

@ Emergent Futures | New Around the World | What Are We Writing About

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Extra links that we couldn't fit in this month's newsletter...



What's Emerging

Gene 'fix' in egg prevents inherited diseases in monkeys

A genetic tweak of the unfertilized eggs of macaque monkeys effectively prevented the transmission of diseases typically passed down through the maternal line, U.S. scientists reported. The hope is that the method could prevent inherited diseases passed from human mothers to their children through mutated DNA in cell "power plants" called mitochondria. [Read more...](#)

The claim: Lack of sleep increases the risk of catching a cold

Studies have demonstrated that poor sleep and susceptibility to colds go hand in hand, and scientists think it could be a reflection of the role sleep plays in maintaining the body's defences. [Read more...](#)

Light switch for bladder control

A startup out of Case Western Reserve University in Cleveland plans to commercialize molecular "light switches," a genetic technology that has rapidly taken root in the research world.....the technology involves injecting small snips of DNA into living animals to allow specific neurons to be controlled with light. The company, called LucCell, will focus first on developing therapies to restore bladder control in paralyzed people. [Read more...](#)

3D platform aids cancer research

A THREE-DIMENSIONAL technology platform that could enhance testing of treatments across a range of fields such as cancer research is being readied for commercialisation. [Read more...](#)

Beyond the biopsy: A tiny monitor for cancer

DOCTORS doing a needle biopsy to analyse tissue for cancer may one day add a second step to the procedure: depositing a tiny device at the site to report on growth of a tumour — and even the effects of chemotherapy. [Read more...](#)

Proven: Wednesday is the worst day of the week!

Your folks may push you to school but when it comes to wisdom there is more to be learnt from Calvin and Hobbes and Garfield than any teacher. A recent research by two American scientists shows that the most miserable day of the week is Wednesday, and this was something I learnt from Garfield as a kid. [Read more...](#)

Artificial tongues pave way for a new generation of robots

The world's first electronic tongue converts the chemical properties of what we eat into a visual image which gets translated into taste in the brain, thanks to all the receptors. The results are apparently 100% accurate.

[Read more...](#)

How your online footprint predicts the future

Real time web search like Twitter messages, can give a clue of what people around the world are thinking or doing at any moment. The latest research from Google, suggests that online footprint including real time results could be even more powerful: they may reveal the future as well as the present. [Read more...](#)

Iran's web spying aided by western technology

The Iranian regime has developed, with the assistance of European telecommunications companies, one of the world's most sophisticated mechanisms for controlling and censoring the Internet, allowing it to examine the content of individual online communications on a massive scale. [Read more...](#)

A 21st century education

For as long as Americans have been paying the mortgage, we've been transfixed by the home of tomorrow. U.S. News asked a handful of experts to sketch out their version of the home of the not-so-distant future. Here's a peek at eight innovations that may be in store. [Read more...](#)

Computer says no

What's more important, the quality of a decision or who makes it? This is an academic question for most people, but what about the day when machines take over from people in matters of life and death? [Read more...](#)

Mind control - closer than you think

What if you could change the way your brain works, without drugs or surgery? Christopher deCharms thinks we can, using functional Magnetic Resonance Imaging (or fMRI). He believes this rapidly emerging technology will allow us to take charge of our gray matter in new ways — and sooner than you might think. (TED video) [Read more...](#)

Scientists find evidence some forms of prostate cancer 'may be caused by virus'

Some forms of prostate cancer may be caused by a virus, raising the possibility of a vaccine being developed to combat it, say scientists. Researchers examined more than 300 tumours and found the infection, known as XMRV, in almost a third of them. [Read more...](#)

Enlightened Chinese farmer branches out by growing pears shaped like baby Buddha

For Britain's struggling fruit farmers, things could be about to go even more pear-shaped. A Chinese farmer has invented baby-shaped pears - and he is planning to export his novel idea over here. [Read more...](#)

Snoring treatment made easy

Research could spell the end for invasive medical tests for obstructive sleep apnoea. [Read more...](#)

Solar panels built into roads could be the future of energy

The Department of Energy just gave \$100,000 to upstart company Solar Roadways, to develop 12-by-12-foot solar panels, dubbed "Solar Roads," that can be embedded into roads, pumping power into the grid. The panels may also feature LED road warnings and built-in heating elements that could prevent roads from freezing. [Read more...](#)

Is instant translation in any language now possible?

Kristin Precoda, a speech translation researcher at SRI International, demos a new translation system. Originally designed for the military to mediate a conversation between English and Iraqi Arabic, the translator is being developed for civilian use in the fields of medicine and general conversation. [Read more...](#)

Meters for the smart grid

Researchers say new energy infrastructure isn't nearly secure enough. [Read more...](#)

KroneHit blasts mosquitoes

Vienna, Austria-based music station KroneHit is offering listeners an unusual summer prize — a mosquito-free environment. Since mid-July, the station has embedded a 14,850 Hz tone in its audio signal in an effort to discourage mosquitoes from biting KroneHit listeners. [Read more...](#)

CBS to run video ad in EW print magazine

An upcoming issue of Entertainment Weekly's print edition will be embedded with a video player that will run ads for CBS shows and Pepsi. [Read more...](#)

Tetris 'could boost brain power'

The classic computer puzzle Tetris may boost brain power, American scientists have discovered. [Read more...](#)

'Synthetic tree' claims to catch carbon in the air

Scientists in the United States are developing a "synthetic tree" capable of collecting carbon around 1,000 times faster than the real thing. [Read more...](#)

College for \$99 a month

The next generation of online education could be great for students—and catastrophic for universities. [Read more...](#)

HP plays the print app game; Will you buy into 'Printing 2.0'?

Hewlett-Packard has unveiled a "print app" marketplace where consumers can print specialized content sans a PC. A print app is lightweight software designed to work with HP's high-end printer. These apps will allow you to print custom content without a PC. HP calls it Printing 2.0. [Read more...](#)

Complete Genomics sequences 14 genomes for \$4K each

Complete Genomics has pulled off the amazing feat of sequencing 14 full human genomes for a group of customers in the medical research field at a cost of only about \$4,000 each--down from about \$250,000. [Read more...](#)

Google micropayments coming: Can it save newspapers?

In a twist that's probably a surprise to almost no one, the potential suitor for saving the newspapers from the bugaboo of Google might well be... Google. The company submitted a document indicating it is in the process of building a sophisticated micropayments system based on Google Checkout that would allow publishers to charge for individual pieces or bundles of content. [Read more...](#)

Capsules for self-healing circuits

Nanotube-filled capsules could restore conductivity to damaged electronics. [Read more...](#)

Can wind power China's energy future?

Study: Wind energy could cover country's projected electric needs for 2030. [Read more...](#)

Half of the fish consumed globally is now raised on farms

Aquaculture, once a fledgling industry, now accounts for 50 percent of the fish consumed globally, according to a new report by an international team of researchers. And while the industry is more efficient than ever, it is also putting a significant strain on marine resources by consuming large amounts of feed made from wild fish harvested from the sea. [Read more...](#)

Will we eventually upload our minds?

Bruce Katz received his Ph.D. in artificial intelligence from University of Illinois. Katz believes we are on the cusp of a broad neuro-revolution, one that will radically reshape our views of perception, cognition, emotion and even personal identity. [Read more...](#)

Ring concept will turn your hands into a mobile phone

Most of us should know the universal hand sign for "on the phone" or "give me a call". BCK, which collaborates with companies and organizations to transform ideas into products, is going to literally turn that hand sign into a mobile phone. [Read more...](#)

Scientists find lifesaver for India – rice that doesn't have to be cooked

It sounds too good to be true. But if Indian scientists are correct, hundreds of millions of people across the

subcontinent could benefit from a specially-developed strain of rice that "cooks" simply by being soaked in water. [Read more...](#)

High-speed video of locusts could help make better flying robots

A new study may inspire aeronautical engineers to be more flexible with their designs. That's because the bends and twists in locusts' flexible, flapping wings power the insects' extraordinary long-distance flights. [Read more...](#)

Forrester – The social media system has tipped

In 2009, more than four out of five online Americans are active in either creating, participating in, or reading some form of social content at least once a month. [Read more...](#)

Feds launch Apps.gov; Cloud computing players salivate

The US Federal government launched Apps.gov, a site designed to be a storefront for approved cloud computing applications. The move is designed to streamline application adoption at federal agencies. [Read more...](#)

Canadian scientist aims to turn chickens into dinosaurs

After years spent hunting for the buried remains of prehistoric animals, a Canadian paleontologist now plans to manipulate chicken embryos to show he can create a dinosaur. [Read more...](#)

Twitter users get phone calls

Twitter users will, for the first time, be able to make voice calls directly to each other through the microblogging service. [Read more...](#)

New "H-Prize" offers \$1 million for improved hydrogen storage

US DOE has launched the H-Prize competition, offering a \$1 million award to an individual or team that creates the most advanced materials for hydrogen storage in vehicles. [Read more...](#)

Giant robotic cages to roam seas as future fish farms?

In the future, giant, autonomous fish farms may whirl through the open ocean, mimicking the movements of wild schools or even allowing fish to forage "free range" before capturing them once again. [Read more...](#)

Scientists design plant filtration system that lets you drink your own SHOWER water

Eco-thinkers have come up with an amazing new way to create drinking water - by putting plants in the bottom of a shower. After you have washed in the special eco-shower the water passes down into a series of physical filters and is treated by plants such as reeds and rushes growing around your feet. [Read more...](#)

Climate tipping point defined for US crop yields

While news reports and disaster movies remind us about tipping points for Arctic melt and sea level rise, some things closer to home get less attention. Take food supply: new modelling studies show that there are climate tipping points here too, beyond which crop yields will collapse...the damaging effects above 29 °C are staggeringly large." [Read more...](#)

Robotic fish could patrol waterways

Schools of newly-designed robotic fish could one day patrol waterways, swimming around as fluidly as the real fish they're based on, looking for environmental pollutants and inspecting submerged structures, such as boats and oil pipelines. Story and video. [Read more...](#)

Engineering earth 'is feasible'

A UK Royal Society study has concluded that many engineering proposals to reduce the impact of climate change are "technically possible". [Read more...](#)

Asus's new e-reader looks more like a real, live book

The company's forthcoming reader sports a dual-screen, two-page layout and (yes) color. [Read more...](#)

New earthquake-resistant design pulls buildings upright after violent quakes

How exactly does one build an earthquake-proof building? If you answered "make sure the structure rocks completely off its foundation," you're actually in good company. A research team led by Stanford and the

University of Illinois successfully tested a structural system that holds a building together through a magnitude-seven earthquake, and even pulls it back upright on its foundation when the quaking stops. [Read more...](#)

Plasmobot: The slime mould robot

In recent years, single-celled organisms have been used to control six-legged robots, but Andrew Adamatzky at UWE wants to go one step further by making a complete "robot" out of a plasmodium slime mould. [Read more...](#)

HSBC bids farewell to dollar supremacy

The sun is setting on the US dollar as the ultra-loose monetary policy of the US Federal Reserve forces China and the vibrant economies of the emerging world to forge a new global currency order, according to a new report by HSBC. [Read more...](#)

Oil rig of the future: A solar panel that produces oil

BANGALORE, India—In the ongoing hunt for alternative fuel sources that are also cost-effective, researchers are looking into making biofuel from genetically engineered diatoms, a type of single-celled algae with shells made of glasslike silica. [Read more...](#)

Google Docs items to show up in search

Google plans to make all publicly published Google Docs documents, presentations and spreadsheets available for search on the web. [Read more...](#)

Private firms preparing for moon flights

Lured by millions of dollars in prize money, teams of private firms aren't waiting for NASA to figure out if, when and how to get back to the moon. They're preparing to go themselves. [Read more...](#)

Think flying economy is bad now?

New aircraft design puts passengers face-to-face in rows for budget travel and earlier this year Ryanair looked into vertical seating options. [Read more...](#)

3D TV: Now leaping out of the cinema and into a living room near you

3D is being trialled by a number of TV makers and the BBC has said it may even broadcast part of the London 2012 Olympics in the format. [Read more...](#)

Panasonic's robotic bed transforms into a mobile chair, makes standing up obsolete

Mobility-impaired patients and layabouts alike can rejoice at the debut of Panasonic's robotic bed that transforms into a wheelchair. Human nurses and hospitals may also breathe a tiny sigh of relief. [Read more...](#)

You can't trust a tortured brain: Neuroscience discredits coercive interrogation

According to a new review of neuroscientific research, coercive interrogation techniques used during the Bush administration to extract information from terrorist suspects are likely to have been unsuccessful and may have had many unintended negative effects on the suspect's memory and brain functions. [Read more...](#)

Leave no child inside

Louv -- who popularized the idea of 'nature-deficit disorder' in his widely acclaimed book, Last Child in the Woods -- has found emerging allies in residential developers who are joining the movement to return children to nature. [Read more...](#)

Nap your way to creativity

People in need of a creative boost should take a long nap, according to new research highlighted by ScienCentral. The researchers found that naps increase people's ability to solve problems creatively, but only if the nap includes REM, the deep sleep when dreams occur. [Read more...](#)

Reverse aging: Easier than you think

Here's an innovative way to lower health care costs: Set everyone's biological clock back 20 years. A landmark experiment suggests reverse aging needn't be relegated to the realm of science fiction. [Read more...](#)

A few songs a day keep the doctor away

According to research out of the University of Belgrade at Serbia, listening to music every day might also be good for the heart. Predrag Mitrovic just presented his study of 740 patients to the European Society of Cardiology 2009 Congress, demonstrating that 12 minutes of music a day reduces blood pressure, heart rate, and patient anxiety. [Read more...](#)

