Heart Knight

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The beat had stopped. A beloved one had died. A family missed a father or a mother. We didn’t lose a heart; we lost a family. As the WHO said, in 2015 14.4 million people around the world died from heart diseases. In an attempt to raise public awareness and consider that problem from different points of view. We tried to use communication through considering molecular interactions in biological activities. In fact, heart disorders have become a grand challenge to Egypt. The National Health Service declared that 33% from the total deaths comes because of the fatal delay time till the clot is detected. One of the fatal heart diseases is heart attack. The danger of heart attack doesn’t lie in only the risks exposed to the heart, but also in the total dysfunction of lungs and the strokes that follows. All these facts directed us to establish our solution. We have come up with a medical bracelet that can increase the time of the patient till the patient is treated. As the patient that had a heart attack die within a minute, but with our bracelet we gave the patient from 2 to 4 hours to reach the hospital and get the help he needed. In our project, we had proven our scientific hypothesis by eminent test plan. With these tests, we demonstrated the verity of our hypothesis and measured the accuracy. Consequently, we used the simplified ECG to detect heart attack by 7.1% error. After detecting, The ECG sends the readings to the Arduino in order to raise the case of emergency and stabilize the heart functions in 67 seconds with micro intravenous oxygen molecules and Ca channel blockers which works as a vasodilator for the coronary artery. In conclusion, our medical bracelet offers the key to solve the delay time problem and improves general health status in the world.

Awards Won: