



3D-printed corneas mimic human eye: study
SEOUL

Using bioink made from stem cells, scientists have 3D-printed artificial corneas that mimic the human eye. The researchers produced the artificial cornea with the lattice pattern of the human cornea by regulating the shear stress to control the pattern of protein fibrils, a study published in *Biofabrication* said. PTI



Apple unveils new generation iPod model
SAN FRANCISCO

Apple has introduced its first new iPod model in four years, highlighting music and games as it continued to make a priority of serving up digital content. The new-generation iPod touch, essentially an iPhone without the phone calls, is now available in more than two dozen countries starting at \$199. AFP



GoT star Kit Harington getting stress therapy
LOS ANGELES

Game of Thrones actor Kit Harington is undergoing treatment after the end of the HBO series, his representative has said. "Kit has decided to utilise this break in his schedule as an opportunity to spend some time at a wellness retreat to work on some personal issues," he said. REUTERS

Virus-packed laptop sells as artwork for over \$1.3 million

Artist Guo O Dong says the computer is a representation of all digital threats

AGENCE FRANCE-PRESSE
WASHINGTON

For Chinese artist Guo O Dong, the simple black Samsung laptop computer, loaded with six potent viruses, symbolises one of the world's most frightening threats.

This week, his creation "The Persistence of Chaos" rocked the art world, selling for more than \$1.3 million in a New York online auction.

There's nothing special about the 2008 10-inch Netbook, running Microsoft's now-outdated Windows XP.

But loaded onto its memory chips are the computing world's equivalents of the most deadly infectious diseases: "I LOVE YOU" from 2000, "Sobig" of 2003, "MyDoom" (2004), "DarkTequila" (2013), "BlackEnergy" (2015), and the most notorious of all, the "WannaCry"



The virus-laden computer. ■THE PERSISTENCE OF CHAOS

ransomware from two years ago.

It is a powerful symbol of digital threats that the world faces. The six trojans, worms and malware loaded on it have caused at least \$95 billion in damage around the world, according to Mr. Guo.

Mr. Guo is an Internet artist "whose work critiques

modern day extremely on-line culture", the auction site, organised by cybersecurity group Deep Instinct, said.

The computer, viewed via an online video stream, is harmless in its auction state – turned on, but not connected to any network or the Internet.

The auction site says it is "airgapped" – a security measure to isolate it from wireless and Internet connections. But the laptop comes with an ominous warning to the buyer not to unleash its pathogenic programs – possible by unplugging its connection hardware, or by simply inserting a thumb drive.

The site stresses that the artwork is for research use only, saying that anyone who submitted a bid contractually agreed that they "have no intention of disseminating any malware".

The warning added, "Please remember that these are live and dangerous malware samples. Running them unconstrained means that you will infect yourself or others with vicious and dangerous malware." The buyer was not identified.

SpaceX satellites pose new headache for astronomers

'The objects can interfere with observations'

AGENCE FRANCE-PRESSE
WASHINGTON

It looked like a scene from a sci-fi blockbuster: an astronomer in the Netherlands captured footage of a train of brightly-lit SpaceX satellites ascending through the night sky this weekend, stunning space enthusiasts across the globe.

But the sight has also provoked an outcry among astronomers who say the constellation, which so far consists of 60 broadband-beaming satellites but could one day grow to as many as

12,000, may threaten our view of the cosmos and deal a blow to scientific discovery.

The launch was tracked around the world and it soon became clear that the satellites were visible to the naked eye: a new headache for researchers who already have to find workarounds to deal with objects cluttering their images of deep space.

Not starstruck

"People were making extrapolations that if many of the satellites in these new mega-constellations had that kind of steady brightness, then in 20 years or less, for a good part the night anywhere in the world, the human eye would see more satellites



A group of SpaceX Starlink satellites pass over Leiden, Netherlands on May 24.

than stars," said Bill Keel, an astronomer at the University of Alabama.

The satellites' brightness has since diminished as their orientation has stabilised and they have continued their ascent to their final orbit at an altitude of 550 km.

But that has not entirely allayed the concerns of scientists, who are worried

about what happens next. Elon Musk's SpaceX is just one of a several companies looking to enter the fledgling space Internet sector.

To put that into context, there are currently 2,100 active satellites orbiting our planet, according to the Satellite Industry Association.

If another 12,000 are added by SpaceX alone, "it will be hundreds above the horizon at any given time," Jonathan McDowell of the Harvard Smithsonian Center for Astrophysics said, adding that the problem would be exacerbated at certain times of the year and certain points in the night.

"So, it'll certainly be dramatic in the night sky if

Mumbai writer Annie Zaidi wins \$100,000 global prize

She is set to expand her award-winning essay into a book

PRESS TRUST OF INDIA
LONDON

Writer Annie Zaidi was on Wednesday announced as the 2019 winner of the \$100,000 Nine Dots Prize, an award for creative thinking that tackles contemporary societal issues.

Mumbai-based Zaidi, a freelance writer whose work includes reportage, essays, short stories, poetry and plays, won the prize for her entry 'Bread, Cement, Cactus' – a piece that combined memoir and reportage to explore concepts of home and belonging.

The prize challenged entrants to answer the question 'Is there still no place like home?' in a 3,000-word essay. The winner is supported to develop their response into a full-length book, which will be published by the Cambridge University Press. The award



Annie Zaidi

also gives the recipient the opportunity to spend a term at the Centre for Research in the Arts, Social Sciences and Humanities at Cambridge University.

"I had been working towards a similarly themed project for a while but didn't have the financial, or even mental, bandwidth to do it justice. The prize will allow me to dedicate time to the examination of this question, which is of critical im-

portance in the modern world," said Ms. Zaidi.

The 40-year-old has published both fiction and non-fiction, including a collection of essays *Known Turf: Bantering with Bandits and Other True Tales and Love Stories # 1 to 14*, a collection of short fiction published in 2012.

Her proposed book, based on the prize-winning essay, will be published in May 2020 and will examine how a citizen's sense of home might collapse, or recover. The varied themes it will address include the politics and economics of death in India, the crossing of caste and religious lines in marriage, and the Partition of India as a great cultural and emotional sundering.

The Nine Dots Prize is funded by the Kadas Prize Foundation, a U.K.-registered charity.

New species of wasp identified in Goa

PRAKASH KAMAT
PANAJI

A new species of wasp from the genus *Kudakrumia* has been recently identified by scientists in Goa.

The wasp, *Kudakrumia rangnekari*, has been named after Goa-based researcher Parag Rangnekar.

"A species being named after me comes as a complete surprise. Mixed feelings at the moment, of joy and for some unknown reason slightly uncomfortable," Mr. Rangnekar said. The new species was collected in the forests of the Western Ghats.

Mr. Rangnekar's quest to



Kudakrumia rangnekari

document the butterflies of this unique region resulted in a record of 220 species, of which 13 species had not been spotted before.

Mr. Rangnekar, who is the founder-president of the Goa Bird Conservation Network, has now taken up the documentation of the dragonflies in the State.

Being transgender is no longer a mental disorder, says WHO

Activists and doctors welcome the resolution

BINDU SHAJAN
PERAPPADAN
NEW DELHI

The World Health Organization (WHO) will no longer categorise being transgender as a "mental disorder".

The change was brought in after a major resolution to amend the WHO health guidelines was approved earlier this week on May 25.

Health care needs

The global health organisation said, "Evidence is now clear that gender incongruence is not a mental disorder, and indeed classifying it as such can cause enormous stigma for people who are transgender. Also there remain significant health care needs that can best be met if the condition is coded under the ICD (International Classification of Diseases)."

Gender incongruence has now been listed under sexual health conditions.

The WHO added that a "significant change in the mental disorders section of ICD-11 is the attempt of statisticians to simplify the codes as much as possible to allow for coding of mental health conditions by primary health care providers rather than by mental health specialists. This will be a critical move since the world still has a scarcity of mental health specialists – upto 9 out of 10 people needing mental health care don't receive it."

Health and human rights activists are now hoping that the ICD-11 will be implemented by the WHO's 194 member states over the next three years. The WHO's removal of "gender identity

disorder" from its diagnostic manual will have a liberating effect on transgender people worldwide, they said.

"In India, psychiatrists at an individual level have stopped treating transgender as a mental health condition. With this move, the Indian government will have to make the changes in the medical systems and laws that require this now officially outdated diagnosis," said Dr. Zakirhusain Shaikh, assistant professor, Department of Community Medicine, Hamdard Institute of Medical Sciences and Research.

Akkai Padmashali, social activist, said, "The Indian government now has to ensure that this is implemented in totality. This may be a milestone, but there is still quite a way to go."

Melting hearts



Eye on the ball: A wax figure of Indian cricket captain Virat Kohli was installed at the Lord's Cricket Ground in London on Wednesday to mark the launch of the ICC Men's World Cup. ■PTI

Nepal marks anniversary of Everest ascent

This comes amidst an increase in the death of climbers leading to a debate over number of permits

ASSOCIATED PRESS
KATHMANDU

Nepal commemorated the anniversary of the first ascent of Mount Everest on Wednesday amid a climbing season marred by the highest death toll in four years and a debate on whether the government should limit permits to prevent dangerous overcrowding on the world's highest peak.

Officials said at an event in Kathmandu celebrating the successful climb of Edmund Hillary and Tenzing Norgay in 1953 that there were no plans to cap permits. Nepal takes in \$300 million each year from climbing.

A record number of 381 permits were issued this year. Eleven people have died on the southern side of



Runners participating in the world's highest marathon in the foothills of Mount Everest on Wednesday. ■AFP

Everest in Nepal, likely due to altitude sickness, which is caused by low amounts of oxygen at high elevation and can lead to headaches, vomiting, shortness of breath and mental confusion.

Because of the altitude, climbers have just hours to

reach the top before they are at risk of a pulmonary oedema, when the lungs fill with liquid causing respiratory failure.

Mountaineers described traffic jams caused by exhausted rookies in the "death zone", the final phase

of the ascent from Camp Four at 8,000 metres to the 8,850-metre-tall peak.

On Wednesday, Nepal Minister Gokul Prasad Baskota said the congestion on Everest wasn't due to the mismanagement of climbing permits but rather the inadequate training of some climbers.

'Scale back'

Renowned mountaineer Um Hong-gil of South Korea, who was honoured by the Nepal government at the event commemorating the 66th Everest anniversary, said the number of climbers should be scaled back and only those with training should be allowed.

The Nepal Mountaineering Association, an umbrella

body of expedition operators, said it would push the government to require climbers to adequately prepare for what Mr. Um described as an extremely taxing physical and mental task.

"The government needs to come up with strict policies to control the inexperienced climbers from attempting to scale Everest," said the association's president Santa Bir Lama. He also faulted private trekking companies that are more focused on expanding their client base than safety.

Expedition operators said they do vet climbers' experience and ability before signing up them up and that even seasoned mountaineers sometimes lose their lives on Everest.

India has 20 health workers for 10,000 people, study finds

The ratio is close to the WHO threshold of 22.8

SPECIAL CORRESPONDENT
CHENNAI

India has 20.6 health workers per 10,000 people, a study based on data from the National Sample Survey reveals. While it is less than the World Health Organisation's minimum threshold of 22.8, the numbers have increased from 19 health workers per 10,000 people in 2012.

"This is welcome news as the numbers have increased since 2012. This shows that we are moving in the right direction and the size of the health workforce is steadily improving," says Dr. Himanshu Negandhi, additional professor at the Indian Insti-

tute of Public Health, Delhi. Unfortunately, the distribution of health workers is uneven between urban and rural areas.

Rural areas with nearly 71% of India's population have only 36% of the country's health workers.

"This is not just in our country. Many countries have this divide," adds Dr. Negandhi. Delhi has the highest concentration of health workers followed by Kerala, Punjab, and Haryana.

The data also showed that approximately 25% of currently working health professionals do not have the required qualifications as laid

down by professional councils, notes a study published in *BMJ Open*.

Dr. Anup Karan, additional professor at Indian Institute of Public Health, Delhi, and lead researcher of this paper is of the opinion that "the public sector can collaborate with the private sector to overcome the shortages in human resources for health. However, this will not influence the overall size of the health workforce in the country."

The paper notes that policy should focus on enhancing the quality of health workers and bringing professionally qualified persons into the health workforce.

Teacher forces 7-year-old to eat grass

INDO-ASIAN NEWS SERVICE
ISLAMABAD

A Pakistani schoolteacher has been booked for forcing a primary school student to eat grass as punishment in class.

The video of the incident at Government Primary School in Fatehpur, Lodhran, went viral on social media. It showed a seven-year-old being told to either eat grass or read out a chapter in front of his classmates.

The video clip shows the boy failing to read the chapter and instead eating grass after being forced by his teacher Hamid Raza.

The boy's parents told the *Dawn* newspaper that they have forgiven the teacher. District Police Officer Malik Jameel Zafar, however, took notice of the episode and directed the police to investigate the matter.