



Chesapeake Bay Governor's School

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Director's Newsletter

Dear CBGS Students and Families,

This is an exciting time of year for CBGS as our students prepare for their senior research presentations at the VCU Science Symposium. Student research is a hallmark of our program and is truly a testament to the rigor and quality of the CBGS experience. Many students do not have an opportunity to experience research in a similar capacity until graduate school, so I am confident that our students are prepared for future academic endeavors.

The process of student research is a labor of love. It begins with a question, and we hope that students choose to explore a topic of interest to them. Students review the literature to understand the work of researchers before them before designing their studies. The actual implementation of their study teaches students the messiness of research. Many times even the best designed plans encounter challenges. The process of data analysis gives students an opportunity to see real-world applications of their mathematics coursework and statistics in action. And finally, the conclusions students draw may even spark future inquiry.

For our seniors, they are most likely drawing a sigh of relief as their projects are winding down, while our juniors are now embarking on their own research journeys. And senior research projects may still seem like a distant endeavor for our sophomores. Wherever you or your student finds him or herself in this journey, we are confident that it will be a meaningful experience. Our faculty does a masterful job inspiring, supporting, coaching, and challenging our students throughout this process.

We look forward to our student presentations on March 7th at VCU. Please be reminded that ALL students are expected to attend to hear the presentations of our seniors. Families are also invited. We hope you will join us as we celebrate another successful year of student research.

Best regards,

A handwritten signature in cursive script that reads "Rachel P. Ball".

Rachel P. Ball, Ed.D.
Director

News and Recent Happenings

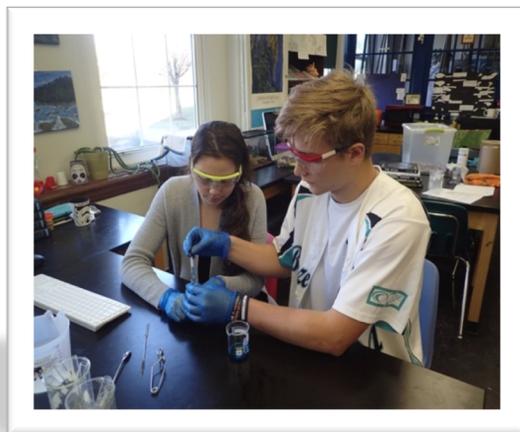
- CBGS has been named one of *Virginia Living's* 2020 Top Schools and will be recognized in the State of Education edition of the March/April issue. The write-up will focus on the 2019 Mid-Atlantic Regional MATE ROV Underwater Robotics Competition.
- 121 students earned a place on the Director's List for exemplary academic performance for the first semester. Students, parents, superintendents, principals, advisory members, and local newspapers have been notified.

STUDENT ENGAGEMENT IN ACTION



Three Glens Juniors traveled to a Vernal Pool Survey workshop at Rappahannock National Wildlife Refuge Wilna Lodge. They learned protocol for collecting data on spotted salamanders and wood frogs in vernal pools. Using this protocol students can collect data on the refuge or in other places and submit it to the USGS survey.

In a lab on macromolecules and human nutrition, students pulverized different types of foods and then tested for the presence of lipids, glucose, protein, starch, and vitamin C.



Students worked in teams during a stoichiometry relay race where students took turns solving various steps and competing against other teams.



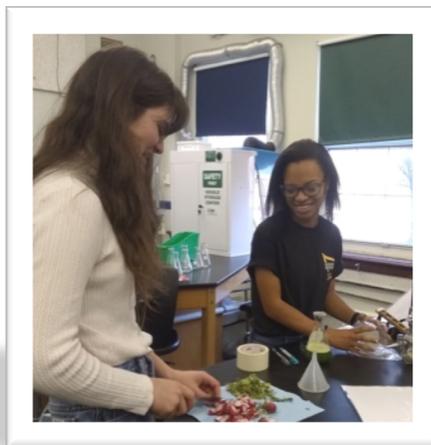
STUDENT ENGAGEMENT IN ACTION CONTINUED

Seniors collaborated and collected data during a physics lab on momentum. Dr. Hoang is pictured providing feedback to students as they conducted the lab.



Juniors collaborated to complete a lab in chemistry on the specific heat of various metals.

Juniors executed an allelopathy lab that they had designed in a previous class. The students were investigating whether common garden plants exhibit allelopathy.



Students carefully completed a redox titration lab in chemistry.

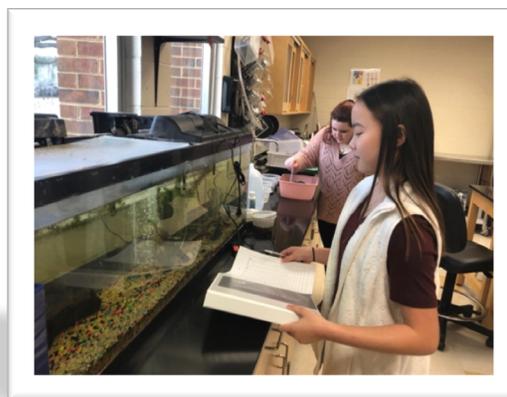
STUDENT ENGAGEMENT IN ACTION CONTINUED

In Biology, students researched and constructed scale models of cellular organelles as their introduction to the Cells and Macromolecule Unit. They presented within a giant cell (also to scale) that was in the student workroom.



In chemistry, students tested the effect of an electrical current on different solutions. They also used indicators to show how electron transfer changes the acidity/ basicity of the solution.

Biology students observed and recorded data on the behavior of various species using an ethogram.



Students completed a stoichiometry lab in chemistry to produce a designated amount of copper from a reaction of solid aluminum and copper (II) chloride solution.



Students displayed and shared their artistic and interpretative representations of plankton art!

STUDENT ATTENDANCE REMINDERS

Please be reminded that student on time attendance is critical to student success. Since the academic pace at CBGS is accelerated and not all courses meet each day, it is important that students be present every day and absences be kept to a minimum; however, IF and WHEN students are sick, we ask you to please be considerate of others and take the time to rest, recuperate, and get well. Please be sure to bring a signed note upon your return. Thank you for your cooperation.

UPCOMING DATES:

- CBGS Senior Research Science Symposium – March 7 at VCU (All students are required to attend)
- CBGS Aquarium Field Trip for Juniors & Seniors—March 31 (This is a change)
- **Spring Break—April 6-13**
- Sophomore Field Studies Trip to Shenandoah
 - Warsaw: May 2-4
 - Glens May 9-11
 - Bowling Green May 9-10 and May 14 (Day trip)
- Senior Night – Monday, May 18 at 7:00 p.m. at Essex High School Auditorium
- All-Site CBGS School Picnic – Friday, May 22
- **Memorial Day: School Closed —May 25**