RPSEC 20th Anniversary Celebration Dinner

The RPSEC kicked-off its 20th anniversary celebration during a fund-raising dinner held on October 12, 2006. Dr. Ruth Patrick came to the dinner as an honored guest. The 98-year-old Patrick described her love for science and expressed appreciation for the efforts of the RPSEC in nurturing the next generation of scientists.

The event was sponsored by Bechtel Savannah River, DuPont, R. E. Phelon Company and Washington Group International. More than 80 people came to support Dr. Patrick and the science education center that bears her name. Dr. Jeff Priest was the master of ceremonies for the event. Three long-time friends of Dr. Patrick spoke about her life: Mr. Ray Harvey, Dr. Jack Corey and Dr. Todd Crawford. Accompanying Dr. Patrick was her son, Dr. Charles Hodge. Dr. Hodge is a pediatrician in the Kansas City area.

A culminating activity of the event was a special video that highlighted Dr. Patrick’s life, described the success of the RPSEC and encouraged people to support future science and mathematics education efforts promoted by the RPSEC.

Spirit of Ruth Patrick Award

On October 14, 2006, USC Aiken sponsored a teacher appreciation breakfast in honor of Dr. Ruth Patrick and the RPSEC. During the breakfast, Dr. Patrick presented Susie Yonce with the Spirit of Ruth Patrick Award. Area teachers were nominated for the award based on their dedication to infusing a love of science mathematics and technology in their students. The RPSEC advisory board selected the awardee based on the biographies of the nominees. Many area teachers and other supporters participated in the teacher appreciation breakfast. Accompanying the Johnston-Edgefield-Trenton Middle School teacher were Edgefield County Superintendent, Dr. Sharon Keesly and her principal, Louis Scott.
Washington Group International

Sponsors 20th Anniversary

Washington Group International revealed their sponsorship of the 20th anniversary of the RPSEC during a presentation made at the fundraising dinner held on October 12, 2006. Dr. Todd Wright presented a check for $10,000 to USCA Chancellor Dr. Tom Hallman during the announcement of WGI’s sponsorship of the 20th anniversary activities. WGI and WSRC have a long history of support for science, mathematics and technology through a variety of partnerships with the RPSEC. The RPSEC is very grateful for this important relationship with WGI.

RPSEC 20th Anniversary Events

October 12, 2006 – Fund-raising dinner
This dinner was in honor of Dr. Ruth Patrick and the Ruth Patrick Science Education Center. There were special presentations about the life of Dr. Patrick and the success of the RPSEC.

October 14, 2006 – Teacher appreciation breakfast
This breakfast was to honor area teachers. Dr. Patrick presented the Spirit of Ruth Patrick Award to JET Middle School Teacher, Susie Yonce.

November 30, 2006 – Galaxy Gala
During the Galaxy Gala, people became Galactic Guardians of celestial objects and supported the DuPont Planetarium. This fun event included heavy hors d’oeuvres, an open bar, music from the USCA Jazz Band, and special piano music from USCA Music Education Major, Ariana McGhee. There was a silent auction where people adopted celestial bodies and became Galactic Guardians of adopted objects. The event featured the “Galaxy Gals,” who were hostesses for the evening.

March 3, 2007 – Total lunar eclipse
There will be a total lunar eclipse when the moon rises on that evening. Telescope viewing of the moon and other objects in the night sky will be available in partnership with the Astronomy Club of Augusta.

April 21, 2007 – Earth and Sky Night
The annual Earth and Sky Night will be held at the RPSEC. There will be a variety of hands-on activities, planetarium shows and telescope viewing.

May 31, 2007 – Once in a Blue Moon Festivity
This festival will be held on the blue moon of May, the second full moon of the month. It will feature blues music and a space theme. Proceeds from the festival will be used to support the RPSEC.
**Student Programs Update**

Student Programs is off to a great start with record-breaking numbers of students attending classes this September and October. Blown Away has been the most popular program, with 1,406 participants attending this fall and more scheduled in the spring. Circuit City attracted 919 visitors, while 643 people participated in the Hitchcock Woods Eco-Hike. November and December promise to be just as busy, with programs such as Animals with Backbones, Magnets and Motions, Dark Shadows, and A Walk Across the Solar System filled to capacity. This year we have a waiting list of more than 10,000 students, and we have groups coming to visit the RPSEC from as far away as DeKalb County, Georgia.

<table>
<thead>
<tr>
<th>Number of Student Visits</th>
<th>2005-2006</th>
<th>2006-2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>2087</td>
<td>2185</td>
</tr>
<tr>
<td>October</td>
<td>1758</td>
<td>3257</td>
</tr>
</tbody>
</table>

**Masters Degree in Educational Technology**

**Program Moving to On-line format**

The Educational Technology program at University of South Carolina Aiken (USCA) and the University of South Carolina (USC) Columbia is accepting applications for enrollment. There has been interest in moving the program to an on-line format and this process is well underway. For more information visit: http://edtech.usca.edu/.

The focus of the program is to develop capabilities essential to the effective design, evaluation, and delivery of technology-based instruction and training (e.g., software development, multimedia development, assistive technology modifications, web-based development, and distance learning) in order to (1) prepare educators to assume leadership roles in the integration of educational technology into the school curriculum, and (2) to provide graduate-level instructional opportunities for several populations (e.g., classroom teachers, corporate trainers, educational software developers) that need to acquire both technological competencies and understanding of sound instructional design principles and techniques.

Anyone interested in enrolling in this program should contact Karen Morris at 641-3489.

<table>
<thead>
<tr>
<th>Foundational Core Courses (12 hours)</th>
<th>Technology Core Courses (15 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERM/EDRM 700 – Introduction to Research in Education</td>
<td>AEET/EDET 703 – Design and Development Tools II</td>
</tr>
<tr>
<td>AEET/EDET 709 – Applications of Learning Principles</td>
<td>AEET/EDET 772 – Employee and Organizational Development</td>
</tr>
<tr>
<td>AEET/EDET 722 – Instructional Design and Assessment</td>
<td>AEET/EDET 793 – Advanced Instructional Design and Development</td>
</tr>
<tr>
<td>AEET 731 – Instructional and Informational Applications of Technology or</td>
<td>ETRM 736 – Program Evaluation</td>
</tr>
<tr>
<td>EDTE 731 – Integration of Technology and Instruction</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (9 hours chosen from the following courses)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AEET 650/EDTE 650,651 – Internship in Educational Technology</td>
<td></td>
</tr>
<tr>
<td>AEET/EDET 652 – Design and Evaluation of Games and Simulations</td>
<td></td>
</tr>
<tr>
<td>AEET/EDET 703 – Design and Development Tools II</td>
<td></td>
</tr>
<tr>
<td>MGMT 772 – Employee and Organizational Development</td>
<td></td>
</tr>
<tr>
<td>AEET/EDET 793 – Advanced Instructional Design and Development</td>
<td></td>
</tr>
</tbody>
</table>
German Exchange Students Visit the RPSEC

This fall fourteen German students from the Max Hachenburg Schule and their two German chaperones, Ms. Ulrike Hendel and Ms. Ina Hramacek, visited the Ruth Patrick Science Education Center and the DuPont Planetarium. The students were participating in the German American Partnership Program (GAPP), which is an exchange program between a secondary school in Mannheim, Germany and Aiken High School. The students enjoyed touring the building and interacting with snakes, an alligator, a red-tailed hawk, and a barred owl. They were surprised and delighted when their planetarium presenter, Mrs. Monica Dainer, conducted the live portions of the show entirely in fluent German!

Senn Selected as DUG President

At the 2006 annual meeting of the International Digistar Users Group (DUG), Dr. Gary J. Senn was re-elected as president. The Digistar system is a full dome, graphics projection system found in more than 100 planetariums around the world. The DUG is composed of individuals who work with Digistar systems and desire an opportunity to share professional interests with others in the same field. DUG’s main activity is an annual conference that is held at different Digistar locations as determined by the membership. The 2006 meeting was held in Salt Lake City, Utah, the home of Evans & Sutherland, the makers of Digistar. http://www.digistardomes.org/

Publications and Presentations


Dr. Gary J. Senn conducted a presentation about the Ruth Patrick Science Education Center to the Aiken Outdoors Club on August 10, 2006.

Dr. Gary J. Senn presented a discussion about the Dupont Planetarium to the Augusta Rotary Club on September 18, 2006.


Dr. Gary J. Senn appeared on “Comcast Live” with Austin Rhodes on October 16, 2006. The show aired a number of times during the next week.

Dr. Gary J. Senn discussed activities the Ruth Patrick Science Education Center and its 20th anniversary to the Aiken Kiwanis Club on October 26, 2006.

Dr. Gary J. Senn and the “Galaxy Gals” appeared on channel 26 with Bridgett Williams on November 15, 2006.

21st Annual SEED Sets Attendance Record

The 21st Annual SEED (Science Education Enrichment Day) offered the community over 50 science and mathematics related exhibits and activities hosted by business, industry and school organizations. Visitors had the chance to make their own paper, race robots, build straw towers, fly airplanes and much more. Students had the chance to test their skills with SEED Trivia, completing math puzzles and exploring other thought provoking exhibits. This year’s theme “Science is Everywhere” was certainly brought to life by the many community volunteers that made this event so successful. Over 2700 people attended this year’s SEED.
CSRA Mathematics and Science Regional Center
Professional Development Opportunities

For registration information please call Tempie Adams at 803-641-3594 or email to tempiea@usca.edu

TI TUESDAYS
Intro to Mathematics and Science Graphing Calculator Training
Grades 6-12
January 9, 2007 * 4:00PM – 6:00PM
USC Aiken RPSEC Room 117
“Getting Started: Introduction to Graphing Calculator Technology for Classroom Instruction”
This introductory TI 84 Plus session is designed to improve instructional practices for new or novice calculator users.

Math and Science Focus:
✓ Getting Started with TI 83 and 84-Plus
✓ Basic Menus, Mode Settings, and Graphing Functions
✓ Entering and Analyzing Data
Registration Deadline: November 28, 2006
Follow-up training available Spring 2007 (See February - May TI Tuesdays)

Participants will receive with No Charge:
✓ Course materials
✓ Refreshments
✓ Certificate renewal credit available
✓ TI 84 Plus Graphing Calculator**
**Participants must attend and complete 4 of 5 TI Tuesday sessions.
Limited to 25 participants

JANUARY 2007
Creating Excellence in Elementary and Middle Mathematics “CEEMM” K-8
January 12, 2007 * 8:30AM – 4:00PM
USC Aiken RPSEC Room 117
“A Vertical Teaming Framework”
Focus: Year-1: Teaming – Curriculum
Year-2: Bridging to Practice

“CEEMM” is an acronym for “Creating Excellence in Elementary and Middle Mathematics”. In brief, it is a framework for mathematics team building and planning at grades K-8. The framework is based on research that suggests one of the common factors in more successful schools is teachers coming together and planning within and across grade levels. In other words, the entire school is aware of where the children are headed mathematically and what needs to be done at each grade level in order to achieve that outcome.

CEEMM is a “framework” because it is not a step-by-step, prescriptive, add-on program. Rather, it is an ongoing, flexible guide that builds on and improves the planning and teaching processes that already occur in schools. CEEMM has three components – Curriculum, Teaming, and Bridging to Practice.

Registration deadline: January 5, 2007
$50 per participant includes:
✓ Notebook,
✓ CD, handouts
✓ Lunch
Limited to 32 participants
2 teachers per school recommended

TI TUESDAYS
Regional Mathematics and Science Graphing Calculator Training
Grades 6-12
2/3, 3/3, 4/10, 5/8 * 4:00PM – 6:00PM
USC Aiken RPSEC Room 117

“Linking Mathematics and Science Understanding to Technology in Middle and High School Instruction”
A continuation of December 5, 2006 workshop training.
Participants will gain knowledge of and explore:
(1) Technology (TI 83 and 84-Plus calculators – Vernier Bio-Technology) as a tool to develop deeper understanding in the classroom.
(2) Practical strategies and activities relevant to the math or science school setting.

Registration Deadline: 1 week prior to monthly scheduled dates

Participants will receive with No Charge:
Course materials, Refreshments, Certificate renewal credit available, TI 84 Plus Graphing Calculator**
**Participants must attend and complete 4 of 5 TI Tuesday sessions.

JANUARY 2007
South Carolina Algebra Classroom and Physical Science Companion Workshops
January 12, 2007 * 8:30AM – 4:00PM
USC Aiken RPSEC Building

Three Concurrent Workshops for Teachers of Algebra 1, Mathematics for the Technologies 1 and 2, and Physical Science

Teachers will experience instructional strategies to help students develop conceptual understanding of algebraic or physical science concepts for improved performance on the end-of-course exams. Algebra teachers will experience hands-on data collection activities using graphing calculators and Calculator Based Ranger (CBR™). Physical Science teachers will experience hands on activities and receive a notebook with information on resources, lab safety, and classroom management strategies. (Choose Waves or Force & Motion)

Registration deadline: January 5, 2007
$ No Charge $

Sponsored by the Office of Curriculum and Standards Mathematics and Science Unit and the CSRA MSRC. (The CSRA MSRC is one of eight MSU regional centers in the Office of Curriculum & Standards).
PROJECT LEARNING TREE’S
K-8 Energy & Society WORKSHOP
January 26, 2007

Energy & Society is a new environmental education program designed for formal and informal educators. It helps students learn about their relationship with energy and investigate the environmental issues related to energy’s role in our society. For more information on the PLT Energy & Society curriculum and kit, visit their website at www.plt.org

Experience energy in a new way! Project Learning Tree® (PLT) has integrated science and social studies, music, dance, and hands-on activities to investigate energy concepts in creative ways. Each participant will receive PLT’s 406-page PreK-8 Activity Guide and NEW Energy & Society kit (a $65 value), including teacher’s guide, music CD, dance video, and poster set.

PLACE: Ruth Patrick Science Education Center, Aiken, SC
TIME: 8:30 to 3:30

To register or to receive more information
Contact Anne Bohnet at AnneB@usca.edu or 803-471-0291.

-Special Thanks to our Sponsors-
Environmental Science Education Cooperative
Washington Savannah River Co.
SC Project Learning Tree
Ruth Patrick Science Education Center

RESERVATIONS:
Online: http://rpsec.usca.edu/travelingscience
Telephone: 803-641-3683
E-mail: travelingscience@usca.edu

The Traveling Science and Mathematics Demonstrations Program currently has over 350 kits available for checkout. The kits include FOSS (K-6), STC (K-6), Museum to Go, CBL, Math and Science to Go, various teacher created kits and numerous other materials and resources. For a complete listing of available kits, please log on to: http://rpsec.usca.edu/travelingscience/. To schedule an information session for teachers at your school, please contact John Hutchens at 803-641-3474 or johnh@usca.edu

RESERVATIONS:
Online: http://rpsec.usca.edu/travelingscience
Telephone: 803-641-3683
E-mail: travelingscience@usca.edu

STRAND VOLUNTEERS: Request a volunteer to come to your classroom and present a hands-on science or math lesson. We are very happy to have many SRS volunteers participating in the Scientist with Traveling Resources and Neat Demonstrations Program. Complete your STRAND request online: http://rpsec.usca.edu/travelingscience/.

Robert E. Alexander Outstanding Administrator
of the Year Award

Dr. Sharon W. Keelsey, Edgefield County School District Superintendent, was awarded the Robert E. Alexander Outstanding Administrator of the Year Award from the University of South Carolina Aiken and the Ruth Patrick Science Education Center, at the August 8th Edgefield County School District Board of Trustees meeting. Dr. Gary Senn presented the award. This is the fifth year this award has been presented to an administrator in the CSRA. The prestigious award recognizes individuals for their efforts and support of bringing full awareness to math and science education, and using the resources of the RPSEC to help meet science and math standards. Recipients of the award are also individuals who encourage teachers to work with the RPSEC to develop skills needed for science and math instruction.

The CSRA MSRC Welcomes Ms. Tempie Adams

Ms. Tempie Adams has joined the CSRA Math and Science Regional Center staff as the new Administrative Assistant beginning in August of this year. Tempie holds a Bachelor of Science Degree in Business Administration with a concentration in Accounting from South Carolina State University. Tempie comes to the CSRA MSRC/RPSEC with a wealth of knowledge and experience including 11 years at South Carolina State University, 11 years as an Administrative Assistant and 15 years in Finance and Accounting at Westinghouse Savannah River Company, and most recently, 3 years at Lloyd Kennedy Charter School.

Tempie can be reached by email at TempieA@usca.edu or by phone at 803-641-3594.
UPCOMING PLANETARIUM SHOWS

’Tis the Season
December 1, 2, 15, 16, 19, 22, 23, 26, 29, 30 at 7:00 & 8:00 pm
Ticket Prices: Adults $4.50, Seniors $3.50, Students $2.50, USCA Faculty Staff & Students $1.00

December 4 at 4:00 & 5:00 pm “Early Bird Special”
Ticket Prices: Adults $3.50, Seniors $2.50, Student $1.50, USCA Faculty Staff & Students $1.00

“’Tis the Season” traces the development of many of the world’s endearing holiday customs, and how they involve lighting up the winter season. The show also recounts the historical, religious and cultural customs practiced during the time of the winter solstice. Guests will see a few winter constellations and learn how the orbit of the earth around the sun causes seasons to occur. And, of course, we explore some possible astronomical explanations for the “Star over Bethlehem”.

More than Meets the Eye
January 5, 6, 19, 20, 2007 at 7:00 & 8:00 pm
Tickets: Adults $4.50, Seniors $3.50, Students $2.50, USCA Faculty Staff & Students $1.00

January 6 at 4:00 & 5:00 pm “Early Bird Special”
Tickets: Adults $3.50, Seniors $2.50, Student $1.50, USCA Faculty Staff & Students $1.00

In this great introduction to astronomy, mysteries of outer space are revealed as naked-eye views of objects in the sky are compared with views through binoculars and telescopes. You realize that there is “More than Meets the Eye” in the night sky as you observe planets, nebulae, galaxies and stars in ways you have not seen them before.

SC DEPARTMENT OF EDUCATION
MATHEMATICS AND SCIENCE UNIT (MSU)
COACHING INITIATIVE

Coaching is an opportunity for professionals to reflect upon decisions that impact classroom instruction. The goal of the MSU Coaching Initiative is to increase student achievement in K-8 mathematics and science. Coaches work to improve instructional practices of teachers in the context of the teachers’ own classrooms. Coaching involves listening, observing, questioning, and offering support to help teachers grow professionally, reflect, and make instructional decisions. Locally, the following eleven mathematics and science coaches are supported through the work of the CSRA Mathematics and Science Regional Center (one of eight MSU Regional Centers):

Year 1 Mathematics - Jaci Bearden, Barnwell Elementary
Year 1 Science - Sally Fickling, Kelly Edwards Elementary; Dorothy Kennedy, Allendale Elementary; Doris Frederick, Fairfax Elementary; and Wanda Wates, W.E. Parker Elementary
Year 1 “iCoach” - Judy Freeman A.L. Corbett Middle School
Year 2 Mathematics-Tammy Swartz, Busbee Elementary; Dale Smith, Boundary Street Elementary; and Rachell Wall, Kelly Edwards Elementary
Year 2 Science - Kippy Kelly, Johnston Elementary
Year 3 Science - Michelle Narato, North Augusta Elementary

For more information or application packets, please contact your principal or district instructional services administrator, or call the CSRA MSRC office at 803-641-3594; or visit online at http://www.myscmsu.org/.
SC Future City Competition
Washington Savannah River Company and the RPSEC would like to welcome the following schools to the South Carolina Regional Future City Competition.

A. L. Corbett Middle
Aiken Christian School
Aiken Middle School
Batesburg-Leesville Middle School
Cardinal Newman
Evans Middle School
Glenn Hills Middle School
Granard Middle School
Honea Path Middle School
Jackson Middle School
JET Middle School
Kennedy Middle School
L. E. Gable Middle

Langford Middle School
League Academy
Midland Valley Preparatory School
New Ellenton Middle
North Augusta Middle
Northside Middle School
Our Lady of Peace School
Palmetto Middle School
Paul Knox Middle School
Sego Middle School
Spirit Creek Middle School
St. Mary on the Hill

A WEEK AT CAMP MAKES A GREAT STOCKING STUFFER!

The Ruth Patrick Science Education Center Newsletter is a publication of the RPSEC for our patrons. The Center encompasses the CSRA Mathematics and Science Regional Center (MSRC), Center of Excellence in Educational Technology (CEET), DuPont Planetarium, RPSEC Student Programs, Traveling Science, and the Science and Technology Enrichment Program (STEP). If you have any information that would be beneficial to the audience of this newsletter, or if you would like to be added to the mailing list, please contact John Hutchens, Editor, at (803) 641-3474 or via email to johnh@usca.edu. Deadline for submission in the next newsletter is March 5, 2007.