



Point of View

The Student Newspaper of ICS

DECEMBER 2025

COP30 Climate Conference Shows the Challenges of Fighting Against Climate Change

by ANNIE JANG



Image Source: Reuters

From November 10th to 21st, 2025, world leaders, scientists, and climate activists gathered in Brazil for the COP30 climate conference. The goal of the meeting was to discuss ways to fight against climate change and reduce global warming together. Many people hoped that the meeting would lead to strong commitments to reduce greenhouse gas emissions and stop harmful pollution. However, the final agreement did not include strong and strict rules to limit fossil fuel use, which made many of the citizens disappointed about it. Activists warned that promises are not enough to solve the climate crisis.

The conference also focused on the human effects of climate change such as rising sea levels, storms, and extreme weather events. These events result in people leaving their homes and creating various problems, especially in developing countries. During the conference, some countries argued about who should take the most responsibility. Developed nations are expected to reduce emissions faster and provide more support to developing countries, while some developing nations asked for more help to handle the damage of climate change.

After the conference, people shared videos, posts, and opinions about whether leaders are doing their best to prevent and solve the extreme climate change effects. Some of them posted positive thoughts about the new funding for climate adaptation, but many of them felt frustrated that there aren't some binding rules that can be a strict solution to solve the problems. Those online actions showed that citizens around the world are paying

attention to climate change and their reaction to solve the problems.

In the conference, COP30 showed that fighting against climate change is a huge challenge that needs a lot of effort to keep on the right track. The conference reminded once again to everyone that climate change affects people's lives everywhere, not just in specific countries. This conference made it clear that leaders must take responsibility and not fight to find a profits for their each countries, they need to work together to protect the planet.

Blood Donation Process and Benefits

by SALLY HUH

Processing just one pack of donated blood requires far more than the donor's contribution. It involves more than ten sanitized materials and the coordinated efforts of nurses, technicians, drivers, and volunteers who ensure that every step is completed safely. Before donating, individuals must complete health forms and screenings, which volunteers or workers help guide to prevent mistakes and keep the process moving smoothly. During and after the donation, nurses monitor the donor's condition, while volunteers provide support, check for dizziness, and make sure donors have rested enough before leaving.

Beyond what we see, drivers transport collected blood to testing facilities approximately four times a day, driving the donation center and facility back and forth. There, all the donated blood is checked to determine if it is safe to be injected into other patients. Staff members oversee storage, paperwork, and record-keeping. Every role is essential to keeping blood donation safe, organized, and reliable for hospitals that depend on it.

Blood donation is not only for the patients, but also advantageous for the donors. Regular donation helps maintain healthy iron levels, which reduces blood thickness and strain on the heart, thereby lowering the risk of heart attacks and strokes. It also lowers excess iron storage, reducing the risk of liver, lung, colon, stomach, and throat cancers. Additionally, the blood donation certificate that you receive allows the donor or a designated person to receive a discount on the cost of a blood transfusion when needed. The tasty snacks, drinks, and coupons cannot be excluded as well!

There are at least at least 153 Korean Red Cross donation centers in South Korea; however, the number of blood donors is decreasing significantly every year, and more and more patients are in urgent demand of blood.

In Songdo, the Triple Street Korean Red Cross Blood Donation Center offers a meaningful volunteer opportunity where you can donate blood or support the process by volunteering. You do not need to donate blood to make a difference. By helping guide donors, assisting staff, and maintaining a supportive environment, you can contribute to saving lives while gaining valuable experience working around medical equipment and trained professionals.

Shooting at Stockton Banquet Hall Leaves Four Dead During Birthday Party

by SEJIN TENNANT

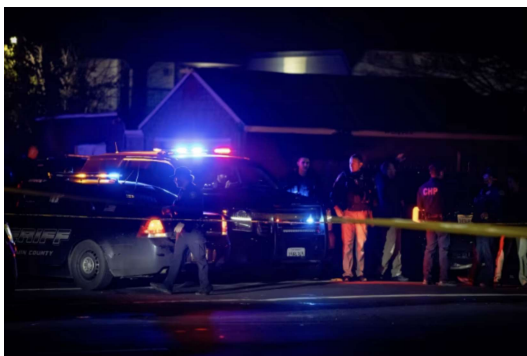


Image Source: CNN

On November 30, 2025, a mass shooting took place at a banquet hall in Stockton, California, leaving four people dead and ten others injured in what officials are describing as a targeted attack.

The shooting happened at around 6 p.m. during a child's birthday party, where dozens of people had gathered for a family member's birthday. According to the San Joaquin County Sheriff's Office, at least 14 people were struck by gunfire, with victims ranging from teenagers to adults. Several were taken to nearby hospitals, while four were pronounced dead at the scene.

Authorities stated that early evidence suggests the shooting was targeted, although they have not identified a suspect or announced a motive for the shooting. Investigators have not released any information about who may have been the intended target, and they have not confirmed whether there was one or multiple shooters. Police are asking anyone who attended the party or who lives nearby to share any videos or information that could assist the investigation.

In the hours after the shooting, the area around the banquet hall was blocked off as investigators collected evidence and

interviewed witnesses. Families remained outside throughout the evening, waiting for updates about relatives who had been inside the building at the time of the attack.

This shooting adds to a growing number of violent incidents in Stockton throughout 2025. Many residents have expressed concern about the increasing frequency of shootings in the city, with some noting that gatherings that were once considered safe, such as birthday parties or family events, have now become vulnerable to acts of violence.

Officials have not yet released the names of the victims as they continue notifying families. The investigation remains active, and authorities are expected to release additional information in the coming days as more evidence is reviewed and witnesses are questioned.

Who Judges the Media? White House vs. the Press in the 2025 U.S. Media battle

by YEJU JANG

In November 2025, the White House launched a controversial new webpage the "Media Offenders", publicly listing new organizations it deemed "misleading" or "biased". The page names major outlets like The Washington Post, CNN, and CBS News criticizing their recent coverage of political events. The White House claims the site helps Americans identify "fake news" and provides a tool for media accountability.

Critics argue that the webpage is a direct attack on press freedom. By labeling specific news organizations as biased, the government steps into the role of "media judge" which raises concerns about censorship and political influence over journalism. Freedom of the Press advocates warn that such actions threaten the democratic principle that the press should operate independently from the government.

The controversy began after certain outlets reported critically on comments from Democratic lawmakers, which the administration said misrepresented the facts. The White House defended the webpage, insisting it was a necessary response to what it called persistent misinformation in major media coverage.

This clash between the administration and the press has sparked debate across the country. Some citizens support the White House, arguing that the media often has its own biases and that Americans deserve clarity. Others see it as a dangerous precedent, where government officials label information as "wrong" based on political motives rather than factual accuracy.

Ultimately, the 2025 media conflict highlights the ongoing tension between journalists seeking to report the truth and political powers trying to shape public perception. As citizens and future leaders, we are reminded that protecting press freedom is crucial for a functioning democracy. The White House's

“Media Offenders” page may change how Americans see the news, but it also encourages readers to think critically, and ask questions.

Lithium - The Ultimate Cure for Alzheimer’s?

by JIHOON CHOI

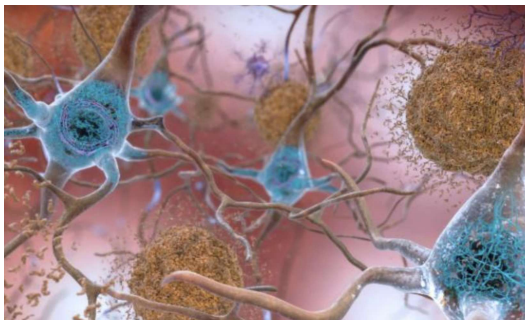


Image Source: UCL

It is heartwrenching to watch videos of Alzheimer’s patients failing to recognize themselves in the mirror, or to treat their family members as strangers. Alzheimer’s disease is a neurodegenerative disorder that leads to degradation of brain cells. This leads to memory loss and cognitive decline, leading to the symptoms above. After its initial finding by Alois Alzheimer, it has since then been studied extensively by neuroscientists, leading to some clue about its pathology. So, what are its causes, and treatments?

Alzheimer’s is known to affect neurons, specifically through two proteins called Amyloid-beta and tau protein. Amyloid-beta is part of a bigger protein called amyloid precursor protein (APP), which plays an important role in synapse formation and neuroplasticity. When it is cut into smaller protein by gamma and beta secretase, it releases amyloid-beta. Although a few of them do not cause damage, its danger lies in its ability to attract and stick together. As this protein accumulates, it forms amyloid plaques, which are large enough to clot synapses and ultimately lead to neuronal death. Tau proteins act in a similar fashion. Tau proteins are integral to keeping the structure of the axons, the signal pathway of neurons. But when they are disrupted, they detach from the axons, and form neurofibrillary tangles inside the neurons which disrupts the neuronal activity.

An new perspective is the disruption causes by glia cells, specifically, the microglia. These cells are usually tasked with engulfing the amyloid-beta and keeping their concentration level. But overconsumption can lead to release of toxic neuroinflammation signals such as cytokines which damages nearby neurons. Current research also supports the idea that overreactive astrocytes may be the cause.

Then, does getting rid of the malfunctioning proteins and abnormal cells cure the disease? Unfortunately, removal treatments have shown to only slow down the disease. This hints that although there is a causal effect, it is far more complex and can involve other factors that have yet to be researched - until now.

This year August, Harvard scientists published a novel article in the nature journal that found a causal link between lithium deficiency and Alzheimer’s progression. In this research, the scientists first observed sharp difference in lithium levels between Alzheimer’s patient and healthy patients. Experiments on mice showed that lithium was highly concentrated on areas with amyloid-beta. Using this fact, they knew that amyloid-beta sequestered lithium from nearby cells, reducing its bioavailability. When they fed the mice Lithium-rich diet (Li2O2 solution), it not only degrades amyloid-beta, and cured Alzheimer’s mice, but also make old mice young again. Thus, lithium may be the ultimate cure for Alzheimer’s and aging.

Decades of research have focused solely on the neurons and glia cells when looking at neurodegenerative disorders. However, this recent study shows that the “neuro-” label can be misleading - it often involves many other factors. Lithium may be just one of the many cures out there. Scientific research is giving hope for patients; thus, continuous support and funding is important.

Number Congruence Theory’s Application

by IDAM SUH

In number theory, according to congruence theory, $ab \pmod{n}$ indicates $(a - b)$ is divisible by the number n , which is similar to getting a remainder. For example, $73 \pmod{4}$, because $7 - 3 = 4$ and $44 \equiv 1$, which indicates $7-3$ is divisible by 4. In this article, application of this congruence theory is used in computer science.

One of the applications of number congruence theory is random-number generation. It concludes that “Computer-generated random numbers are actually pseudo-random, produced using a Pseudo-Random Number Generator (PRNG) like the Linear Congruential Generator(LCG)”. Pseudo-Random numbers are defined to be produced from a defined process even though it may appear random. Specifically, number congruence is used in Linear Congruential Generator, previously mentioned as LCG. It uses recurrence relations such as $X_{i+1} = (ax_i + c) \pmod{m}$ where a is the multiplier and c is the increment.

Another application of number congruence theory is error detection in identification numbers, related to cryptography. In error detection, modular arithmetic algorithm called Luhn algorithm, which is also known as modulo 10, is most commonly used. For example, if the number is correct if the total modulo 10 is equal to 0, meaning it is multiple of 10.

It is interesting to dive into number congruence. It has broad application in science, especially in the case of computer science. What I've noticed is that it actually has a lot of applications in cryptography, particularly in computer science. Now, many companies around the world are focusing on automation and AI development. As this trend goes on, the importance of computer science will be emphasized, and better understanding mathematical operations like number congruence is crucial for algorithm programming, where it focuses on efficiency.

Trees can also send signals through the air. When insects start eating a tree, the tree releases special chemicals that float into the air. Nearby trees sense these chemicals and prepare their own leaves to be harder to eat. This warning system helps stop the insects from spreading too much. In some forests, trees can even warn each other about animals like giraffes or deer chewing their leaves, showing that they react quickly to danger.

Some scientists say there are 'mother trees' in a forest. These are big, old trees that support younger trees. Mother trees send more nutrients and information through the underground network, helping the young trees grow strong. If a mother tree is cut down, many small trees around it may grow more slowly or become weak because they lost an important helper. This shows that keeping old trees alive is important for protecting the future of the forest.

Tree communication is important for humans to understand because it shows how forests really work. When people cut down too many trees or damage the soil, the communication network breaks. Without this network, new trees have a harder time growing. But if we protect old trees and take care of the forest floor, the connections stay strong, and the forest can recover more easily. Many forest workers now use this knowledge to decide which trees to protect and how to let forests grow naturally.

Learning how trees communicate teaches us that nature is full of teamwork. Trees are not just standing alone; they are constantly helping and warning each other. When we understand this hidden world, we can take better care of forests and make sure they stay healthy for a long time.

MERRY CHRISTMAS



Artwork by Heidi Jang

How Trees Communicate

by RION KIM

Many people think trees are quiet and lonely, but scientists have discovered that trees actually 'talk' to each other. Of course, they do not speak with voices like humans, but they send signals and share information in their own special ways. Forests are like big communities where trees help and protect one another. Some scientists even say that forests are more connected than many human neighborhoods because trees constantly support each other.

One way trees communicate is through their roots. Under the ground, there are tiny fungi called mycorrhizae that connect many trees together. These fungi act like wires in a computer network. Through them, trees can send food, water, and chemical messages. For example, if one tree has extra nutrients, it can share some with a weaker tree nearby. This helps the whole forest stay healthy. Scientists have found that trees can also send stress signals through these roots when they feel thirsty or sick, allowing other trees to change how they grow. This means trees are always paying attention to what is happening around them.

The Dangerous Symptom on Working

by SHAWN JEONG

Working makes you tired and exhausting. If the work doesn't go pretty well you feel very stressed about the work. When you feel tired every single day, there is a symptom that affects your emotion, condition and your health. This symptom is called burnout. Burnout is a symptom from exhaustion when you have a lot of stress at work. WHO, World Health Organization classified burnout as syndrome because it is associated with specific health.

Burnout mostly occurs when people have a lot of stress for work. If you are suffering from burnout, you feel very exhausted and tired. Also it is easy to get a headache, muscle pain, insomnia and other diseases frequently. Burnout makes you feel isolated. Like you're stuck on an island with nothing just by yourself. And you easily lose the energy of working. Which makes you not doing work pretty well.

There's a five stage burnout. The first stage is the honeymoon stage, which affects nothing. You just feel normal and fine at this stage. But in stage 2, now it's starting to cause

burnout. In stage 2, you feel like you want to avoid something, feel depressed and stressed, have less confidence and have a headache often. Move on to stage 3, you feel more depressed and stressed than stage 2. Also you feel you want to be alone so you may withdraw from others. When you are in stage 4 you might suffer burnout. If you are in stage 4, you might have a high chance of suffering from burnout. Lastly in stage 5, you are always depressed every single day.

Luckily there's a solution to avoid burnout. First you need to set boundaries which is an important part for avoiding burnout. If you set your boundaries your mood will get better and better. You could ask others for help to avoid burnout.

You can listen to their advice and utilize it. Doing an active activity is also a great way to avoid burnout. Because it also releases your stress too.

If you suffer from burnout you might feel out of mind.
