporation of music, teachers can keep students interested in Chemistry.</p> <p>Content: Chemistry</p> |
| <p>Day: THURS, 2/16 Time: 4:00-4:50 Level: K-5 Room: Grand Hall East D</p> <p>Title: <u>Seeds of Science, Roots of Reading</u></p> <p>Presenters: Marilyn Enoch, Jane Sharp, Steve Jones</p> <p>Description: Do It, Talk It, Read It, Write It—Use research based materials to teach Science and Literacy. Experience a lesson and receive workshop materials from Delta Education.</p> <p>Content: Interdisciplinary</p> |

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| Day: THURS, 2/16 | Time: 4:00-4:50 | Level: High | Room: Grand Hall East A |
| Title: <u>Photosynthesis and Respiration Shuffle! Teaching for True Conceptual Understanding</u> | | | |
| Presenters: Amy Kezman, Laura Lenz | | | |
| Description: Take home standards-based, hands-on materials that engage students in learning about photosynthesis and cellular respiration. | | | |
| Content: Life Science | | | |
| Day: THURS, 2/16 | Time: 4:00-4:50 | Level: High | Room: Grand Hall East C |
| Title: <u>Flipping Using Edmodo: Trials and Triumphs & Other Tech Tools for Teaching Science</u> | | | |
| Presenters: Timmi Shawler | | | |
| Description: The session will include my experiences using Edmodo to flip my biology classrooms. The second part of the session will be tech tools that can be incorporated in the process. | | | |
| Content: Life Science | | | |
| Day: THURS, 2/16 | Time: 4:00-4:50 | Level: K-12 | Room: Exhibit Hall |
| GSTA District Meet & Greet! | | | |
| Description: Come and gather in the exhibit hall and network with fellow educators from your GSTA District. Find teachers in your area to share ideas, resources, and maybe a ride to the next conference! GSTA District Directors will be here to facilitate this informal gathering. | | | |

68 million years before Elvis...

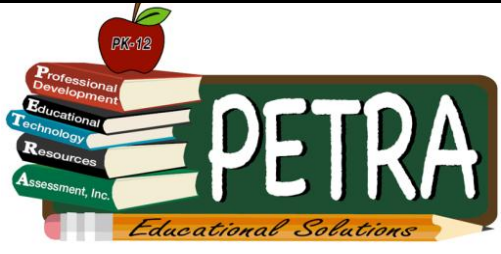
He was king.

MESOZOIC ERA
THE AGE OF DINOSAURS

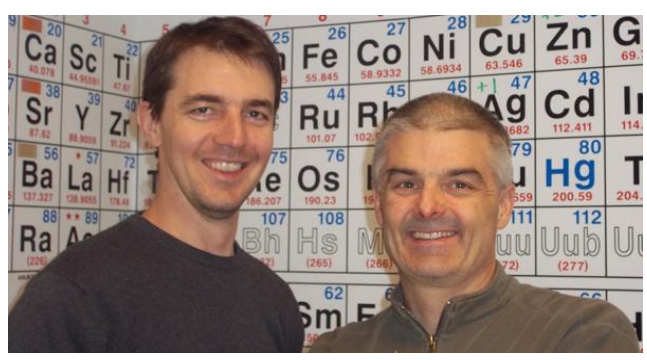
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GEORGIA AQUARIUM



Jon Bergmann & Aaron Sams

Featured Presenters

**Learning 4 Mastery:
Flipping Your Classroom
*Learning When and
Where You Want It!***



Bergmann & Sams have become known around the world as the first teachers to flip the classroom. In the flipped classroom, students watch video lessons made by their teachers and then use class time to do more hands-on activities and work with their teachers on difficult topics.

**Friday
Feb. 17th**

| | | | |
|---------------------------------------|----------|---------------------------------------|-------------------|
| 8:00 | Piedmont | 11:00 | Piedmont |
| • The Flipped Classroom | | • The Flipped Classroom | |
| 9:00 | Piedmont | 2:30 | Grand Hall East B |
| • Mastery Learning/Teaching | | • Mastery Learning/Teaching | |
| 10:00 | Piedmont | 3:30 | Grand Hall East B |
| • Getting Started with Pod/Vodcasting | | • Getting Started with Pod/Vodcasting | |



Keynote Address

Friday, February 17

12:00-1:15

International Ballroom

Get the Scoop on New Next Generation Science Standards

Dr. Stephen Pruitt

Work is progressing to develop the Next Generation Science Standards (NGSS). This informational session will provide an update on the development of these standards, including process and timeline for release of drafts and final documents, how science educators can be involved, and implications for science teaching.

With private funding from the Carnegie Corporation, the National Research Council (NRC) and Achieve, with support from NSTA and the American Association for the Advancement of Science (AAAS), have embarked on a two-step cooperative process to develop the Next Generation Science Standards. The first step was to develop a conceptual framework that is grounded in current research on science and science learning and identifies the science all K–12 students should know. In July, NRC released *A Framework for K–12 Science Education*, which now serves as the foundation for new K–12 science education standards. The next step will be the development of the standards. That state-led process is being managed by Achieve and will involve scientists, science teachers, policy makers, industry, and other interested parties. The standards are expected to be completed in late 2012



Bio: **Stephen Pruitt** was named Vice President for Content, Research, and Development for Achieve, Inc., in November 2010. He joined Achieve as director of science in July 2010. In addition to his new role, he will continue to lead the development of the Next-Generation Science Education Standards. Stephen began his career as a high school chemistry teacher in Georgia, where he taught for 12 years. In 2003, he joined the Georgia Department of Education as program manager for science. He served in that role for four years before becoming director of academic standards, where he oversaw the continued implementation of the Georgia Performance Standards in all content areas. In 2008 he became the Associate Superintendent of Assessment and Accountability, responsible for directing all state assessments and overseeing the No Child Left Behind accountability process.

In addition to his state-level work, Stephen also served as president of the Council of State Science Supervisors and a member of the writing team for the College Board's Standards for College Success Science Standards. Most recently, he served on the National Academy of Sciences' Committee on Conceptual Framework for New Science Education Standards, which is developing the framework for the Next-Generation Science Education Standards.





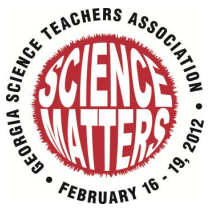
Presentation Strands

Thursday
February 16th



| | |
|-------|---|
| 10:00 | Science & The Common Core |
| 11:00 | Connecting Science with the Whole Curriculum |
| 12:00 | Making Meaning with the Nouns & Verbs of Science |
| 1:00 | Simple Methods for Improving Student Performance & Motivation |
| 2:00 | Using Student Engagement to Make Class Time More Meaningful |
| 3:00 | STEM Internships for High School Students |
| 4:00 | Picture Perfect Science, Grades 3-5 |

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| <p>1:00</p> <p>Introducing Public Health Education</p> | <p>2:00</p> <p>Public Health & Public Health Careers</p> | <p>3:00</p> <p>Introducing Epidemiology Through Food Borne Outbreak Demo: Who Ate the Potato Salad?</p> |
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Presentation Strands

Friday
February 17th



- 8:00 • Practical Insights from Outstanding Earth Science Teachers
- 9:00 • The New Horizons space craft to Pluto and the Kuiper Belt
- 10:00 • Campus Outdoor Education Development
- 11:00 • Fitting the Human Body into the Science Curriculum
- 1:30 • GENESIS: DNA Basics
- 2:30 • SAND
- 3:30 • Excitable Science: Hands on for 3rd, 4th & 5th grade

Hong Kong Room

11:00
1:30-4:20

Physics Teaching Strand Co-Sponsored by SACS & AAPT
Roswell Room



Presentation Strands

Friday
February 17th

National
Science
Teachers
Association

NSTA
Manila Room

Complete Overview of how NSTA Can Support Your Science Teaching 8:00

e-PD: Fully Utilizing the NSTA Learning Center 9:00

Facilitating PD with NSTA Press Books 10:00

Robust Networks that Allow Science Educators to Thrive 11:00

BIOTECHNOLOGY

RNA Interference 9:00

Digital Resources from the Hudson Alpha Institute for Biotechnology 10:00

Proper Pipetting Technique & Maintenance 11:00

BioRAD

DNA is Elementary 1:30

Cairo Room 2:30

Thursday

Power Tools for Powerful Teachers - SLDS @ 10:00 Hong Kong

Applying for the Presidential Award @ 1:00 Manila

STEM In Georgia @ 2:00 Manila

Friday

Power Tools for Powerful Teachers - SLDS @ 8:00 Singapore

Science Updates @ 1:30 International Ballroom

Formative Assessment & Differentiation in Science @ 10:00 Singapore

Saturday

Differentiation in the Science Classroom @ 9:30 University



Friday - 8:00-8:50 Sessions

Day: FRI, 2/17 **Time:** 8:00-8:50 **Level:** Elementary **Room:** Manila

Title: A Complete Overview of how NSTA Can Support Your Science Teaching

Presenters: Edward Rock

Description: Come learn how the largest science education organization in the world can support your classroom, school, district and state. We'll discuss who the National Science Teachers Association (NSTA) is, how it interfaces with GSTA, and provide a detailed scope of the association and the resources that are available to all science educators. Learn how you can actively engage in the national discussion about science and STEM education. All attendees will receive a FREE copy of NSTA's newest publication, *NSTA Reader's Guide to the K-12 Science Education Framework*.

Content: General Science



Day: FRI, 2/17 **Time:** 8:00-9:50 **Level:** High **Room:** Cairo

Title: BIOTECH - RNA Interference

Presenters: Philip Gibson

Description: RNA interference challenges the Central Dogma of Biology. This session's activity demonstrates how genetically identical organisms can develop into phenotypically distinct populations.

Content: Biotechnology



Day: FRI, 2/17 **Time:** 8:00-8:50 **Level:** High **Room:** Piedmont

Title: The Flipped Classroom

Presenters: Jon Bergmann and Aaron Sams

Description: What a flipped classroom is, what it is not, and how to do it well. See how they completely transformed their high school chemistry classrooms, so that students would actually master the material. Turning learning on its head.

Content: General



Day: THURS, 2/16 **Time:** 8:00-9:50 **Level:** K-12 **Room:** Singapore

Title: Power Tools for Powerful Teachers - SLDS

Presenters: Hubert Bennett

Description: Would you like to know the strengths and weaknesses of every student on your Roster? Find out how use the Statewide Longitudinal Data System (SLDS) to UNLOCK every child's potential. Now at your fingertips, you will find up to six years worth of information on your students (Assessment, Enrollment, Attendance, Previous Class Grades, Instructional Programs, etc...).

Content: General Science



Day: FRI, 2/17 **Time:** 8:00-8:50 **Level:** Elementary **Room:** Montreal

Title: CAN YOU SEE THE PHASES

Presenters: Robert Bowman

Description: Learn better techniques and tricks on how to get your students to learn the phases of the moon. Come join this interactive session!

Content: Earth/Space Science

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| Day: FRI, 2/17 | Time: 8:00-8:50 | Level: K-8 | Room: Vancouver |
| Title: <u>Butterflies - Engage and Teach Students with Special Needs</u> | | | |
| Presenters: Donna Gast, Dorinda Haley, | | | |
| Description: From collaborative to self-contained classrooms caterpillars and butterflies reach and teach students with special needs. Learn how all students can raise butterflies, tag monarchs, and participate in citizen science. Freebies. | | | |
| Content: Biology (Life Science) | | | |
| Day: FRI, 2/17 | Time: 8:00-8:50 | Level: K-8 | Room: University |
| Title: <u>Storm Chasing - A Classroom Experience</u> | | | |
| Presenters: Jim Hinton | | | |
| Description: Turn your classroom into a storm chasing adventure. Participants will be given resources/strategies to engage their students in the study of severe weather through the eyes of a storm chaser. | | | |
| Content: Earth/Space Science | | | |
| Day: FRI, 2/17 | Time: 8:00-8:50 | Level: K-8 | Room: Techwood |
| Title: <u>Class Museums</u> | | | |
| Presenters: Charmagne Quenan | | | |
| Description: Learn how to create a field trip experience in your own as your students become curators of your own class museum. | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 8:00-8:50 | Level: High | Room: Spring |
| Title: <u>Breaking Boundaries: Collaboration between gifted and ESEP (MIOD/MI)</u> | | | |
| Presenters: Peter Fischer, Chris Kennedy, Rie Cowan, Sherrie Chovanec | | | |
| Description: Inquiry methods used within ESEP classes in collaboration with gifted students in Biology/Physical Science, preparing students for GAA and EOCT. | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 8:00-8:50 | Level: High | Room: Grand Hall East B |
| Title: <u>Life Science Tech Fest: Really Easy Data Collectors</u> | | | |
| Presenters: Dr. Janet McManic | | | |
| Description: Celebrate innovation with our Real Easy Data probes, RED! A hands-on technology workshop using our RED data collectors to record and analyze animal behavior and muscle fatigue. | | | |
| Content: Biology (Life Science) | | | |
| Day: FRI, 2/17 | Time: 8:00-8:50 | Level: Middle | Room: Hong Kong |
| Title: <u>Practical Insights from Outstanding Earth Science Teachers - FERNBANK</u> | | | |
| Presenters: Bill Witherspoon | | | |
| Description: 5 recipients of the Outstanding Earth Science Teacher award and 15 other geoscience teachers from middle school through university level came together to share insights in March 2011. Hear and see the ideas brought to the symposium in Wilmington, NC, sponsored by the Southeastern Section of the National Association of Geoscience Teachers. | | | |
| Content: Biology (Life Science) | | | |



Day: FRI, 2/17 **Time:** 8:00-8:50 **Level:** K-8 **Room:** Grand Hall East C
Title: Teach Your Standards with turtle Activities

Presenters: Marti Schriver, Karen Chassereau, Breanna Young
Description: Take the beach to your classroom, teachers will use their week long experiences at Jekyll Island and the Georgia Sea Turtle Center for activities you can take back to your classroom.
Content: General Science

Day: FRI, 2/17 **Time:** 8:00-8:50 **Level:** High **Room:** Grand Hall East D
Title: Biotech Kitchen DNA with a Twist of Inquiry

Presenters: Jennifer Carden, Dr. Neil Lamb, Madelene Loftin
Description: Tired of cookbook DNA extraction protocols? We present an inquiry based DNA extraction procedure that will have students thinking about cell type, structures and DNA.
Content: Life Science

Friday - 8:00-10:50

Day: FRI, 2/17 **Time:** 8:00-10:50 **Level:** High **Room:** Roswell
Title: Honors Physics Labs that WORK! Build student interest, get results!

Presenters: Joseph Cox, Dan Miller, Stephen Beall
Description: It's time for your students to learn by doing! Experience a year's worth of physics labs all in one session. Low tech to high tech it's all here.
Content: Physics



Friday – 9:00-9:50 Sessions

Day: FRI, 2/17 **Time:** 9:00-9:50 **Level:** High **Room:** Piedmont
Title: Mastery Learning/Teaching

Presenters: Jon Bergmann and Aaron Sams
Description: See how they used video podcasts to make better use of class time by taking the non-interactive part (lecturing) *out* of class time and putting the stuff that kids were struggling with (homework and problem solving) *into* class, to improve their mastery. Learn how to make your classes more student centered, objective driven, differentiated places for learning.
Content: General



Day: FRI, 2/17 **Time:** 9:00-9:50 **Level:** Elementary **Room:** Manila
Title: e-PD: Fully Utilizing the NSTA Learning Center

Presenters: Edward Rock
Description: Highly Skilled teachers are critical to student success. Georgia Science Educators and Administrators will enjoy a detailed tour of the NSTA Learning Center, a tool for both online professional development content, PD coordination, and PD documentation. We'll explore the many ways educators are utilizing the tools and resources in the NSTA Learning Center and look at the research supporting the Learning Center's efficacy. Every participant will receive a FREE NSTA Learning Center account and their choice of 2 SciPacks (a \$79.98 value).
Content: General Science



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| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Elementary | Room: International Ballroom |
| Title: <u>3rd Grade Science MSP Show & Share</u> | | | |
| Presenters: David Rosengrant, Marlee Tierce, Sally Creel, Northwest GA MSP 3 rd Grade Cohort | | | |
| Description: 3rd grade teachers from the Northwest GA MSP will share resources, ideas, and best practice lessons addressing all 3 rd grade science GPS standards. Hand-out of each resource will be provided. | | | |
| Content: General | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Elementary | Room: Montreal |
| Title: <u>Matter Activities for K-5 Students with Household Products</u> | | | |
| Presenters: Amy Cook | | | |
| Description: Teachers will participate in several matter activities that will be demonstrated using household products to enhance and encourage students' interest in physical science. The activities involve inquiry based student learning. | | | |
| Content: Physical Science | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: 6-12 | Room: Grand Hall B |
| Title: <u>Free Classroom Resources from HHMI for Teaching Evolution</u> | | | |
| Presenters: Jennifer Bricken | | | |
| Description: Discover Howard Hughes Medical Institute classroom-ready lessons, hands-on activities, animations, and video clips to help you teach central and difficult biological concepts in evolution, such as selection, phylogenetic trees, drug resistance, and biodiversity, and the molecular genetics behind them. These free, engaging multimedia resources include inquiry-based investigations, and data collection, analysis, and computation. | | | |
| Content: Biology | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: 3-6 | Room: Inman |
| Title: <u>Why Does It Matter?</u> | | | |
| Presenters: Katherine Armstrong, Jane Sharp, Steve Jones | | | |
| Description: Use formative assessment to better inform teaching practices. Experience Next Step Strategies to help move student learning. Free workshop materials from Delta Education. | | | |
| Content: Physical Science | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Elementary | Room: Vancouver |
| Title: <u>Big Ideas from the Very Small</u> | | | |
| Presenters: Joyce Palmer Allen, Katie Hutchison, Samantha Andrews | | | |
| Description: Come and have fun exploring how teaching about small scale objects can fit into your science curriculum. Participants will be provided CD containing all lessons. | | | |
| Content: General | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Middle | Room: Singapore |
| Title: <u>Begged, Borrowed, and Stolen ~ We're still finding great ideas!</u> | | | |
| Presenters: Zoe Evans, Carol Turner, Ann Cook Tina Denney | | | |
| Description: Need a great activity to use Monday? No time to search the Internet? If so, come see some of the great ideas and activities we've begged, borrowed, and stolen over the years. | | | |
| Content: General | | | |

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| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: High | Room: University |
| Title: <u>Teaching Earth Systems in High School</u> | | | |
| Presenters: Stephanie Miles, Brandie Freeman | | | |
| Description: Teachers will engage in hands-on Earth systems activities, learn about resources available, and take home teaching materials | | | |
| Content: Earth/Space Science | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: High | Room: Grand Hall East A |
| Title: <u>Genetics: A Novel Method for Teaching Gene Expression</u> | | | |
| Presenters: Amy Kezman, Laura Lenz | | | |
| Description: Use standards-based, hands-on activities to teach gene expression and how it relates to the use of genetically modified organisms to address sustainability issues. | | | |
| Content: Life Science | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: K-8 | Room: Grand Hall East C |
| Title: <u>The Butterfly Man</u> | | | |
| Presenters: Steve Rich | | | |
| Description: Join author Steve Rich for a migration journey with the Monarch Butterfly. Incorporate reading, mathematics, and social studies into your science lessons, and consider inviting "The Butterfly Man" to your school. | | | |
| Content: Biology (Life Science) | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Middle | Room: Grand Hall East D |
| Title: <u>Inquiry Matters</u> | | | |
| Presenters: Katherine Armstrong, Jane Sharp, Steve Jones | | | |
| Description: Students learn science by DOING science. Use best practices that include inquiry and literacy that are incorporated in a research-based program. Free workshop materials from Delta Education | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Middle | Room: Techwood |
| Title: <u>Middle School Edible Science Lessons</u> | | | |
| Presenters: Tammy Hyder | | | |
| Description: Hands on Science at it's best! This workshop will combine not only hands on science activities, but will include a way to every middle schoolers heart...food! | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 9:00-9:50 | Level: Elementary | Room: Hong Kong |
| Title: <u>The New Horizons space craft to Pluto and the Kuiper Belt- FERNBANK</u> | | | |
| Presenters: April Whitt | | | |
| Description: In 2006, a small space craft was launched on a nine-year journey toward the edges of our solar system. The New Horizons robot probe will arrive at Pluto and the Kuiper Belt in 2015, and will send home the first up-close images of the ice dwarf planets out there. We'll take a look at the latest project information and try some of the related activities that have been developed for teachers and students. | | | |
| Content: Biology (Life Science) | | | |



Friday - 9:00-10:50 Sessions

Day: FRI, 2/17 **Time:** 9:00-10:50 **Level:** Middle **Room:** Spring

Title: Science Tools for Success

Presenters: Deanna Boyd

Description: Teachers will experience a hands-on demonstration of science tools including: interactive notebooks, foldables, vocabulary strategies, and various differentiation techniques. Free materials and information will be distributed!

Content: Biology (Life Science)

Friday - 10:00-10:50 Sessions

Day: FRI, 2/17 **Time:** 10:00-10:50 **Level:** High **Room:** Piedmont

Title: Getting Started with Pod/Vodcasting

Presenters: Jon Bergmann and Aaron Sams

Description: They have become known around the world as the first teachers to flip the classroom. In this session Bergmann & Sams will walk you through creating videos students will love, and using them appropriately.

Content: General



Day: FRI, 2/17 **Time:** 10:00-10:50 **Level:** Elementary **Room:** Manila

Title: Facilitating PD with NSTA Press Books

Presenters: Edward Rock

Description: Science Education Administrators, Professional Developers, and science consultants will revel in the research-based classroom practices provided by NSTA Press' professional development books. We'll discuss strategies and share hands-on examples for using these extraordinary tools as anchors for your professional learning communities. Several exemplary NSTA Press titles will be gifted as door prizes at this session

Content: General Science



Day: FRI, 2/17 **Time:** 10:00-10:50 **Level:** High **Room:** Cairo

Title: BIOTECH Digital Resources from the Hudson Alpha Institute for Biotechnology

Presenters: Jennifer Whitney Carden, Dr. Neil Lamb, Madelene Loftin

Description: Imagine students using their smart phone to study cells and to see science as a process. During this hands-on workshop teachers will use laptops and tablets to investigate these FREE digital resources

Content: Life Science



Day: FRI, 2/17 **Time:** 10:00-10:50 **Level:** K-5 **Room:** International Ballroom

Title: Hands On 5th Grade All Year Long – Paulding MSP

Presenters: Sally Creel, Stacey Osborne, 5th Grade Cohort

Description: Teacher leaders from the Paulding MSP will demonstrate several hands-on experiments to teach 5th grade science GPS. Attendees will take away several lessons and receive practical advice on fitting science in an elementary classroom.

Content: General

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| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: K-8 | Room: Montreal |
| Title: <u>Sensing Science</u> | | | |
| Presenters: Michaela D'Aquanni | | | |
| Description: Experiences bring science to life. Reconnecting our children to the world around them is the future we can invite them to hold in their hands. | | | |
| Content: General | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: Elementary | Room: Hong Kong |
| Title: <u>Campus Outdoor Education Development- FERNBANK</u> | | | |
| Presenters: Al Tate | | | |
| Description: Essentially, I plan to present a slide show supporting the development and use of school campuses (COED "Campus Outdoor Education Development") and local parks (or other convenient outdoor locations) for academic curriculum in Biology, Ecology, Geology, Physics, and applied mathematics. I plan to present slides with one or two examples, locations and proposals for others, and a discussion period at the end. | | | |
| Content: Biology (Life Science) | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: K-8 | Room: Vancouver |
| Title: <u>Georgia Barrier Islands</u> | | | |
| Presenters: Donna Mullenax | | | |
| Description: The Barrier Islands of Georgia will be presented through hands-on activities and discussion. The session will focus on the geology, habitats, geography, and history of the barrier islands. | | | |
| Content: Earth/Space Science | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: Middle | Room: Singapore |
| Title: <u>Strategies to Promote Reading and Writing in Middle School Science Instruction</u> | | | |
| Presenters: Joey Nunn, Cary Sell, Brian Lucy | | | |
| Description: Workshop will present classroom-tested strategies aimed at improving student's reading and writing abilities as they relate to understanding middle school science topics | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: 6-12 | Room: University |
| Title: <u>Seeing the Invisible Universe with NASA</u> | | | |
| Presenters: Tyson Harty, Ph.D | | | |
| Description: How do we "see" our invisible Universe? Explore the properties of light waves—from radio to gamma—with hands-on activities and free NASA materials. | | | |
| Content: Earth/Space Science | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: Middle | Room: Techwood |
| Title: <u>Single Gender and Science:What Works Best?</u> | | | |
| Presenters: Daphne Todd, Robert Wells, Travis Phelps | | | |
| Description: Science Showdown: Boys vs Girls in Science Achievement! Join us to learn gender specific strategies to increase student interest in science inquiry and mastery of the Georgia Performance Standards. | | | |
| Content: Interdisciplinary | | | |



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| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: 6-12 | Room: Grand Hall East A |
| Title: <u>Investigating Alternative Energy: Hydrogen and fuel cells</u> | | | |
| Presenters: AMY KEZMAN, Laura Lenz | | | |
| Description: Join us for an overview and two activities from a classroom-tested SEPUP module on hydrogen & fuel cells within the context of current energy & environmental issues related to transportation. | | | |
| Content: Earth/Space Science | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: Middle | Room: Grand Hall East B |
| Title: <u>Middle School Tech Fest: Really Easy Data Collectors</u> | | | |
| Presenters: Dr. Janet Mcmanic | | | |
| Description: Celebrate innovation with our Real Easy Data probes. Learn how to integrate the RED technology into your classroom with two hands-on activities: Pressure in a Column and Cartesian Diver. | | | |
| Content: Physical Science | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: 6-12 | Room: Grand Hall East C |
| Title: <u>EZ Data Collection with TI</u> | | | |
| Presenters: Ned Colley | | | |
| Description: Ned Colley from Texas Instruments will share innovative activities and resources for your science classroom. Hands-on session using TI and Vernier technology. Take home materials and door prizes! | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: Middle | Room: Grand Hall East D |
| Title: <u>Genetics Made Easy with Student Created Creatures</u> | | | |
| Presenters: Donna Gast | | | |
| Description: Students get it – genotypes, phenotypes, chromosomes, genes, meiosis, and much more with these easy and inexpensive activities. Even better, they remember it! Come away with samples and templates. | | | |
| Content: Biology (Life Science) | | | |
| Day: FRI, 2/17 | Time: 10:00-10:50 | Level: K-12 | Room: Inman |
| Title: <u>What is critical thinking How will I recognize it? And how can I get students to think critically?</u> | | | |
| Presenters: George Stickel, PhD. | | | |
| Description: What is critical thinking and how will I recognize it? Moving beyond merely doing science, this workshop will show how students to get students to analyze, apply, and integrate concepts. | | | |
| Content: General | | | |
| Friday - 11:00-11:50 Sessions | | | |
| Day: FRI, 2/17 | Time: 11:00-11:50 | Level: High | Room: Piedmont |
| Title: <u>The Flipped Classroom</u> | | | |
| Presenters: Jon Bergmann and Aaron Sams | | | |
| Description: What a flipped classroom is, what it is not, and how to do it well. See how they completely transformed their high school chemistry classrooms, so that students would actually master the material. Turning learning on its head. | | | |
| Content: General | | | |



Day: FRI, 2/17 **Time:** 11:00-11:50 **Level:** Elementary **Room:** Manila



Title: Robust Networks that Allow Science Educators to Thrive

Presenters: Edward Rock

Description: Teachers are lifelong learners. And lifelong learners know that most effective learning takes place during an open and focused conversation with colleagues. Science Educators of all grade ranges, administrators and staff developers will learn about the extraordinary networks, listserves and discussion forums they can engage in through the National Science Teachers Association. We'll share examples of the types of professional discussions and resource sharing that takes place on these lively networking venues. If science matters to you, you'll also have a chance to win a *Science Matters in Georgia* tee-shirt as a door prize.

Content: General Science

Day: FRI, 2/17 **Time:** 11:00-11:50 **Level:** K-8 **Room:** Montreal

Title: Project Based STEM Lessons

Presenters: John Payne

Description: Presentation includes a discussion of how project based learning can be used to improve student motivation and learning outcomes. Sample projects outlines will be distributed and discussed.

Content: Interdisciplinary

Day: FRI, 2/17 **Time:** 11:00-11:50 **Level:** High **Room:** Cairo

Title: BIOTECH - Proper Pipetting Technique and Maintenance

Presenters: Melinda Sheehan

Description: This session will focus on the importance of proper pipetting technique and the significance of pipette accuracy. Guidelines for proper usage, handling and calibrating of pipettes will be addressed.

Content: Biotechnology



Day: FRI, 2/17 **Time:** 11:00-11:50 **Level:** 6-12 **Room:** Roswell

Title: Physics Teaching Strand Co-Sponsored by SACS-AAPT

Presenters: Taha Mzoughi

Description: Come join fellow physics teachers in an afternoon filled with hands on physics activities. Activities range from simple yet engaging activities, teacher tools, share-a-thon, and more. Related sessions continued in afternoon.

Content: Physics



Day: FRI, 2/17 **Time:** 11:00-11:50 **Level:** 6-12 **Room:** Vancouver


Title: Lively Life Science

Presenters: Brown Thomas, 7th Grade MSP Participants

Description: Who says that Life Science can't be hands-on, exploratory, and exciting? Come and see how these top activities can promote student thinking, curiosity and love for our natural world.

Content: Life Science

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| <p>Day: FRI, 2/17 Time: 11:00-11:50 Level: High Room: Inman</p> <p>Title: <u>Using Probeware and Graphing Calculators in an Inquiry-Based Chemistry Classroom</u></p> <p>Presenters: Andy Felt</p> <p>Description: The purpose of this session will be to demonstrate how graphing calculators and probeware can be used to facilitate an inquiry-based high school chemistry classroom for ninth graders. Participants in the session will use Vernier probeware and a TI-Navigator.</p> <p>Content: Chemistry</p> |
| <p>Day: FRI, 2/17 Time: 11:00-11:50 Level: High Room: University</p> <p>Title: <u>Instructional Strategies for Science Achievement</u></p> <p>Presenters: Judy Ward, Yolanda Jones, Angie Walker</p> <p>Description: Come learn how to use different types of instructional strategies to enhance and strengthen science literacy.</p> <p>Content: Interdisciplinary</p> |
| <p>Day: FRI, 2/17 Time: 11:00-11:50 Level: 6-12 Room: Techwood</p> <p>Title: <u>Web 2.0: A Network of Possibilities</u></p> <p>Presenters: Blair Inabinet</p> <p>Description: This session will present a rationale for using Web 2.0 tools in Science instruction, while also providing take-with-you information about the most outstanding Web 2.0 tools available.</p> <p>Content: Interdisciplinary</p> |
| <p>Day: FRI, 2/17 Time: 11:00-11:50 Level: Middle Room: Spring</p> <p>Title: <u>Sense-ational Science</u></p> <p>Presenters: Donita Legoas, Kristina Istre</p> <p>Description: Sense-ational Science is a hands-on session with many practical and inexpensive ways to motivate your students to enjoy science. Science should engage all of the senses as well as make sense to the teacher and the students.</p> <p>Content: General Science</p> |
| <p>Day: FRI, 2/17 Time: 11:00-11:50 Level: High Room: Grand Hall East A</p> <p>Title: <u>Teaching toward Change: Preparing for the AP Biology Redesign</u></p> <p>Presenters: Kristen Dotti</p> <p>Description: Come practice ready-to-use activities and techniques you can implement immediately in your course to increase the level of critical thinking while integrating the desired changes for the AP Biology Redesign.</p> <p>Content: Biology (Life Science)</p> |
| <p>Day: FRI, 2/17 Time: 11:00-11:50 Level: High Room: Grand Hall East B</p> <p>Title: <u>Chemistry and the Atom: Fun With Atom Building Games!</u></p> <p>Presenters: Chris Neill, Wendy Delano, Alen Brown</p> <p>Description: Experience innovative games and activities that give students with different learning styles opportunities to explore and grasp atomic structure and the periodic table.</p> <p>Content: Chemistry</p> |

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| Day: FRI, 2/17 | Time: 11:00-11:50 | Level: 6-12 | Room: Grand Hall East C |
| Title: <u>The Impact of Social Media on Science Learning in the Classroom</u> | | | |
| Presenters: Dr. Sherry Crocker | | | |
| Description: This session will demonstrate 21st century communication and collaboration in Science by using Social Networking, Social Media, and Social Media tools to engage students and/or teachers. | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 11:00-11:50 | Level: K-8 | Room: Grand Hall East D |
| Title: <u>Cross-Curricular Mania (K-8)</u> | | | |
| Presenters: Stephanie Shultz | | | |
| Description: The new Common Core standards encourage greater integration of curriculum areas than ever before. How can you help prepare your students this year for what will come in futureFind out how! | | | |
| Content: Interdisciplinary | | | |
| Day: FRI, 2/17 | Time: 11:00-11:50 | Level: 6-12 | Room: Singapore |
| Title: <u>Science Fair Fun For Kids</u> | | | |
| Presenters: Beverly Klein, Beverly Adams | | | |
| Description: Do you need ways to make sure that your Science Projects are student projects? This is a standards based way to help students through the scientific process successfully by using a planning guide. | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 11:00-11:50 | Level: K-12 | Room: Hong Kong |
| Title: <u>Fitting the Human Body into the Science Curriculum- FERNBANK</u> | | | |
| Presenters: Linda Lögdberg | | | |
| Description: Most teachers believe that students need to understand how the human body works, but many find that the emphasis on improving ELA and math performance presents challenges in accomplishing this. There are only so many hours in a day! But there is hope: the human body is a marvelous tool for learning in almost all science areas. This presentation presents lessons and activities that meet science standards for elementary and high school yet help educate the future generation of health care consumers and providers about the most important machine of all—the human body. | | | |
| Content: Biology (Life Science) | | | |
| General Session –12:00-1:30 Keynote Address | | | |
| Day: FRI, 2/17 | Time: 12:00-1:15 | Level: K-12 | Room: International Ballroom |
| Title: <u>Get The Scoop on the New Next Generation Science Standards</u> | | | |
| Presenters: Stephen Pruitt, VP Achieve | | | |
| Description: Work is progressing to develop the Next Generation Science Standards (NGSS). This informational session will provide an update on the development of these standards, including process and timeline for release of drafts and final documents, how science educators can be involved, and implications for science teaching. | | | |
| Content: General Science | | | |
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Friday – 1:30-4:20 Sessions

Day: FRI, 2/17 **Time:** 1:30-4:20 **Level:** 6-12 **Room:** Roswell

Title: Physics Teaching Strand Co-Sponsored by SACS-AAPT

Presenters: Taha Mzoughi

Description: Come join fellow physics teachers in an afternoon filled with hands on physics activities. Activities range from simple yet engaging activities, teacher tools, share-a-thon, and more. Related sessions continued in afternoon.

Content: Physics



Friday – 1:30-2:20 Sessions

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** K-12 **Room:** International Ballroom

Title: Science Updates

Presenters: Juan-Carlos Aguilar

Description: This session will provide information about current policies coming out of the Georgia Department of Education that affect science instruction throughout the state.

Content: General Science



Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** 6-12 **Room:** Cairo

Title: Sustaining Biotechnology Labs in a Tough Economy: Making the Most of Your Resources

Presenters: Sherrie Andrews

Description: Come learn about how you can stretch your precious dollars and learn about resources you have in your area. Bio-Rad is dedicated to helping make your job easier and helping you develop best practices.

Content: BioTechnology



Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** 6-12 **Room:** Singapore

Title: MAT Students

Presenters: Rushton Greg

Description: Join Kennesaw State University chemistry education faculty and graduate students for this interactive workshop aimed at addressing introductory chemistry GPS concepts at the secondary (middle, high school) level. This session is specifically targeted towards out-of-field, alternatively-certified, or otherwise new teachers who are looking for research-based lessons that are safe, fun, inexpensive, and that target common student misconceptions.

Content: Chemistry



Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** K-12 **Room:** Manila

Title: Training Teachers to Apply Inquiry in K-12 Science

Presenters: Gail Marshall, Sharmistha Dutt

Description: This presentation illustrates how several successful programs have helped elementary, middle, and secondary teachers learn to more effectively use inquiry-based instruction in elementary, middle and secondary science and math.

Content: Interdisciplinary

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** Elementary **Room:** Montreal

Title: Baby, You Move Me!

Presenters: Sharon Golden, Jenny Hohn

Description: Make learning about simple machines, force & motion, and Newton's Laws FUN for your students! Come try a variety of hands-on, inquiry based activities that will enhance your teaching.

Content: Physical Science

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** Elementary **Room:** Vancouver

Title: Snacking Your Way Through Science *REMIX*

Presenters: Stacey Osborne, Alan Aumann,

Description: Looking for ways to assess your students through performance based activities? This presentation will provide hands on edible science labs for grades 3-5.

Content: Earth/Space Science

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** High **Room:** University

Title: Closing GAPSS in student's achievement.

Presenters: Steve Tester

Description: This presentation provides an overview of the GAPSS process highlighting key standards used to measure teacher performance.

Content: Interdisciplinary

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** High **Room:** Spring

Title: Vertical Alignment in Action - Biology & Chemistry

Presenters: Lauren Horton, Tasha Young

Description: Want to help prepare your students for science across grade levels? Come learn ideas and activities that align biology and chemistry K-12. Packets will be given to first 25 attendees.

Content: General Science

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** High **Room:** Grand Hall East A

Title: Learning and Teaching Science from the Inside Out

Presenters: Danielle Armstrong, Shannon Thorne-Brackett

Description: This session focuses on strategies for engaging non-traditional and at-risk students taking Biology, Physics and Physical Science geared toward maximizing student engagement while increasing rigour.

Content: General Science

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** High **Room:** Grand Hall East B

Title: Hands-On Genetics: Crazy Traits and Adaptation Survivor

Presenters: Chris Neill, Wendy Delano, Alen Brown

Description: How can you predict the traits of offspring when you know the genetic makeup of the parents? Ideas come alive by creating crazy creatures and studying the resulting population.

Content: Biology (Life Science)

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** K-8 **Room:** Hong Kong



Title: GENEsis: DNA Basics- FERNBANK

Presenters: Patricia Jenkins

Description: This program is designed to present DNA fundamentals, teaching strategies, demonstrations and labs to assist elementary and middle school teachers.

Content: Biology (Life Science)

Day: FRI, 2/17 **Time:** 1:30-2:20 **Level:** K-5 **Room:** Hong Kong

Title: Elementary Science: How to do it Right!

Presenters: Nancy DiPetrillo, Kelly Bodner, Donna Smith

Description: Explore the design, structure, and impact of science in a metro-Atlanta elementary school. Teachers and school administrator will share how science labs, outdoor learning areas, and space program have been cultivated.

Content: General Science

Friday – 1:30-3:20 Sessions

Day: FRI, 2/17 **Time:** 1:30-3:20 **Level:** High **Room:** Grand Hall East C

Title: STEM Activities Using TI-Nspires

Presenters: Jan Nourollahi, Ned Colley

Description: STEM Activities will be presented using the new Ti-Nspires and Vernier Probeware. Handouts provided for teachers.

Content: General Science

Day: FRI, 2/17 **Time:** 1:30-3:20 **Level:** Elementary **Room:** Grand Hall East D

Title: Differentiating Science in the Active Classroom (K-5)

Presenters: Stephanie Shultz

Description: After every HANDS-ON ACTIVITY we will stop to reflect on the standards used & how to differentiate these tasks between all grade levels. Using a variety of resources, participants will be engaged in activities involving life, physical & earth science. Door prizes will be given at the end of this session.

Content: General Science

Friday – 1:30-4:20 Sessions

Day: FRI, 2/17 **Time:** 1:30-4:20 **Level:** 6-12 **Room:** Roswell

Title: Physics Teaching Strand Co-Sponsored by SACS-AAPT

Presenters: Taha Mzoughi

Description: Come join fellow physics teachers in an afternoon filled with hands on physics activities. Activities range from simple yet engaging activities, teacher tools, share-a-thon, and more. Session continued from morning.

Content: Physics



Friday – 2:30-3:20 Sessions

Day: FRI, 2/17 **Time:** 2:30-3:20 **Level:** High **Room:** Grand Hall East B

Title: Mastery Learning/Teaching

Presenters: Jon Bergmann and Aaron Sams

Description: See how they used video podcasts to make better use of class time by taking the non-interactive part (lecturing) *out* of class time and putting the stuff that kids were struggling with (homework and problem solving) *into* class, to improve their mastery. Learn how to make your classes more student centered, objective driven, differentiated places for learning.

Content: General



Day: FRI, 2/17 **Time:** 2:30-3:20 **Level:** K-8 **Room:** Hong Kong

Title: SAND- FERNBANK

Presenters: Nan Huebner

Description: Hands on activities using river and beach sand to teach weathering, rocks and minerals, regions, and constructive/destructive processes to upper elementary and middle school students.

Content: Biology (Life Science)



Day: FRI, 2/17 **Time:** 2:30-3:20 **Level:** High **Room:** Manila

Title: Science is STEM-tastic!

Presenters: Patti Grammens, Lilly Turpin

Description: Dynamic teachers show you ways to incorporate STEM into your curriculum. We will give you ideas that are easy to implement and don't cost a lot of time or money.

Content: Interdisciplinary

Day: FRI, 2/17 **Time:** 2:30-3:20 **Level:** K-12 **Room:** Montreal

Title: Student Mentor Magic

Presenters: Brittney Cantrell, Lisa Oswald,

Description: Increase Elementary Science Engagement with High School Mentors

Content: General Science

Day: FRI, 2/17 **Time:** 2:30-3:20 **Level:** K-8 **Room:** Vancouver

Title: Making Science Fun

Presenters: LaTrina Howell, La'Detra Braswell

Description: This session will focus on interactive, innovative, hands-on, "out-of-the box" activities to keep students interested in doing and learning Science.

Content: General Science



Day: FRI, 2/17 **Time:** 2:30-3:20 **Level:** High **Room:** Spring

Title: Backward Design for Conceptual Labs for Physical Science

Presenters: Sherrie Chovanec, Peter Fischer

Description: Do you have favorite labs that need rejuvenation? Use backward design to infuse inquiry for all levels of learners.

Content: Physical Science

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|--|------------------------|--------------------------|--------------------------------|---|
| Day: FRI, 2/17 | Time: 2:30-3:20 | Level: Middle | Room: Grand Hall East A | |
| <u>Title: The Continent Puzzle...what can rearranging the continents tell you about the earth's history?</u> | | | | |
| Presenters: Amy Kezman, Peggy Bailey, | | | | |
| Description: We will use puzzle pieces representing earth's continents to begin to investigate continental drift. Concepts covered are; an intro to continental drift, fossil evidence, and geological time. | | | | |
| Content: Earth/Space Science | | | | |
| Day: FRI, 2/17 | Time: 2:30-3:20 | Level: High | Room: Inman | |
| <u>Title: The Value of Doing Science: A Comparison of Traditional versus Virtual Laboratory Activities in the High School Science Classroom</u> | | | | |
| Presenters: Jorge Diaz | | | | |
| Description: Use of virtual technology in the high school chemistry classroom focusing on the benefits and ideas for incorporating virtual labs in chemistry instruction. | | | | |
| Content: Chemistry | | | | |
| Friday – 2:30-4:20 Sessions | | | | |
| Day: FRI, 2/17 | Time: 2:30-4:20 | Level: Elementary | Room: Cairo | |
| <u>Title: BIOTECH - "DNA is Elementary"</u> | | | | |
| Presenters: Michelle Ventura, Dana Brown, Chandan Morris Robinson | | | | |
| Description: 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. | | | | |
| Content: Life Science | | | | |
| | | | |  |
| Day: FRI, 2/17 | Time: 2:30-4:20 | Level: High | Room: Singapore | |
| <u>Title: Formative Assessment and Differentiation in Science</u> | | | | |
| Presenters: Gilda Lyon | | | | |
| Description: Tired of reading about differentiation theory? Come see differentiation in action using formative assessments as the springboard. Hands-on activities that show you how differentiation is done. | | | | |
| Content: General Science | | | | |
| | | | |  |
| Day: FRI, 2/17 | Time: 2:30-4:20 | Level: Middle | Room: Techwood | |
| <u>Title: Journey to the Edge of the Solar System</u> | | | | |
| Presenters: Jayma Koval | | | | |
| Description: Come learn how you can incorporate space weather topics and NASA missions into your physical science or astronomy class. NASA giveaways are included! | | | | |
| Content: Earth/Space Science | | | | |
| Day: FRI, 2/17 | Time: 2:30-4:20 | Level: High | Room: Piedmont | |
| <u>Title: Using Higher Order Thinking Activities in Biology</u> | | | | |
| Presenters: Kristen Dotti | | | | |
| Description: Tired of lectures and handouts? Using games, modeling and simulations, this session will add new activities to your bag of tricks for teaching biology in an engaging and memorable manner. | | | | |
| Content: Biology (Life Science) | | | | |

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|--|------------------------|-----------------------|-------------------------------------|
| Day: FRI, 2/17 | Time: 2:30-4:20 | Level: K-12 | Room: International Ballroom |
| Title: <u>Out of the Textbook and Into the Fold with Notebook Foldables®</u> | | | |
| Presenters: Nancy Wisker | | | |
| Description: Recharge your students' interactive notebooks and turn on the motivation factor with Notebook Foldables®. Cut, fold, and more in this high-energy, hands-on session. | | | |
| Content: General Science | | | |
| Friday – 3:30-4:20 Sessions | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: High | Room: Grand Hall East B |
| Title: <u>Getting Started with Pod/Vodcasting</u> | | | |
| Presenters: Jon Bergmann and Aaron Sams | | | |
| Description: They have become known around the world as the first teachers to flip the classroom. In this session Bergmann & Sams will walk you through creating videos students will love, and using them appropriately. | | | |
| Content: General | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: High | Room: Manila |
| Title: <u>Life or death by PowerPoint in the classroom</u> | | | |
| Presenters: Marion Reeves | | | |
| Description: You have technologically advanced students entering your room. Is the use of technology in your class boring them? Can you teach characteristics of science well using electronic presentations and the web? | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: K-8 | Room: Montreal |
| Title: <u>At-Risk Student Success in Science Classrooms</u> | | | |
| Presenters: Ginger Harbin | | | |
| Description: This hands-on presentation will provide science educators with the tools needed to make the science classroom accessible and successful for all students. | | | |
| Content: Interdisciplinary | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: College | Room: University |
| Title: <u>Identifying and remediating misconceptions</u> | | | |
| Presenters: John Payne | | | |
| Description: This presentation will allow for a discussion of misconceptions among higher education science education faculty and preservice students. | | | |
| Content: Interdisciplinary | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: High | Room: Inman |
| Title: <u>Differentiation using student shuffle</u> | | | |
| Presenters: Sarah Eales, Christine Wahl | | | |
| Description: Differentiation within one classroom can be tough. Come see how a group of chemistry teachers has made differentiation a department initiative. | | | |
| Content: Chemistry | | | |



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|--|------------------------|--------------------|--------------------------------|
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: High | Room: Spring |
| Title: <u>Using Journal Clubs in High School to Improve Scientific Literacy</u> | | | |
| Presenters: Amanda Baskettt | | | |
| Description: Learn how to set up a journal club within the high school classroom to support student understanding of current scientific literature. | | | |
| Content: General Science | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: High | Room: Grand Hall East A |
| Title: <u>Springs and Swings: Harmonic Motion and Hooke's Law</u> | | | |
| Presenters: Chris Neill, Wendy Delano, Alen Brown | | | |
| Description: Make observations, measurements, and predictions in hands-on investigations exploring the concepts of harmonic motion, oscillation, natural frequency, resonance, and Hooke's Law. | | | |
| Content: Physics | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: 6-12 | Room: Grand Hall East C |
| Title: <u>AUTOPSY: Forensic Dissection Featuring Carolina's Perfect Solution® Pigs</u> | | | |
| Presenters: Carolina Teaching Partner | | | |
| Description: Engage students and revitalize your instruction of mammalian structure and function with a "real" autopsy! Participants dissect a pig using human autopsy protocols. Free materials. | | | |
| Content: Life Science | | | |
| Day: FRI, 2/17 | Time: 3:30-4:20 | Level: 3-5 | Room: Hong Kong |
| Title: <u>Excitable Science: Hands on for 3rd, 4th & 5th grade - FERNBANK</u> | | | |
| Presenters: Nathaniel Haeck | | | |
| Description: Teaching today is challenging. Come see some simple, fun, demonstrations that will spice up your classroom for all students in grades 3-5. | | | |
| Content: Biology (Life Science) | | | |



Don't Forget!

- GSTA is partnering with NSTA to host a NSTA Regional Conference in Atlanta on Nov. 1-3, 2012 at the Georgia World Congress Center.
- Since this regional conference will take place during the 2012-2013 school year, **there will not be a separate GSTA Conference in February 2013.**
- GSTA will continue with our Awards Program in 2013, and pick back up in February 2014 with our annual conference hosted in Macon.



Saturday – 8:30-9:20 Sessions

| | | | |
|---|------------------------|----------------------|--------------------------------|
| Day: SAT, 2/18 | Time: 8:30-9:20 | Level: 6-12 | Room: Roswell |
| Title: <u>Standards Based Assessment for Inquiry Based Classrooms</u> | | | |
| Presenters: Amy Beavers | | | |
| Description: Meaningful assessment that supports inquiry based science instruction is challenging. This session presents creative ways to integrate standards-based assessments to enhance student learning outcomes. | | | |
| Content: General Science | | | |
| Day: SAT, 2/18 | Time: 8:30-9:20 | Level: K-5 | Room: Grand Hall East C |
| Title: <u>Seeds of Science, Roots of Reading</u> | | | |
| Presenters: Marilyn Enoch, Jane Sharp, Steve Jones | | | |
| Description: Do It, Talk It, Read It, Write It—Use research based materials to teach Science and Literacy. Experience a lesson and receive workshop materials from Delta Education. | | | |
| Content: Interdisciplinary | | | |
| Day: SAT, 2/18 | Time: 8:30-9:20 | Level: K-8 | Room: Grand Hall East B |
| Title: <u>Brain Boosters - Science Extension Activities for the Classroom</u> | | | |
| Presenters: Jennifer Gates | | | |
| Description: Scientific learning doesn't have to end when the lesson does... the excitement of science lives on in extension menus. Take away activities and lessons to extend learning and engage students in higher order and critical thinking. | | | |
| Content: General Science | | | |
| Day: SAT, 2/18 | Time: 8:30-9:20 | Level: High | Room: Grand Hall East A |
| Title: <u>Teaching Physics with Angry Birds</u> | | | |
| Presenters: Rebecca Howell | | | |
| Description: How to use free software to screen capture and analyze video of Angry Birds in order to teach/reinforce mechanics principles: kinematics, energy and momentum. | | | |
| Content: Physics | | | |
| Day: SAT, 2/18 | Time: 8:30-9:20 | Level: Middle | Room: Techwood |
| Title: <u>Exploring Science Through Inquiry</u> | | | |
| Presenters: Enosa Erhunmwunsee, Oneisha Young, Lora Brazil | | | |
| Description: Come along on a journey and investigate Inquiry Based Teaching. Participants will learn the jargon, the philosophy behind the approach and practical ways to incorporate it into today's science classes. | | | |
| Content: Interdisciplinary | | | |
| Day: SAT, 2/18 | Time: 8:30-9:20 | Level: 9-12 | Room: Grand Hall East D |
| Title: <u>Using an Online Learning Management System (Moodle) to Increase Student Achievement</u> | | | |
| Presenters: Jennifer Forsyth | | | |
| Description: Hybrid courses are becoming more and more common at colleges and universities – why not give your students a head start? This session will focus on one teacher's explorations into creating a hybrid course for AP Biology. Open to anyone that would like to see how to begin setting up a hybrid course with ideas for management, creation of activities, and how to use this medium to increase student achievement. | | | |
| Content: General | | | |

Saturday – 8:30-10:20 Sessions

Day: SAT, 2/18 **Time:** 8:30-10:20 **Level:** K-8 **Room:** Piedmont

Title: Elementary Science Olympiad Coaches Mini-workshop

Presenters: Kelly Price

Description: Learn how to start Science Olympiad at your elementary school. Georgia hosts one of the largest state competitions for Elementary Science Olympiad. Learn about the events, resources, fund raising, and how to get involved with the state competition.

Content: General Science

Saturday – 9:30-10:20 Sessions

Day: SAT, 2/18 **Time:** 9:30-10:20 **Level:** 6-12 **Room:** Roswell

Title: “Georgia Barrier Islands, Rivers, and Swamps: Using local resources to reach students”

Presenters: Missy Bennett, Nancy Deal, Brian Burruss

Description: This presentation describes how teachers can use local resources such as Georgia’s barrier islands, rivers and swamps to teach science standards at multiple grade levels.

Content: Life Science

Day: SAT, 2/18 **Time:** 9:30-10:20 **Level:** 6-12 **Room:** Chicago AB

Title: Teaching Science Through Song

Presenters: Donna Governor

Description: Learn what makes a good song for teaching science concepts and how to use it effectively in the classroom.

Content: Interdisciplinary

Day: SAT, 2/18 **Time:** 9:30-10:20 **Level:** K-8 **Room:** Grand Hall East B

Title: Animal Classification

Presenters: Linda Bishop

Description: I use live animals to help students understand the different classification systems of the Animal Kingdom. Show different ways to classify animals.

Content: Life Science

Day: SAT, 2/18 **Time:** 9:30-10:20 **Level:** K-5 **Room:** Grand Hall East C

Title: Do It, Talk It, Read It, Write It

Presenters: Marilyn Enoch, Katherine Armstrong, Steve Jones

Description: Use research based materials to teach science and literacy. Experience a lesson and receive free workshop materials from Delta Education.

Content: Physical Science


Day: SAT, 2/18 **Time:** 9:30-10:20 **Level:** High **Room:** Grand Hall East A

Title: Redesigning the Laboratory Investigation: Integrating Inquiry into Biology

Presenters: Alfred Porter

Description: Learn how tried-and-true biology laboratory activities can be transformed into investigations that engage students while helping them to develop abilities for and understandings about inquiry.

Content: Life Science

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|---|--------------------------|----------------------|--------------------------------|--|
| Day: SAT, 2/18 | Time: 9:30-10:20 | Level: High | Room: Techwood | |
| Title: <u>Everything is about Science</u> | | | | |
| Presenters: Courtney Boehlke, Becky Bundy | | | | |
| Description: Two High School science teachers, with experience as scientists, bring the Scientific Method to the real world interests of the High School student | | | | |
| Content: General Science | | | | |
| Day: SAT, 2/18 | Time: 9:30-10:20 | Level: Middle | Room: Grand Hall East D | |
| Title: <u>How to teach Earth science and effectively reach every type of learner</u> | | | | |
| Presenters: Sarah Jordan | | | | |
| Description: I'll share activities that help each type of learner: auditory, visual and kinesthetic. I'll share vocabulary practices, lab ideas, and technology resources that will greatly improve ALL your students' understanding | | | | |
| Content: Earth/Space Science | | | | |
| Saturday – 9:30-11:20 Sessions | | | | |
| Day: SAT, 2/18 | Time: 9:30-11:20 | Level: Middle | Room: Spring | |
| Title: <u>Differentiation in the Science Classroom</u> | | | | |
| Presenters: Gilda Lyon | | | | |
| Description: Experience a differentiated classroom complete with formative assessments. | | | | |
| Content: General Science | | | | |
|  | | | | |
| Day: SAT, 2/18 | Time: 9:30-11:20 | Level: High | Room: Inman | |
| Title: <u>Labs using the Wii</u> | | | | |
| Presenters: Donna Mullenax | | | | |
| Description: We will perform several experiments using Wii controllers and balance to collect motion data. The Wii accessories will be bluetooth interfaced with laptops. | | | | |
| Content: Physics | | | | |
| Saturday – 10:30-11:20 Sessions | | | | |
| Day: SAT, 2/18 | Time: 10:30-11:20 | Level: Middle | Room: Roswell | |
| Title: <u>Vocab Motion Potion!</u> | | | | |
| Presenters: Jamila Bowser, Lynda Byrne | | | | |
| Description: Discover a way to increase science literacy by engaging your students in tactile learning. Participants will be exposed to a drill-based strategy that increases vocabulary knowledge and understanding. | | | | |
| Content: General Science | | | | |
| Day: SAT, 2/18 | Time: 10:30-11:20 | Level: 2-8 | Room: Piedmont | |
| Title: <u>Interactive Science Notebooks</u> | | | | |
| Presenters: Sally Creel | | | | |
| Description: Come and learn how to use interactive notebooks as an ongoing assessment and feedback tool. Interactive notebooks assist students in developing higher order thinking and reasoning skills. It is the perfect tool to integrate language arts, particularly writing, and mathematics. During the session you'll see sample student science journals and even create a few entries in your very own journal! | | | | |
| Content: General | | | | |

Day: SAT, 2/18 **Time:** 10:30-11:20 **Level:** K-12 **Room:** Grand Hall East B

Title: Bridging the Gap with Family Science Night

Presenters: Zoe Evans and Carol Turner

Description: Would you like to increase your science scores? Are you stumped by ways to increase parent and community involvement? Are you looking for "fun" ways to engage your students? The answers to these questions can be found in planning and conducting a family science night. Come find out how you can truly create a learning community with this event.

Content: General

Day: SAT, 2/18 **Time:** 10:30-11:20 **Level:** Elementary **Room:** Grand Hall East A

Title: Science Tales: Elementary School Children co-Authoring a Science Story

Presenters: Sumitra Himangshu, Randall Spaid

Description: In this session we will share the process preservice teachers used to brainstorm and create a children's science storybook about habitats, ecosystems, or force and motion using concept maps .

Content: General Science

Day: SAT, 2/18 **Time:** 10:30-11:20 **Level:** High **Room:** Chicago AB

Title: Using modeling strategies in physics and chemistry to facilitate student learning.

Presenters: Frank Lock

Description: This presentation will introduce participants to the strategies used in the modeling pedagogy to develop mathematical models (equations) that enable students to make scientific predictions.

Content: Physical Science

Day: SAT, 2/18 **Time:** 10:30-11:20 **Level:** High **Room:** Techwood

Title: Physics & the iPad

Presenters: Jaclyn Murray

Description: Use the iPad to present physics concepts.

Content: Physics

Saturday – 10:30-12:20 Sessions

Day: SAT, 2/18 **Time:** 10:30-12:20 **Level:** Middle **Room:** Grand Hall East C

Title: Energy: Sun to Atmosphere to Earth

Presenters: Jamie Akin, ,

Description: We will do different experiments to determine how energy is transformed as it comes from the sun through the atmosphere to Earth. Hand outs provided and some give-aways! Grades 6 - 12

Content: Earth/Space Science

Day: SAT, 2/18 **Time:** 10:30-12:20 **Level:** 6-12 **Room:** Grand Hall East D

Title: Utilizing the FDA/NSTA Collaborative Food Safety Curriculum in Science Courses

Presenters: Rebecca Austin, ,

Description: This session will provide applicants with the complete curriculum developed by the FDA in collaboration with the NSTA and will highlight ways to implement the curriculum into a variety of high school science courses.

Content: Interdisciplinary

Saturday – 11:30-12:20 Sessions

| | | | |
|--|--------------------------|----------------------|--------------------------------|
| Day: SAT, 2/18 | Time: 11:30-12:20 | Level: K-8 | Room: Grand Hall East B |
| Title: <u>Using Google Docs for Collaborative Lab Reports</u> | | | |
| Presenters: Rebecca Howell | | | |
| Description: Focuses on teaching students how to use Internet based, free document editing software that will allow them to work collaboratively both synchronously and asynchronously. | | | |
| Content: General Science | | | |
| Day: SAT, 2/16 | Time: 11:30-12:20 | Level: K-12 | Room: Grand Hall East A |
| Title: <u>What is Science Olympiad and how do I start at team at my school?</u> | | | |
| Presenters: Kelly Price | | | |
| Description: This session will provide full details on what Science Olympiad competition looks and feels like. All details about how to start a team, register a team, suggestions for running team practices/schedules and much more will be shared. | | | |
| Content: Interdisciplinary | | | |
| Day: SAT, 2/18 | Time: 11:30-12:20 | Level: 6-12 | Room: Chicago AB |
| Title: <u>The STEM Initiative at Georgia Perimeter College</u> | | | |
| Presenters: Pamela Gore, Kouok Law, Pamela Leggett-Robinson, Margie Lewkowicz, Margaret Major, Brooke Skelton | | | |
| Description: This session will provide information on the grants that GPC recently received, which are designed to increase the number of students majoring in STEM subjects. | | | |
| Content: Interdisciplinary | | | |
| Day: SAT, 2/18 | Time: 11:30-12:20 | Level: High | Room: Spring |
| Title: <u>Molecular Biology: Feasible, affordable & standards-aligned</u> | | | |
| Presenters: Laura Regassa, Donna Hanson, Kelly Dabney | | | |
| Description: Wondering how to bring the excitement of molecular biology into your high school classroom? This workshop will provide hands-on experience, teaching materials, and standards alignment. | | | |
| Content: Life Science | | | |
| Day: SAT, 2/18 | Time: 11:30-12:20 | Level: Middle | Room: University |
| Title: <u>Case Studies of Problem Based Learning</u> | | | |
| Presenters: Larry Hampton, Lucy Guillory, Jamila Segure | | | |
| Description: This presentation will explain and demonstrate the use of Problem Based Learning as a tool for teaching the GPS in life science and physical science classrooms. | | | |
| Content: Physical Science | | | |

Dates to Remember

NSTA Regional Conference in Atlanta (*Counts as 2013 GSTA Conference*)

Nov. 1-3, 2012

2013 GSTA Awards Applications Window

Sept. 1 - Nov. 30, 2012

2014 GSTA Conference Call for Proposals

June 1- Sept. 30, 2013



GSTA Board Elections



Attention GSTA Members

- Meet the candidates at the conference. Look for signs in front of the exhibit hall. Come to the first general session to put a face with the name.
- Members may vote at the conference near the Registration area.



Hungry?

Try the food court at **The Mall at Peachtree Center** (231 Peachtree Street). It is connected to the Hyatt from the lobby level.

| | | | |
|---|--|--|---|
| Farmer's Basket (Southern buffet) | Dairy Queen (burgers and hotdogs) | Roman Delight Pizza (pizza, calzones) | Moe's Southwest Grill (tacos, burritos, more) |
| Bistro 7 (Mediterranean) | Great Wraps (Greek sandwich/salad) | Yami Yami (sushi and seafood) | My Friend's Place (soup, sandwich, salad) |
| Café Momo (buffet by the pound) | GW Cheesesteak (Philly cheesesteak, subs) | Café du Jour (soups, roll-ups, hot food) | Oriental Express (Mandarin/Cantonese/ Szechuan) |
| Checkers (hamburgers) | Jack's Sandwich Shop (sandwiches, grilled items) | Kameel's Café (fresh and healthy) | Subway (sub sandwiches) |
| Chick-fil-a (chicken) | Noodle Café (Pan-Asian) | Malibu Wings (wings and vegetables) | Tropical Cajun (taste of New Orleans) |

Additional Area Restaurants

| Name | Address | Hours | Price | Other |
|--|------------------|---------------------------------|----------------------------------|--|
| Hsu's (Chinese) | 192 Peachtree | lunch, dinner | L: \$8-16 D: \$12-26 | Business Casual |
| Hooters (American, Sports) | 209 Peachtree | lunch, dinner | \$7-15 | Casual |
| Goodfella's Pizza/Wings (Fast Italian) | 209 Peachtree | lunch, dinner | \$6-10 | Casual |
| Sun Dial-top of Westin (Upscale, menu selections vary, visit website for current offerings) | 210 Peachtree | lunch, dinner bar until 2 AM | L:\$13-22+ D:\$15-55+ | Reservations encouraged, Business Casual required, rotating restaurant, bar only option for views |
| Hard Rock Café (American) | 215 Peachtree | lunch, dinner | \$10-22 | Very casual |
| Fire of Brasil (Brazilian steakhouse) | 218 Peachtree | lunch, dinner | L: \$17.95 D: \$41.50 | Price per person |
| Benihana (Japanese) | 229 Peachtree | lunch, dinner | L: \$8-18 D: \$17-43 | Reservations accepted, Business Casual |
| Azio (Italian) | 229 Peachtree | lunch, dinner | L: \$10-17 D: \$15-37 | Reservations accepted online and by phone, Business Casual |
| Durango Steak House (steakhouse) | 230 Peachtree | lunch, dinner | L: \$9-19 D: \$10-28 | Business Casual |
| Gibney's Pub (Pub fare) | 231 Peachtree | lunch, dinner | \$8+ | Peachtree Center Mall, connected to Hyatt by Skywalk |
| Ninfa's (Mexican) | 231 Peachtree | lunch, dinner | \$8-12 | Peachtree Center Mall, connected to Hyatt by Skywalk |
| Sear (Seafood, Steak) | 265 Peachtree | dinner | \$16-30 entrees, \$7 sides | Reservations, business casual |
| Pacific Rim Bistro (Asian/pan-Asian) | 303 Peachtree | dinner | \$15-25 | Casual dining, reservations |
| Max Lager's Woodfire Grill (American, brew pub) | 320 Peachtree | lunch, dinner | Under \$30 | Casual dining, reservations |
| Barley's Sports Bar (American, Sports) | 338 Peachtree | dinner | \$9-15 | Casual dining, entertainment |
| McCormick/Schmicks (Seafoof, specialties) | 190 Marietta | dinner | \$16-25 | Business casual, reservations |
| Mandarin House (Chinese, sushi) | 11 Baker | | \$10-15 | Casual, reservations |
| Pitty Pat's Porch (American, Southern) | 25 International | dinner | \$20-30 | Business casual |
| Haveli Indian Cuisine (Indian, Asian) | 225 Spring | dinner | \$9-15 | Casual dressy, reservations suggested |



Door Prize Giveaway

Friday, 17 February @ 4:30pm

Exhibitors providing door prizes:

AIMS Education Foundation
American Book Company
Britannica Digital Learning
Camp Invention
Capital Microscope Services, Inc.
Carolina Biological Supply
Centers for Disease Control
Chattahoochee Nature Center
CPO Science
Delta Education
Diamond Del's Gem Mining Adventure
Dinah-Might Adventures
Dodge Learning Resources
Educational Innovations
Edumatics
ETA/Cuisenaire
ExploreLearning
Fernbank Museum of Natural History
Flinn Scientific
Frey Scientific
Georgia Aquarium
Georgia Bioscience Technology Institute
Georgia Farm Bureau/Agriculture in
the Classroom
Georgia Mineral Society
Georgia Project Learning Tree
Georgia Sea Turtle Center
Georgia Voyager Magazine
Georgia Youth Science & Technology
Centers

Glencoe/McGraw-Hill
High Touch High Tech of Greater Atlanta
Howard Hughes Medical Institute
Lab-Aids, Inc.
National Nanotechnology Infrastructure
Network
PASCO scientific
Pearson Education
Peoples Education
Petra, Inc.
SAR Ink Books
Sargent Welch/Science Kit/Wards Natural
Science
Schooltran
ScienceFirst/Starlab
Texas Instruments
The School Box
Triumph Learning
University of Georgia,
4-H Environmental Education
University of Georgia,
Depts. of Entomology & Plant Pathology
University of Georgia,
Warnell School of Forestry & Natural
Resources
Wildlife Wonders - North Georgia Zoo
World Book Classroom
Zoo Atlanta

Vendor Prize Passport

PASSPORT

Name: _____
Phone: _____
E-mail: _____

- To be included in the prize drawing, pick up your GSTA Vendor Passport in the Exhibit Hall. As you visit with the various vendors, have them give your passport a stamp.
- Once you have at least 15 stamps, drop your passport in the door prize box at the Exhibit Hall Registration Desk, by 3:00 PM on Friday.
- A Door Prize drawing will be held on Friday, Feb. 17th @ 4:30 in the Exhibit Hall . **Must be present to win.**



GSTA Exhibitors



| Booth# | Exhibitor | Website |
|---------------|--|--|
| 903 | AIMS Education Foundation | www.aimsedu.org |
| 907 | American 3B Scientific | www.a3bs.com |
| 605-606 | American Book Company | www.americanbookcompany.com |
| 1305 | Blue Ridge Outdoor Education Center | www.blueridgeoec.com |
| 302 | Britannica Digital Learning | www.info.eb.com |
| 301 | Brock Optical | www.magiscope.com |
| 604 | Camp Invention | www.campinvention.org |
| 1101-1102 | Capital Microscope Services | www.microscopesandmore.com |
| 601-602 | Carolina Biological Supply | www.carolina.com |
| 1004 | Catalyst Learning Curricula | www.catalystlearningcurricula.com |
| 1300 | CEISMC - Georgia Tech | www.ceismc.gatech.edu |
| 607 | Cengage Learning | www.gale.cengage.com |
| 1207 | Centers for Disease Control | www.cdc.gov |
| 1200 | Charlie Elliott Wildlife Center | www.georgiawildlife.com |
| 507 | Chattahoochee Nature Center | www.chattnaturecenter.org |
| 208,308 | CPO Science | www.cposcience.com |
| 204-205 | Delta Education | www.deltaeducation.com |
| 603 | Diamond Del's Mining Adventure | www.diamonddel.com |
| 705-706 | Dinah-Might Adventures | www.dinah.com www.dzacademy.com |
| 802 | Dodge Learning Resources/ Benchmark Education | www.dodgelearning.com |
| 803 | Dodge Learning Resources/ Heinemann Publishing | www.dodgelearning.com |
| 804 | Dodge Learning Resources/ Lerner Publishing Group | www.dodgelearning.com |
| 805 | Dodge Learning Resources/ National Geographic School Publishing | www.dodgelearning.com |
| 1307 | Educational Experiences | www.educationalexperiences.org |
| 1308 | Educational Express | www.educationalexpress.com |
| 808,908 | Educational Innovations | www.teachersource.com |



GSTA Exhibitors



| Booth# | Exhibitor | Website |
|---------------|--|--|
| 103 | Edumatics | www.edusmart.com |
| 503 | Emory College Center for Science Education | www.cse.emory.edu |
| 402 | Environmental Education Alliance of Georgia | www.eealliance.org |
| 901-902 | ETA/Cuisenaire | www.etacuisenaire.com |
| 106 | EXAMgen, Inc. | www.examgen.com |
| 1204 | ExploreLearning | www.explorelearning.com |
| 406 | Fernbank Museum of Natural History | www.fernbankmuseum.org |
| 1400 | Fisher Science Education | www.fisheredu.com |
| 107 | Flinn Scientific | www.flinnsci.com |
| 206-207 | Frey Scientific | www.freyscientific.com |
| 300 | Georgia Aquarium | www.georgiaaquarium.org |
| 203 | Georgia Bioscience Technology Institute | www.gabioscience.org |
| 404 | Georgia Department of Natural Resources | www.eeingorgia.org www.gadnr.org/education |
| 1301 | Georgia Farm Bureau/Agriculture in the Classroom | www.gfb.org |
| 707 | Georgia Mineral Society | www.gamineral.org |
| 801 | Georgia Power | www.georgiapower.com/learningpower |
| 405 | Georgia Project Learning Tree | www.georgiaplt.org |
| 504 | Georgia Sea Turtle Center | www.georgiaseaturtlecenter.org |
| 1206 | Georgia State University - MSIT | http://education.gsu.edu/main/online_ed.htm |
| 1203 | Georgia Voyager Magazine | www.gavoyager.com |
| 905 | Georgia Youth Science & Technology Centers | www.gystc.org |
| 306-307 | Georgians Experience Astronomy Research in Schools (GEARS) | http://cheller.phy.georgiasouthern.edu/gears |
| 304-305 | Glencoe/McGraw-Hill | www.glencoe.com |
| 1104 | Grand Classroom | www.grandclassroom.com |
| 704 | High Touch High Tech of Greater Atlanta | www.sciencemadefunatl.net |
| 806 | Howard Hughes Medical Institute | www.BioInteractive.org |



GSTA Exhibitors



| Booth# | Exhibitor | Website |
|---------------------|---|--|
| 904 | It's About Time | www.its-about-time.com |
| 703 | Juice Plus + | |
| 701-702 | Lab-Aids, Inc. | www.lab-aids.com |
| 1007 | LEGO Education | www.legoeducation.us |
| 303 | Nancy Larson Publishers | www.nancylarsonscience.com |
| 1006 | National Nanotechnology Infrastructure Network | www.nnin.org/nnin_education_training.html |
| 506 | Oxford Institute for Environmental Education | www.oiee.oxford.emory.edu |
| 1106 | PASCO scientific | www.pasco.com |
| 1005 | Pearson Education | www.pearsonschool.com |
| 1105 | Peoples Education | www.peopleseducation.com |
| 1001 | Petra, Inc. | www.nsta.org www.tcmpub.com www.triumphlearning.com |
| 200 | SAR Ink Books | www.sarinkbooks.com |
| 807 | Sargent Welch Science Kit Wards Natural Science | www.sargentwelch.com www.sciencekit.com www.wardsci.com |
| 1201 | Schooltran | www.schooltran.com |
| 101,102, 201,202 | ScienceFirst/Starlab | www.sciencefirst.com www.starlab.com |
| 906 | Southeastern Reptile Rescue | www.snakesareus.com |
| 502 | Stone Mountain Memorial Association | www.stonemountainpark.org |
| 600,700 | Texas Instruments | www.education.ti.com |
| 403 | The Clean Air Campaign | www.cleanaircampaign.org/schools |
| 408 | The EDMAT Company | www.edmatcompany.com |
| 1306 | The School Box | www.schoolbox.com |
| 1002 | Triumph Learning | www.triumphlearning.com |
| 105 | University of Georgia, Departments of Entomology & Plant Pathology | http://plantpath.caes.uga.edu www.ent.uga.edu |
| 401 | University of Georgia, Georgia 4-H Environmental Education | www.georgia4h.org/ee |
| 407 | University of Georgia, Odum School of Ecology | www.ecology.uga.edu |

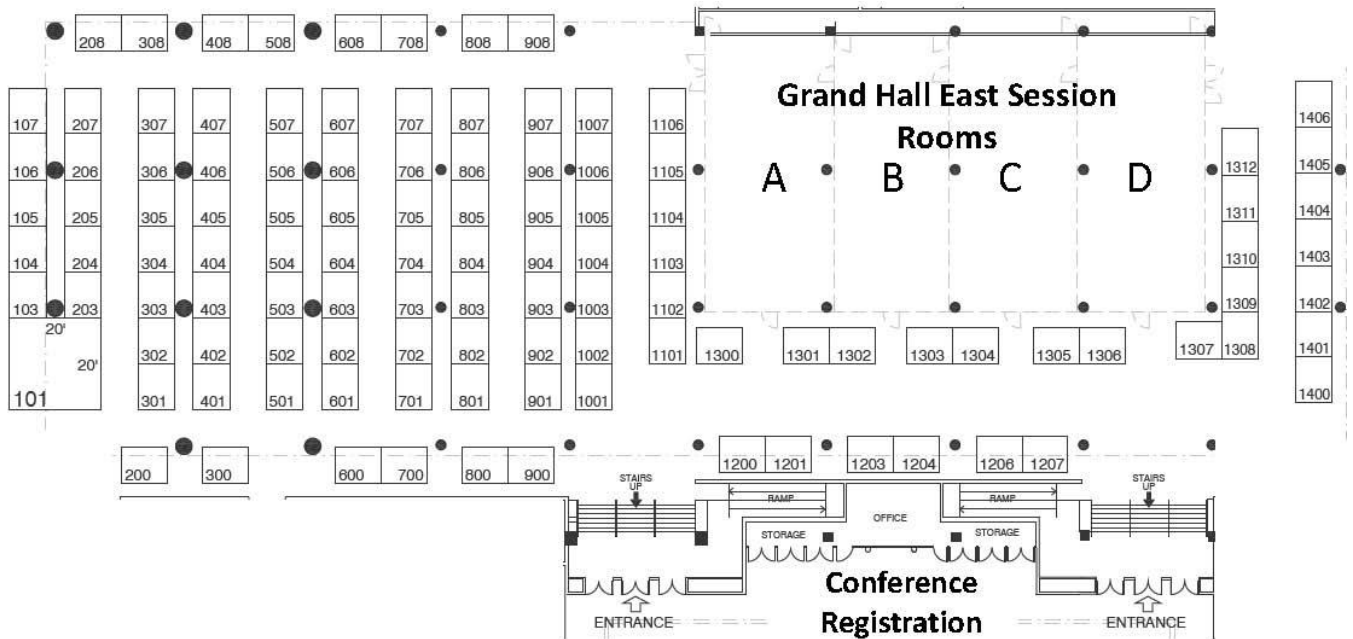


GSTA Exhibitors



| Booth# | Exhibitor | Website |
|---------|---|--|
| 1302 | University of Georgia, Warnell School of Forestry and Natural Resources | www.warnell.uga.edu |
| 505 | USDA Forest Service | www.naturalinquirer.org www.scienceinvestigator.org |
| 1304 | U.S. Solar Installation Group, LLC | www.ussolarinstallationgroup.com |
| 608,708 | Valdosta State University | www.valdosta.edu |
| 1303 | Vizitech USA | www.vizitech.com |
| 104 | Walden University | www.waldenu.edu |
| 1103 | Western Governors University | www.wgu.edu |
| 1401 | Wildlife Wonders - North Georgia Zoo | www.wildlifewonders.org |
| 1003 | World Book Classroom | www.worldbook.com |
| 501 | Zoo Atlanta | www.zooatlanta.org/educators_lounge |

Exhibit Hall Layout





Personal Conference Schedule

Thursday Planner

| Time | Room | Session |
|-------|------|---------------------------------------|
| 8:00 | | Exhibit Hall Open – No Sessions |
| 9:00 | | |
| 10:00 | | |
| 11:00 | | |
| 12:00 | | |
| 1:00 | | |
| 2:00 | | |
| 3:00 | | |
| 4:00 | | District Meet & Greet in Exhibit Hall |

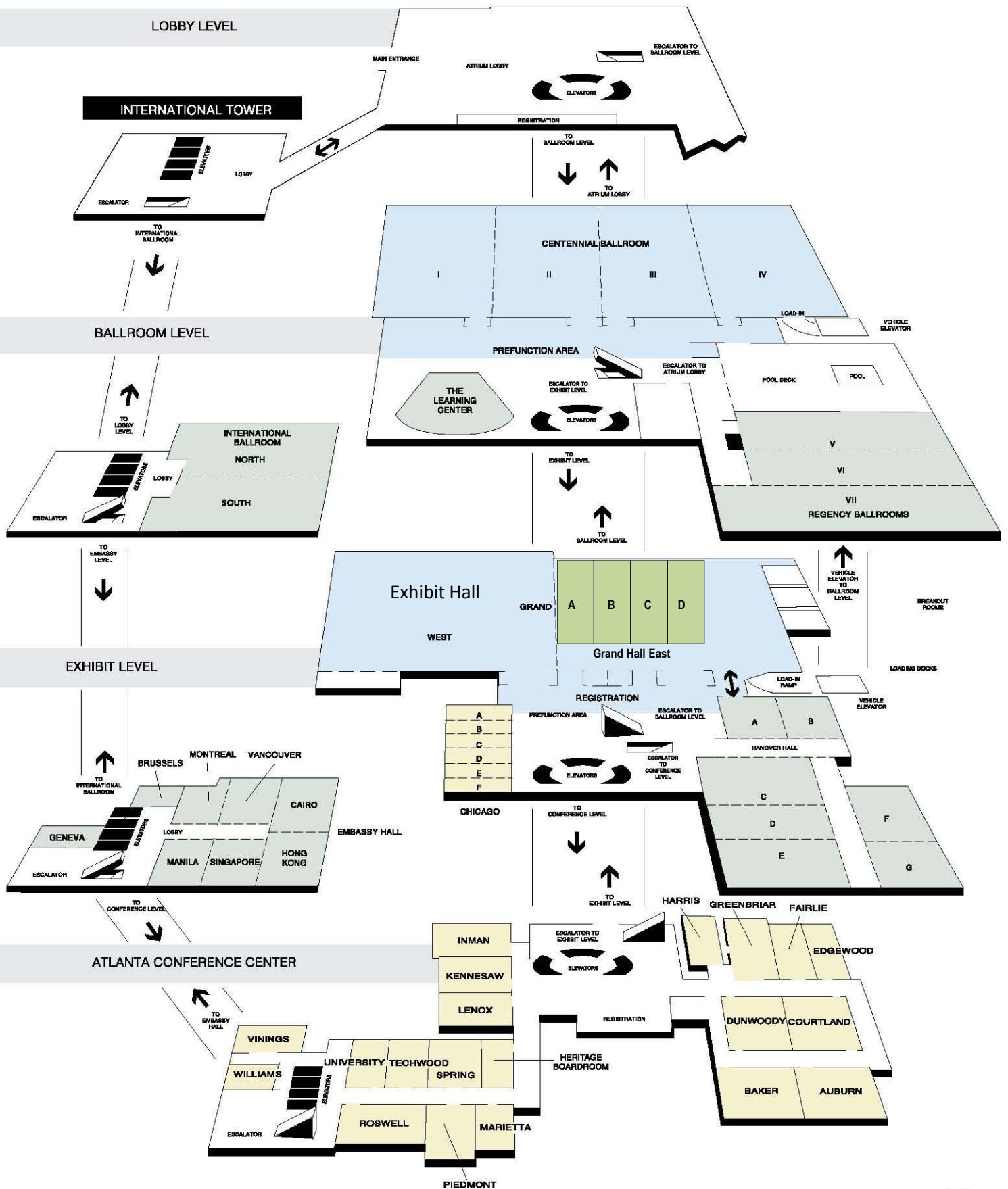
Friday Planner

| Time | Room | Session |
|-------|------|--|
| 8:00 | | Exhibit Hall Open – No Sessions |
| 9:00 | | |
| 10:00 | | |
| 11:00 | | |
| 12:00 | | General Session: Dr. Stephen Pruitt – Next Generation Science Standards <i>International Ballroom</i> |
| 1:30 | | |
| 2:30 | | |
| 3:30 | | |
| 4:30 | | Exhibit Hall Door Prizes – <i>Must be present to win!</i> |
| 6:30 | | Awards Banquet @ Georgia Aquarium – <i>Tickets Required</i> |

Saturday Planner

| Time | Room | Session |
|-------|------|---------|
| 8:30 | | |
| 9:30 | | |
| 10:30 | | |
| 11:30 | | |

Hyatt Regency Atlanta





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Leading the competition is our 5 Year Warranty on parts and labor on all desktops and 3 years on all monitors and laptops. Plus, we cover cross shipment on defective parts.

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 **TEXAS
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