



## STEM in the News

With the rapid growth of Covid-19, it is very important for distributors to get the vaccine out very quickly and through a way that won't ruin the vaccine. The vaccine that is being distributed right now is the Pfizer BioNTech vaccine. This vaccine has a small problem with being transported. The problem is that it must be kept at subzero temperatures which is a hard thing to do while on the road. Though the hard work of some healthy I.T. workers, they found a way to make temperature controlled containers with connected devices. These devices can be used for measurement, notification, tracking, and insight on the containers of the covid vaccine. The containers themselves have a GPS beacon, a temperature monitor, and a barcode.

---

*“Healthcare has yet to be transformed by technology.”* *-Joshua Kushner*

---

## STEM Career Spotlight

If you want to become a doctor or a nurse but want a job that involves computers and keeping records, then you should be a medical records and health information technician. These technicians are responsible for keeping records on past diagnosis and logging outcomes of patients. The job requirements at least are a high school diploma and experience record keeping. The pay is about \$20.50 per hour and \$42,630 per year.

## STEM History

Health Technology is the application of organized skills in the forms of medicines, devices, vaccines, and many more that are developed to solve and improve health problems. Ancient Egyptians conducted research that diagnosed and treated many diseases. In fact, it has been confirmed that the world's oldest prosthetics were Egyptian, wooden and leather toes that date back to as early as 950 B.C. In the medical world, technology is as important as ever, thanks to the constant advancements in technology healthcare practitioners can do several things safer and more efficiently. Due to this, technology has established its place in society and continues to advance more rapidly than anyone can believe.

---

## STEM Curriculum

### Health Technology

**Discipline:** PE and Technology

**Activity:** Here is PE activity that ties in with computer coding. Assign color spots to PE skills, such as jumping, running, doing push ups, etc. Design a warm-up sequence by choosing 5-6 color spots and laying them in a row. They go through the room completing the activities in each “code”. Challenge your friends and family, and enjoy figuring out the codes and being active.

## STEM Movies

In the 1931 movie called *Frankenstein*, an obsessed scientist named Dr. Henry Frankenstein attempts to create life by assembling a creature from body parts of the deceased, when his loyal mishap assistant Fritz Frankenstein succeeds in animating his monster. The monster escapes into the countryside and begins to wreak things. When Frankenstein goes searching for the being he soon has to confront his tormented creation.



*“The only way you multiply resources is with technology. To really affect poverty, energy, health, education, or anything else- there is no other way.” -Vinod Khosla*

## #STEMatADM Spotlight

Here at Alice Drive Middle School, we used to have a program called “Hearts To Hands.” Students came before and after school to work with 3D printers. After many hours, days, even months of brainstorming, designing, and printing, they finally created the perfect hand design. They ended up sending the hand to a girl in China, who later sent back a picture of her riding her bike using her prosthetic hand.

## Famous STEM Person

A scientist known by the name Dr. William Einthoven was the inventor of one of the first medical machines. The machine was so recognized that he received the nobel prize in physiology. He was the person that started the revolution of self saving machines.

## STEM Challenge

Do you want to create a breathing “machine”?

*Materials: 2 blue straws, 2 red balloons, 1 plastic bottle, 1 blue balloon, 1 sheet of colored paper*

Step 1: Cut the bottom off of the plastic bottle.

Step 2: Take one straw and wrap the red balloon around it, then use tape to stick the sides down.

Step 3: Repeat step 2 with the remaining straw and red balloon.

Step 4: Take the blue balloon and attach it to the end of the bottle, use tape to ensure that it stays on.

Step 5: Use colored paper to cut a human like shape onto the bottle.

## STEM Video

This is a small video that explains what some health technical machines are capable of doing. The Tech Titans provide information on the different procedures that the machines adept.

Video- <https://youtu.be/tBYE45LKLK8>

Credit to - Tech Titans