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#### **Chino Hills High School Huskies**

# HSA Times

HSA Newspaper Guest Writers: J.P. Fuertez, Mitwa Joshi, Hayley Skripko, Isabella Tan and Sahar Zaidi.

**Guest Photographers:** Mitwa Joshi, Bianka Lomer, Sierra Matsudo, Jana Rassool and Sahar Zaidi.

**Editors:** Mitwa Joshi, Shreena Patel, Isabella Panagiotou, Courtney Price, Heather Varnes and Jennastyn Velasquez. Newspaper Advisor: Neil Murphy.



Photos courtesy of Sierra Matsudo: Pictured top right: Samantha Agustin, Alex Kwon and Natan Merilus. Pictured bottom left: Melody Campbell, Mr. Morales, Alyssa Tejeda and Sahar Zaidi. Pictured second from bottom: Aban Domingo and Alex Kwon. All of the pictured students are working on their grant proposals.

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# The Grant Proposal: Importance and Impact on Students

The grant proposal is a biomedical project in which students plan out the creation of a medical device. The project contains seven sections. In section one, students must state the expected outcome or the goal of the grant. Section two is where students would introduce readers to the project by invoking in them the sense of importance for the project. Section three includes the problem statement in which students prove to readers why the project is needed, and how the outcome would address a critical need. In section four, students outline the procedures needed to achieve the goals and objectives of their project. Section five lists the available resources in which students mention any agencies, organizations, research laboratories, private and public foundations, industries or individuals that could be resources for their project. Section six summarizes the project and indicates how it will be evaluated. Section seven is simply a documentation page, which cites all of the sources that were used to create the students' proposal.

In order to gain a greater understanding of the project, we interviewed Mr. Morales and Amber Plata's grant proposal group.

See The Grant Proposal, Page 6

#### **Readers' Forum Contact Information**

The HSA Times welcomes feedback from its readers. If readers have ideas for feature stories, health-related news articles and/or want to submit article corrections or critiques, please e-mail Mr. Murphy at neil\_murphy@chino.k12.ca.us. HSA does, however, reserve the right to edit comments for language conventions and length.

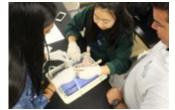


# Notorious P.I.G.

By: Hayley Skripko and Sahar Zaidi

This year in the HSA biology classes, students were given the opportunity to dissect fetal pigs. Mr. Morales, a 10-year HSA freshman biology teacher, truly enjoys the impact that these dissections leave on his students. "What I [Mr. Morales] love most about these dissections is, it allows my students to get hands on experience and to apply the [concepts] we learned in the last five chapters in a real setting." Not only does Mr. Morales love assisting with the the fetal pig dissection, but the students love it too. It gives them the opportunity to learn about the body and its numerous functions in a hands-on activity.

A fellow student, Ayesha Karim (pictured right) states, that her favorite part was "... opening up the pig and seeing what's inside, and also feeling around the pig and finding the kidneys."



Pictured above: Mr. Morales, Agnes Yoon and Shreena Patel





Pictured above: Mr. Morales and Hayley Skripko



Pictured above: Mr. Morales

Pictured above: Mr. Morales, Hayley Skripko and Jia Albaran



Pictured above left to right: Mr. Morales, Jana Rassool, Hayley Skripko & Jia Albaran are exchanging observations.





#### Day One (Tuesday, May 16, 2017):

On the first day, students performed the external part of the fetal pig dissection. To observe the mouth of the fetal pig, students were first directed to break the jaw and cut the cheek muscle. Next, students had to determine the gender and age of their pig. Students had to measure their pigs to determine the approximate age. After determining the age, students cut the top eyelid off of their pig to see the pig's stage of development.



### Day Two (Wednesday, May 17, 2017):

On the second day of dissection, students cut their first incision into the abdominal area. In addition, students carefully drained the pigs and examined their abdominal organs (intestines, colon, etc.). Finally, eager students cut open the stomach, examining its surrounding organs.



#### Day Three (Thursday, May 18, 2017):

On day three of the dissection, students were able to remove parts of the intestines from the abdomen. When removing the intestines, students were then able to see the kidneys and the urinary tract. By following the urinary tract, students were able to see the exposed testicles on the male pigs, and were able to identify the ovaries on the female pigs.

#### Day Four (Friday, May 19, 2017):

On the final day of dissection, students examined the chest cavity of the fetal pigs. After examining the cavity, students then cut through the pericardium to get to the heart. Tiny incisions were performed on the larynx, the trachea and thyroid to allow for students to make further examinations. This was many students' favorite day because of the fascination of the different chambers of the heart.





#### Pig Practical (Wednesday, May 24, 2017)

On this day, students were tested through a pig practical that displayed their knowledge over the fetal pig's anatomy. This test consisted of 50 free response questions about the various organs and their functions. There were multiple stations set up around Mr. Morales's biology classroom where students examined different dissected fetal pigs.

This part of the dissection unit resulted in a lot of work for Mr. Morales. Mr. Morales stayed very late in order to get the pig practical ready. --Photos Courtesy of Mitwa Joshi, Jana Rassool and Sahar Zaidi.







#### Alumni Section: Simran Patel

Meet Simran Patel. She is a high school graduate from Chino Hills High School. She participated in the Health Science Academy for all four years. She is currently majoring in PharmD at Massachusetts College of Health Science and Pharmacy.

**Q**: Which HSA activities did you participate in and why?

A: I participated in random projects like float decorations and attended every club meeting and field trip there was. I found the field trips to be interesting so that was a reason why I went on the field trips. Also, for the club meetings, I attended because I wanted to be upto-date on all of the news. Also, a lot of my friends were in HSA, so we used to help out a lot as a big group.

Q. Which HSA internship did you participate in?

A: I actually volunteered at Kaiser Permanente in Ontario. I was in the post partum department, so I made rounds making sure the moms were okay and asked if they needed anything. I made cribs for the babies and worked at the front desk to [check in] visitors. I also randomly helped out in the NICU [where] I monitored the parents coming in to see their children.

Q: What was your best memory about the HSA internship?

A: My most memorable moment [interning] was the time I was able to discharge twins at the NICU. The parents were so happy, and I was able to see them when they made their way home.

Q. What tips do you have for students in HSA at CHHS?

A: Just make sure that you want to pursue a career in the health science field! If you are passionate about the career you are planning to go into, then go for it! Also, make sure to take [advantage of] as many opportunities that HSA provides, such as internships, classes, volunteering, etc. Also, have fun! I personally was able to learn a lot and was able to have fun while volunteering and doing work for HSA. **Q**. How is the pacing of your college classes different from the pacing of classes at CHHS?

A: They are not actually that different. I have up to four classes a day here at MCPHS because of block scheduling. The pacing of the classes is normal, but I would say that it's a tad bit faster than CHHS. Luckily, I was able to take courses, such as AP Chemistry and AP Psychology, when I attended CHHS. Though I didn't retain much from the classes, I do randomly remember information, [which] helps me.

**Q**. What is the student life like at the university?

I love the student life here! Even though my university is literally one building, I was [still] able to meet some really cool people to not only hang out with but also study with.

Q. What tips do you have for surviving the first semester in college?

A: My number one tip for surviving the first semester in college is to not slack off. It is super tempting with the new freedom that you are given and all these new friends. Sometimes, you want to just go hang out rather than study for an upcoming test. It is definitely going to hurt you in the long run so just make sure you stay on task.

Thank you Simran for your time, and I wish you continued success at MCPHS. by Mitwa Joshi

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# Grant Proposal, continued from Page 1

Mr. Morales, the biomedical sciences teacher, explains the purpose of the grant proposal and his hopes for the students.

**Q**: Why is the grant proposal included in the Biomedical curriculum?

A: It's an excellent real life application of what the students learn in biomed throughout the school year. It takes all the different parts of biomedical science and puts them into a real life setting so that students can experience it. The project also gives students an opportunity to investigate something that they're interested in or have passion about. It allows students to divulge and get more intimate with ideas and topics that they may relate to.

**Q**: What do you hope your students will gain from working on a grant proposal assignment?

A: I hope they will gain better communication and time management skills. Students need to learn how to work in a group setting and converse with each other while working for a common goal. Kids can work by themselves easily, but it's different trying to work with each other while trying to manage time in order to hit deadlines.

**Q**: What growth in maturity do you see in your students while they are working on their grant proposals? [article continues below in the lefthand column]

A: Students start to understand their own strengths and weaknesses. They also understand how hard it is to get some people to work while trying to bring out the best part of each other. They also develop better time management and communication skills.



Ninth Grade Students Pictured above, left to right: Madison Sherrill, Melody Campbell, Joseph Garcia, Nishtha Mistry and Alyssa Tejeda. These students created a medical invention as part of a project for biomedical science. The product they created was called The Virus Scanner, or TVS. The TVS team will strive to decrease the amount of deaths in the world due to international epidemics. TVS will be located in ports of international travel. Amber Plata and her group members are working on their own grant proposal. They discuss their grant proposal and advice they would give to future freshman.

**Q**: What do you like most about writing the grant proposal?

**A**: What we like most about writing the grant proposal is learning about new medical techniques and issues. We also like learning about how we can solve these issues in the medical field.

**Q**: What do you find most difficult about writing a grant proposal?

**A**: Keeping each other in check and working as a team are the aspects that we find difficult. Trusting each other with certain parts [of the grant proposal] is another aspect we think is difficult.

Overall, the grant proposal represented a semesterlong, interdisciplinary assignment; it counted for both English Honors and Biomedical. Moreover, Mr. Morales and Mr. Murphy collaborated as well.

by Isabella Tan and J.P. Fuertez

Photo by Sierra Matsudo