

# The Horizon Newsletter

## March 2019

### OA Conclave

By: *Sumant Anantha*

For anyone out there who enjoys scouting, this event will electrify you. The name of the event is The Order of the Arrow Conclave. All Scouts who have accomplished their ordeal to get into the OA will be able to attend this event. The OA Conclave is the second biggest event in Scouting. It lasts for the whole weekend with transportation. The Conclave has existed over 10 years with each Lodge hosting the event at their location every 6 years. This year, the Conclave will be hosted at Camp Durant. Being an OA member is fun but what's more amusing is participating in the activities the group provides for newcomers.



## Germany's Two Biggest Banks May be Merging

By: *Pranay Koneru*

Deutsche bank and Commerzbank bank--banks whose names are synonymous with the loaning industry in Germany may soon carry out their business under one name after speculation that both companies are in talks of a merger. The merger would result in massive cost-saving measures with the German government appearing to favor a deal in part due their ownership of a 15.5% stake in Commerzbank. German finance minister Olaf Scholz has also urged the two banks to consider merging due to his belief of Germany



needing a national champion in the finance sector. Combined the banks would own one-fifth of Germany's high street banking business

and control 1.8 trillion euros worth of assets in the form of loans and investments. Both banks are currently facing an economic slowdown in Europe and in Germany where the economy narrowly avoided falling into a recession at the end of last year. But many critics of the merger say that it could create one larger bank with more problems. In addition to displeasing critics, the deal also faces opposition from

unions who fear that more than 10,000 jobs could be lost if the merger goes through. In the end, this is all just speculation. While the merger might create more problems, it might be necessary in order to preserve Germany's economy.



## High Anticipation on All Sides for Mueller's Special Report on Trump's Involvement with Russia

By: *Shrihan Dadi*

The media, lawmakers, and publishers are scrambling to find out more information about Mueller's special report on Mr. Trump. A lot isn't known about the report: how long it will be, and if it will even be meaningful. The report, by Robert S. Mueller III, is about interference by Russia into the 2016 election and if Mr. Trump orchestrated any attempt to purposely conspire into the effort. Democrats, some of whom are opting to impeach Mr. Trump, are worried about whether the report will be meaningful and powerful enough to be used as evidence. Some of them have already have plans to conduct further oversight, regardless of the conclusions drawn from Mueller's report, as they might be too weak. Their current evidence relies on Mr. Trump's previous Russian contacts, abuse and assertion of power, and hush payments. Once Mueller's investigation finishes, he plans to send his report to William P. Barr, the new attorney general. The media and reporters have already rushed to Barr's house in the lookout for any new news. Mr. Trump and his allies refuse to recognize the investigation as credible and consider it going too far, even so far as to call it a "WITCH HUNT." Mr. Trump and members of the White House remain calm, confident that Mueller won't find any evidence against Mr. Trump. They don't have any new large plans if anything serious comes out. Some Republicans have supported Mr. Trump and announced to back him up, calling the mission of the Democrats a "fishing expedition." Coming to the people, some senior citizens see the report as so important to their lives that they see it as a reason to live on longer. In conclusion, stress is on all sides, and people are in high anticipation for the special report on Mr. Trump's involvement with Russia.



The White House

## Vitamins and Minerals: Today v. Yesterday

By: Arya Bharti

Generally, vitamins are classified in two groups: water soluble and fat soluble. Our body is constantly busy making new cells. All this requires multiple metabolic pathways continuously running and producing vital components. While protein, fats, and carbohydrates are macronutrients that are needed, vitamins and minerals act as coenzymes and cofactors in all the metabolic pathways without which these pathways cannot be conducted. Our ancestors never depended on taking vitamins and minerals but due to our tremendous lifestyle changes and increased stress in our life, we need them in much more amounts than our ancestors. Having said that, several research articles conclude that most of the vitamins and minerals should come from diet source, but certain vitamins like Vitamin D that the modern generation is lacking should be taken in appropriate doses after consultation with a doctor as its deficiency leads to a weak immune system, bone loss, neurological disorders and many more. Again our ancestors were much rooted close to nature and depended on more whole foods and foods in its natural form but people from the modern generation are consuming foods like pizza, pasta, and soda which is not only destroying our gut health, but also robbing the body from its vital nutrients and vitamins, as the body needs to work hard to process these processed food. Ideally, it looks like with the demand of our times, we should eat food that is densely rich in all the vitamins and micronutrients and take some supplements.

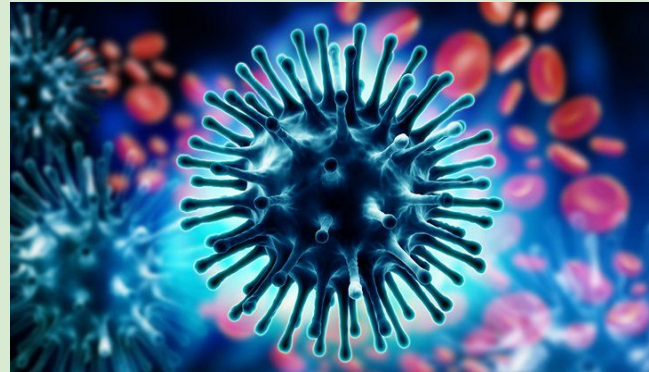


## Artificial Intelligence to Make a Better Flu Vaccine

By: *Sruthi Anne*

Influenza (flu) is a contagious respiratory tract infection mainly caused by influenza virus. It is a virus that spreads mostly from person to person, generally around the spring and fall months. Flu viruses enter the body through the mucus membranes of your nose, eyes, and mouth.

Everytime you touch these areas with your hands, you are possibly infecting yourself with a virus. Not all flu is created equal; some types can make you very ill, and some can cause mild symptoms. There are three types of flu viruses: A, B, and C. Type A and B cause the annual influenza epidemics



that have up to 20% of the population sniffing, aching, coughing, and having high fevers. Type C also causes the flu, but the symptoms are less severe. To help prevent the flu, you can get a vaccine. Within 2 weeks of getting the shot, your body makes antibodies to help protect you against flu. Flu vaccination reduces the risk of flu illness by 40% and 60% among the overall population, but that does not mean that it works for sure. However, is there a more precise way to fight the flu? The team at *Berg*, a Boston-based pharmaceutical startup, thinks so. *Berg* is using artificial intelligence to have a better understanding of the flu. Niven Narain, *Berg*'s co-founder and CEO, says "such an understanding could help create more precise, and therefore more effective, flu shots. It could even pave the way for personalized flu prevention, with people receiving customized vaccines designed to induce a better response in their particular immune system." Many other researchers and experts say that more precise vaccines could be the next frontier in the fight against influenza. The machine learning approach allows them to handle that volume of data, and allows them to measure many components of immune response. Even with *Berg*'s work, we're still a long way from universal flu vaccine, and also influenza research. "Any studies in this area that are going in with this kitchen-sink approach are going to tell us something that's going to be useful," says Richard Webby, director of the World Health Organization Collaborating Centre for Studies on the Ecology of Influenza in Animals at St. Jude Children's Research Hospital.



## Spotify v. Apple: Who Will Win?

By: *Harvik Kolla*

An online war has broken out between the global music streaming software, Spotify and the world's famous Apple. Spotify filed a complaint against Apple alleging that Apple uses unfair practices within the app store.



Specifically, Spotify is upset at the 30 percent that Apple charges developers for subscriptions and that it's designed to give Apple Music an advantage in the app store. Apple came back with by saying that "Spotify wants the benefits of a free app without being free." In its latest statement, Spotify called Apple a monopolist and went on to say "Apple's belief is that Spotify's users on iOS are Apple customers and not Spotify

customers, which goes to the very heart of the issue with Apple." Apple has also brought Pandora, Google Music, and Amazon Music into the playing field after it said that all of these companies get their money by the number of streams and number of songs played, but they are leeching off the artists and producers. Apple states, "We share Spotify's love of music and their vision of sharing it with the world. Where we differ is how you achieve that goal.



Underneath the rhetoric, Spotify's aim is to make more money off others' work. And it's not just the App Store that they're trying to squeeze - it's also artists, musicians, and songwriters." The European Commission has received Spotify's complaint and is working on an official statement. Stay tuned to read about the next update in this rivalry between these big multi-media companies.

## GMO Hens

By: *Pavitra Madala*

A month ago, researchers at the University of Edinburgh have found out that they can genetically modify hens to produce certain drugs that are inexpensive and are of high quality. This was done by encoding therapeutic proteins into the hen's DNA and



produced as part of the egg white. High amounts of proteins can be obtained now without bringing consequences to the hens. This study shows that hens are viable to producing proteins

that can be helpful for drug discovery studies as well as other applications in biotechnology. The researchers say that this discovery is more efficient, produces more yields, and is more cost-effective than any of the previous attempts to genetically modify animals. GMO hens can potentially help with the treatment of many complex diseases, such as cancer. This was their ultimate goal, and this could mean a major breakthrough in the field of science.

## Meet Wish: The Most Downloaded E-Commerce App

By: *Harvik Kolla*

Wish was the most downloaded shopping app worldwide in 2018 and is now the third-biggest e-commerce market in the U.S. by sales. Globally, 90 million people use it at least once a month. It is valued at more than \$8.7 billion, and Peter Szulczewski, the CEO, 18% stake makes him a billionaire. But Wish was not the first E-Commerce market or by any means the most popular. It is also competing with Alibaba's AliExpress and Amazon. Then how is it doing so well? The answer is Affordable. While Amazon keeps adding new movies and items online, Wish sells sweaters for 2\$, Apple watch knockoffs for 9 and Samsung phones for 21\$. When interviewed, Szulczewski said that he focused on building something its customers wanted, not what Silicon Valley thought they should want. He said, "Forty-one percent of U.S. households don't have \$400 worth of liquidity,". He wants to provide something that the common man can afford and doesn't have to wait for weeks to get their product. Wish shoppers scroll through an average 600 to 700 items, drawn in by a parade of products that scratches the same visual itch as an Instagram feed. Around 80% of Wish's first-time customers will return to buy a second time. Even though Wish is losing 190 million dollars annually, but it claims it could be better if it stopped spending so much on marketing. It has big campaigns on Pandora and Snapchat, and Facebook. In 2017, Wish signed a \$30 million deal to sponsor the Los Angeles Lakers. Los Angeles is also one of Wish's biggest metropolitan markets by revenue. Wish has gained a big reputation by surpassing Amazon but can it maintain it?

