



RVGS Newsletter

Issue 2 December 2021



Counselor's Corner

It's amazing how quickly the last few months have passed! As students are about to enter into Intersession, I want to remind students and parents the importance of time management. This is important not only for the research project itself, but for the math and science assignments that the students will be working on throughout the month of January. It's very easy to put things off when you aren't in class each day. Inevitably, that procrastination will lead to increased stress and poor quality of work....or no work at all. Please remember to stay on top of your assignments and avoid the last-minute stress.

It is also very important to remember the importance of a healthy and consistent sleep schedule. Many of our over-extended students tend to sacrifice sleep far too frequently. This leads to an increase in depression and anxiety as well as a decline in overall mental and physical health. Academics are important, but your physical and mental health **MUST** be a priority.

Stay safe and healthy this winter and enjoy a much deserved rest over winter break!

-Kathy Sebolt

Ultimate Frisbee Returns to RVGS

Ultimate Frisbee has returned to RVGS! The much-anticipated season kicked off with 8 teams representing all grades and home schools. Teams arrived for competition in a variety of hats, costumes and themes. Some even brought fan bases with banners and noise makers to cheer them on. The Patrick Henry Jazz band made a special early morning appearance to add to the festive atmosphere with spirited music



to cheer on the teams. After a week of intense competition, the championship was held between "Bee Gees" and "Big Energy". The Bee Gees were able to remain undefeated and be named as Champions of the fall Ultimate Frisbee season. The victors were treated to breakfast courtesy of Mrs. Sebolt. Entry fees from the



tournament were used for a donation of over \$400 to the United Way.

Message from the Director

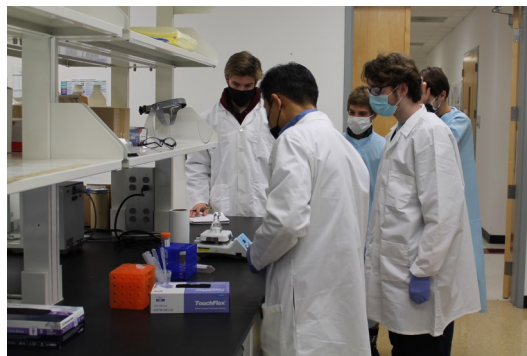
It's a new year, but we are experiencing some familiar challenges from a holiday surge of COVID fueled by omicron. As in the past, we will continue to do our best to provide a safe and academically effective learning environment at RVGS. We appreciate everyone's patience and flexibility during this time.

The start of January brings the most exciting part of the year at RVGS - Intersession. For folks new to RVGS, Intersession is the modified schedule we run during January for students to work exclusively on their research projects. It is a special time for our students to spread their wings and take on challenging problem-solving. Sometimes students can have difficulty with the freeform problem-solving involved in this process, and that might be doubly so with the impact of COVID. Students should take ownership over their project, but don't forget the teacher is there to help along the way. Just remember there is no need for panic if things don't go perfectly—experimentation is 'messy' and working through challenges is part of the process!

As always, if you have any questions or concerns, don't hesitate to contact me.

ACR Field Trip To Virginia Tech

Mr. Smith's Advanced Chemical Research (ACR) class recently got to spend the day on the campus of Virginia Tech. Students began their morning at NanoEarth. NanoEarth is one of the leading research centers for earth and environmental research in the country. The facility is equipped with more than \$10 million in highly specialized equipment. Its goal is to create technologies that solve critical challenges especially environmental. Virginia



Tech is one of the only universities in the country that is able to offer undergraduate nanotechnology degrees. Students were able to synthesis gold nanoparticles in the laboratory. They were also able to get hands on with scanning electron and transmission microscopes. These microscopes allow scientists to create 3-dimensional reconstruction of objects that are only a

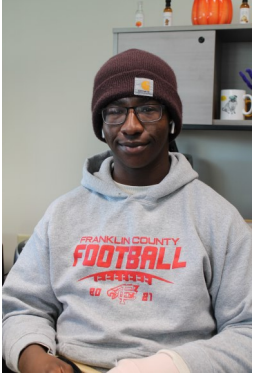
few nanometers in size.

After a relaxing lunch at the duck pond, students headed to Latham Hall. Here students met with Drs Westwood and Collakova to learn more about their research into genetically modifying plants and parasitic plants. Dr. Collakova's lab is working specifically on modifying tomato plants to reduce their overall size and make the entire plant edible. They hope to create a plant that will be used by NASA to supplement the astronauts' diets. Dr.



Westwood's lab is studying parasitic plants. He is national known for his discovery of genetic material transfer between host and parasite plants. We would like to thank Virginia Tech for being wonderful hosts to the ACR students and look forward to returning next year.

National Society of Black Engineers



Bakari Deskins (FC/RVGS) has been spending some time on the campus of Virginia Tech. Thru the National Society of Black Engineers (NSBE), Bakari has been attending workshops that hope to promote and education high school students of the opportunities that exist in the various fields of engineering. The NSBE hopes to "increase the number of culturally responsible Black Engineers who excel academically, succeed professionally, and positively impact the community."

Once a month, students are invited to the VT campus to attend a half day lecture followed by a engineering based competition. Students are placed on teams with other students from Virginia and challenged with tasks specific to that morning's lectures. Recently, Bakari and his team won a challenge based on a hydraulic press and its ability raise the most weight. His team won t-shirts and bragging rights over the other 60 students in attendance. Bakari has found the workshops have really inspired his interest in engineering and hopes to attend the rest of the workshops for the remainder of the school year.

STEM project for Roanoke's English Language Learners Students

In our first Student Advisory Meeting of the year, students asked if RVGS could do some sort of STEM kit for Afghani refugee students. after some brainstorming, students decided that something involving planting would be a great option. Mrs. Sebolt met with Corey Alder who oversees English Language Learners (ELL) for Roanoke City and the 3 ELL teachers from Fishwick Middle School (which has the highest population of ELL students in the area) to develop a plan for RVGS to sponsor a STEM project. We decided to create a seed kit for each ELL student (which represent a wide range of languages and country origins) and teacher so that the project could be done in class. We packaged 120 individual packets, each with enough materials for 2 plantings of peppers or herbs. Our students also created written directions and produced a video demonstrating how to do the planting. Mrs. Sebolt will be delivering the packets to Fishwick Elementary school. We hope the plants (and students) will flourish this school year!



Behind the Scenes at RVGS

