

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."

May 2018 Issue

Current Events

By: Shrihan Dadi

Toronto Van Attack:

Around 1:30 p.m. Monday, a white van, mounted the sidewalk at the busy intersection of Yonge Street and Finch Avenue and struck a number of people. From there, the van proceeded southbound on Yonge for several blocks toward Sheppard Avenue. Over less than 25 minutes, the van mowed people down in a killing rampage. The van made it roughly 2.2 km before being stopped on the sidewalk near Poyntz Avenue, with severe front-end damage. A suspect named Alek Minassian has been arrested by a Canadian police officer named Ken Lam. He has been charged with 10 charges of first degree murder.

Bill Cosby found guilty of sexual assault:

Bill Cosby was found guilty of drugging and molesting a woman. A jury concluded Thursday that Cosby sexually violated Temple University employee Andrea Constand at his suburban Philadelphia home in 2004. The charges filed against him could put him in jail for up to 30 years.

CARY LOCAL EVENTS:

- Mercedes Benz Charity Doubles Tennis Tournament
 - Date: 05/18/2018 - 05/20/2018
 - Location: Cary Tennis Park
- Cary Music and Arts Festival
 - Date: 05/20/2018 3:00 PM - 9:00 PM
 - Location: Koka Booth Amphitheatre

- Bond Park Adventure Day
 - Date: 05/26/2018 10:00 AM - 6:00 PM
 - Location: Bond Park Boathouse
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After 35 years it awakens.

By: Sumant Anantha

Kilauea, A shield Volcano became active on May 3rd, 2018. It started to spurt out lava and spewing high levels of sulfur dioxide. The Lava and burning fumes starts to burn over the hawaiian island. The lava and molten rock have destroyed more than 35 structures with at least of those are 26 homes. 12 fissures have been created from this. Authorities have convinced the tourist to evacuate the area and avoid Leilani estates, due to the lava rush and going through the huge crack on the surface.

It becomes worse now that Earthquakes start to happen after the eruption. A 6.9 magnitude of an Earthquake shook the island. After Earthquakes start shaking the island many people evacuate from the premises. Two new vents from the erupting Kilauea volcano on Hawaii's Big Island prompted officials on Tuesday afternoon to order the immediate evacuation of residents remaining in Lanipuna Gardens. Some still hardly believe that the Volcano would not erupt again and refused to evacuate. People on monday May 7th 2018 were allowed to come back to Leilani to get their pets, Medicines and Vital documents.

Is there more Eruptions in the future? Geologist predict that the Eruptions will continue for a limited amount of time for now. Dangers still persist, not only in the form of lava, but also earthquakes and newly formed cracks. Cracks on Highway 130 became wide from 7 to 8 centimeters over the day and additional cracks were disco west of the highway. A couple lost their home of 15 years was burned down and that all their belongings were destroyed with it. This Volcano is much more disastrous instead of the eruption in January 3rd 1983. Scientist are still trying to determine if this Incident will continue for Hawaii.

Health

By: Pavitra Madala

Watery red eyes, runny nose, coughing, sneezing--these symptoms usually mean that spring is in the air. Many people suffer from these allergies originating from pollen, not just in spring, but in summer and fall too. Now, new evidence is showing that the numbers are going to increase due to climate change. The evidence is currently is precursory, but there are many factors proving that there is a longer growing season for plants that initiate seasonal allergies. Seasonal allergies and asthma attacks impose significant health burdens, with an estimated 10-30% of the global population affected by hay fever and 300 million people worldwide affected by asthma. Trend data suggests that the universality of asthma, including forms of the disease initiated by allergenic substances, is on the rise. For more information, visit

<https://news.nationalgeographic.com/2016/04/160408-pollen-climate-change-allergies-spring-seasons/>

Twitter Hack

By: Harvik

Twitter's chief technology officer, Parag Agrawal, revealed in a post that a bug in its system caused people's passwords to be kept in an internal log. Twitter says it has "no reason to believe password information ever left Twitter's systems or was misused by anyone," and it's recommending that all 336 million users change their passwords immediately. Twitter claims it is a glitch that caused passwords to be stored in text on its internal system by a process known as "hashing".

Avenger's Infinty War

By: Harvik

In its third weekend in theaters, "Avengers: Infinity War" continues to dominate in North America. The Walt Disney Co. says Sunday that the superhero film will be worth estimated \$12.5 million over the weekend, becoming the second-highest grossing film in weekend two behind "Star Wars: The Force Awakens" \$149.2 million. Globally, "Avengers: Infinity War" has now grossed over \$1.2 billion and become the first film ever to cross the \$1 billion mark in 11 days of release.

In the movie, The Avengers and their Super Hero allies must be willing to sacrifice all in an attempt to defeat the powerful Thanos before his devastation and ruin puts an end to the universe. As the Avengers and their allies have continued to protect the world from threats too large for any one hero to handle, a new danger has emerged from the cosmos: Thanos. His goal is to collect all six Infinity Stones, artifacts of unimaginable power, and use them to enhance his power and destroy the world. Everything the Avengers have fought for has led up to this moment, can they stop him? Or will they die trying?

NewYorkCoin

By: Pranay Koneru

By now we've all probably heard of Bitcoin, the lucrative business venture taken by an anonymous Japanese billionaire Satoshi Nakamoto. But after nine years of controlling the cryptocurrency market Bitcoin may have a new competitor: NewYorkCoin. Named after New York City, NewYorkCoin was created in 2014 by yet another anonymous developer. Like most cryptocurrencies its source code is open to the public, but as any avid cryptocurrency user will tell you, it's the community that builds up the coin. And the NewYorkCoin community is slowly growing. Although there is no number to show exactly how popular the currency is, it's gaining traction. And those who support it have a multitude of reasons to do so. For starters NewYorkCoin transactions only take 30

seconds which is 20 times faster than Bitcoin. Currently 250,000 NewYorkCoins are worth 20 dollars. This may seem like a small amount right now, but many of its users expect the cryptocurrency to grow substantially in the following years. One of these users is Bitcoin and blockchain expert Nick Spanos who told Wall Street Journal of the currency's advantages. Among these are the fact that you can't discount a currency that's been alive for so long. He also adds that the name doesn't hurt, giving the coin a familiar name allows people to relate to where it comes from. Another user named Cameron Tareen told the Wall Street Journal that he mines about 50,000 NewYorkCoins a day. That's about 4.15 dollars, but if NewYorkCoin's value rises in the following years, he could soon become a millionaire. Until then though, NewYorkCoin users will just have to wait. The current market cap for all NewYorkCoin is only 11 million dollars opposed to Bitcoin's 150 billion. So what'll happen to NewYorkCoin? We'll just have to wait and see.

The Austin Bombing

By: Nidhi Vellanki

For 19 days, detonating packages were sent to and received by Austin residents, which persecuted the Austin residents. The attacks started when bomb packages were left outside of homes on March 2 and March 12. The enigmatic bombs killed two people and injured various other people. The number of attacks intensified when the bomber rigged a tripwire with an explosive, and two days later the bomber sent a package bomb through FedEx. With every shift in strategies, fear disperses as the attacks got progressively dubious. After nearly three weeks of agitation and chaos, police enclosed the man they described as the serial bomber on Tuesday night. When SWAT officers started coming up towards his SUV, he blew himself up in a ditch outside of Austin. Bombings and shootings seem to be happening a lot and what might have caused the bombing suspect to harm innocent people is still a mystery. The question I have is why would the suspect blow himself up in a ditch, but what if he really didn't blow himself up? What if he did this to throw off people and mysteriously send more packages to people in other states. Well, there was a package that exploded in San Antonio, that could have been the suspect who sent the package. The suspect for the Austin bombing was Mark Anthony Conditt, a 23-year-old man.

The first attack occurred on March 2, 2018. There was a package left on a doorstep in north Austin. This became the theme for the first three bombings. When Anthony Stephan House opened the package on his front porch, the package exploded and killed Anthony. The 39-year-old father worked as a project manager for Texas Quarries. The blast was reported at 6:55 a.m., it received a little attention.

There were two more blasts that occurred after the death of Anthony Stephan House. The first package out of the two was left outside of a house in east Austin on March 12, 2018. The second victim was a 17-year-old bass player named Draylen Mason. Anthony and Draylen were both African American. When Draylen went inside to open the package, the package exploded and killed him. Right after the second bomb out of the three exploded, the third one exploded in southeast Austin, and injured a 75-year-old woman as she picked it up outside of her home. The Hispanic woman's injuries, in addition to the two men's deaths, initiated fears of hate crimes.

As I said before, there was a mailed package with an explosive inside of it and exploded on a conveyor belt at a FedEx facility outside San Antonio. Investigators suspect that the package is related to the Austin explosions, making it the first bomb package that the bomber has sent. Law enforcement officials secured surveillance footage from the FedEx store south of Austin, which revealed crucial data. It showed a man in a baseball cap, a blonde wig, and pink gloves. This person was bringing in two packages into the store and the packages could have had the bombs inside of them.

In conclusion, the Austin bombing was tragic to the families and friends of Anthony Stephan House and Draylen Mason and hopefully the 75-year-old woman is okay and has recovered from her injury. The mystery that still remains unknown is that if the suspect bomber is dead or not and might he be the man in the baseball cap, blonde wig, and pink gloves who walked into a FedEx store with two packages that might possibly have had bombs inside of the packages. No one knows where Mark Anthony Conditt is or if he is dead or not.

Facebook Information Was Stolen

By: Ria Vellanki

On Wednesday Facebook said, "malicious actors" took advantage of search tools on its platform, making it possible for them to discover the identities and collect information on most of its 2

billion users worldwide. . ." The scam started when hackers collected e-mail addresses and

phone numbers on the dark web, where criminals post information stolen from data breaches

over the years. Then the hackers used automated computer programs to feed the numbers and

addresses into Facebook's "search" box, allowing them to discover the full names of people affiliated with the phone numbers or addresses, along with whatever Facebook profile information they chose to make public, often including their profile photos and hometown. Many people are starting to wonder whether they should use Facebook or not. I think that using it is fine you just have to be more careful about what you post and what information you give out on the Platform. For more information, visit www.nationalreview.com/the-morning-jolt/mark-zuckerberg-yeah-your-facebook-data-was-probably-stolen-sorry-about-that/.

Mount Rushmore: Not What It Seems

By: Abhiram Dasari

When someone says "Mount Rushmore", what do you think of? Many people think of just the 4 faces carved onto the mountain, and a select few will even remember their names. Aside from that, however, not many people actually know about this great granite monolith. This incomprehensibly huge monument has attracted almost 5,000 people a day during the summer, totalling up to almost 3,000,000 people year-round, for good reason. The 60-foot sculptures of George Washington, Thomas Jefferson, Theodore Roosevelt and Abraham Lincoln take up 2.0 square miles and stand 5,725 feet above sea level, making this monument one of the biggest in the world. But even those statistics aren't the most intriguing thing about this monument, because Mount Rushmore has been hiding some secrets from most of us.

In order to understand those secrets however, one needs to know the basic history of the iconic shrine to America. In 1923, Doane Robinson, a historian, proposed a huge sculpture in South Dakota to raise the tourism industry there and boost the economy. Critics of this proposal called it 'preposterous' and 'egotistical', but in 1924, she convinced Gutzon Borglum to take on the job. Although she wanted the sculptures to be on the Needles, a group of eroded granite pillars in present-day Custer State Park, when Borglum inspected the site, he found it to be too weak to support the sculpture. So, the site was moved to Rushmore. This site had been taken over by the U.S. military by a series of attacks against the Lakota Sioux tribe. These actions are still being debated today because of the Treaty of Fort Laramie, which gave the right to Rushmore to the Lakota Sioux "for perpetuity". This did not dampen Borglum's spirits, however, as he set a crew of

over 400 workers to the task of creating this seemingly impossible sculpture. Borglum imagined a sculpture of Washington, Jefferson, Roosevelt, and Lincoln from the waist up accompanied by a panel in the shape of the Louisiana Purchase with labels eight feet high, but funding was cut short and this was not allowed to happen. In addition, Jefferson was originally supposed to be to the right of Washington, but the rock there was found insuitable, so he was moved to the left. But it was not just these 4 presidents that were proposed. In the middle of the project, Susan B. Anthony, a women's suffrage activist, was nominated to be carved into the mountainside as well, however a federal bill was passed at the same time that prevented new faces from being added, as funding was running dangerously low.

But how did a team of people carve an entire mountain? The answer lies in explosives. Approximately 85% of the original mountain was blasted away with dynamite, while workers made the fine details. After the general shapes of the heads were made, sculptors "honeycombed" the granite, a technique where the workers drill small holes close together to make the granite very easy to remove. To further ease the strain on the employees, the worker's elevator went all the way to the top of the monument to assist the making of the heads. To aid the safety of the workers, harnesses, ropes, and pulleys were used at all times. This meant the no fatalities occurred during construction, which is a very rare happening in a project of this size.

But just because measures were taken to make the project easy, it doesn't mean that Borglum had no ambition. In fact, his ambition was so great that the nation couldn't keep up, cutting his funding multiple times. This resulted in many unfinished prospects of the project, including the panel of the Louisiana Purchase, the entire torso of the presidents, and the adding of a fifth person. But there was another part of the sculpture that Borglum wanted to add: The Hall of Records. This was supposed to be a secret compartment behind Abraham Lincoln's hairline that would have a 800 foot granite staircase leading up to an entrance way with a giant bronze eagle above it. Inside, there would be different products that advanced art, music, literature, and technology and majorly affected our lives. However, he only got to make a 70 foot intrusion into the rock before his funding was cut short. In spite of this, in the late 1900's, the National Park Service made a titanium vault, put in biographies of each of the 4 presidents, a biography of Borglum, the Constitution, the Declaration, and other historical documents integral to the history of America. They then buried it and over it placed a granite capstone to seal it in.

This shrine to America is amazing, not only because of the hard work and time that was put into it, but because of the ideal that it stands for; that all people,

no matter their race or gender, should be treated equally. Over 90% of the mountain was sloughed off, but in the end it was worth it to complete the dream of one, the work of hundreds, and the pride of our country.

Prashant Patel Interview

By: Pranay and Harvik

In the April 2011 issue of the Wake County Physician's Magazine you talk about wanting to combat obesity and diabetes in America. What results have you seen so far due to your efforts?

"My hope was to bring attention the epidemic of obesity. Fighting obesity continues to remain a challenge as the percentage of individuals over the age of 20, who are overweight for obese in the United States is at 70%. Thus, only the minority of the population is in the normal weight range (a BMI-Body Mass Index of 18 to 25). The number of diabetic patients has increased from 14 million in 2004 to the current 31 million and in addition to this there are yet an additional 80 million with Prediabetes. I'd like to say we have made headway at fighting obesity and diabetes but this couldn't be more further from the truth. It will take greater appreciation of the ill effects of obesity by various stakeholders such as politicians, corporate America, educational system (mandating physical education in schools) and individuals in order to effect change."

You also talk about why you chose to pursue medicine as a career. What do you think you would have been doing if you hadn't gone in that direction?

"I didn't have a plan B as I had fortunate and grateful to have been accepted to an accelerated seven year BS/MD program. However, if I had to select an alternative area of study it would have been engineering or becoming a pharmacist. Either one of these fields would have fueled my interest in either math or science."

What parts of your job do you find most challenging?

"The time spent with electronic health records. For every hour we spend with the patient we are now spending 1-2 hours working in the evenings, weekends, lunch or prior to the start of the day. This is due to charting or completing the notes, review of records from specialists and hospitals which have gotten much longer due to the electronic generation of medical records. What used to be a one to two page discharge summary is now sometimes in excess of 50 pages! Takes a long time to scroll through. In addition we get radiologic reports, information from insurance companies, and so forth. In addition electronic data entry with regard to various quality and other metrics tends to be time-consuming and involves many "clicks"."

What parts are the most enjoyable?

"Being in the exam room with the patients provides the greatest gratification. I am grateful for the privilege to be a physician and see how I can help others maintain or attain better physical and mental health. Sometimes we focus on the physical but the mental aspects are just as important. I also enjoy in hearing in particular how the children of many patients are doing in school along with how the patients are doing at work and in other aspects of their

lives."

What advice do you have for youngsters looking to excel in this field?

"The medical field is an altruistic field that requires a tremendous amount of both time and resources. It is a field that has historically provided a tremendous amount of satisfaction. However, with the tremendous sea of change in healthcare triggered by the passage of the Affordable Care Act otherwise known as "Obamacare" various parts of the system are all facing challenges: hospitals as a few have closed in our state, pharmacies/pharmaceuticals and we are seeing creative business models such as the purchase of CVS by Aetna, insurance companies that are looking to merge or purchase pharmacies and even hospital systems; patients as many see their out-of-pocket costs rise and physicians. Today physician burnout stands at 50% and I suspect this will continue to remain a challenge and lead to physicians leaving the workforce earlier than they anticipated. This is unfortunate as it is said that signs of burnout are being seen in medical students and subsequently in those in residency and fellowships. Times have certainly changed in healthcare and with the tremendous costs of obtaining a medical education I am afraid that some of our brightest and best may decide to pursue another career. This would be a tremendous loss for society and the patients that these future physicians would have served. Lastly, I would say that more changes are coming due to artificial intelligence and analytics and how the dust will settle is anyone's guess. I would say that if you wish to consider a field in medicine consider all the pros/cons and try and see what the field of medicine will look like in not only 10-15 years when you're likely to begin practicing but also 30 to 40 years out as you'd want to know what are the long-term prospects of stability. Many fields have noted change especially IT with outsourcing of jobs and it was once thought that the medical field was the holy grail but this is no longer true. I am optimistic that things will change for the better but it sure doesn't appear to be the case anytime soon."

In the magazine you answer no when asked if you would ever run for a political position. Has your answer changed in the seven years since then?

"My love has been taking care of people's healthcare needs and that continues to be what I get satisfaction from even today...20 years after completing my residency training. So I'll leave politics for others. Effecting change through politics is very slow. If I could be a politician and effect rapid and positive change leading to an improvement in the lives of others I'd consider it."

What sacrifices did you make in order to succeed, and do you feel that those sacrifices were worth it?

"My parents sacrificed the most putting me through seven years of school and my sister through eight years. My sister went to NYU, a private school and then to an out-of-state law school: University of Connecticut and she added a year onto law school to complete a JD/MBA. Hence four years of undergrad and likewise for grad school. So between the two of us 15 years of educational costs. My father always worked two jobs (a full-time and part-time) and my mother worked at a minimum wage job to help out as well. So I am grateful to both and God. I don't think I could have gotten here otherwise. As for my personal sacrifices I did work part-time for the first three and a half years of the

seven year program. As with all professions but in particular the medical profession there is much time spend studying and subsequently in training. Thus, all physicians sacrifice personal time to pursue their passion. The profession is a life-long commitment and it does not simply end with getting your first job. However, I am grateful that I have blessed with two wonderful boys and my wife Poonam. They permit me to focus on taking care of my patients along with pursuing a passion to effect change in society for issues that I am or have been interested in such as Tort Reform (which NC passed), better business climate so that jobs stay in America, and educational opportunity as that can be one's ticket to success."

What personal attributes or characteristics do you think are important to being successful?

"Success is driven in large part through being focused on what it is you want to do and being resilient even when facing adversity. Goal-setting is very important in all stages of life with short-, medium- and long-term goals at both the professional or personal levels. Flexibility or being agile along with asking for help or advice from others when in need are also important attributes. Also knowing that even when you "lose" you win because you have learned in the process. Having good friends whom you can bounce ideas of off is very important. You only need a couple good friends. Lastly, I have always prayed throughout my life and today try to meditate. Not always good at getting meditation in but trying. Consistent meditation is one my goals that I have yet to realize. In addition I try to surround myself with "good company" or other "positive folks". I practice the "Art of Positive Thinking" as taught to me by a guru when I was a teenager."

How have you grown because of your medical career?

"I have grown in that knowing systems change takes time and came to realize that through opportunities to serve over the last 20 years on various committees, councils, cabinets, work groups and advisory boards. Also, learning to engage the help of others to improve healthcare and a more team-based approach has served me well over the years. Over the past year I was elected to be a Medical Director and charged with the well-being of the physicians in tumultuous times in healthcare but simultaneously moving the agenda forward for the Accountable Care Organization we are a part of. Here too I continue to grow by listening to what's on the minds of the physicians as you'll be surprised as to what they will share with you when they believe they can share things in full confidence."

What feelings and thoughts were rushing through your head when you found out that you were one of the first physicians from Wake County to be recognized by the National Committee for Quality Assurance?

"We were very excited to be recognized for Excellence in Diabetes and then Heart/Stroke Care by the NCQA. However, I believe that society is served better if we pull in others and through a role on the "Key Independent Physicians Association" I recommended that we consider all our physicians pursuing the same so that more patients can avail of better care. Shortly thereafter the board accepted the recommendation from the committee I served and now Wake County patients are the beneficiaries. I also agree to a video testimonial with the NCQA along with others from the American Diabetes Association and American Heart Association to share the benefits of such recognitions."

What have you done during your younger years that has been most helpful in your career?

"Good work habits such as perseverance and preparation. For every student this is going to be different in terms of how much effort he/she has to put in. However, both perseverance and preparation can go a long way towards success whether it is a quiz, exam, project, or in the extra-curricular realm. Both of these were helped by daily prayer. I still pray today and have been trying to get better at regularly meditating. In addition as it pertains to my interest in medicine my subjects were weighted toward science and math along with doing science projects in high school."

Finally, what is your advice for staying healthy and physically fit?

"Eat properly, exercise and meditate! Remember that mental fitness is just as important as physical fitness in an every more complex world. With regard to food habits folks may enjoy the Netflix documentaries: What the Health, Forks Over Knives and Cowspiracy. They are eye-openers and I recommend them to my patients."