

SRB's Science Olympiad team earns awards at regional competition

St. Robert Bellarmine's Science Olympiad team members earned a second-, third-, fourth-, and eighth-place medal in their individual events at their regional competition on Saturday, March 14th, 2015. In addition, members narrowly missed qualifying for a medal in three other events, and two SRB team members received a Spirit Award from the judges for their kindness and good sportsmanship. Only one other school received a Spirit Award.

The Wayne-Monroe Science Olympiad (Michigan Region 8) competition was held at Thurston High School in Redford. SRB's fifteen team members, in grades six through eight, competed in fourteen individual events, against teams from twenty-two other middle schools throughout Wayne and Monroe counties.

Sara Stawarz and Hannah Cieglo, who were coached by Sarah's father, earned a second place medal in the "Bottle Rocket" event. Each of their water-pressurized rockets stayed in the air for more than 13 seconds after being launched, and made a perfect, gentle landing. Competitors in that event were expecting water to be provided at the launch site. When it was not, Sara and Hannah, who were among the first to compete, went to find bottles of water that they could use as rocket "fuel." They donated extra bottles of water for other competitors to use as well, and for that, the judges awarded each of the two seventh-grade girls a Spirit Award ribbon.

Hannah Cieglo also earned a third-place medal, along with seventh-grade student Emma DelCotto, in the "Write It, Do It" event. In that event, Hannah was given a three-dimensional object made out of a box with a top, pins and a cupcake paper liner. Hannah had to write a detailed set of instructions for creating a replica of that object. Emma did not see the object. Her task was to recreate it, though, using a set of materials provided by the event supervisor and Hannah's written instructions. Mrs. Linda Sabak, the girls' event coach and English teacher, has said that she thinks the event was inspired by the Apollo 13 space mission. When the spacecraft in that mission encountered a problem, NASA engineers had to figure out how the astronauts could fix the problem using onboard supplies, and then had to verbally guide the astronauts on what to do, without the aid of any video or pictures.

Ryan Cicala and Matthew Piotrowski, both in the sixth grade, earned a fourth-place medal in the "Wheeled Vehicle" event. For that event, they and Matthew's father, who was their coach for that event, constructed a rubber-band powered vehicle. Their car not only had to travel a certain distance, but it had to veer around a coffee-can obstacle on its way to the finish line. During each of their two trials, the car went around the can beautifully and stopped about a centimeter before the finish line.

Matthew, along with Sara Stawarz, also earned an eighth-place medal in the “Elastic Launch Glider” event. They, along with Matthew’s father, who was their coach for that event, constructed a glider made of balsa wood. The goal in that event was to launch a wooden glider with a rubber band, and to have the glider then stay airborne for as long as possible. One end of the rubber band was tied to a small wooden rod, and the other end was hooked to the glider. To launch the glider, the person doing the launching had to stretch the rubber band as far as possible, which meant standing with his or her arms spread apart as far as possible, forming an upward diagonal line. That isn’t as easy as it might seem. Sara and Matthew each built a glider and spent many hours in SRB’s gym, practicing how to launch them. They took turns launching their gliders at the regional, and in addition to that, they had to submit their practice data as part of the competition.

At the regional, medals were given for the top eight scores in each event. Ryan Cicala and Emma Delcotto came close to receiving a medal in the “Bridge Building” event. They, along with Ryan’s father, who was their event coach, constructed a bridge made of balsa wood. The weight of the bridge was divided by the amount of weight that could be suspended in a bucket from the bottom center of the bridge. Even though their bridge held the thirty pounds of sand that was provided without breaking, the weight of the bridge needed to be slightly smaller, Mr. Cicala said.

Sara Stawarz and Hannah Cieglo came in ninth in “Can’t Judge a Powder.” For that event, they had to conduct chemical tests on different powders that were provided at the event and carefully record their observations. Jacy Holder and Elizabeth Machowicz came in tenth place in “Simple Machines.” For that event, they and Jacy’s father, who was their event coach, constructed a simple lever out of wood. The lever looked like a see-saw and was used as a balance. At the competition, the girls were given unknown weights and had to determine the ratio of one weight to another. For example, “Weight A is 0.5 times as heavy as weight B.” The girls also had to take a test on simple machines as part of the event.

In addition to the above-named students, the following SRB Science Olympiad team members received a participation medal at the regional, for competing in the following events:

- “Experimental Design” – Selina Al-Shaer (seventh grade), Sophia Moten (sixth grade) and Hannah Rawlings (sixth grade)
- “Picture This” – Clara Furton (seventh grade) and Grace Brown (eighth grade)
- “Solar System” – Joshua Booterbaugh (eighth grade) and Antonio Stone (eighth grade)
- “Entomology” – Aly Brumm (seventh grade) and Elizabeth Machowicz
- “Crave the Wave” – Elizabeth Machowicz and Hannah Cieglo
- “Fossils” – Aly Brumm and Grace Brown

- “Crime Busters” – Aly Brumm and Antonio Stone

The SRB team demonstrated flexibility and teamwork at the regional. Antonio Stone had prepared for “Crave the Wave,” but due to unforeseen circumstances, he was unable to participate in it. Aly Brumm voluntarily took his place. Joshua Booterbaugh then invited Antonio to assist him in the “Solar System” event, and Antonio did. In addition, Clara Furton and Aly Brumm volunteered to carry SRB’s banner in the “Parade of Schools” that was held in Thurston’s gym at the start of the awards ceremony.

Also showing great flexibility and a willingness to help were Mrs. Machowicz, Mrs. Al-Shaer, and Mrs. Stawarz. They volunteered to help the organizers of the regional competition on an “as-needed” basis. Mrs. Stawarz helped with a construction event that was held indoors, and Mrs. Al-Shaer and Mrs. Stawarz helped with an event that was held outdoors. They and other parents also assisted the team by taking turns watching the group’s belongings in its “home base” room at Thurston.

SRB’s Science Olympiad team attended meetings once a week after school, starting in December, and the team competed at a practice meet at L’Anse Creuse High School in Harrison Township in January. Many students attended other practice sessions for their events at school, at each other’s houses, and some also met at a local library. The team was assisted throughout the season through the support and encouragement of Mrs. Linda Kramer, SRB’s school principal.

The team’s head coach this year was Mrs. Donna Mulcahy, who teaches science and math at SRB. This was her first time coaching Science Olympiad, and, like Mrs. Kramer, it is her first year at SRB. However, SRB has been participating in Science Olympiad for more than twenty years. One of the organizers of the event told her that SRB has participated in Science Olympiad longer than any other parochial school in the Wayne-Monroe region, but neither that person nor the team’s former coach, Michigan State Representative Julie Plawecki (D-Dearborn Heights) could confirm that with specific dates. Mrs. Plawecki, who taught math and science at SRB for many years, surprised and delighted her former students by attending the regional competition for part of the morning, as a show of support for them.

Only some of the events were open to the public. They included: Air Trajectory (B & C), Bridge Building (B), Elastic Launched Glider (B), Robo Cross (B), Wheeled Vehicle (B), Bottle Rockets (B), Bungee Drop (C), Scrambler (C), Wright Stuff (C), Get Your Bearing (B and C), and Pentathlon (B and C). The letter “B” denotes middle school events (for students in grades six up to, in some cases, grade nine). The letter “C” denotes high school events. Of the middle schools that competed, five were Catholic schools, including St. Robert Bellarmine. Of the fifteen high schools that competed, two were Catholic schools.

The top five middle school teams and the top four high school teams were invited to participate in the state Science Olympiad competition, to be held May 2nd at Michigan State University in East Lansing. The top teams there will advance to the national competition. In the past, the Wayne-Monroe Regional competition was held at the University of Michigan-Dearborn, but it could not be held there this year due to construction on campus.

As stated on the Science Olympiad web site, "Science Olympiad is a national non-profit organization dedicated to improving the quality of K-12 science education, increasing male, female and minority interest in science, creating a technologically-literate workforce and providing recognition for outstanding achievement by both students and teachers. These goals are achieved by participating in Science Olympiad tournaments and non-competitive events, incorporating Science Olympiad into classroom curriculum and attending teacher training institutes." For more information about Science Olympiad, please visit its website at soinc.org For more information about the Wayne-Monroe Regional competition, visit its website at www.region8so.org.

-- By Donna Mulcahy