

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



What's Emerging

Mood reading computers could be a reality

Imagine if your work computer could read your mood. Imagine you arrive at work on Monday mornings plagued by depressive Mondayitis symptoms. You log onto your computer. It senses your mood by monitoring your emotional expressions and alters its running environment accordingly, cheering you up.

A musical score for disease

Converting genetic activity into music may be a way to monitor health.

Miniaturized DNA sewing machines

Japanese researchers have found a way to build long threads of DNA using miniaturized hooks and bobbins.

Nematodes costing 10pc of world food production

Pest nematodes cost the world about 10pc of its food production. Dr Mike Hodda, of CSIRO entomology and the convenor of the 5ICN organising committee, says the impact the tiny worms have on food output means sharing scientific research is "vitaly important to humans."

How the web was won

Fifty years ago, in response to the surprise Soviet launch of Sputnik, the US military set up the Advanced Research Projects Agency. It would become the cradle of connectivity, spawning the era of Google and YouTube, of Amazon and FaceBook, of the Drudge Report and the Obama campaign. Each breakthrough—network protocols, hypertext, the World Wide Web, the browser—inspired another as narrow-tied engineers, long-haired hackers, and other visionaries built the foundations for a world-changing technology. This is a fascinating history of that process told by the people who were there and published in Vanity Fair.

Scientists prevent brain-cell suicide to keep birds singing

Scientists have shown they can keep birds singing by stopping the action of an enzyme key to their brains' natural cell-death processes. As cell-death mechanisms are similar across species, the research could open up new avenues of research on degenerative and age-related diseases like Alzheimer's.

Nanotech revives a cancer drug

Many drugs that show great promise in the lab fail in clinical trials due to unforeseen toxicity. Nanomedicine, however, promises a way to make safer, more effective versions of such drugs, including one that inhibits development of secondary tumors which are the biggest killers.

Oil madness to only help wool

As oil prices ratchet ever higher, wool looks more attractive as its price ratio to competing synthetics improves.

Do you want to live forever?

This is a Google video exploring the ideas of Aubrey de Gray from the UK who believes that the first human to live to 1000 years of age is already alive. Caution – this is 1 hr and 16 minutes long so it will take time, bandwidth and download resources to watch.

In fertile India, growth outstrips agriculture

With the right technology and policies, India could help feed the world. Instead, it can barely feed itself. Experts blame the agriculture slowdown on a variety of factors.

Paper gets a nano makeover

Cellulose nanofibers from wood pulp create a superstrong paper that could be used to make tough packaging material, filters, membranes, and even car and aircraft parts.

Japan robot startups join hands

Four of Japan's leading robot startups have joined forces, brought together by a common concern that neighboring South Korea could pull ahead in the race to transform robots from science fiction fantasy to commercial success.

A controllable camera pill

Pills containing tiny cameras pass through the esophagus in as little three seconds, not long enough to provide useful data. But now researchers have devised a camera pill that can be stopped and steered where desired.

Photos: Intel's future tech for robots, health care, PCs

This robotic arm and hand developed by researchers at Intel's personal robotic lab in Pittsburgh demonstrates the latest in motion planning and manipulation.

A genetic quest for better chocolate

Mars approached researchers at the United States Department of Agriculture and then sought big-time computing firepower at I.B.M. Labs. The result is a five-year project to sequence and analyze the entire cocoa genome.

Stem cell researchers give old muscle new pep

Old muscle got a shot of youthful vigor in a stem cell experiment by bioengineers at the University of California, Berkeley, setting the path for research on new treatments for age-related degenerative conditions such as muscle atrophy, Alzheimer's or Parkinson's.

Scientists close to reconstructing first living cell

Harvard Medical School researchers report in Nature that they have built a model of what they believe the very first living cell may have looked like, which contains a strip of genetic material surrounded by a fatty membrane.

It's American brandstand: marketers underwrite performers

The hip-hop and R&B producer Jermaine Dupri has discovered best-selling acts and produced hits for Mariah Carey and Jay-Z. He's also looking for fresh talent for a new label financed by a company new to the music industry. The new player? Procter & Gamble. The consumer goods giant is part of a wave of companies getting into the music business to promote their own products.

Could Nanotechnology End Cartilage Loss?

Brown University nanotechnology specialist Thomas Webster has found a way to regenerate cartilage naturally by creating a synthetic surface that attracts cartilage-forming cells. These cells are then coaxed to multiply through electrical pulses.

Riding the power of undersea waves

WaveRoller, a company in Finland, says it has devised a way to generate electricity from waves without buoys or other floating devices, the mainstay of other wave power companies. Instead, the company wants to plant oscillating fiberglass/steel plates on the sea bed.

Nokia to take location-based social networking mainstream

Location-based social networking could soon go mainstream with today's news that Nokia has acquired Berlin-based Plazes. Founded in 2005, Plazes lets "friends" update each other about what they are doing when and where, resulting in a Twitter-like activity stream but with integrated geo-tagging.

Free bike trailer to get your Ikea purchases home

Ikea in Denmark has teamed up with a company that provided free trailers with advertising on them to provide customers with a bike trailer to get their bulky purchases home with them. In countries with cycling cultures this could become a big thing.

Saving the Ozone layer could slow climate change

Recovery of the Earth's ozone layer could weaken climate change in the Southern Hemisphere.

Is your tank half empty or half full?

High gas prices have had some obvious immediate effects on Americans: Hummer sales are down, commuting by public transit is up, airlines are charging for nonessentials, like baggage. But if \$4 gas (or higher) is here to stay, we can expect our lives to change in other ways, too. The Op-Ed page asked 10 writers to reflect on the consequences — unexpected, unnoticed, unrealized, good, bad or indifferent — of really expensive fuel. Requires a free registration.

Can weeds help solve the climate crisis?

In an experiment in Baltimore in a hot, carbon dioxide enriched environment not only did weeds grow much larger - a weed called lambs-quarters, or *Chenopodium album*, grew to an impressive 6 to 8 feet on the farm but to a frightening 10 to 12 feet in the city.

Why fly when you can float?

As the cost of fuel soars and the pressure mounts to reduce carbon dioxide emissions, several schemes for a new generation of airship are being considered.

Petrol tipped to hit \$8 a litre by 2018

A new report by the CSIRO has warned the cost of petrol could rise to as high as \$8 a litre in the next 10 years.

Has Twitter just bought itself a business model?

Reports suggest that Twitter is on the verge of acquiring startup Summize, whose mission "is to search & discover the topics and attitudes expressed within online conversations."

Disney's home of the future

This is really quite weird. Disney's home of the future seems to not really be much about the future at all. This article links to a multimedia presentation from New York Times.

Web 3.0 - the future of social networking

Is this the future of on line social networking? You start in your scene, a three-dimensional model, blank and bare, with nobody around and nothing much to do. It's a fresh start, a clean break, and you can start customising every little bit of your Scene with the content that you want. Say for example, you want to share a FaceBook album with the world - you can create an actual picture frame on one of your walls, and set the content to be that particular album.

Wave power building snake

A device consisting of a giant rubber tube may hold the key to producing affordable electricity from the energy in sea waves. See here for more details.

Switch on a chip to boost internet speed

A new ultrafast optical switch on a chip could help speed up the internet in Australia by more than 6,000 per cent, say researchers.

Aussies may get limitless downloads

Relief may be at hand for Australian consumers starved of the limitless internet download quotas offered in other countries