Student Programs

2013-2014 Impact Data

RPSEC Student Programs for K-12 students had 42,378 program visits during the 2013-2014 school year. Of that total, 37,052 were K-12 students from 88 schools encompassing 14 public school districts in South Carolina and Georgia, as well as numerous private and home school groups. In addition, 780 teachers and 4,546 adult chaperones accompanied the students during this year’s programs. This year’s most popular programs included Animals with Backbones (2,065 student visits), The Graph Club (1,759 student visits), and Circuit City (1,623 student visits).

K-12 Student Programs 2014-2015

The deadline has passed for reservation requests for the 2014-2015 school year. Once again, we received many more requests than we will be able to serve, and our schedule is now full. We are unable to schedule additional programs at this time, but will be happy to place your request on a waiting list in the event of a cancellation. To download a reservation request form, please go to: http://rpsec.usca.edu/student/.

The RPSEC currently offers 52 hands-on, inquiry-based programs for K-12 students. All of our programs are aligned with South Carolina and Georgia academic standards, and many of our programs are interdisciplinary. Please note that our price has increased from $3.00 to $3.50 per student per program. Classroom programs for Aiken County public schools have been prepaid by the district.

Our Student Programs website includes program descriptions, standards correlations, and related Traveling Science and Mathematics Kits that support and extend each lesson. These kits contain excellent post-visit activities and are available, free of charge, for checkout. To reserve a kit, go to http://rpsec.usca.edu/traveling science/ or call (803) 641-3683.
Summer Student Programs at the RPSEC

During the summer, the DuPont Planetarium and the RPSEC offered programs to day-care centers, church groups, summer camps, and civic organizations. Summer programs offered this year include Animals with Backbones, Mad Scientist, Grossology, Digistar Laser Fantasy, Digistar Virtual Journey, To the Moon and Beyond, and Worlds in Motion.

Home School Mondays 2014

Once again the RPSEC offered a series of monthly programs for home school students on Monday afternoons from January through May. One Monday per month, each child attended (2) one-hour, back-to-back science or math programs. Over the course of the spring semester, each child attended a total of 10 programs. The two programs for the younger students (Grades K-3) were held at the same time as the two programs for the older students (Grades 4-8). Different programs will be offered each year with a 3-year rotation cycle. Home School Mondays 2014 had a total of 1,414 student visits with 40 adult chaperones.

2015

The Ruth Patrick Science Education Center is pleased to announce the offerings for Home School Mondays 2015. This year’s program offerings and reservation request form are available at http://rpsec.usca.edu/student/HomeSchool/HomeSchoolMondays.html/. Reservation request forms with pre-payment ($35) must be received by Monday, December 1, 2014.

The children will be assigned to one of eight groups. Four of the groups will meet on the first Monday of each month (January 5, February 2, March 2, April 6, and May 4, 2015). The other four groups will attend on the second Monday of each month (January 12, February 9, March 9, April 13, and May 11, 2015). Please check the Home School Mondays 2015 group lists, which will posted on our website in December, to be sure that your child has been assigned to the right group, especially if you had a special request. Please let us know as soon as possible if you see any conflicts.

Students should report to the RPSEC gallery at 1:00 pm each month on their designated days. Parents will need to sign their child in each time, and pick up the child’s nametag. We will then line the children up by group. The first class will begin at 1:15 pm and will last for one hour. After a restroom break, the children will be escorted to their second class.

Parents are welcome to stay but are not required to do so. It would be helpful, however, to have at least one parent volunteer accompany each of the groups. We hope to have one parent volunteer per 8 children. There is no charge for adults to participate in our Home School Mondays programs. Please note that children under the age of 4 are not permitted in the planetarium.

We look forward to seeing you soon!

Science and Technology Enrichment Program (STEP)

The Science and Technology Enrichment Program (STEP) is a cooperative effort between Savannah River Nuclear Solutions, Silver Bluff Audubon Center, and the Ruth Patrick Science Education Center. Two field trip locations for STEP include the Savannah River Site and the Silver Bluff Audubon Center. At each location, STEP students utilize classroom and outdoor laboratories to conduct scientific investigations on topics such as water and soil ecology, wildlife, forestry, archaeology, navigation and more. For program information please visit the STEP website at: http://rpsec.usca.edu/step/

NOTE: To visit the Savannah River Site, there are specific procedures that must be followed two weeks prior to your visit for badging purposes.
New Feathered Friend to Join the RPSEC Team!

Hunter is his name and cuteness is his game - but don’t tell him that! Hunter is a full-grown Eastern screech owl about 8 inches tall. This little ball of red feather fluff will be coming this fall to help educate and entertain visiting students, teachers and the public. He will be a regular at both RPSEC and at the Silver Bluff Audubon Center programs. Despite him having only one eye due to an automobile accident, Hunter will still be sure to engage little and big people alike!

Hunter came to us from North Carolina but Eastern screech owls are native and common to South Carolina and throughout the Eastern U.S. However, due to their small size and amazing camouflage complete with small ear tufts, they often go unseen. Sometimes their characteristic call (often called a whinny) or bright yellow eyes give them away!

Currently, Hunter resides at the home of Larry and Carol Eldridge where he is receiving training and care from these two wonderful volunteers. With such a calm and patient nature, we know Hunter will fit right in with all the other animals at RPSEC. If you are not scheduled to come see us as a class, then come meet Hunter and the rest of the feathered crew, Lina, Charlotte and Raleigh, at SEED on October 11th!

EDPY 334 Service Learning for Pre-Service Teachers

Undergraduate students enrolled in EDPY A334 Adolescent Growth and Development classes were asked to complete a 10 - 20 hour service learning project at a CE-MIST school: Leavelle McCampbell Middle School, A. L. Corbett Middle School, or JET Middle School. During the fall and spring semesters, each pre-service teacher was asked to mentor a young adolescent, interview them to co-construct an Identity Concept Map, and write reflections about the experience. Over the course of the 2013-2014 school year, the pre-service teachers logged a total of 550 service learning hours. This project was sponsored by the Center of Excellence in Middle-level, Interdisciplinary Strategies for Teaching (CE-MIST).
Festival of the Woods - 9/26/14

The Festival of the Woods is an annual event to celebrate the history and natural resources of the Hitchcock Woods. This year’s celebration will also mark the 75th anniversary of the Hitchcock Woods Foundation. We are pleased to announce that the Ruth Patrick Science Education Center (RPSEC) is partnering with the Hitchcock Woods Foundation during the month of September to provide a series of guided walks and hands-on activities for local school groups. The students will explore characteristics of habitats, investigate the diversity of life, make observations and inferences, and classify organisms as producers, consumers, and decomposers. Woods staff will be on site to share their expertise including a demonstration of prescribed burning for healthy forests. The Festival of the Woods will culminate with a ticketed dinner featuring a guest speaker.

Please visit hitchcockwoods.org for more information.

Hitchcock Woods Essay Contest
Célestine Eustis Prize

Area students are invited to participate in the seventh annual Hitchcock Woods essay contest.

The winner receives the Célestine Eustis Prize consisting of a $500 check and his or her name engraved on a sterling silver trophy. The winner is announced at the annual Festival of the Woods dinner to be held Friday, September 26.

A panel of judges reviews all entries and selects a recipient whose appreciation of the Woods is in the tradition of Célestine Eustis, who purchased land in the pine forests of Aiken more than 130 years ago. She had a passion for flora and fauna, and loved the serenity of the Woods.

Contributors should describe why the Woods are important to them and detail their use and enjoyment of the Woods.

The Célestine Eustis Prize is funded through the generosity of Jane Page Thompson.

Deadline is September 15, 2014
Please visit hitchcockwoods.org for Essay Rules and Entry Form.
ANIMALS AND RAPTORS OUTREACH

Shannon Unger and Susanne Kneece presented a limited number of programs at public libraries during the summer. Participants observed and interacted with live animals, including salamanders, frogs, turtles, snakes, a small alligator, an Eastern Screech Owl, and a Barred Owl. Sites included public libraries in Bamberg, Blackville, Denmark, Edgefield, Johnston, Wagener, and Wil-liston, South Carolina.

In addition to the library programs, this year Larry and Carol Eldridge presented a limited number of off-site programs for Birds and Butterflies and DOE Kids’ Day at the Savannah River Site. Participants got an up-close look at two very different birds of prey found in South Carolina. Live birds including a Red-Tailed Hawk, Barred Owl, and Eastern Screech Owl were used as part of this presentation. This program emphasized the physical characteristics and adaptations that enable these predators to survive at the top of the food chain.

FREE Teacher Resources and Visiting Scientists Available

The Traveling Science and Mathematics Demonstrations Program has over 350 science and math kits available for use in the classroom. Supplement your curriculum with nationally-recognized and state-adopted exemplary materials. Kits have been correlated to SC state standards. Many kits contain children’s literature so that you can integrate your science and language arts lessons.

In addition to these resources, you can request a visiting Scientists with Traveling Resources and Neat Demonstrations (STRAND) volunteer for classroom presentations.

For more information please visit http://rpsec.usca.edu/travelingscience/ or call us @ 803-641-3683

South Carolina Science Council Annual Conference

October 29-31, 2014

Myrtle Beach Convention Center

http://SouthCarolinaScience.org/
The Ruth Patrick Science Education Center is looking for sponsors to help support the cost of feeding and caring for the animals used in our K-12 educational programs. An animal may be adopted by an individual, a business, or a group such as an elementary school class or a scout troop. The sponsors’ names will be displayed on donor recognition kiosks at RPSEC, and they will be recognized in the Center’s publications and website as Friends of the RPSEC. Donations are tax deductible; sponsorship opportunities for 2014 are listed below.

For more information, please contact Deborah McMurtrie at DeborahMc@usca.edu or (803) 641-2834.

<table>
<thead>
<tr>
<th>BIRDS</th>
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<tbody>
<tr>
<td>Barred Owl (Strix varia) Non-releasable male, Raleigh</td>
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<tr>
<td>Eastern Screech Owl, brown phase (Megascops asio) Non-releasable female, Lina</td>
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<tr>
<td>Eastern Screech Owl, brown phase (Megascops asio) Non-releasable female, Charlotte</td>
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<td>Eastern Screech Owl, red phase (Megascops asio) Non-releasable male, Hunter</td>
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<tr>
<th>REPTILES: CROCODILIANS</th>
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<tr>
<td>American Alligator (Alligator mississippiensis) female, hatched 2012, Al</td>
<td>ADOPTED by John M. Hutchens</td>
</tr>
<tr>
<td>American Alligator (Alligator mississippiensis) male, hatched 2009, Tex</td>
<td>ADOPTED by Ms. Barbara Fenstermacher</td>
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<tr>
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<tr>
<td>Grey Rat Snake (Elaphe obsoleta spiloides)</td>
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<tr>
<td>Corn Snake (Elaphe guttata)</td>
<td>$100</td>
</tr>
<tr>
<td>Albino Corn Snake (Elaphe guttata)</td>
<td>ADOPTED by Tristan Davis</td>
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<th>REPTILES: TURTLES</th>
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<tr>
<td>Box Turtle (Terrapene carolina carolina)</td>
<td>ADOPTED by Dr. &amp; Mrs. Kenneth Perrine</td>
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<tr>
<td>Snapping Turtle (Chelydra serpentina)</td>
<td>ADOPTED by Mr. &amp; Mrs. James Ferrell</td>
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<tr>
<td>Painted Turtle (Chrysemys picta picta)</td>
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<tr>
<td>Chicken Turtle (Deirochelys reticularia)</td>
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<tr>
<td>Red-Eared Slider Turtle (Trachemys scripta elegans)</td>
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<tr>
<td>Yellow-Bellied Slider Turtle (Trachemys scripta scripta)</td>
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<tr>
<th>AMPHIBIANS</th>
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<tbody>
<tr>
<td>Barking Tree Frog (Hyla gratiosa)</td>
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<tr>
<td>Green Tree Frog (Hyla cinerea)</td>
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<tr>
<td>Gray Tree Frog (Hyla versicolora)</td>
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<tr>
<td>Southern Toad (Bufo terrestris)</td>
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<tr>
<td>Spotted Salamander (Ambystoma maculatum)</td>
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<tr>
<td>Tiger Salamander (Ambystoma tigrinum)</td>
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<tr>
<td>Tiger Salamander (Ambystoma tigrinum)</td>
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In partnership with Invent Now, the Ruth Patrick Science Education Center was again pleased to offer the nationally-acclaimed Camp Invention program to nearly 100 children entering grades one through six this summer. This exciting, weeklong adventure in creativity immersed children in imaginative play that reinforced and supplemented school-year learning in the subjects of Science, Technology, Engineering and Math (STEM).

This exciting week began on June 16th, when Ruth Patrick Special Programs Director John Hutchens directed the Camp Invention Morphed program. Children worked together to seek innovative solutions to relevant problems and sharpen critical 21st century learning skills as they rotate through different modules that reinvent summer fun.

In the Super Go™ module, students designed a small, motor-powered vehicle that zoomed! Girls and boys collect energy coins along the way for building ramps, bridges and tunnels for the Super Go Road Rally.

Participants received personalized challenges from National Inventors Hall of Fame Inductees that ignited a spirit of creativity, innovation and entrepreneurship during the Design Studio: Morphed™ module.

Throughout the Amplified™ module, children invented bionic gadgets while journeying to acquire superhuman senses. Time was spent encountering illusions and discovering if they were a supertaster.

Finally, Camp Invention’s flagship module, I Can Invent: Pinbug™, allowed participants to use tools to upcycle electronics and build an epic, insect-themed pinball machine!

Parents tell us Camp Invention improves their child’s outlook on learning and increases their child’s interest in using science to solve problems.

Local educators facilitated the program modules, and enthusiastic high school and college students served as Leadership Interns, ensuring that one staff member was in place for every five children.

MARK YOUR CALENDARS FOR CAMP INVENTION 2015
JUNE 15-19, 2015
The Future City Competition is a national, project-based learning experience where students in 6th, 7th, and 8th grade imagine, design, and build cities of the future. Students work as a team with an educator and engineer mentor to plan cities using SimCity™ 4 Deluxe software; research and write solutions to an engineering problem; build tabletop scale models with recycled materials; and present their ideas before judges at Regional Competitions in January. Regional winners represent their region at the National Finals in Washington, DC in February.

*Future City Engages Kids in Engineering and So Much More...*

This flexible, cross-curricular educational program gives students an opportunity to do the things that engineers do—identify problems; brainstorm ideas; design solutions; test, retest and build; and share their results. This process is called the engineering design process. With this at its center, Future City is an engaging way to build students’ 21st century skills. Students participating in Future City:

- Apply math and science concepts to real-world issues
- Develop writing, public speaking, problem solving, and time management skills
- Research and propose solutions to engineering challenges
- Discover different types of engineering and explore career options
- Learn how their communities work and become better citizens
- Develop strong teamwork skills

Visit HTTP://WWW.FUTURECITY.ORG to register your school to participate.

**Want more information?**

Plan to attend one of our
**TEACHER / MENTOR INFORMATION WORKSHOPS**
August 28th and September 18th
4:00-6:30PM - RPSEC

Call John Hutchens 803.641.3474
to register for the workshop.

Sponsored by:

**Ruth Patrick Science Education Center**
UNIVERSITY OF SOUTH CAROLINA AIKEN

2014 Regional Winners -Aiken Area Home Educators
## DuPont Planetarium
**Ruth Patrick Science Education Center**  
**UNIVERSITY OF SOUTH CAROLINA Aiken**

### 2014-2015 Public Shows

<table>
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<tr>
<th>DATES</th>
<th>SHOW NAMES</th>
<th>SHOW TIMES</th>
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</table>
| 2014 August 2, 9, 16, 23, 30 | Worlds in Motion  
Digitizer Virtual Journey | 8:00 pm  
9:00 pm            |
| 2014 September 6             | Dark Shadows                        | 7:00 pm  
8:00 pm            |
| Observe the Moon Night       | Mission to Mars  
Ancient Sky Lore              | 7:00 and 8:00 pm  |
| 2014 October 4, 18, 25      | Larry Cat in Space  
To the Moon and Beyond       | 7:00 pm  
8:00 pm            |
| Total Lunar Eclipse - Oct. 8| Safe Solar observing here           | 6:00 - 6:45 pm    |
| Partial Solar Eclipse - Oct.23|                                    |                    |
| 2014 October 11              | Digistar Virtual Journey  
I Spy the Sky                | 10:00, 11:00, 12:00, 1:00, 2:00 |
| S.E.E.D.                     | Mission to Mars  
Ancient Sky Lore              | 6:00, 7:00 & 8:00 pm|
| 2014 November 1, 8, 15, 22, 29| In My Backyard  
More than Meets the Eye     | 7:00 pm  
8:00 pm            |
| 2014 December 6, 13, 15      | 'Tis the Season                     | 7:00 and 8:00 pm  |
| 2014 December 20, 22, 27     | 'Tis the Season                     | 6:00, 7:00 & 8:00 pm|
| 2015 January 3, 10, 17, 24, 31| Mission to Mars  
Ancient Sky Lore              | 7:00 pm  
8:00 pm            |
| 2015 February 7, 14, 21, 28  | Follow the Drinking Gourd  
Explorers of Mauna Kea       | 7:00 pm  
8:00 pm            |
| 2015 March 7, 14, 21, 28     | Solar System Adventure Tour  
Blown Away: Wild World of Weather | 7:00 pm  
8:00 pm            |
| 2015 April 4 Total Lunar Eclipse – April 4 | Dark Shadows | 7:00 pm and 8:00 pm |
| 2015 April 11, 18, 25 Earth & Sky Night – April 25 | Engineering the International Space Station | 7:00 pm and 8:00 pm  
7:00, 8:00, and 9:00 p.m. |
| 2015 May 2, 9, 16, 23, 30    | Larry Cat in Space  
To the Moon and Beyond       | 8:00 pm  
9:00 pm            |
| 2015 June 6, 13, 20, 27      | In My Backyard  
More than Meets the Eye     | 8:00 pm  
9:00 pm            |
| 2015 July 4, 11, 18, 25 New Horizons at Pluto - July 14 | Engineering the International Space Station  
Laser Fantasy with New Horizons preshow | 8:00 pm  
9:00 pm            |
| 2015 August 1, 8, 15, 22, 29| Worlds in Motion  
Virtual Journey with New Horizons preshow | 8:00 pm  
9:00 pm            |

### Special Events
- **International Observe the Moon Night**: September 6, 2014
- **SEED: Science Education Enrichment Day**: October 11, 2014 – 10 a.m.-3 p.m.
- **Family Earth & Sky Night, National Astronomy Day, SC Statewide Star Party**: April 25, 2015 – 7:00-11:00 p.m.

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**For Planetarium information call: 803-641-3654**  
**From Augusta: 803-278-1967 ext. 3654**

More information is available on our website: [http://rpsec.usca.edu/Planetarium/](http://rpsec.usca.edu/Planetarium/)

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**Become a Galactic Guardian for 2014**

How would you like to adopt a celestial object and be its Galactic Guardian for a year? There are a number of celestial objects that need a caring person, family or group to look out for their best interests over the next year. Additionally, you will have the opportunity to support programming at the Ruth Patrick Science Education Center with your tax-deductible donation. For more information, please call the main office at 803-641-3313 or email RPSEC@usca.edu.
Masters Degree in Educational Technology
Earn Your USCA Degree Online

Do you enjoy using your computer? Do others ask you how to do something on their computers? Do you enjoy showing others something new on your computer? Have you considered getting a masters degree? Then maybe it is time for you to consider the Masters of Education in Educational Technology (MEd Tech). The MEd Tech program at University of South Carolina Aiken (USCA) and the University of South Carolina (USC) Columbia is accepting applications for enrollment. 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 803-641-3489.
How would you like to adopt a celestial object and be its Galactic Guardian for a year? There are a number of celestial objects that need a caring person, family or group to look out for their best interests over the next year. Additionally, you will have the opportunity to support programming at the Ruth Patrick Science Education Center with your tax-deductible donation. For more information, please call the main office at 803-641-3313 or email RPSEC@usca.edu.

$400 level:
1. Milky Way
2. Sun - *Adopted by Barbara Fenstermacher*
3. Moon

Planets:
4. Mercury
5. Venus
6. Earth
7. Mars
8. Jupiter
9. Saturn
10. Uranus
11. Neptune
12. Pluto (Dwarf $399.99)

$150 level:
13. Virgo
14. Libra
15. Scorpius
16. Ophiuchus-
17. Sagittarius
18. Capricornus
19. Aquarius
20. Pisces
21. Aries
22. Taurus
23. Gemini
24. Cancer
25. Leo

$100 level:
26. Andromeda the Princess
27. Aquila the Eagle
28. Auriga the Charioteer
29. Bootes the Herdsman
30. Canis Major the Big Dog
31. Canis Minor the Little Dog - *Adopted by Brooke Nicholson*
32. Cassiopeia the Queen
33. Cepheus the King

34. Crux the Southern Cross
35. Cygnus the Swan, Northern Cross
36. Draco the Dragon
37. Hercules
38. Lyra the Harp
39. Orion the Hunter
40. Pegasus the Flying Horse
41. Perseus the Hero
42. Ursa Major, Big Dipper
43. Ursa Minor, Little Dipper

$75 level:
Galaxies and Nebulae:
44. Cat’s Eye Nebula, NGC 6543
45. Cat’s Paw, NGC 6914
46. Crab Nebula, M1
47. Dumbbell Nebula, M27
48. Flame Nebula, NGC 2024
49. Helix Nebula, NGC 7293
50. Horsehead Nebula B33, IC434
51. Horseshoe Nebula, M17
52. Lagoon Nebula, M8
53. Orion Nebula, M42
54. Owl Nebula, M97 - *Adopted by Mr. John and Mrs. Deborah McMurtrie*
55. Pillars of Creation (M16) - *Adopted by Dr. Joette and Mr. L.K. Sonnenberg*
56. Ring Nebula, M57
57. Rosette Nebula, NGC 2237
58. Seagull Nebula, IC2177
59. Stellar Spire (M16)
60. Tarantula Nebula, NGC 2070
61. Trifid Nebula, M20
62. Andromeda Galaxy, M31
63. Black Eye Galaxy, M64
64. “Cigar” Galaxy, M82
65. Pinwheel Galaxy, M101
66. Sombrero Galaxy, M104
67. Sunflower Galaxy, M63
68. Tadpole Galaxy, UGC 10214
69. Whirlpool Galaxy, M51

$50 level:
Other Constellations:
70. Centaurus
71. Cetus the Sea Monster
72. Columba the Dove - *Adopted by Mr. Robert and Mrs. Nancy Harrington*
73. Corona the Crown
74. Corvus the Crow
75. Delphinus the Dolphin - *Adopted by Dr. Paul & Mrs. Moncia Dainer*
76. Lepus the Hare
77. Monoceros the Unicorn
78. Sagitta the Arrow -

Stars and Star Clusters:
79. Albireo, a double star -
80. Beehive cluster
81. Alcor & Mizar, double stars
82. Hercules globular cluster -
83. Pleiades, the Seven Sisters
84. Polaris, the North Star -

Brightest Stars:
85. Aldebaran - *Adopted by Dr. Paul & Mrs. Moncia Dainer*
86. Altair
87. Antares
88. Arcturus
89. Betelgeuse
90. Capella
91. Castor
92. Deneb
93. Fomalhaut
94. Pollux
95. Procyon
96. Regulus
97. Rigel
98. Sirius
99. Spica
100. Vega
Susanne Kneece

My name is Susanne Kneece. I was delighted to join the Ruth Patrick Science Education Center as a Student Program Specialist with STEP 1 year ago. It is a job that I had only dreamed about as I took Fifth and Sixth Grade students to programs at SRS, Silver Bluff Audubon Sanctuary, and the RPSEC for the last 25 years. Using my Elementary certification, I taught Fifth and Sixth Grade students at A.L. Corbett Middle School, Ridge Spring Monetta Elementary-Middle School, and Fifth Grade Math, Science, and Social Studies at Batesburg-Leesville Elementary. I hold an undergraduate degree in Early Childhood Education and a Master’s Degree in Elementary Education, both from USC. I am certified in both Early Childhood and Elementary Education. During my time at Aiken Elementary, I taught third, fourth, and fifth grades the last 15 years I have specialized in teaching Science and Social Studies, integrating Language Arts and Writing into my lessons. Other duties included maintaining and coordinating the use of our Outdoor Classroom and organizing our school Science Fair. I also spent one year at Aiken Elementary as a full-time grant manager for “Project VCR” in which I produced monthly parent education videos.

I am looking forward to working and growing professionally at RPSEC. What a great place to learn more about our world and beyond!

Darya McMurtrie

Hello! My name is Darya McMurtrie. In February of this year, I finally started my dream job – Student Programs Specialist at The Ruth Patrick Science Education Center. As a classroom teacher for 14 years, I brought my students to RPSEC every year and often dreamed of working there myself. In my first few months on the job, I have taught and helped develop programs for the many students who visit each year. I have also been involved in planning and creating lessons for upcoming teacher workshops. My favorite programs to teach are those that involve live animals or messy experiments and programs for our younger students.

I have a Bachelor of Science degree in Interdisciplinary Studies from the University of South Carolina Aiken. I taught in private schools in Aiken for 14 years before taking a year off to stay home with my daughter.

I am thrilled to be a part of the RPSEC family and look forward to serving the students and teachers of our area in the coming years.

Beth Eberhard

My name is Beth Eberhard. I am delighted to join the Ruth Patrick Science Education Center as a Student Programs Specialist after having taught 25 years at Aiken Elementary. I hold an undergraduate degree in Early Childhood Education and a Master’s Degree in Elementary Education, both from USC. I am certified in both Early Childhood and Elementary Education. During my time at Aiken Elementary, I taught third, fourth, and fifth grades the last 15 years I have specialized in teaching Science and Social Studies, integrating Language Arts and Writing into my lessons. Other duties included maintaining and coordinating the use of our Outdoor Classroom and organizing our school Science Fair. I also spent one year at Aiken Elementary as a full-time grant manager for “Project VCR” in which I produced monthly parent education videos.

I am looking forward to working and growing professionally at RPSEC. What a great place to learn more about our world and beyond!

Lizzy Green

My name is Lizzy Green and I recently joined the Ruth Patrick Science Education Center as a Student Programs Specialist. As a program specialist, I teach and help develop various hands-on, inquiry-based science and math programs geared for all ages throughout the year.

My background includes graduating from Clemson University with a Bachelor of Arts degree in Elementary Education as well as being a South Carolina certified educator for ten years. Over the course of my teaching career, I have gained experience spanning grades 2-5, worked to develop and edit district curriculum and earned the title of school level Teacher of the Year. Having always had a natural curiosity for all things in nature and science, I could not be more excited to continue my path as an educator by being a member of the Ruth Patrick team. Our animal programs are by far a favorite of mine to teach. I am inspired each day as our furry, feathery or scaly friends bring science alive for students visiting the center!
### Part I. 2014-15 STEM Forward Quarterly Sessions (Mathematics Focus With STEM Applications)

<table>
<thead>
<tr>
<th>Date</th>
<th>Grade Band</th>
<th>Area of Emphasis</th>
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<tbody>
<tr>
<td>Tuesday, September 9, 2014</td>
<td>K-2</td>
<td>Counting and Cardinality Numbers and Operations in Base Ten</td>
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<tr>
<td>Tuesday, November 11, 2014</td>
<td>K-2</td>
<td>Operations and Algebraic Thinking</td>
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<tr>
<td>Tuesday, January 13, 2015</td>
<td>K-2</td>
<td>Measurement and Data</td>
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<tr>
<td>Tuesday, March 10, 2015</td>
<td>K-2</td>
<td>Geometry</td>
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<tr>
<td>Tuesday, September 23, 2014</td>
<td>3-5</td>
<td>Numbers and Operations - Fractions</td>
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<tr>
<td>Tuesday, November 18, 2014</td>
<td>3-5</td>
<td>Operations and Algebraic Thinking</td>
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<tr>
<td>Tuesday, January 27, 2015</td>
<td>3-5</td>
<td>Measurement and Data</td>
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<tr>
<td>Tuesday, March 24, 2015</td>
<td>3-5</td>
<td>Geometry</td>
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<tr>
<td>Tuesday, October 14, 2014</td>
<td>6-8</td>
<td>Ratios and Proportional Relationships</td>
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<td>Tuesday, December 2, 2014</td>
<td>6-8</td>
<td>The Number System</td>
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<td>Tuesday, February 10, 2015</td>
<td>6-8</td>
<td>Statistics and Probability</td>
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<tr>
<td>Tuesday, April 21, 2015</td>
<td>6-8</td>
<td>Geometry</td>
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<tr>
<td>Tuesday, October 28, 2014</td>
<td>9-12</td>
<td>Number and Quantity</td>
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<tr>
<td>Tuesday, December 9, 2014</td>
<td>9-12</td>
<td>Algebra</td>
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<tr>
<td>Tuesday, February 24, 2015</td>
<td>9-12</td>
<td>Functions</td>
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<tr>
<td>Tuesday, April 28, 2015</td>
<td>9-12</td>
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<td>9-12</td>
<td>Geometry</td>
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### Part II. STEM Symposium - All teachers in the grant project will participate in this.

- Friday, January 16, 2015*  | K-12  | STEM Symposium - ATC

### Part III. CNTA (Citizens for Nuclear Technology Awareness) Workshops - Teachers should choose from one of the following dates. There are a limited number of slots for each workshop, so teachers should designate their first and second choices. (Dates are tentative)

- Friday, October, 2014*    | K-12  | CNTA Workshop - RPSEC
- Friday, January, 2015*    | K-12  | CNTA Workshop - RPSEC
- Friday, April, 2015*      | K-12  | CNTA Workshop - RPSEC

*Note: CNTA Dates are to be confirmed.

### Part IV. STEM Industry Visits - Teachers should choose from one of the following dates.

- Friday, June 12, 2015      | K-12  | STEM Industry Visit
- Friday, July 24, 2015      | K-12  | STEM Industry Visit

### Part V. Summer Institutes - Teachers will attend their grade-span's summer institute.

- June 15 - 19, 2015        | 9-12  | On Friday during each of these institutes, teachers will attend Aiken Technical College's STEM Education Day.
- June 22 - 26, 2015        | K-2   |
- July 13 - 17, 2015        | 3-5   |
- July 27 - 31, 2015        | 6-8   |

* ACPS Teacher Workday
MARK YOUR CALENDARS!

Saturday, October 11th
10am-3pm

Congratulations to Dr. Gary J. Senn on his promotion to full professor of science and technology education at the University of South Carolina Aiken.

At USCA, Dr. Senn is involved with the master of education program in educational technology and he devotes significant effort as the Director of the Ruth Patrick Science Education Center (RPSEC). In his association with the RPSEC he is also the Director of the Dupont Planetarium, Manager of the Bechtel Telescope housed in the RPSEC Observatory, Director of the South Carolina Center of Excellence in Middle-level Interdisciplinary Strategies for Teaching and Director of the South Carolina Center of Excellence in Educational Technology. Dr. Senn’s main areas of interests are with science education and technology integration in the K-12 classroom. Over the past several years he has concentrated on astronomy education through his involvement with the observatory and planetarium.