

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



What's Emerging

We'll soon be building new hearts to order in just 24 hours say stem cell scientists

Although the research has so far been used only to produce a new rat's heart, experts believe the prospects for the future are limitless. [Read more...](#)

Augmented reality system lets you see through walls

If only drivers could see through walls, blind corners and other dangerous road junctions would be much safer. Now an augmented reality system has been built that could just make that come true. [Read more...](#)

Evolutionary past may determine how we choose leaders

Why did Barack Obama win the US election and did the fact he is over six feet tall influence the voters? Nearly three quarters of business failures in corporate America are due to managerial incompetence ... new approaches might be useful in understanding when and why human leadership succeeds and fails -- including Nature's own lessons on what works best in different contexts. [Read more...](#)

For the first time, geneticists diagnose disease through whole-genome analysis

"We have shown that one can use whole genome sequencing to make clinically meaningful diagnoses- it is technically feasible . . . and can provide new clinical insight that directs treatment." [Read more...](#)

NEC Tele Scouter wearable computer goes on sale in 2010

Wearable computer concepts aren't new, but NEC are hoping to drive the idea into the mainstream market. [Read more...](#)

Mantis shrimp eyes could show way to better DVD and CD players

The remarkable eyes of a marine crustacean could inspire the next generation of DVD and CD players, according to a new study from the University of Bristol. [Read more...](#)

Video: Army's robot-man walks like the real thing

The makers of the eerily lifelike robotic mule have a new creation: a machine that walks around like a real human being. [Read more...](#)

A few coffees a day keeps liver disease at bay

Researchers at the U.S. National Cancer Institute have found another good reason to go to the local espresso bar: several cups of coffee a day could halt the progression of liver disease. [Read more...](#)

New processor will feature 100 cores

Forget dual-core and quad-core processors: A semiconductor company promises to pack 100 cores into a processor that can be used in applications that require hefty computing punch, like video conferencing, wireless

base stations and networking. By comparison, Intel's latest chips are expected to have just eight cores. [Read more...](#)

GE: 'Stethoscope for the 21st century'

At the Web 2.0 Summit in San Francisco, GE Chief Executive Jeff Immelt introduces a handheld ultrasound gadget called Vscan. Immelt believes that the new device will make it easier for clinicians to monitor the human body in a variety of settings, including countries where medical professionals cannot afford larger imaging systems. [Read more...](#)

Bumper brains

Science can help us stretch the limits of the human mind: but should we embrace brain enhancement, despite the risks? [Read more...](#)

Industrial robot hones virtual autopsies

THE small industrial robot that dominates the room is in many ways much like any other. A robotic arm smoothly wields grippers and probes - always accurate and never tired. But rather than working on cars or computers, this robot is processing human corpses. [Read more...](#)

School chooses Kindle; are libraries for the history 'books'?

Cushing Academy is the very model of a modern New England boarding school. But in the past few years, the old library was in danger of becoming a relic. Its 20,000-book collection was barely used, administrators say. Spot checks last year found that, on some days, fewer than 30 books, or about .15%, circulated. Last summer it began getting rid of most of the library's books. In their place: a fully digital collection. [Read more...](#)

High-energy batteries coming to market

Rechargeable zinc-air batteries can store three times the energy of a lithium-ion battery. [Read more...](#)

Fastest supercomputer in the world models dark matter, HIV family tree simultaneously

In November of last year, scientists at Los Alamos National Laboratory switched on Roadrunner, the world's fastest computer. [Read more...](#)

Muscle-bound computer interface

Forearm electrodes could enable new forms of hands-free computer interaction. [Read more...](#)

Robot army could explore space, researchers say

Instead of spending time and money planning a manned mission to Mars, why not send an army of robots into space to do all the work? [Read more...](#)

OOOQ - A spill proof cooking coach

While tech fiends are anxiously awaiting web tablets made by Apple and TechCrunch, a recently-launched French touchpad device could become the darling of culinary geeks. [Read more...](#)

MySkyStatus

While you're in the air, MySkyStatus sends altitude, location, departure and arrival updates automatically to your Facebook and Twitter pages. [Read more...](#)

Software that fixes itself

A new tool aims to fix misbehaving programs without shutting them down. [Read more...](#)

Why Google should fear the social web

Google made a number of announcements last week, including one that will see it partner with San Francisco-based Twitter to get paid access to the micro messaging service's data feed. [Read more...](#)

A new robotic hand

A team of scientists from Italy and Sweden has developed what is believed to be the first artificial hand that has feeling. Video [Read more...](#)

French ideal of bicycle-sharing meets reality

This latest French utopia has met a prosaic reality: Many of the specially designed bikes, which cost \$3,500 each, are showing up on black markets in Eastern Europe and northern Africa. Many others are being spirited away for urban joy rides, then ditched by roadsides, their wheels bent and tires stripped. [Read more...](#)

New camera promises to capture your whole life

A camera you can wear as a pendant to record every moment of your life will soon be launched by a UK-based firm. Originally invented to help jog the memories of people with Alzheimer's disease, it might archive entire lives. [Read more...](#)

Report: VoIP sales top \$20 billion in first half; more growth to come

"Demand for residential and business VoIP services continues to grow even as spending in other communication areas tightens. For the first half of 2009, the worldwide VoIP services market grew to \$20.7 billion. [Read more...](#)

Truck 2020: Overcoming turbulent times for sustainable prosperity

IBM study on the trucking industry. In the face of multidimensional challenges, the truck industry finds itself in need of immediate transformation. [Read more...](#)

Researchers ask how best to engineer the planet

A group of academics on Friday considered the ultimate engineering challenge: building machines to stabilize the earth's climate. [Read more...](#)

NSA to store yottabytes of surveillance data in Utah mega repository

The NSA is constructing a datacenter in the Utah desert that they project will be storing yottabytes of surveillance data. And what is a yottabyte? There are a thousand gigabytes in a terabyte, a thousand terabytes in a petabyte, a thousand petabytes in an exabyte, a thousand exabytes in a zettabyte, and a thousand zettabytes in a yottabyte. [Read more...](#)

The brain downshifts to simpler ways of processing information when lacking sleep

A study in the Nov.1 issue of the journal Sleep shows that sleep deprivation causes some people to shift from a more automatic, implicit process of information categorization (information-integration) to a more controlled, explicit process (rule-based). This use of rule-based strategies in a task in which information-integration strategies are optimal can lead to potentially devastating errors when quick and accurate categorization is fundamental to survival. Examples include driving, making a medical diagnosis and performing air-traffic control. [Read more...](#)

Floating cities and climate change

Made from high strength concrete and masses and masses of polystyrene, the pod-like city will rise with sea levels, making this a genuine option for the Netherlands if the worst climate predictions come true. [Read more...](#)

Nanoparticle coating prevents freezing rain buildup

Preventing the havoc wrought when freezing rain collects on roads, power lines, and aircrafts could be only a few nanometres away. [Read more...](#)

'Fear detector' being developed that will be able to sniff out terrorists

A device that smells human fear is being developed by British scientists and could soon be sniffing out anxious terrorists. **Paul Higgins: Imagine all the people being singled out who are just scared of flying!!!** [Read more...](#)

Dollar each way on the future

LONG-TERM forecasts for the Australian dollar are diverging, with strategists forecasting the dollar will sit between US68¢ and US90¢ in a year, highlighting global economic uncertainty. [Read more...](#)

Twitter finds growth abroad with 58.4 million global visitors in September

Twitter's growth these days seems to be coming from abroad. ComScore data shows a 6.7 percent jump from

August to September in worldwide visitors to 58.4 million (which translates to 949 percent increase from a year ago). The 20.9 million visitors from the U.S., in contrast, has remained flat since June. [Read more...](#)

What's black and white and red all over? Top newspaper circulation numbers

The Audit Bureau of Circulations has released the numbers for the top 25 daily newspapers in the U.S. based on their weekday circulation numbers. Not surprisingly, the numbers are bad - okay, awful. Exactly one of the top newspapers has shown growth when compared to where they were 6 months ago. That paper is The Wall Street Journal. [Read more...](#)

Google's new mobile app cuts GPS nav companies at the knees

Google released a new mobile navigation app 28th October and GPS navigation companies such as Garmin and Tom Tom saw their shares take a plunge. The announcement shaved \$1.2 billion off of Garmin's market cap alone. [Read more...](#)

An app so you'll never forget

A language-learning application that's already big in Japan is coming to the U.S. in the form of a new iPhone app. Smart.fm, based in Tokyo, says that the adaptive-learning algorithms behind its software can help users memorize all kinds of information. [Read more...](#)

Henry Markram builds a brain in a supercomputer

Henry Markram says the mysteries of the mind can be solved -- soon. Mental illness, memory, perception: they're made of neurons and electric signals, and he plans to find them with a supercomputer that models 100,000,000,000,000 synapses. [Read more...](#)

Mobile ad revenues to top \$4 billion in 2015, mostly from search (report)

Coda Research Consultancy in a new report forecasts mobile broadband search and display ad revenues in the US to grow to \$4.2 billion in 2015, up from \$1 billion in 2010. [Read more...](#)

Implantable silicon-silk electronics

Biodegradable circuits could enable better neural interfaces and LED tattoos. [Read more...](#)

Robots that care

"With extroverts, robots can speak forcefully; with introverts, they are more soothing." [Read more...](#)

Computational method points to new uses, unexpected side effects of already existing drugs

Scientists at the University of North Carolina at Chapel Hill School of Medicine and the University of California, San Francisco have developed and experimentally tested a technique to predict new target diseases for existing drugs. [Read more...](#)

Meet Aida, the in-car robot who will take the stress out of driving

Driving could soon be a far more pleasant experience thanks to a personal in-car robot being developed by researchers. [Read more...](#)

Dark matter and dark energy make up 95 percent of universe, detailed measurements reveal

A detailed picture of the seeds of structures in the universe has been unveiled by an international team. [Read more...](#)

Cereplast to transform algae into bioplastics

Breakthrough technology could eventually replace 50% or more of petroleum-based plastics content with algae-based resins. [Read more...](#)

Space hotel 'on schedule to open in 2012'

A company behind plans to open the first hotel in space says it is on target to accept its first paying guests in 2012 despite critics questioning the investment and time frame for the multi-billion dollar project. [Read more...](#)

Gene-makers put forward security standards

Several gene-synthesis companies yesterday finalized a code of conduct that outlines how to screen orders for

synthetic DNA that could be used for terrorist activities. [Read more...](#)

Does technology reduce social isolation?

In fact, people who regularly use digital technologies are more social than the average American and more likely to visit parks and cafes, or volunteer for local organizations. [Read more...](#)

Wearable Artificial intelligence could help astronauts troll mars for signs of life

The systems would entail an AI system known as a Hopfield neural network that uses processes closely mimicking human thought to weigh evidence and make decisions based on previously known facts and patterns. Using digital eyes incorporated into astronauts' suits, the AI system would collect data from the environment and analyse it. [Read more...](#)

An electric car created by the McLaren F1 'supercar' road car designer Gordon Murray has been unveiled

Three prototypes of the T.27 model will be developed over the next 16 months. The manufacturing process, called iStream, has received £9m of investment, half of which came from the government's Technology Strategy Board. iStream plants can be just one fifth of the size of a conventional car factory, as the cars are not made from stamped steel. [Read more...](#)

New computer simulator helps design military strategies based on ants' movements

A researcher at the University of Granada has designed a new system for the mobility of military troops within a battlefield based on the mechanisms used by ant colonies to move. [Read more...](#)

Software listens for hints of depression

A large-scale trial will test whether software can identify depressed patients. [Read more...](#)

Scared of flying - there's an app for that

Virgin is offering its Fear of flying counselling and training process via an iPhone application. [Read more...](#)

New neural chip requires no battery

A new one, created by experts at the University of Washington, works without a battery, drawing its power from a radio source up to a meter away. [Read more...](#)

On the go mobile coupons

The idea behind AT&T's system is that you can walk around a city with a phone in your pocket and get alerted when a nearby retailer has a deal for you. [Read more...](#)

Updated report on the future of nuclear power

An interdisciplinary MIT faculty group has issued an update on their 2003 report on the future of nuclear power. [Read more...](#)

Could you green the world brick by brick?

One California-based company is going to try. And they're going to make those "green" bricks in Wisconsin, not ship them in from China. A basic ingredient of the CalStar brick is coal ash, residue from burning coal. The chemical production process takes place at temperatures below that of boiling water meaning each brick has a carbon footprint of 0.2 pounds while a standard kiln-fired brick produces 1.3 pounds. [Read more...](#)

Changing a city: Inside Portland's 80 percent by 2050 target

Last week the City of Portland and Multnomah County jointly passed one of North America's most ambitious Climate Change Action Plan (CAP), which commits the city and county to reducing their overall emissions by 80 percent below 1990 levels by 2050. Includes some really interesting strategies eg. influencing food choice. [Read more...](#)

Food insecurity growing issue for kids

The percentage of black children who live in a household where food stamps will be used at some point in their childhood is a staggering 90 percent, according to a new study. The percentage for white children is

substantially lower, but still significant at 37 percent. "Forty-nine percent of all U.S. children will be in a household that uses food stamps at some point during their childhood." [Read more...](#)

Hot spot hot rod: The internet invades the automobile

A group of companies led by Alcatel-Lucent demonstrate the power of next-generation wireless broadband technologies by rolling out a Prius with 4G connectivity. [Read more...](#)

Early life stress 'changes' genes

A study in mice has hinted at the impact that early life trauma and stress can have on genes, and how they can result in behavioural problems. [Read more...](#)

The modest superpower

How the financial crisis could leave Europe even stronger than America. [Read more...](#)

Tiny 'sticking plaster' nanoparticles for broken nerves could provide spinal cord treatment

Scientists last night raised hopes that microscopic nanoparticles could be injected into the spines of paralysed people to help them walk again. [Read more...](#)

If the WSJ.com says goodbye to Google, it will also say goodbye to 25 percent of its traffic

If Murdoch wants fewer people coming to the WSJ.com and other news sites he controls, blocking Google from indexing those sites is the perfect way to achieve that goal. [Read more...](#)

Cough into your mobile phone for instant diagnosis

Your mobile phone may soon be able to diagnose respiratory illnesses in seconds when you cough into it. [Read more...](#)

Retractable speed bumps

Mexican firm Decano Industries has developed a speed bump that remains in place when a vehicle that is moving too quickly is about to drive over it, but retracts when a slow-moving vehicle approaches. [Read more...](#)

Azure dynamics gets FedEx order for 51 hybrid vans

FedEx has signed up to take on another 51 of the vans based on Ford's E450 cutaway chassis. Once the new vans are delivered by the end of this year, FedEx will have 325 hybrid and electric vans in its fleet. [Read more...](#)

Scientists develop apple that won't rot

Disease-resistant variety of fruit can be kept out of the fridge for a fortnight without going off. [Read more...](#)

Plant experts unveil DNA barcode

Hundreds of experts from 50 nations are set to agree on a "DNA barcode" system that gives every plant on Earth a unique genetic fingerprint. [Read more...](#)

UK calls for a transforming, laser-toting stealth UAV

The MOD has opened bidding for the chance to produce one of the centerpiece projects of their modernization program, the Novel Air Concept. [Read more...](#)

'Road trains' get ready to roll

Road trains that link vehicles together using wireless sensors could soon be on European roads. [Read more...](#)

Retiring 'makes you feel 10 years younger'

Workers feel ten years younger after they retire, according to a study that highlights the physical toll of lengthy careers. [Read more...](#)

Mimicking the building prowess of nature

Scientists build new materials using inspiration from complex biological forms. [Read more...](#)

The future of business is in ecosystems

Paul Higgins: An interesting post from Jeff Jarvis of Buzz Machine and What would Google Do fame on the nature of business and the future of media. [Read more...](#)

Japan Plans an Outer Space Solar Power Station by 2030

Cashing in on the fact that power of the sun is five times stronger in space when compared to Earth; the Japan Aerospace Exploration Agency (JAXA) is looking forward to launching an array of photovoltaic dishes measuring several square kilometres. [Read more...](#)

The why imperative

Paul Higgins: Another good question from Seth Godin on the balance between maintaining focus and acting and recognising on change:

Successful organizations spend a lot of time saying, "that's not what we do."..... [Read more...](#)

Robots could mimic human forgetfulness to filter out less useful information

To test the software, the researchers used it to control a simulated robot that measured the strength of WiFi signals in a virtual environment..... The Team found that on average, ActSimple created the most reliable estimated WiFi map. [Read more...](#)

How much power does the human brain require to operate?

Simulating the brain with traditional chips would require impractical megawatts of power. One scientist has an alternative. [Read more...](#)

Aluminium fuel could power future space trips

Aluminium and water is usually a boring combination, but light a mixture of nanoaluminium and ice and the results are explosive. [Read more...](#)

Super-fast quantum computer gets ever closer: Quantum particles pinned down

Researchers at the Kavli Institute for Nanosciences at Delft University of Technology, have succeeded in getting hold of the environment of a quantum particle..... a step closer still to the super-fast quantum computer. [Read more...](#)

Coming soon: Free video conferencing from Google

According to Rishi Chandra (a Google Apps product manager) who talked to SFGate, Google is set to roll out their first update in a long line of updates that will include multi-user video conferencing. [Read more...](#)

Dream of solar sailing in space lives on in new project

The US-based Planetary Society this week announced its second attempt to launch a small spacecraft with sails propelled by sunlight. [Read more...](#)

Miniature robots to swarm the oceans

Swarms of soup-can-sized robots will soon plunge into the ocean seeking data on poorly understood phenomena from currents to biology. [Read more...](#)

Researchers plan ice cream that's good for you

In what might seem to defy the laws of comfort foods, researchers are setting out to concoct a healthy, yes healthy, ice cream. [Read more...](#)

As shipping slows, banks and carriers fear loan defaults

Now there is more to worry about. Banks with large shipping industry portfolios could face meaningful write-downs as ship owners confront plummeting charter rates from a 25 percent drop in global trade. [Read more...](#)

Should Nintendo fear the Apple juggernaut?

The iPhone has inarguably changed the landscape of mobile phones, personal media players, and to a lesser extent personal computers. Why shouldn't Apple extend its holy sovereignty to gaming? [Read more...](#)

One key found for living to 100

Scientists have zeroed in on one apparent key to long life: an inherited cellular repair mechanism that thwarts

aging and perhaps helps prevent disease. Researches say the finding could lead to anti-aging drugs. [Read more...](#)

Intel says shape-shifting robots closer to reality

Researchers use distributed computing and robots to create programmable matter. [Read more...](#)

High-performance plasmas may make reliable, efficient fusion power a reality

In the quest to produce nuclear fusion energy, researchers from the DIII-D National Fusion Facility have recently confirmed long-standing theoretical predictions that performance, efficiency and reliability are simultaneously obtained in tokamaks, the leading magnetic confinement fusion device, operating at their performance limits. [Read more...](#)

Singularity University executive program: Ray Kurzweil's opening address

Singularity University, an educational institution based at NASA Ames that draws some world's top technologists and futurists, has been holding an Executive Program. Here is the Ray Kurzweil opening address (via [TechCrunch](#)). [Read more...](#)

Newsweek's 10 worst predictions of the decade

Paul Higgins : It is pretty easy to pick out some of these and laugh at people but I am particularly taken by the text that comes with number 7 - Bill Gates Doubts Google's Potential:

"The future is hard to see even for the smartest people. The reason is simple: we focus on the wrong things. We look at technology and ask ourselves how it will get faster, better, and smaller. But actually, radical change comes from somewhere else: shifts in consumer behavior." [Read more...](#)

A good video on the future of our digital life as Nokia sees it on 2015

Paul Higgins: Not sure about operating bank accounts via a mobile phone unless the security issues can be sorted out. [Read more...](#)

Army corps of engineers now required to consider climate change in all future projects

A new policy now requires the U.S. Army Corps of Engineers to plan for future climate change when designing plans for flood control or other projects. [Read more...](#)

Rat made supersmart -- Similar boost unsafe in humans?

By modifying a single gene, scientists have made Hobbie-J the smartest rat in the world, a new study says. [Read more...](#)

Gene knockout may cheer up mice

A gene in the brain that was not previously linked to mood disorders could have a role in bipolar, depression, and schizophrenic conditions. [Read more...](#)

Gene therapy can improve muscle mass and strength in monkeys

A study appearing in Science Translational Medicine puts scientists one step closer to clinical trials to test a gene delivery strategy to improve muscle mass and function in patients. [Read more...](#)

Longevity tied to genes that preserve tips of chromosomes

A team led by researchers at Albert Einstein College of Medicine of Yeshiva University has found a clear link between living to 100 and inheriting a hyperactive version of an enzyme that rebuilds telomeres -- the tip ends of chromosomes. [Read more...](#)

Taxi² is a co-innovation with Virgin Atlantic that lets people find shared taxi rides if they re on a flight

Taxi² enables you to recognise other travellers who are interested in saving half the cost of their taxi ride from the airport to their final destination. [Read more...](#)

Seeking a shorter path to new drugs

WHAT'S smaller than a breadbox, can cost \$800 million or more, and takes more than eight years to research

and develop? [Read more...](#)

Agriculture methane estimates a mess

Read this if you want to be confused about agriculture's contribution to global warming. [Read more...](#)

New light on carbon footprint of irrigation

IRRIGATORS need to think carefully about upgrading their systems in light of energy costs, according to the Irrigation Futures CRC. [Read more...](#)

Two rival supercomputers duke it out for top spot

The upgraded Jaguar supercomputer at Oak Ridge, in Tennessee, now boasts a speed of 1.759 petaflops per second from its 224,162 cores. [Read more...](#)

Scientists test first universal programmable quantum computer

Physicists have been taking baby steps toward creating a full-fledged quantum computer faster and more powerful than any computer in existence, by making quantum processors capable of performing individual tasks. [Read more...](#)

Why 'eco-friendly foods' can be worse for the environment

SO-CALLED "environmentally responsible" food purchases need to be based on sound science rather than merely perception. [Read more...](#)

Improving security with face recognition technology

A number of U.S. states now use facial recognition technology when issuing drivers licenses. Now, a researcher from the University of Miami College of Engineering and his collaborators have developed ways to make the technology more efficient while improving accuracy. [Read more...](#)

FedEx launches SenseAware: Collaboration meets GPS meets sensory data

FedEx unveiled a gadget called SenseAware that tracks a packages temperature, location, light exposure and other data and integrates it into a Web collaboration portal. [Read more...](#)

Infostate of Africa

People often only see Africa from one perspective, here's another. The above infographic details some of the happenings over the past few years in regards to infrastructure improvement and capacity building in Africa, particularly in the area of the internet and cost. [Read more...](#)

Vaccines on horizon for AIDS, Alzheimer's

Vaccines are no longer a sleepy, low-profit niche in a booming drug industry. Today, they're starting to give ailing pharmaceutical makers a shot in the arm. [Read more...](#)

Why Web widgets will invade your TV

Web widgets bring Internet perks to the biggest screen in most people's homes. [Read more...](#)

Harnessing waste heat from laptop computers and cell phones may double how long batteries last between charges

In everything from computer processor chips to car engines to electric powerplants, the need to get rid of excess heat creates a major source of inefficiency. But new research points the way to a technology that might make it possible to harvest much of that wasted heat and turn it into usable electricity. [Read more...](#)

Liquid cooling bags for data centers could trim cost and carbon by 90 percent

After the individual bags of coolant pull heat away from the individual server components, a water transfer system moves heat out of the data center, possibly for use in heating offices during cold weather. [Read more...](#)

Robots perform shakespeare

A Midsummer Night's Dream has been updated for the 21st century with seven small robots playing fairies alongside carbon-based co-stars. [Read more...](#)

IBM makes supercomputer significantly smarter than cat

IBM has announced a software simulation of a mammalian cerebral cortex that's significantly more complex than the cortex of a cat. And, just like the actual brain that it simulates, they still have to figure out how it works. [Read more...](#)

Would you buy a data-only cellphone?

There's a rumour that Google's toying with a cellphone that could work on any data network and make phone calls through its Gizmo5/Google Voice package. Are you ready to leave standard voice channels behind for the wireless data frontier? [Read more...](#)

USC study to evaluate robots as exercise trainers

The effort, entitled "Robot Motivator: Towards Adaptive Health Games for Productive Long-Term Interaction," will examine the influence of virtual social characters on people's motivation to exercise. [Read more...](#)

Antarctic temperature spike surprises climate researchers

During the warm periods between recent ice ages, temperatures in Antarctica reached substantially higher levels than scientists had previously thought. This conclusion, based on ice-core studies, implies that East Antarctica is more sensitive than it seemed to global warming. [Read more...](#)

Are the earth's oceans hitting their carbon cap?

Like the vast forests of the world, which continually suck carbon dioxide from the atmosphere and release oxygen, the planet's oceans serve as vital carbon sinks. [Read more...](#)

Alcohol 'protects men's hearts'

Drinking alcohol every day cuts the risk of heart disease in men by more than a third, a major study suggests. [Read more...](#)

Sounds during sleep aid memory, study finds

A new study about a different kind of audio approach during sleep gives insight into how the sleeping brain works. [Read more...](#)

Glowing bacteria that finds landmines

Edinburgh University engineers have a plan to use genetically engineered bacteria that glow in the presence of explosives to detect landmines. [Read more...](#)

A 25-year battery

Long-lived nuclear batteries powered by hydrogen isotopes are in testing for military applications. [Read more...](#)

The future of evolution: What will we become?

The past of human evolution is more and more coming to light as scientists uncover a trove of fossils and genetic knowledge. But where might the future of human evolution go? [Read more...](#)

A new route to cellulosic biofuels

ZeaChem's pilot plant will make ethanol using termite microbes. [Read more...](#)

The emerging field of biophotonic communication

The growing evidence that cells communicate with photons is generating an exciting new field of research. [Read more...](#)

TV set-top will put internet on the box

The internet is about to become the de facto fourth commercial television network in Australia after Telstra confirmed it would launch a digital set-top box to make it easier to watch internet video on your TV. [Read more...](#)

Kraft trims 50 million truck miles since 2005

As part of its company-wide sustainability efforts, Kraft Foods, parent company of Oscar Mayer and other food brands, is finding alternatives to trucking and making its distribution network more efficient. [Read more...](#)

Top 10 trends for mobile apps

As smartphone sales skyrocket, research firm Gartner has ranked the ten types of mobile applications it thinks will see the most demand in 2012. The categories follow in the order in which they were ranked. [Read more...](#)

Fewer players 'secret to World Cup success'

The secret to success in next year's Football World Cup could have been uncovered by academics.

Paul Higgins: This might be the article headline and it might actually be true but it looks like a classic case of confusing causation and correlation. [Read more...](#)

Robotic farming – the way of the future?

PRECISION Agriculture is about to take the next step and see robots planting, spraying and harvesting crops... or is it? [Read more...](#)

Can GM rice fill the world's shortfall?

Syngenta believes it is time for the barriers against GM to come down, so that biotechnology companies can confidently invest in GM research ahead of the looming food crisis. [Read more...](#)

Weapons manufacturer unveils black box for guns

The gadget would record details of every shot fired to track both weapon and user performance. [Read more...](#)

Time-travelling browsers navigate the web's past

Finding old versions of web pages could become far simpler thanks to a "time-travelling" web browsing technology being pioneered at the Los Alamos National Laboratory in New Mexico. [Read more...](#)

Mathieu Lehanneur demos science-inspired design

A fascinating TED video on different approaches to design and thinking. [Read more...](#)

Surprising discovery explains formation of new memories

Short-term memory may depend in a surprising way on the ability of newly formed neurons to erase older connections. [Read more...](#)

Smart meters put heat on bills

NSW households forced on to "smart meters" face paying an extra \$275 a year to run their air- conditioner and pool compared with those on standard power tariffs. [Read more...](#)

Demonstrating a CO2 recycler

Sandia scientists successfully test a machine that creates fuel from carbon dioxide. [Read more...](#)

Wave of debt payments facing U.S. government

The United States government is financing its more than trillion-dollar-a-year borrowing with i.o.u.'s on terms that seem too good to be true. With the national debt now topping \$12 trillion, the White House estimates that the government's tab for servicing the debt will exceed \$700 billion a year in 2019.

Paul Higgins: the graphic embedded in this article is well worth looking at if you want to or need to understand the US debt structure. [Read more...](#)

Urbavista

A future scenario machine on display at Kulturhuset, Stockholm, Sweden. [Read more...](#)

Blood and guts: On the brink of a revolution

Scientists will soon be able to manufacture body tissue to order if clinical trials continue to yield promising results. [Read more...](#)

What makes a nation rich? One economist's big answer

Say you're a world leader and you want your country's economy to prosper. According to this Clark Medal winner from MIT, there's a simple solution: start with free elections. [Read more...](#)

A speculative post on the idea of algorithmic authority

Paul Higgins: an interesting post by Clay Shirky. Resonated with me because in media I think that trust is going to be one of the key drivers and how that trust is measured and passed around will be vital.

"One of the things up for grabs in the current news environment is the nature of authority. In particular, I noted that people trust new classes of aggregators and filters, whether Google or Twitter or Wikipedia (in its 'breaking news' mode.) I called this tendency algorithmic authority." [Read more...](#)

The surgeons of tomorrow: Miniaturized robots that go inside you

Before the advent of laparoscopic or keyhole surgery in the 70's, operations such as a stomach bypass or gall bladder removal required large incisions and long periods for recovery. [Read more...](#)