

## THIS MONTH:

- APR 11** INTERIMS/ FINAL ELECTIVE GRADES
- APR 14** EARLY DISMISSAL
- APR 17-21** SPRING BREAK!
- APR 25** FIRST DAY OF NEW ELECTIVES (TUESDAY SCHEDULE)

## Counselor's Corner

For students (and parents), spring means everything happening at full speed. Registration is complete and students will find out which elective they received just prior to spring break. The new electives will meet for the first time on April 25<sup>th</sup>.

Spring also means many events. We will be holding a canned food fundraiser for Feeding America the week we return from break. Students may participate in one of two ways. Students may form ultimate Frisbee teams and each team member must donate 5 canned food items to play. We will also have our AM1 and PM1 classes competing to see who can bring in the most canned food items. The winning ultimate Frisbee team and the winning AM1 and PM1 classes will receive a pancake breakfast or other food award. Please encourage your students to bring in canned food! It's an easy and fun way to give back to our community.

Senior Dinner is scheduled at Hotel Roanoke for Monday, May 8<sup>th</sup> at 6:30. The invitations will be mailed on Tuesday, April 25<sup>th</sup> and the RSVP will be due to me by May 1<sup>st</sup>. We will also be having a Senior Breakfast on the morning of May 18<sup>th</sup>. I will be contacting senior parents in the near future asking for help coordinating and feeding our seniors. Thank you in advance for your help!

AP testing takes place in the first two full weeks of May. As in the past, students are to have registered for their AP tests through their home school. Students are responsible for paying the fees when registering at the home school. If you have questions about registration, fees or deadlines, please contact your student's home school.

As always, if you have any questions or need any assistance, please do not hesitate to contact me.

# RVGS Newsletter

Issue 7  
March 31, 2017

## Western Virginia Regional Science Fair

The Western Virginia Regional Science and Engineering Fair is an annual event that celebrates science by bringing together, in competition, students from Botetourt, Craig, Franklin, and Roanoke counties, and the cities of Roanoke and Salem. This year's fair was held at Hollins University on March 4. Students competing at the regional fair have already won category awards in at least one fair and often two, and they arrive at the regional fair ready to compete for prizes, awards, and two all-expense paid trips to the Intel International Science and Engineering Fair (ISEF), the world's largest pre-college science competition.

RVGS typically sends around 60 students to the regional fair, and we generally hope to have a dozen or so advance to the state fair. I am thrilled to report that this year, Gov. School produced a bumper crop! Not only did 19 students win their categories at the regional fair, qualifying them to advance to states, but both Grand Award winners and both Grand Award Alternate winners were Governor's School students.

Congratulations to **Christine Flora** and **Reid Tenzer**, the fair's two Grand Award winners! They will receive an all-expense paid trip to ISEF, which will be held this year in Los Angeles, California, from May 14 – 19. At the fair, Christine and Reid will interact with over 1,700 other gifted young scientists from more than 75 countries, regions and territories, and they will compete for \$4 million in prizes and special awards. Last year's top winner at ISEF received a \$75,000 cash prize for developing a way to boost the performance of microbial fuel cells to bio catalyze the conversion of waste into electricity.

Congratulations to **Kailyn Jani-**



**ga** and **Richard Qiu**, the fair's two Grand Award Alternate winners! They will compete at ISEF if Christine and Reid are unable to attend the event.

Congratulations to all of the RVGS students who won first place category awards at regionals and advanced to the state competition at VMI on March 25:

**Ana Barrios, Izzy Baxter, Carol Chen, Alex DeFelice, Christine Flora, Harrison Huang, Kailyn Janiga, Elysia Lin, William Luqiu, Caleb McMurtry, Madelyn Nichols, Jai'Chaun Paige, Maria Parnell, Richard Qiu, Ryan Smith, Matthew Svec, Ainsley Swartwout, Reid Tenzer, and Ellen Wood.**

Many other Governor's School students received second, third, and fourth place category awards, as well as over two dozen special awards. For the full listing of award winners from the Western Virginia Regional Science and Engineering Fair and from its ISEF affiliate counterpart for our Bedford County students, the Central Virginia Regional Science Fair, please visit the RVGS home page at [www.rvgs.k12.va.us](http://www.rvgs.k12.va.us).

-Regina Carson



## Message from the Director

As science fair competition comes to a close for the majority of our students, I want to take the opportunity to again express my respect and admiration for our students' impressive work and determination. I am appreciative, on a daily basis, for the opportunity to spend time with such fine young people.

Along those lines, I truly value relationships with our students and cherish the interactions I have with them. Students- I know it may not be your normal experience to talk to school administrators often, but remember that RVGS isn't a conventional environment. I want you to know that I'm always excited to talk to you, whether it's to share a concern, ask for advice, or to trash talk about the faculty team for Ultimate Frisbee! I, like the rest of the RVGS staff, am here to support you, as both students and young adults.

In exciting news, we ordered our new atomic force microscope and it arrived at RVGS last week! Dr. Frazier and I still have some work to do before it is fully operational, but you can expect to see an update and some images from the new equipment in the next newsletter!

As always, I am happy to hear from students and parents. If there are any concerns or there is anything I can do to help you, please don't hesitate to get in touch with me.

Students who advanced from WVRSF to the state fair. (Not pictured: Caleb McMurtry and Ryan Smith)

### ISEF Update

With the conclusion of the state fair, our international fair competitors have been finalized. Please congratulate junior **Christine Flora** (Hidden Valley High School) for her microbiology project titled, "Assessing Rice Bran's Protective Efficacy as a Probiotic Against Rotavirus Infected IPEC-J2 Cells," and sophomore **Reid Tenzer** (Patrick Henry High School), for her biomedical engineering project titled, "Dilatant Insole to Reduce Damage Inflicted by Peripheral Neuropathy." As the two Grand Award winners from the regional fair, these students have won their way into ISEF, the premier global science competition for grades 9 – 12, and the holy grail of science fairs. Chaperoned by a very excited Ms. Bohland, the students will each receive an all-expense paid trip to Los Angeles, California for the fair, which will take place May 14-19. Stay tuned to hear how their quest turns out!



## Virginia State Science and Engineering Fair

The Virginia State Science and Engineering Fair brings together regional fair winners from a dozen regions across the commonwealth, for a total of more than 200 projects that are judged by 70 experts in higher education and business communities from around the state. This year's state fair was held at VMI on March 25, and a total of 20 RVGS students earned a spot at the competition.

Research projects at the state fair are literally the best of the best of the best – meaning the entries have already won at the school, city or county, and regional levels – and being recognized among this select group is a monumental achievement. Please congratulate the following students who received awards at the state fair!

### Category Awards

First place: **Izzy Baxter and Alex DeFelice** in Energy and Transportation; **Richard Qiu** in Chemistry

Second place: **Matthew Svec** in Cell and Molecular Biology

Third place: **Carol Chen and Madelyn Nichols** in Plant Sciences; **Ellen Wood** in Animal Sciences

Honorable Mention: **Kailyn Janiga** in Bio-medical and Health Sciences

### Special Awards

**Ellen Wood** – Virginia Dental Association

VSSEF award winners (Alex DeFelice not pictured)



## 1st Annual RVGS Drag Race

The Governor's School held its First Annual Drag Racing Competition on Saturday, March 18, and boy, was it a doozy! The Rules of the Road were so strict that just creating the race cars was a daunting task, but once the cars were evaluated and approved for competition, they still had to cover a 30-foot straight track and come to a complete stop no more than eight feet past the finish line to qualify as an eligible run. Each car counted its

best of five runs, and at the end of the day, the team with the fastest run was declared the winner.

Students were required to design and construct the cars themselves on their own time, and the morning of the competition, Dr. Holt and Mr. Levy checked each car to make sure it (A) fit within a 25 cm x 15 cm x 12 cm box, (B) did not have a mass greater than 1 kg, and (C) was entirely self-propelled. Components ranged from basic, such as

string, compact discs, and duct tape, to advanced, such as an Arduino micro-processor and 3D printed side walls. Mr. Merrill had so much confidence in his car – "Dream Crusher" – that he even told the kids he would buy breakfast for any team that beat him.

Unfortunately for Mr. Merrill, the practice round was a nightmare. Almost immediately he broke an axle and popped a band, and because his hot rod was so beautifully designed and meticulously constructed to his own precise specifications, he had no back-up parts. Students took full advantage of his bad luck, and even the ineligible runs –

Vicki Shelly waves the starting flag to open the race.



## Virginia Junior Science and Humanities Symposium

The Virginia Junior Science and Humanities Symposia Program (JSHS) is designed to challenge, engage, and publicly recognize students in grades 9-12 conducting research in the STEM fields. It is sponsored by the US Army, Navy, and Air Force, with the aim of preparing and supporting students to contribute as future scientists and engineers. On behalf of the Department of Defense, the Academy of Applied Science administers the national program, and our regional JSHS was held March 16-17 at JMU.

After Student Project Forum each year, the RVGS faculty invites 10 to 12 students to present their research projects at JSHS. This year, 12 Gov. School students were selected for the all-expense paid trip to the regional conference, and Ms. Bohland and Mr. Merrill served as chaperones. Competition at the symposium was fierce, but our group fared extremely well.

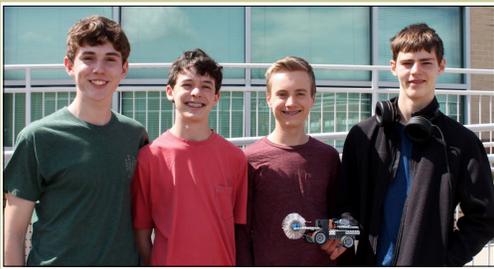
**Christine Flora, Kailyn Janiga, Vanessa Lin, Kendall**

**Livesay, Tara Malloy, Richard Qiu, Matthew Svec, and Ellen Wood** were recognized for Outstanding Research. **Reid Tenzer** was awarded Best Sophomore in the Life Science category, and **Kendall Livesay and Tara Malloy** were named Presidential Scholar Nominees. **Christine Flora, Vanessa Lin, Tara Malloy, and Richard Qiu** received Gold Awards, and **Richard Qiu** was named one of the symposium's five Regional Finalists.

Please congratulate these students, and wish **Richard Qiu** luck at nationals! As a Regional Finalist, he will receive an all-expense paid trip to present his research in the poster session at the 55<sup>th</sup> National Junior Science and Humanities Symposium held April 26-30 in sunny San Diego, California.

-Regina Carson





### 1st Annual RVGS Drag Race cont.

like the Junior Division car that traveled several inches by turning around in circles or the RVGS Division car that overshot the cone by 50 feet before the curb stopped it – technically beat Dream Crusher, which remained comatose at the starting line.

Fortunately, the students crushed it. Three teams had at least one eligible run, two teams had two, and “Wheel of Death” had the fastest eligible run of the day at 4.11 seconds.

**Congratulations to our first place team of Noah Gettings, Hayden Gray, Evan Gross, and Luke Suess!** (pictured above) Each team member won \$20 in cash and bragging rights in perpetuity. In second place was M.A.D. W.E.B with a time of 5.1 seconds, winning \$10 for each team member, and in third place was The Meme Team with a time of 6.87 seconds. Well done, Lab Rats! Thank you for taking part in the inaugural drag race! Enjoy your pancakes.



Mr. Merrill buckles under the agony of defeat.

## “Why Gov School?” Series: Craig County

Craig County is a picturesque outdoor paradise for those who love to hunt and fish, hike, and camp, and it’s a great place to grow up. But with a total high school student population of just over 200, it’s hard for the County to secure the funds needed to maintain a cutting edge STEM program at the school. This year, Craig County sends four of their most motivated students to RVGS every day, and two of them, Seth Helm and Olivia Menezes, are seniors.

At 16 people per square mile, everything is far away in Craig County. Seth and Olivia live 40 miles from each other, and another five from the high school, which is where they meet up each day at 7 AM for the hour-long trip to Roanoke.

“Our driver, ‘Kitten,’ picks us up every morning in one of the County’s Crown Vics,” said Olivia, “and we try to sleep on the way in. She picks us up again after Gov. School, and we get back to Craig County around 11:50. We have lunch and take three afternoon classes at Craig, then for me, it’s off to practice.”

Olivia stays as involved as she can at her home school, participating in Beta Club, After Prom, yearbook, volleyball, basketball, softball, and track. She’s never home before 6 PM, and with or without a game or a committee meeting, she’s often completing homework until midnight. “I’m tired,” said

Olivia, “but the Governor’s School is worth it.”

“Sports are hard to keep up with,” she said, “and I have to take extra classes in the summer, and I won’t get a spring break this year. But I’m going to college, and the Governor’s School is helping me get there.”

With a 1% minority rate at Craig, most of their classmates look like Seth and Olivia, but it’s at Gov. School where the two feel they blend in best. “There’s a like-mindedness here that we don’t have at our home school,” said Seth. “Everyone here has the same drive, and we’re all here for the same reason. There’s a willingness to work hard at the Governor’s School, and the change of environment is like a breath of fresh air.”

-Regina Carson



The VMI mascot (a kangaroo interestingly enough) seemed to be everywhere at the VSSEF. He managed to hop his way into photos with many of our state science fair students!



Congratulations to Ms. Cindy Bohland, who was selected by Williams College to receive its George Olmsted Jr. Class of 1924 Prize for Excellence in Secondary School Teaching.

The annual award recognizes four high school teachers who played an influential role in the lives and learning of the college’s more than 500 graduating seniors. Nominated by former student Gemma Porras, RVGS/PHHS Class of 2013, the prize includes an all-expense paid trip to Williams’ 2017 commencement for Ms. Bohland and her family, a \$3,000 personal cash prize, plus a \$5,000 donation to Gov. School. Thank you, Gemma, and congratulations, Ms. Bohland!

