



The Horizon Newsletter

“Our goal as teens of this community is to inform the public in the Triangle area about our generation’s view on topics in our world. We hope to connect with others of our age and allow them to voice their opinions on relevant issues. Above all, we would like to encourage our peers to do their part as active members of this society.”

November 2018 Issue

Election Results

By Shrihan

With election results for Congress, the Democrats took the House of Representatives while the Republicans took the Senate. Election day was November 6th and a lot of key races cut it tight. The Democrats managed to secure more than 218 seats giving them control of the House while the Republicans managed to secure 51 seats. No other southern state has been as bitterly divided as North Carolina when it comes to elections. A majority of U.S. House, state senate, and state house representatives are incumbents, meaning that they have served a term before. However, the majority of the candidates who won were republican making NC a republican state.

Ballot measures were taken for proposed state constitution amendments that won:

- Expand constitutional rights for crime victims
- Establish a constitutional right to hunt and fish
- A photo ID would be required to vote in person
- The maximum allowable state income tax rate would be reduced to 7% from 10%

OMX-CV

By Pavitra Madala

Recently, a new therapeutic drug named OMX-CV that has been developed to deliver oxygen to deoxygenated tissues in heart cells to treat hypoxia. This condition is so serious that people can die within 5 minutes of total oxygen deprivation. Although a drug already exists to treat the condition, it

tends to accumulate to toxic levels, impairing the kidney hence the new drug was developed. OMX-CV would only work when under zones of hypoxia. Therefore, the researchers had to test it on animals. They exposed a lamb to only a small amount of oxygen to develop acute hypoxia, and then treated it with the new drug. Fortunately, the hypoxia in the cardiac cells was significantly reduced. Over a period of time, studies like these could help, for example, infants undergoing bypass. This study of new therapy has promising results and is believed to be “taking people one step further to a better world”.

The Human Microbiome

By Arya Bharti

Not all Bacteria and viruses are pathogenic. Microbiome is a name given to a total collection of a genome of Bacteria, bacteriophage, fungi, viruses and protozoa that lives inside the human body and is beneficial for Humans. These multitude of organism outnumber our own cells by a factor of about ten. Most of them live in our digestive tract in the small and large intestine. National Institute of health (NIH) in 2008 launched “Human microbiome project” as an extension of Human Genome project. There is enough scientific data now that suggest that a healthy microbiome is essential for Human Immunity, detoxification, nutrient absorption, fighting inflammation, building neurotransmitter and hence leads to a more disease free state. A healthy bacteria also keep population of disease causing bacteria so low that they cannot leads to sickness. Constant stress, lack of adequate sleep, eating processed food, antibiotics , pesticides and chemicals kill our good gut bacteria and can potentially promote our bad bacteria to increase and harm us further. Eating a variety of vegetables, fruits and lentils, fermented foods like Sauerkraut, Kefir, Kombucha, and yogurt, etc. Can help us increase the population of healthy bacteria. Also, eating prebiotic rich food helps to increase healthy bacteria. Prebiotic is a term given to certain class of foods (beetroot, onion, garlic, Acacia gum, Chicory root, artichoke, Dandelion green etc) that gut bacteria love to eat and thrive.

Pittsburgh Shooting

By Neha Kamichetty

The Pittsburgh shooting, one that Federal Authorities said was a hate crime, killed 11 innocent people. The shooting happened on October 27 and officials identified the shooter as Robert D. Bowers, an anti semitic that thinks that the victims of shooting deserved it.. During a baby naming ceremony at a synagogue, Mr. Bowers killed 11 people and injured 6 people, in which 4 were police officers. Jeffrey R. Clark, a friend on a social media network called “Gab,” got arrested because he

supported Bowers in the assassination of Jews. Officials found messages which indicated that Mr. Bowers is a true hero to Mr. Clark.

6 Apps That Make You Feel Like Your Working in a Lab

By Sumant Anantha

1. eBird - This app helps you track down different species of Birds. All you need to do is type in the location of where your at and it will scan the whole place looking for Birds. This app mostly would most likely amuse Bird-watchers. If you go birding in a remote region, the app can work offline
2. Star Walk - Star Walk will use the sensors in your phone to figure out where you are, and which astronomical objects your camera has in its sights. Then it tells you a little bit about the stars and planets your camera is pointing at. This app gives much more information about the Stars during the Night.
3. NASA Globe Observer - This app lets you send information to the professional NASA international Station. You can take pics of Land cover or Cloud cover. Once NASA receives the information, they'll send a satellite image of what your observing.
4. MyShake - This app relies on your phone sensors for getting information on any Seismic activity occurring globally. The app works in the background not affecting usual activity on the phone. The app can also give advice for any recent Earthquakes. This app can help save lives the next time an Earthquake or Tsunami occurs.
5. The Elements - The Elements displays each element in a 3d form with information. This comes with rapid facts as much as more in-depth background details, such as properties, how it was discovered, its applications, and even its current price on any store. This app identifies the periodic table as a whole
6. Wolfram Alpha - This app can chart physics and chemistry formulas, list the material properties, and give out information on Earth's geological layers. This app helps out with Homework and can convert different units of measurement. If you like weather, the app can access data to help you with any reports.