Ode to E Pluribus Unum for Sunday November 5 2023

The Corps Turns 248 this Friday. Semper Fi





https://www.dvidshub.net/video/901860/248th-marine-corps-birthday-message

On November 10, 2023, U.S. Marines around the globe will celebrate 248 years of success on the battlefield and reaffirm their commitment to our Corps' proud legacy of honor, courage, and commitment. This year, the Commandant of the Marine Corps, Gen. Eric M. Smith and Sergeant Major of the Marine Corps Carlos A. Ruiz remind us that Marines are professional warfighters who have earned their reputation of discipline and lethality in the crucible of combat.



========

Mahoney: Marines Corps No. 2 and Acting Chief



Lieutenant General Christopher J. Mahoney Promoted to General and Assistant Commandant just in time for the 248th Birthday Ball. criticalreport.substack.com

For the Marine Corps, Lt. Gen. Christopher Mahoney, a career aviator and previous 3rd Marine Air Wing commanding general, received a fourth star and will serve as the service's No. 2 officer.

Mahoney was serving as the deputy Marine Corps commandant for programs and resources at the Pentagon. He has accrued 5,000 flight hours in A-6s, F-5s, F-18s and the F-35, according to his official service biography.

His confirmation as the assistant commandant of the Marine Corps comes just days after Commandant Gen. Eric Smith was hospitalized. Some media outlets have reported Smith suffered a heart attack, but the service has not yet publicly confirmed that reporting.

Following Smith's hospitalization, the Marine Corps announced Lt. Gen. Karsten Heckl had temporarily assumed the duties of the commandant. Given his new promotion and assignment as vice chief, Mahoney will likely take over that role from Heckl until Smith returns to work.

Since the previous commandant, Gen. David Berger, retired in July, Smith has publicly discussed the stress of trying to serve as both the service's chief and vice chief simultaneously. Despite now technically having a fully confirmed commandant and assistant commandant, that stress will ostensibly fall on Mahoney's shoulders.

Will an aviator help the Corps' reassess its roles and missions? There's always hope.

=======

What causes long COVID? The answer might be in your gut

New research shows that remnants of the virus in the gut cause chronic inflammation—which may disrupt communication with the brain. Can antidepressants help?



Eve Efron, who has been struggling with long COVID for nearly a year, frequently has to rest on the couch in her home in Fairfax, VA. Her symptoms include significant fatigue, brain fog, anxiety, and depression.

Photograph By Carolyn Van Houten, The Washington Post/Getty Images

Nearly one in five people who have had COVID-19 in the United States continue to suffer from symptoms of long COVID. But why some people recover completely while others remain sick has been a mystery. Now research has provided some enticing clues.

A new study shows that bits of virus that survive in the gut cause chronic inflammation, which reduces production of serotonin—a molecule critical for communication between nerve cells in the gut and brain. The authors of the new article suggest that depletion of serotonin disrupts gut-to-brain communication, which can cause long-term neurological symptoms such as "brain fog" and impaired memory.

This may explain how "long COVID might be linked through a pathway that originates in the gut and leads to serotonin reduction," says Christoph Thaiss, a microbiologist at the University of Pennsylvania, who led the study.

"These are very important findings that help explain why serotonin levels remain low in certain long COVID patients following SARS-CoV-2 infection," says Liam O'Mahony, an immunologist at APC Microbiome Ireland, University College Cork, who was not involved in Thaiss' work.

Links between the gut and brain

The brain and the gut talk to each other. In fact, the gastrointestinal nervous system with its own 500 million neurons is so large, it is sometimes called the "second brain."

"That's why when you're feeling stressed, you can get abdominal pain or diarrhea," says Kenji Hashimoto, a neuroscientist at Chiba University in Japan.

The longest of the brain nerves, called vagus nerve connects with gut and uses the neurotransmitter serotonin to communicate and regulate many biological and neurological functions such as mood, digestion, appetite, learning and memory, immune response, and heart rate, among others, says Éric Boilard, an immunologist at Laval University in Quebec City, Canada.

About 95 percent of the serotonin is produced in the gut, although the brain makes its own supply. Microbes that live in our gut also produce chemical neurotransmitters, including serotonin. While serotonin produced in the gut does not directly reach the brain, it can influence the brain via neuronal circuits through vagus nerve.

"We've known that the gut is a reservoir for virus for a long time," says Melanie Gareau, a microbiologist at University of California, Davis. What is exciting is that "we're starting to identify messengers from the gut that signal to the brain."

Causes of neurological symptoms

Scientists have proposed several possible mechanisms that may cause long COVID. An abnormal immune response that triggers ongoing inflammation after the acute infection is one explanation, says David Sahner, a senior data adviser to National Center for Advancing Translational Sciences in Bethesda.

Previous studies had shown that fragments of SARS-CoV-2 virus that linger in patients after the initial infection heals can cause chronic inflammation, auto-antibody development, tissue damage, and in some cases disrupt communication in the nervous system.

COVID-19 also interferes with the levels of several metabolites during the initial infection. Patients not only have lower levels of serotonin but these imbalances can persist in those with long COVID.

Thaiss and his colleagues set out to find if and how all these factors are related?

They began by comparing the level of metabolites in blood samples of long COVID patients and healthy volunteers. They found that serotonin levels in blood were so different, they could predict whether a patient had fully recovered or had developed long COVID.

The long COVID patients also had changes in the blood levels of amino acids—the building blocks of proteins—compared to healthy patients. One, called tryptophan,

stood out, because it was suppressed in long COVID patients. Humans need tryptophan from food to produce serotonin. That suggests that chronic inflammation caused by viral remnants lowers absorption of tryptophan from food, which then lowers blood serotonin.

Thaiss' team also confirmed that some long COVID patients continue to excrete bits of SARS-CoV-2 virus in their stool even months after recovering from COVID-19. These remnants of the virus, called a viral reservoir, trigger the immune system to release virus fighting proteins called interferons. The extended release of interferons caused chronic inflammation in lab mice and in the long COVID patients.

Blocking interferon kept serotonin levels high in mice. The scientists confirmed that low absorption of tryptophan from food was the reason for low serotonin levels in virus-infected mice.

"The serotonin reduction affects the vagus nerve," says Thaiss. Reduced serotonin levels due to viral infections in mice disrupted their vagus nerve signaling and mice failed to distinguish new objects from familiar ones in tests. This failure mimics neurological symptoms, such as brain fog, generally associated with long COVID in humans.

Some common antidepressant drugs, called selective serotonin reuptake inhibitors (SSRIs), such as Prozac and Sarafem boost mood by increasing serotonin in the brain. When scientists gave Prozac to sick mice, it improved their performance in recognition tests. Supplementing the mouse food with tryptophan, which improved levels of serotonin, also helped.

This new research identifies mechanisms that contribute to depleted blood levels of serotonin, says O'Mahony.

"I think we have a few actionable items about long COVID, that we can now look at in clinical trials," says Thaiss.

Can boosting serotonin levels treat long COVID?

The new study suggests SSRI's might be useful in treating, or even preventing long-COVID. When scientists gave Prozac to the lab mice—whose neurological symptoms mimicked long COVID because of viral infection—it restored their memory loss.

A study that has not yet been peer reviewed, shows that COVID patients already on SSRI had 25 percent less risk of developing long-COVID.

"Initiating use of SSRIs prior to diagnosis of COVID-19 may be effective in reducing the risk of long-COVID," says Hythem Sidky, a computational biologist, who led the study for the National COVID Cohort Collaborative (N3C) at the National Institutes of Health.

But whether SSRIs can cure long COVID, "remains to be determined," says Sahner, who co-led the N3C study with Sidky.

Further research is needed to establish which serotonin boosting drug and at what dosage may help in treatment of long COVID. Fluvoxamine, an SSRI known under the brand names Luvox and Faverin, which is prescribed to treat major depressive disorder, obsessive—compulsive disorder, and post-traumatic stress disorder did not prevent long COVID although it prevented severe COVID-19 at higher doses.

"Giving fluvoxamine at a dose of 50 milligrams twice a day during acute infection did not prevent the development of long-COVID," says Carolyn Bramante, an internist at University of Minnesota, Minneapolis. Bramante led a trial that followed overweight or obese patients for 10 more months after treating their original COVID-19 infection with fluvoxamine. "It did prevent severe COVID at a higher dose," says Bramante. "But high doses are complicated with this drug."

In the meantime, scientists warn patients against self-medicating with antidepressants to treat long COVID. If the levels of serotonin in brain become too high, it can cause serotonin syndrome—a rare but serious condition with symptoms such as seizures, irregular heartbeat, and unconsciousness.

"We're going to need several ways to both prevent long-COVID and treat it," says Bramante. "But people should only act in connection with their physician and in ways that are supported by data."

By Sanjay Mishra for National Geographic

========

Orcas Show Terrifying New Behaviors. Are They Getting Smarter?



slantedonline.com

From sinking boats and feasting on shark livers to dining on whale tongue and tossing porpoises around for fun, orcas are displaying some fascinating — and sometimes terrifying — behaviors.

https://bit.ly/498Pjmm

By Sascha Pare for LiveScience

========

Eye Drop Warning: 26 Products You Should Stop Using Immediately, Says The FDA

The Food and Drug Administration has recommended that manufacturers recall all impacted lots and that customers stop using the products.



[Source photos: 378322/Pixabay, Perchek Industrie/Unsplash]

The U.S. Food and Drug Administration (FDA) has issued a warning to consumers to immediately stop usage of 26 varieties of over-the-counter eye drop products. The 26 products come from several major brands and can cause eye infection and even blindness if used.

The FDA issued an updated warning on October 27 after recommending on October 25 that manufacturers recall all lots of the impacted products. The reason for the recall recommendation is that agency investigators found that the manufacturing facility the eye drops were made in was unsanitary, with tests showing positive bacterial results in "critical drug production areas" of the facility.

So far, the FDA has not received word of harm to anyone using the affected products, but the agency says that the products carry the "potential risk of eye infections that could result in partial vision loss or blindness."

Here's is the full list of the impacted products as of the time of this writing:

CVS Health Lubricant Eye Drops 15 ml (single pack) [Carboxymethylcellulose Sodium Eye Drops 0.5% w/v]

CVS Health Lubricant Eye Drops 15 ml (twin pack) [Carboxymethylcellulose Sodium Eye Drops 0.5% w/v]

CVS Health Lubricant Gel Drops 15 ml (single pack) [Carboxymethylcellulose Sodium Eye Drops 1% w/v]

CVS Health Lubricant Gel Drops 15 ml (twin pack) [Carboxymethylcellulose Sodium Eye Drops 1% w/v]

CVS Health Multi-Action Relief Drops 15 ml [Polyvinyl Alcohol 0.5% w/v & Povidone 0.6% w/v & Tetrahydrozoline Hydrochloride 0.05% Eye Drops]

CVS Health Lubricating Gel drops 10 ml [Polyethylene Glycol 400 0.4% & Propylene Glycol 0.3% Eye Drops]

CVS Health Lubricant Eye Drops 10 ml (single pack) [Propylene Glycol Eye Drops 0.6% w/v]

CVS Health Lubricant Eye Drops 10 ml (twin pack) [Propylene Glycol Eye Drops 0.6% w/v]

CVS Health Mild Moderate Lubricating Eye Drops 15 ml (single pack) [Polyethylene Glycol 400 Eye Drop '0.25% w/v]

Rugby (Cardinal Health) Lubricating Tears Eye Drops 15 ml [Hypromellose 2910-0.3% w/v & Dextran 70- 0.1% Eye Drops]

Rugby (Cardinal Health) Polyvinyl Alcohol 1.4% Lubricating Eye Drops 15 ml [Polyvinyl Alcohol Eye Drops 1.4% w/v]

Leader (Cardinal Health) Dry Eye Relief 10 ml [Polyethylene Glycol 400 0.4% & Propylene Glycol 0.3% Eye Drops]

Leader (Cardinal Health) Lubricant Eye Drops 15 ml (single pack) [Carboxymethylcellulose Sodium Eye Drops 0.5% w/v]

Leader (Cardinal Health) Lubricant Eye Drops 15 ml (twin pack) [Carboxymethylcellulose Sodium Eye Drops 0.5% w/v]

Leader (Cardinal Health) Dry Eye Relief 15 ml [Carboxymethylcellulose Sodium Eye Drops 1% w/v]

Leader (Cardinal Health) Eye Irritation Relief 15 ml [Polyvinyl Alcohol 0.5% w/v & Povidone 0.6% w/v & Tetrahydrozoline Hydrochloride 0.05% Eye Drops]

Rite Aid Lubricant Eye Drops 15 ml (twin pack) [Carboxymethylcellulose Sodium Eye Drops 0.5% w/v]

Rite Aid Lubricant Eye Drops 10 ml (twin pack) [Propylene Glycol Eye Drops 0.6% w/v]

Rite Aid Gentle Lubricant Gel Eye Drops 15 ml [Hypromellose 0.3%, Glycerin 0.2%, Dextran 70 0.1% Eye Drops]

Rite Aid Lubricant Gel Drops 15 ml [Carboxymethylcellulose Sodium Eye Drops 1% w/v]

Rite Aid Lubricating Gel Drops 10 ml [Polyethylene Glycol 400 0.4% & Propylene Glycol 0.3% Eye Drops]

Rite Aid Multi-Action Relief Drops 15 ml [Polyvinyl Alcohol 0.5% w/v & Povidone 0.6% w/v & Tetrahydrozoline Hydrochloride 0.05% Eye Drops]

Target Up&Up Dry Eye Relief Lubricant Eye Drops 30 ml [Polyethylene Glycol 400 0.4% & Propylene Glycol 0.3% Eye Drops]

Target Up&Up Extreme Relief Dry Eye 15 ml (single pack) [Polyethylene Glycol 400 0.4% & Propylene Glycol 0.3% Eye Drops]

Target Up&Up Extreme Relief Dry Eye 30 ml (twin pack) [Carboxymethylcellulose Sodium Eye Drops 0.5% w/v]

Velocity Pharma LLC Lubricant Eye Drop 10 ml (triple pack) [Propylene Glycol Eye Drops 0.6% w/v]

The FDA says that CVS, Rite Aid, and Target are removing the products from their websites and stores. However, it warns that impacted products made by Leader, Rugby, and Velocity "may still be available to purchase in stores and online and should not be purchased."

The agency says that anyone who has signs or symptoms of an eye infection after using the products should seek medical care or talk to their healthcare provider

immediately. If you have any of these products in your possession, the FDA says you should properly discard them.

By Michael Grothaus for Fast Company

I don't know about you, but even the thought of eye problems terrifies me.

========

Microplastic Pollution: Plants Could Be the Answer



UBC postdoctoral researcher Dr. Tianyu Guo is part of a team that developed a wood dust-based filter for removing microplastics from water.

Photo: UBC Forestry/Jilliancolumbia van der Geest

University of British Columbia device uses wood dust to trap up to 99.9 per cent of microplastics in water

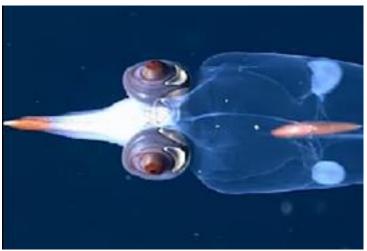
https://bit.ly/3qyHWnb

Science, Health & Technology

========

See-Through Squid with Demon-Like Eyes in Alaskan Waters

The see-through cephalopod was spotted by researchers exploring the deep sea surrounding Alaska's Aleutian Islands.



A glass squid (Taonius borealis) was filmed at a depth of around 2,300 feet (700 meters) on July 15.

(Image credit: NOAA Ocean Exploration)

https://bit.ly/3ssAytW

========

Special Article Collection on Breast Cancer



Symptoms. Tips

During Breast Cancer Awareness Month, <u>Annual Reviews</u> presented expert reviews of leading research about breast cancer, encouraging women to get mammograms. Read this collection to understand risk factors, developments in diagnostic breast imaging, and research on the detection, diagnosis, and treatment of breast cancer.

Environmental and Genetic Factors

<u>Stress Management Interventions to Facilitate Psychological and Physiological</u> Adaptation and Optimal Health Outcomes in Cancer Patients and Survivors

MICHAEL H. ANTONI, **PATRICIA I. MORENO**, and **FRANK J. PENEDO**, *Annual Review of Psychology*

Cancers Attributable to Modifiable Risk Factors: A Road Map for Prevention

GIULIA COLLATUZZO and PAOLO BOFFETTA, Annual Review of Public Health

Molecular Heterogeneity and Evolution in Breast Cancer

JENNIFER L. CASWELL-JIN, CARINA LORENZ, and **CHRISTINA CURTIS**, *Annual Review of Cancer Biology*

The Multifaceted Role of Regulatory T Cells in Breast Cancer

KEVIN KOS and **KARIN E. DE VISSER**, Annual Review of Cancer Biology

Dietary Fat and Sugar in Promoting Cancer Development and Progression

MARCUS D. GONCALVES, BENJAMIN D. HOPKINS, and LEWIS C. CANTLEY, Annual Review of Cancer Biology

<u>Population Screening for Inherited Predisposition to Breast and Ovarian Cancer</u>

RANJIT MANCHANDA, SARI LIEBERMAN, FAIZA GABA, AMNON LAHAD, and EPHRAT LEVY-LAHAD, Annual Review of Genomics and Human Genetics

Environmental Determinants of Breast Cancer

ROBERT A. HIATT and JULIA GREEN BRODY, Annual Review of Public Health

Estrogen and Cancer

JING LIANG and YONGFENG SHANG, Annual Review of Physiology

Nutrition, Genetics, and Risks of Cancer

CHERYL L. ROCK, JOHANNA W. LAMPE, and RUTH E. PATTERSON, Annual Review of Public Health

Obesity in Cancer Survival

NIYATI PAREKH, URMILA CHANDRAN, and ELISA V. BANDERA, Annual Review of Nutrition

Genetic Predisposition to Breast Cancer: Past, Present, and Future

CLARE TURNBULL and **NAZNEEN RAHMAN**, Annual Review of Genomics and Human Genetics

Hereditary Breast Cancer

LEIF W. ELLISEN and DANIEL A. HABER, Annual Review of Medicine

Diagnostics, Progression, and Treatment

Pathogenesis of Triple-Negative Breast Cancer

FATEMEH DERAKHSHAN and **JORGE S. REIS-FILHO**, *Annual Review of Pathology: Mechanisms of Disease*

Combining Molecular and Radiomic Features for Risk Assessment in Breast Cancer

ALEX A. NGUYEN, ANNE MARIE MCCARTHY, and **DESPINA KONTOS**, *Annual Review of Biomedical Data Science*

<u>Next-Generation Estrogen Receptor-Targeted Therapeutics</u>

THARU M. FERNANDO, HEATHER M. MOORE, MATTHEW J. WONGCHENKO, and CIARA METCALFE, Annual Review of Cancer Biology

Regulation of Tumor Invasion by the Physical Microenvironment: Lessons from Breast and Brain Cancer

GARRETT F. BEEGHLY, KWASI Y. AMOFA, CLAUDIA FISCHBACH, and **SANJAY KUMAR**, *Annual Review of Biomedical Engineering*

Current Approaches to Germline Cancer Genetic Testing

ELENA M. STOFFEL and **JOHN M. CARETHERS**, Annual Review of Medicine

<u>Abbreviated Magnetic Resonance Imaging (MRI) for Breast Cancer Screening: Rationale, Concept, and Transfer to Clinical Practice</u>

CHRISTIANE K. KUHL, Annual Review of Medicine

Cancer Treatment in the Genomic Era

GARY J. DOHERTY, MICHELE PETRUZZELLI, EMMA BEDDOWES, SAIF S. AHMAD, CARLOS CALDAS, and RICHARD J. GILBERTSON, Annual Review of Biochemistry

<u>Breast Image Analysis for Risk Assessment, Detection, Diagnosis, and Treatment of Cancer</u>

MARYELLEN L. GIGER, NICO KARSSEMEIJER, and **JULIA A. SCHNABEL**, *Annual Review of Biomedical Engineering*

Novel Radiotherapy Techniques for Breast Cancer

JULIE A. BRADLEY and NANCY P. MENDENHALL, Annual Review of Medicine

<u>Determinants of Organotropic Metastasis</u>

HEATH A. SMITH and **YIBIN KANG**, Annual Review of Cancer Biology

Adjuvant Therapy for Breast Cancer

G. HORTOBAGYI, Annual Review of Medicine

Annual Reviews is a nonprofit publisher dedicated to synthesizing and integrating knowledge for the progress of science and the benefit of society.

You might want to send this to friends and family members for their information.

=========

Charlie Block Turns 90 on November 6th.



Captain Charlie Block growling for the camera in 1961

This comes four days before the Marine Corps celebrates its 248th.

Some of his memories from days with VMA-533"

- Taking off with 2-300 gallon tanks and a full buddy store with an engine that was only at 97% and barely clearing the gatehouse by housing.
- Crashing a party at San Juan posing as executives of a fictitious company and taking off the next morning from San Juan international with the speed brakes extended.
- Parties at the wildlife club followed by some to be unnamed bride dancing on a coffee table at the BOQ and losing her slip, which she deftly kicked to the side of the dance floor and continued with the party.
- Having a Limbo contest with a floor lamp in the BOQ at Guantanomo and being accosted by the duty officer who was threatened with being dragged across the runway and thrown off the cliff into the water if he didn't leave.

His take-away from those days?

"After that litany of memories there should be no doubt that I was cut out for a career in the USMC."

Many, many happy returns of the day, Charlie...and for you who are about to hit that magical waypoint, I'll be pleased proud to share your memories with the group.

========

Alfred Noyes' The Highwayman- Directed by Oliver Chater



The Oxford Book of Narrative Verse says The Highwayman is reputed to be "the best ballad poem in existence for oral delivery". It makes use of vivid imagery to describe surroundings ("the road was a gipsy's ribbon, looping the purple moor - ") and repetitious phrases to emphasise action ("A red-coat troop came marching - marching - marching - "). Almost half a century later, Noyes wrote, "I think the success of the poem... was because it was not an artificial composition, but was written at an age when I was genuinely excited by that kind of romantic story.

Video https://youtu.be/MNvBVJpa1h4?list=TLPQMjcxMDIwMjPMJJTISEdNQq

Text https://poets.org/poem/highwayman

The poem, set in 18th-century rural England, tells the story of an unnamed highwayman who is in love with Bess, a landlord's daughter. Betrayed to the authorities by Tim, a jealous ostler, the highwayman escapes ambush when Bess sacrifices her life to warn him. Learning of her death, he is killed in a futile attempt at revenge ("so they shot him down on the highway, like a dog upon the highway"). In the final stanza, the ghosts of the lovers meet again on winter nights.

It was written on the edge of a desolate stretch of land known as Bagshot Heath in Surrey, where Noyes, then aged 24, had taken rooms in a cottage. In his autobiography, he recalled: "Bagshot Heath in those days was a wild bit of country, all heather and pinewoods. 'The Highwayman' suggested itself to me one blustery night when the sound of the wind in the pines gave me the first line." The poem was completed in about two days

Boy, do I agree with the Oxford's appraisal. I've loved The Highwayman since I first read it when I was perhaps 12 years old. I can't help dragging it out again and again.

========

When Beethoven Invented Boogie-Woogie 100 Years Early!



pinterest

Beethoven wrote his 32nd and final sonata Op 111 in 1822. He was 51 years old. With it, he completed an extraordinary and unbroken sequence of masterpieces, dating back to his early sonatas Op 2 of 1795. Nevertheless, Beethoven declared, after its completion, that the piano is "after all an unsatisfactory instrument" and turned to the string quartet as his primary field of compositional research until his death in 1827.

The final sonata has two highly contrasting movements: a ferocious and defiant Allegro in C minor, and a beautiful Arietta with four variations followed by a long, rhapsodic and ethereal coda, which itself contains a transcendent 5th variation. The music in this video comes from the second movement's third variation: a study in compound rhythm, with wild syncopations, which seem to foreshadow the rhythmic innovations of Jazz and boogie-woogie, more than 100 years later.

Beethoven was almost completely deaf at the time he composed this music. Remarkably, his disability seems somehow to have enabled him to voyage into his own inner world of compositional exploration, driven primarily by his own visionary imagination.

https://youtu.be/Pz-AuBcmASA

========

The Making of a Steinway Piano



Youtube

Note By Note is a feature-length documentary that follows the creation of a Steinway concert grand, L1037. It explores the relationship between musician and instrument, chronicles the manufacturing process, and investigates what makes each Steinway unique.

Watch the evolution L1037 from forest floor to concert hall. Meet the craftsmen and women who shape L1037's personality. Discover the depth of the artist's relationship with their instrument. From the factory floor in Queens to Steinway Hall in Manhattan, each piano's journey is complex, spanning 12 months, 12,000 parts, 450 craftsmen, and countless hours of fine-tuned labor. Filmed in key Steinway locations, the factory, Steinway's reserve Bank, and private auditions. Note By Note is the first documentary to portray the patience, craft, and personality built into each Steinway.

https://youtu.be/6rAhps4AkT8?list=TLPQMjcxMDIwMjPMJJTISEdNQq

========

Amazon Announces Supply Chain by Amazon



The expansion of its logistics network that will allow its selling partners to move their products in bulk from Amazon's low-cost storage service, Amazon Warehousing Distribution (AWD), to any sales channel, including physical stores and warehouses, instead of only directly to consumers' doorsteps.

https://tcrn.ch/3EJdZny

========

Amazon's Opulent Image

Forget the recycled look. Bling is now in.



Amazon HQ2, the corporate site selection project, was a symbol of the tech industry's economic muscle. Now it stands as a palace built for a former dynasty.

Just across the Potomac River from Washington, DC, in an office park tucked between the Pentagon and Ronald Reagan Washington National Airport, sit two gleaming, 22story towers, home to 8,000 Amazon employees.

The company started moving workers into its Metropolitan Park development this year, and the breaking in continued a few weeks ago when the company held its first big news conference at the site, a <u>product unveiling for Alexa devices</u> that had been held in prior years at the Seattle headquarters.

During a tour that week, it was somewhere between the outdoor terrace with electric grills, the plant-lined staircase and the sconces by the elevator that I realized this was built for an Amazon of another era.

For most of Amazon's life, it was deliberately not a fancy-light-fixtures kind of company. In contrast to its free-lunch-and-laundry-service peers, Amazon has always liked to brag that Jeff Bezos built one of the company's first desks out of a wooden door and four-by-fours.

About five years ago, Amazon's Seattle facilities chief told me with pride that employees were free to make their own drip coffee in the kitchen — if they bought the coffee grounds themselves.

HQ2 is not that. The company's south tower, called Merlin, evokes a DC-area hotel of the 1930s or '40s. Black paneling lines the walls of common areas. Wood touches and plant arrangements are everywhere.

Some areas at HQ2 contain "team suites" with couches and meeting rooms, which can be reserved for groups that want to spend their days away from desks. The spaces were designed to encourage workers to leave the comforts of home and come into the office. (Another incentive is to not get fired.) "The cubicle isn't enough anymore," said Brian Earle, of ZGF, the lead architect.

These touches extend to the Amazon Visitor Landing, a museum the company built for itself that doubles as a visitor center. It was here that I met Patrick Phillippi, an Amazon employee charged with carrying the corporate banner at Arlington-area community meetings, delivering cookies to neighboring buildings (an apology for construction noise) and slapping the Amazon logo on the back of local youth soccer jerseys.

That's another contrast to Seattle, where for its first couple of decades the company was mostly unresponsive to local groups and politicians. That left the company short on political capital when the city rolled out a payroll tax on large employers. "We can get it right from the beginning," said Brian Huseman, Amazon's HQ2-based vice president of public policy.

Amazon's museum also features a scale model of the company's full proposed campus, which, in addition to the two occupied towers, includes a development up the street, three more skyscrapers and a soft-serve ice cream cone-shaped workspace called the Helix.

The whole thing is enough to make someone forget Amazon's tradition of, and recent return to, austerity. The company has terminated 27,000 workers since November, meant as a corrective measure after a massive expansion during the Covid-19 pandemic. For some teams, <u>headcount has been frozen</u> for more than a year.

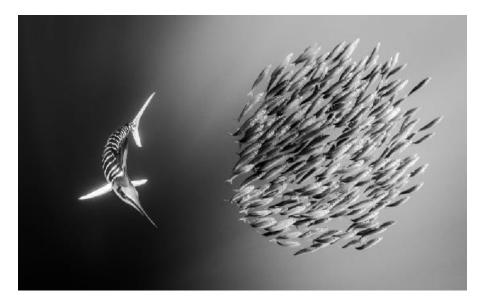
The land where Amazon plans to build the Helix and its other structures is an empty lot with some trees. Amazon <u>postponed development indefinitely</u>, Bloomberg first reported in March. Huseman said the company is still committed to the project and the 25,000 jobs it promised northern Virginia — in exchange for hundreds of millions of dollars in <u>tax breaks</u> — but offered no update on timing.

From door desk to gourmet coffee bars onsite, HQ2 was one of the last grand gestures of the Bezos era. It falls to his successor, Andy Jassy, to decide whether to resume the project as designed or opt for a more frugal alternative.

By Matt Day for Bloomberg Tech Daily

========

Christian Vizl Documents Ocean Life in Black and White



His images tell myriad stories of beauty, passion and conservation.

https://oceanographicmagazine.com/features/black-and-white-photographer-christian-vizl-interview/

========

Protecting Pinnipeds



"I wanted to start a project to help all seals impacted by humans."

In the years since Celia Kujala first discovered her passion for underwater photography, she has won numerous awards, was a finalist in the 2020 Ocean Photography Awards, and has been made a member of The Explorers Club as well as the Ocean Artists Society.

https://bit.ly/3EWjWOb

========

Kelvin Kiptum Breaks Marathon World Record with Chicago Win



Pinterest

Kenyan Kelvin Kiptum shattered the men's marathon world record in Chicago on Sunday, winning in 2 hours, 35 seconds to beat compatriot Eliud Kipchoge's previous mark by more than 30 seconds.

Kiptum smashed the London Marathon course record this year and was determined to make magic again in the Windy City as he sped up through the 35-kilometer mark before thrusting his arms in the air to cheers from the crowd down the final stretch.

He had not originally targeted the record but said he knew that twice Olympic champion Kipchoge's previous mark of 2:01:09 was within reach in the final kilometers, as he dug deep to make history.

"I knew one day I would be a world record holder," Kenya's Kelvin Kiptum said after shattering the men's marathon mark by more than 30 seconds. Patrick Gorski/USA Today Sports

He broke the tape 3 minutes, 27 seconds ahead of compatriot Benson Kipruto, while Belgian Bashir Abdi finished third in 2:04:32.

Kiptum and fellow Kenyan Daniel Mateiko broke away from the rest of the pack by the 10-kilometer mark, and the pair were more than $1\frac{1}{2}$ minutes ahead of the rest of the field by the halfway point.

Running in only his third marathon, Kiptum made it a one-man race at 35 kilometers and decided to take advantage of Chicago's famously flat course as he shifted into another gear.

"I saw the time in front of me. I said let me try; maybe I can run under 2:00," he said. "I knew one day I would be a world-record holder."

========

Bears, Birds and Kangaroos: Comedy Wildlife Photo Awards



The finalists in this year's Comedy Wildlife Photography Awards have been announced. Here is a selection of those that were whittled down from thousands of entries submitted from professional and amateur photographers from around the world, along with comment from the photographers. The winners will be announced on 23 November.

========

How Often Should You Wash Your Jeans?



Businessinsider.com

It turns out those of us ancients may have been right in adopting screwy ways to keep our trusty Levis out of the washing machine.

https://bit.ly/46sR7oN

========

Beautiful Series by Rueben Wu Shot Entirely With an iPhone 15

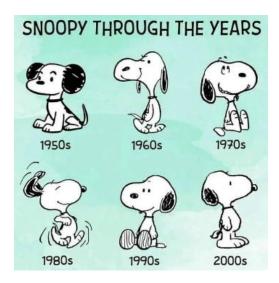


blazepress.com

Reuben Wu employs drones, lighting, and stunning, rocky terrain to create otherworldly scenes. Feeling surreal and futuristic, his work feels even more special knowing that it is made the hard way, with real light sources used to create orbs, rings, and halos of light.

https://bit.ly/3RZQwGQ

========



========

Looking for Lakefront Property in Death Valley?

There's still time to see a rare oasis that formed in Death Valley.



Visitors walk along a rare lake that formed at Death Valley National Park after Hurricane Hilary.

(Image credit: Mario Tama via Getty Images)

An oasis teeming with ponds and wildflowers has formed at Death Valley National Park, one of the hottest and driest places in the world, following a major hurricane this summer.

Hurricane Hilary, which hit the area in August, provided some much-needed rainfall for the national park, located in eastern California, according to CNN.

"It is definitely a rare and special event," Death Valley National Park spokesperson Abby Wines told CNN. She added that this kind of precipitation event occurs only about once a decade.

The hurricane arrived in Death Valley on Aug. 19 and continued dousing the desert for 24 hours. Records indicate that 2.2 inches (5.6 centimeters) of rain was measured at Furnace Creek, a site inside the 5,270-square-mile (13,650 square kilometers) national park, breaking the previous record of 1.7 inches (4.3 cm), set in 2022, according to the National Park Service (NPS).

A month after the storm, park officials took a boat onto the ephemeral lake that had formed at Badwater Basin, a salt flat that marks the park's lowest point, and measured its depth at roughly 1 foot (0.3 meters). In the time since, the water has receded to only a few inches.

"I wish we knew exactly how long it will last," Wines told CNN, but she estimated that the pool could hang around until November. If visitors want to see the oasis for themselves, "the sooner, the better," she suggested.

Due to flooding, officials shut down the park temporarily. The park has since reopened, but several roads remain closed, according to the NPS.

"Every road in the park was damaged," Wines told CNN. "We still have a lot of work ahead of us. It was a lot of rain [from Hilary], and it's going to take a while for all that water to evaporate — even in the desert."

The last time a lake sprang up in Death Valley was in 2019, when a 10-mile-long (16 kilometers) body of water formed.

By Jennifer Nalewicki for Live Science

========





=========

Heavy Metal on Strings: Shostakovich String Quartet No. 8



YouTube

String Quartet No. 8 in C minor, 2nd movement by Dmitri Shostakovich, performed live by Dover Quartet.

https://youtu.be/Vv3ghWE2txg

========

Teen Screen Time: Insights from a Gallup Survey

This is a recent editorial by Shelly Palmer, whose The Palmer Group works on strategy and solutions with Fortune 500 companies including Samsung, Ford, Verizon, Meta, Nike, Oracle, Mastercard, and the NHL on the power and promise of Web3 and generative AI.



mothermag.com

A recent Gallup survey revealed significant insights into U.S. teenagers' social media habits. More than 51% of teens spend an average of 4.8 hours daily on social platforms. Age and gender differences are evident: 13-year-olds average 4.1 hours, 17-year-olds reach 5.8 hours, and girls spend nearly an hour more than boys.

YouTube and TikTok are the dominant platforms, with usage times of 1.9 and 1.5 hours daily, respectively, while Instagram lags behind at 0.9 hours.

The study also highlights the influence of personality and parental restrictions. Adolescents with lower levels of self-control spend about 1.2 hours more on social media than their more conscientious counterparts. Those with strict parental screen time rules report 1.8 hours less time online. Unsurprisingly, insights from the survey suggest that design strategies by tech companies encourage prolonged use.

Taken with the current trend toward synthetic companions, this paints a generational picture that commands attention from every parent, caregiver, and guardian... because it already has the attention of every advertiser and marketer.

========

How Counterfeit Money Actually Works



Jeff Turner counterfeited over \$1 million in US currency. He forged the 1996-series \$100 bill and later the 2013 "blue note." He was indicted on federal conspiracy charges in 2019 and cooperated with the Secret Service, eventually serving 10 months in prison. According to Turner, the Secret Service said the bills he was manufacturing were the highest quality they'd seen in over 25 years.

https://youtu.be/FGAVpJfG1yQ

Turner speaks to Insider about the materials and processes required to make fake money. He talks through how to spot a fake bank note. He also discusses cartel forgeries from Colombia and Peru, and the "supernotes" the US has accused North Korea of making. Nowadays, Turner works as a printer in Knoxville, Tennessee. He speaks about spotting fakes and frauds on his YouTube channel.

A good primer on counterfeiting.

========

Evolution, Physics, and Robotics Used to Decode Insect Flight

Some insects' wings flap without brain input. Robots help us understand how.



A hawk moth in flight.

https://bit.ly/3Sa8yGs

Different insects flap their wings in different manners. Understanding the variations between these modes of flight may help scientists design better and more efficient flying robots in the future. However, decoding insect flight is not as easy as it sounds.

=========

Humans and Neanderthals Mated 250,000 Years Ago



It was previously believed that humans and Neanderthals first encountered each other around 75,000 years ago.

(Image credit: Shutterstock)I

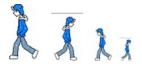
A comparison of the genomes of a Neanderthal who lived 120,000 years ago in Siberia with those from modern humans in sub-Saharan Africa has revealed insight into the migratory and interbreeding history of both species.

https://bit.ly/3Mkpzd5

And doing it ever since, I betcha.

========

My Walking Thoughts



For Sunday November 5 2023

=======

Dead Bug! - A Tribute to Military Aviators



(In Victory, you deserve champagne. In Defeat, you need it!)

As we get older and we experience the loss of old friends, we begin to realize that maybe we bullet-proof aviators won't live forever. We aren't so bullet-proof anymore. We ponder...if I we're gone tomorrow, "Did I say what I wanted to my Brothers?" The answer is "No!" Hence, the following random thoughts:

When people ask me if I miss flying, I always say something like, "Yes, I miss the flying because when you are flying, you are totally focused on the task at hand. It's like nothing else you will ever do (well, almost). But then I always say, "However, I miss the squadron and the guys even more than I miss the flying."

"Why", you might ask? They were a bunch of aggressive, wise ass, cocky, insulting, sarcastic bastards in smelly flight suits who thought a funny thing to do was to break wind to see if they could clear a room. They drank too much, they chased women, they flew when they shouldn't, they laughed too loud and thought they owned the sky, the bar, and generally thought they could do everything better than the next guy.

They flew planes that leaked, that smoked, that broke, that couldn't turn, that burned fuel too fast, that never had working autopilots or radars, and with systems that were archaic next to today's new generation aircraft.

But a little closer look might show that every guy in the room was sneaky smart and damn competent and brutally handsome in their own way! They hated to lose or fail to accomplish the mission and seldom did. They were the laziest guys on the planet until challenged and then they would do anything to win.

They would fly with wing tips overlapped at night through the worst weather with only a little 'Formation' light to hold on to, knowing their flight lead would get them on the ground safely.

They would fight in the air knowing the greatest risk and fear was that another fighter would arrive at the same six o' clock at the same time they did. They would fly in Harm's way and act nonchalantly as if to challenge the grim reaper.

When we flew to another base we proclaimed that were the best squadron on the base as soon as we landed. Often, we were not invited back. When we went into an O' Club, we owned the bar. We were lucky to be the Best of the Best in the military. We knew it and so did others. We found jobs, lost jobs, got married, got divorced, moved, went broke, got rich, broke some things, and knew the only thing you could count on -- really count on -- was if you needed help, a fellow aviator would have your back.

I miss the call signs, nicknames and the stories behind them. I miss getting lit up in an O' Club full of my buddies and watching the incredible, unbelievable things that were happening. I miss the crew chiefs saluting as you taxied out of the flight line. I miss lighting the afterburners, if you had them, especially at night. I miss going straight up and straight down. I miss the cross countries. I miss the dice games at the bar for drinks. I miss listening to BS stories while drinking and laughing until my eyes watered. I miss three-man lifts. I miss naps in the Squadron with a room full of aviators working up new tricks to torment the sleeper. I miss flying upside down in the Grand Canyon and hearing about flying so low that boats were blown over, I miss coming into the break hot and looking over and seeing three wingmen tucked in tight ready to make the troops on the ground proud. I miss belches that could be heard in neighboring states. I miss putting on ad hoc Air Shows that might be over someone's home or farm in faraway towns.

Finally, I miss hearing DEAD BUG! called out at the bar and seeing and hearing a room full of grown men hit the deck with drinks spilling and chairs flying as they roll in the beer and kick their legs in the air—followed closely by a Not Politically Correct *Tap Dancing and Singing spectacle* that couldn't help but make you grin and order another round...and try to stop the fan over the bar from turning by using your head as a speed brake.

I am a lucky guy and have lived a great life! One thing I know is that I was part of a special, really talented bunch of guys doing something dangerous and doing it better than most. Flying the most beautiful, ugly, noisy, solid aircraft ever built ... an aircraft that talked to you and warned you before she spanked you! Supported by ground troops committed to making sure we came home! Being prepared to fly and fight and die for America. Having a clear mission. Having fun.

Most of the time we box out bad memories but never the hallowed memories of our fallen comrades. We are often amazed at how good war stories never let truth interfere and how they get better with age. We are lucky bastards able to walk into a Squadron or a bar and have men we respect and love to shout our names, our call signs, and know that this is truly where we belong.

This came from old buddy and F-4D (Skyray) pilot, Pat Healy, whom I've known since summer camp in 1949...joined by memorable—a few nameless--events in other days.

I've searched in vain for a photo of 'the boys' participating in a Dead Bug evolution but found nary a one. The practice, however, was memorialized in the Movie, The Great Santini, so you may find it on YouTube or another movie archive.

========