

taking a CLOSER look

Biomed III Students conducted an ELISA Test to diagnose infections.

Junior Carmen Kavalekas carefully pipes her sample into the well while conducting an ELISA test in her Biomedical Science III class on Sept. 25. The ELISA test aimed to detect certain antigens in bodily fluid samples.

"I thought it was very interesting to learn how to perform ELISA tests and learn more about the immune system," junior Josephine Meeschart said.

Students were on a mission to determine whether or not their patients were infected with meningitis, and were able to do this through ELISA testing. They had body fluid samples from multiple patients, and each group was responsible for diagnosing one. A visible color change demonstrated that there was a presence of disease antigens in select patients, which proved that not all were infected.

"My patient's wells turned bright blue, which indicated that she was infected. Seeing the fast color change proved my theory, and increased my curiosity for the

Biomedical field," junior Salome Garcia said.

Although most simulated patients presented symptoms, through the use of ELISA testing, students learned that not all patients had the same disease.

"At first when we heard about all the patient's symptoms it was easy to think all of them were infected with the same outbreak, but as this test proved, this was a wrong hypothesis," junior Emma Die-Dienes said.

Realistic lab setups like this one gave students an idea of what their possible future in the medical research field would look like. By building their lab skills early on, they gained an early advantage.

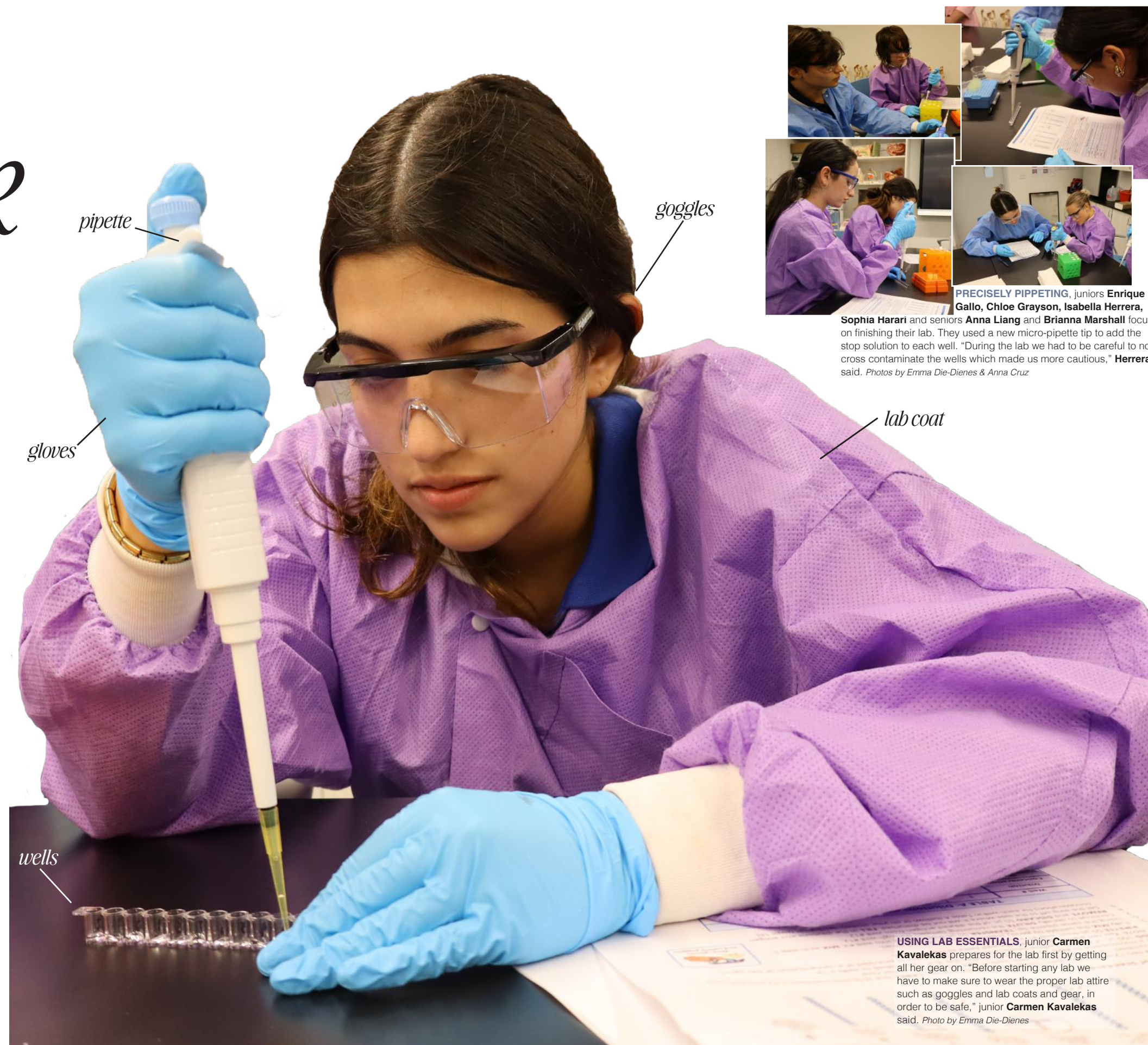
"Building my knowledge through the years of Biomed classes and now participating in lots of lab work in the classroom, I have been able to grow and really see myself doing something in this field in the future," junior Sofia Hernandez said.

STORY BY ANNA CRUZ

growing BACTERIA

Biomed students learned about antibiotic resistance through the lab.

In this lab, students explored how bacteria can share their DNA with each other. Conducting this lab, students learned how sharing genes can make bacteria resistant to medication. "This lab made me realize that bacteria creates big problems in communities that can't treat resistant diseases," said senior Caitlen Dauphin. Learning how bacteria can become resistant to multiple antibiotics shows the global issue many people face. Photos by Emma Die-Dienes



PRECISELY PIPETING, juniors **Enrique Gallo, Chloe Grayson, Isabella Herrera, Sophia Harari** and seniors **Anna Liang** and **Brianna Marshall** focus on finishing their lab. They used a new micro-pipette tip to add the stop solution to each well. "During the lab we had to be careful to not cross contaminate the wells which made us more cautious," **Herrera** said. Photos by Emma Die-Dienes & Anna Cruz

USING LAB ESSENTIALS, junior **Carmen Kavalekas** prepares for the lab first by getting all her gear on. "Before starting any lab we have to make sure to wear the proper lab attire such as goggles and lab coats and gear, in order to be safe," junior **Carmen Kavalekas** said. Photo by Emma Die-Dienes