



HSA Howler: Student Edition

Health Science Academy students embody the true spirit of Thanksgiving—*giving back to*

HSA Newspaper Staff: Adshayaa Balakrishnaiyer, Colleyn Dougherty, Alexis Iturriria, Matthew Nino, Jake Patten, Christopher Salinas, and Elora Seeckts.
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HSA Club Meetings **First and third Wednesday of each month--Room 176**

HSA Canned Food Drive -by Elora Seeckts

On Friday, November 20, 2015 Chino Hills High School's Health Science Academy finished collecting canned food for the ones who need it most. Many HSA freshmen, sophomores, juniors and seniors gathered a sundry amount of canned foods as a friendly competition to all be collected and counted in Mr. Sabbara's room that Friday afternoon.

HSA president, Monica Brizuela, stated that HSA "will be donating all the canned food to *Feeding America* in Riverside." This non-profit organization's goal is to "alleviate hunger in the Inland Empire" by feeding people who live in low-income areas in Southern California. *Feeding America Riverside* distributes over two million pounds of food to homeless shelters, halfway houses, group homes, soup kitchens, etc. every month, and our very own HSA Huskies held a major role in helping.

When asked why the HSA club decided to commit to this kind deed, Monica happily explained that it was a "helping hand to those less fortunate." Monica further indicated that the idea of a canned food drive was a general thought among her fearless HSA officers. It's without a doubt that HSA's beneficent efforts were a complete success.



HSA Contact Information

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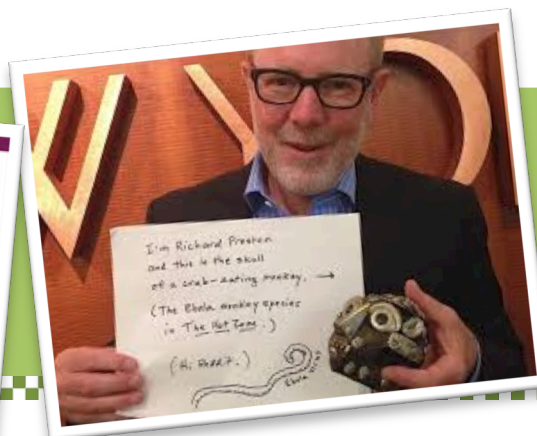
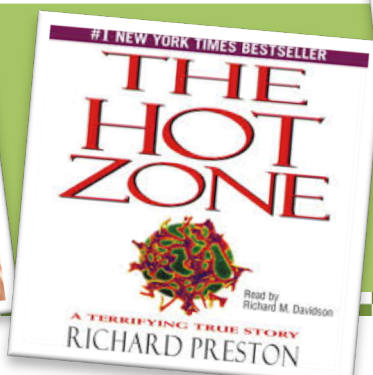
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Canned Food Drive Photos- Courtesy of Elora Seeckts.



HSA's Book Recommendation by Christopher Salinas

Images--Courtesy of Google

Why check under the bed for monsters when they're already ravaging the inside of you? For these miniscule creatures prefer to subjugate the warm, healthy vessel you inhabit for their own replication. Your cells evanesce: effaced to a graveyard of microscopic debris, where the dead creatures thrive in the shallow graves of once healthy tissues. Richard Preston's *The Hot Zone*, published in 1994, beautifully depicts the insidious, true story of the first outbreak involving the Filovirus in America as well as the way it decimates life in Africa.

The novel begins with a man as he takes a trip to Elgon,

Africa. Soon after, he dies, "Black vomit blew from [his] mouth... [he] was in shock from loss of blood... there wasn't enough to maintain circulation... he died in the intensive care unit..." (Preston 26-28). It's discovered that he was infected with a strain of filovirus: A virus family that could kill and spread rapidly. The CDC and Army are first to respond when a shipment of monkeys, suspected to be infected with a sister strain, is brought to the U.S. Emergency responders are quick to contain the threat. This virus is a level four biohazard, requiring handlers to wear space suit-like apparatus to avoid infection. Decontaminating the building requires every monkey to be euthanized and the building to be

eradicated of all life. Samples of *niger*, a tenacious bacterium, were placed throughout the building, indicating if anything survived decontamination, "The crystals [released] formaldehyde gas... The gas penetrated the air. Soaked the offices... The treatment had killed *niger*. ...the Reston Primate Quarantine Unit was the only building in the world where nothing lived, nothing at all" (Preston 356).

Preston expertly visualizes the concept of quarantine as well as the myriad of resources, manpower, and tension that factor into the overall success of bio-containment. I recommend this novel to those who enjoy medical mysteries.

What is the CDC? --by Matthew Nino

Image-courtesy of Google

The Center for Disease Control was founded in July 1st 1946 and is located in Atlanta. The MCWA (predecessor to CDC) was originally created to combat Malaria around military training bases. After World War II, Dr. Joseph Mountin visualized the idea of an agency that could support local health groups and states in controlling and investigating

new and known diseases. During the past 60 years, CDC's goals have expanded to include communicable diseases, infectious diseases, injury and environmental health, and efforts in preventing chronic and preventable diseases.

When the CDC first heard about the Ebola outbreak in Africa, it began creating an

emergency operations center to help contain the spread of the virus. CDC officials then sent hundreds of nurses and doctors to help recognize and contain the virus at Ebola centers in Africa. Slowly but carefully, the disease stopped spreading and began to withdraw due to the efforts of the CDC.



-by Jake Patten



Ebola devastates Guinea, Liberia and Sierra Leone

Photos—Courtesy of Google Images

The Ebola Virus has plagued countries in Africa off and on for the past several decades. Unfortunately, it unleashed its death-like grip over several African nations. The people pictured left are grieving near another innocent victim who succumbed to the deadly virus.

The Ebola Pestilence in Africa?

Ebola, like a cryptic serial killer, annihilates the body killing six out of ten victims. The murderous pathogen began quietly spreading in a tiny village in Guinea on December 26, 2013; however, the killer's identity was not established until March 21, 2014. It was obvious that the living conditions and hygiene of the rural impoverished countries were the common condemnation for the crisis of Ebola spreading to Guinea, Liberia, and Sierra Leone. However, most people do not understand that Africa's customs and traditions were prime suspects for the infestation of Ebola.

Agents, apart of Sierra Leone's Ebola response personnel, stated that 70 percent of new contagions in that region derive from funeral rituals. For example, in Sierra Leone, an immense argument emerged after the death of a

pregnant Guinean woman. Grieving friends and family abhorred the idea of allowing the frightening looking astronauts to bury their fellow loved one. These scary hazmat-looking personnel didn't fully understand the African culture of accompanying death. Her family and friends insisted that if she wanted to reach the village of the dead instead of eternal wandering, it was vital for the fetus to be evacuated. In their Kissi beliefs, a female lying cold for eternity amongst the dead with her fetus disrupts the world's natural cycles. Likewise, with mixing the seed of last year's harvest with the present years, obscures the productivity of the crop identical to the pregnancy of the woman. As a result of firm beliefs, villagers often held secret burial ceremonies for their loved ones who passed from the deadly disease.

One cannot fathom the grotesque scenery and

smell; however, the murderous disease loved it. The traditions and culture worked in Ebola's favor by easily coming into contact with new hosts and by being the most effective near and at death. One drop of any bodily fluid could contaminate and create another victim. Villagers were expected to go



The two first responders pictured above are dressed in hazmet suits. Unfortunately, Africans, from the poor parts of the Ebola-afflicted countries, were not used to seeing medical workers dressed this way.

from personally caring for a deceased loved one to get cleansed, dressed, along with a ritual ceremony; to watching the victim get escorted by strangers in a body bag with no farewell or

prayer. This is why there was such a clash, and why it was so hard for the villagers to comprehend.

To change people's minds about burials, Government officials reached out to traditional healers for advice and help. Villagers now realized the magnitude of the disease and found substitutes for death ceremonies.

Ebola has been contained, but before its containment, it executed approximately 11,300 innocent victims. Although the ghastly criminal has gone quiet, it still remains lurking in Africa waiting to be put behind bars forever.

-by Jake Patten

Angels of Medical Mercy?

Doctors without Borders (DWB) is a charity organization in which groups of doctors help people worldwide where the medical need is greatest; doctors

deliver emergency medical aid to people affected by conflict, epidemics and disasters. This organization can be found in places where children are severely malnourished and large segments of the population are denied health care. They provide aid in approximately 60 countries, including Sudan, Somalia, and Palestinian territories. This organization was founded in France, and the founders were Jacques Bérès, Philippe Bernier, Raymond Borel, along with others. The organization was created on the belief that all people have the right to medical care regardless of gender, race and religion, and that the needs of these people outweigh respect for national boundaries. Moreover, this organization receives its funding from donations from all around the world.

In order to volunteer for DWB, doctors and nurses need to have at least two years of relevant professional experience and have the ability to work and live with a diverse group of professionals. They also need to have experience as a supervisor, manager, teacher,

and/or trainer and have good computer skills as well.

DWB remains the primary international medical aid group battling the Ebola virus in Africa. Since local health systems have all but collapsed, the charity has started six treatment centers in West Africa. Its workers have treated the majority of patients, just as in previous Ebola outbreaks.

Interview with school nurse- In order to gather personal information from a professional directly involved in the medical field, I interviewed Chino Hills High School nurse, Mary Theis, R.N. She was kind enough to describe the nature of how the *DWB* is organized and how medical volunteers efficiently handle medical emergencies all over the world. She elaborated over *DWB*, being an amazing and a magnificent organization, and how it's great to go for free to other countries to help people who are in medical need. Ms. Theis is planning to join the *DWB* probably after retiring, she added.
-by Adshayaa Balakrishnaiyer

Hearts in a Living House—by Colleen Dougherty

Amber Gonzalez, Julia Silva, and Kayla Nguyen all had an opportunity to intern at Pacifica Senior Living this past summer. During the time they interned, they had responsibilities throughout the day that consisted of exercising with the residents, assisting with lunchtime activities and cleaning, helping the residents with whatever they needed, and good ol' conversation. Amber reminisced, "My favorite part

of the day was lunch because when you talked to the residents, you could tell they wanted to be a part of us moving on to college and growing up. They genuinely cared."

There were dolorous times, such as when two of the residents passed, one of whom the three interns grew very fond of. Her name was Paula who they talked to and grew

closer and closer to with each passing day. Kayla sadly remarked, "It was so sudden. Paula was smiling and talking one day, the next we hear she passed..." The other resident was Leon who had passed earlier on in the internship, so the HSA interns hadn't built a relationship with him.

Amber, Julia, and Kayla not only learned responsibility, but they also



Pictured Above: Amber Gonzalez, Julia Silva, Ms. Kathy, and Kalya Nguyen. HSA's three Interns that served and learned at the Pacifica Senior Living Center during the summer. Ms. Zeigler was really impressed with how the three HSA interns handled themselves and how they continued their care with the I-Pod project.



Ms. Zeigler is HSA's Work-Based Learning Coordinator. Ms. Zeigler handles all of the internships for Chino Hills High School.

Images-courtesy of Kathy (Pacifica Living Center Advisor)

Continued

learned how to build relationships, sympathy, and cherish every waking moment. They loved this experience; the only down side was the long hours. The girls were expecting more of a medical-based internship in which they followed behind the staff; instead, they became responsible and respectful and saw how people could truly be. However, there was medical-based learning when the interns spent time with residents who had Dementia or Alzheimer's disease; both medical conditions lead to memory loss. The interns had to be very patient and calm when they worked with these patients.

Texas Troubles— by Alexis Iturriria

On September 25, 2014 a hospital in Texas unknowingly discharged a patient who was a host of a lethal and destructive disease that was killing thousands of helpless people around the world, known only as Ebola. Texas Health Presbyterian Hospital received a patient named Tomas Eric Duncan who had just returned from Liberia, where the Ebola virus was spreading quickly, with high fevers and flu-like-symptoms. Due to lack of training and education about the disease, the nurses and doctors did not pay much attention and discharged Duncan, putting everyone who would come into contact with him at risk and widening the window of potential exposure to people in the community. When Duncan

returned a few days later in even worse condition, nurses and doctors began to run tests to figure out what was wrong. Health care workers treating Duncan did not wear the proper protective suits for days until tests confirmed that the Liberian man was infected with the Ebola virus. Unfortunately, it was too late for two Texas Health Presbyterian nurses who had already been treating Duncan for several days.

Nina Pham and Amber Vinson were both infected after taking care of Duncan. Fortunately, both Pham and Vinson were treated immediately and were able to return to their normal and healthy selves. This monstrous disease infecting these two nurses could have been avoided if they were properly trained and informed on how to be able to do their job correctly without putting themselves in harm's way. The CDC did not stress enough on how serious and how much health care workers needed to be trained and prepared for treating an Ebola patient.

This unfortunate incident that took place in the Texas Health Presbyterian Hospital helped change Ebola protocol for other hospitals across the U.S. After the nerve-wracking outbreak, CDC officials reviewed and watched Pham's treatment that she performed on Duncan. As a result, officials immediately made improvements and adjustments to the old protocols.