

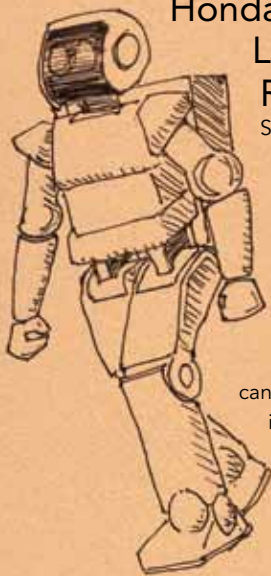
# Points of Interest

## Vioguard Germ-Fighting Keyboard Retracts for an Ultraviolet Light Bath

We have all heard horror stories about how keyboards have more germs than a toilet seat, right? Now a start-up called Vioguard is taking this issue seriously with a self-sanitizing keyboard for hospitals.

The Vioguard works by automatically retracting into the monitor base for a germ-killing ultraviolet bath. Obviously, this could be a matter of life and death in a hospital but, by the looks of things, the average Joe could benefit from this technology as well.

Sean Fallon *Gizmodo* blog March 13, 2009 <http://i.gizmodo.com/5169541/vioguard-germ+fighting-keyboard-retracts-for-a-uv-light-bath>



## Honda Unveils Helmet That Lets Wearer Control a Robot by Thought Alone

Scientists at the Honda Research Institute in Japan demonstrated this new invention by using it to move the arms and legs of an Asimo humanoid robot. Sensors in the helmet detect electrical signals through the scalp in the same way as standard electroencephalography. The scientists combined this with another technique called near-infrared spectroscopy, which can be used to monitor changes in blood flow in the brain. Brain activity picked up by the helmet is sent to a computer, which uses software to work out which movement the person is thinking about.

Ian Sample *The Guardian* March 31, 2009 <http://www.guardian.co.uk/science/2009/mar/31/mind-control-helmet-honda-asimo>

## Creating an Atlas of the Human Mind

With \$55 million, a collection of frozen human brains and robots capable of processing 192 brain slices a day, the Allen Brain Institute is attempting to do the impossible: systematically map out the expression patterns of more than 20,000 genes that make our grey matter tick.

Researchers have probed neurons with specific bits of ribonucleic acid (RNA) in a revealing game of genetic hide-and-seek for 40 years. But the speed and scope with which they're now tackling the problem is unprecedented. Specially constructed robots automate most of the data-gathering and analysis. When the atlas is finished in 2012, scientists will start untangling the whys and hows of our neural network.

Sarah Douglas *Wired* March 25, 2009 [http://www.wired.com/medtech/health/multimedia/2009/03/ff\\_brainatlas\\_gallery](http://www.wired.com/medtech/health/multimedia/2009/03/ff_brainatlas_gallery)

## The Future of Healthcare: Outsourcing the Surgeon

It's been less than a decade since the US Food and Drug Administration and Health Canada approved the first robotic surgical system, and robot-assisted surgeries are already common. Of course, the machines aren't doing the thinking: that's up to the surgeons, who control the robots remotely. For now, that means surgeons and robots still work side-by-side, or at least room-by-room, in the operating theatre. But it might not be long before they're separated by hundreds or even thousands of miles, linked by high-speed data cables. Patient and surgeon could be in different countries, or even different continents. That's called telesurgery, and it's the next frontier.

Brandon Keim *Portfolio.com* <http://www.portfolio.com/views/columns/dual-perspectives/2009/03/03/Outsourcing-The-Surgeon>

## How Similar Was Neanderthal Behaviour to That of Modern Humans?

Neanderthals have long been portrayed as dumb brutes. But a growing body of evidence hints that these extinct humans were much savvier than previously thought. The results of a new study at the annual meeting of the Paleoanthropology Society bolster that view and suggest that, in fact, Neanderthals acted in much the same way as early modern humans.

Paleoanthropologist Bruce Hardy of Kenyon College found that although the modern humans created a larger variety of tools than did the Neanderthals, the groups engaged in mostly the same activities. These activities include using tree resin to bind stone points to wooden handles, employing stone points as thrusting or projectile weapons, crafting implements from bone and wood, butchering animals and scraping hides.

Kate Wong *60-Second Science Blog/Scientific American* April 6, 2009 <http://www.sciam.com/blog/60-second-science/post.cfm?id=how-similar-was-neanderthal-behavior-2009-04-06>



## Athletic Ability May Lie in a Single Gene

The ability to learn new motor skills is affected by a slight genetic variation. Scientists know that small variations in certain genes can

predispose people to cancers or heart disease. Now researchers are starting to show a direct, quantifiable effect on learning traceable to these types of genetic influences: single-nucleotide polymorphisms. A difference in just one amino acid in a protein might explain why some people learn new motor skills faster and reach higher levels of performance.

Roberta Friedman *Scientific American Mind* April 2009  
<http://www.sciam.com/article.cfm?id=a-gene-for-athleticism-hl>

## Blame 37% of Droughts on Global Warming

Global warming is more than a third to blame for a major drop in rainfall that includes a decade-long drought in Australia and a lengthy dry spell in the United States, says scientist Peter Baines of Melbourne University in Australia. He analyzed global rainfall observations and sea surface temperature data as well as a reconstruction of how the atmosphere has behaved over the past 50 years to reveal rainfall winners and losers. What he found was an underlying trend where rainfall over the past 15 years or so has been steadily decreasing, with global warming 37% responsible for the drop.

David Fogarty *Toronto Star* March 25, 2009 <http://www.thestar.com/sciencetech/article/608025>

## Bed Bug Sniffing Dogs

No one wants to buy a house, have it pass an inspection and then find out the place is rife with termites, bedbugs or another pest. Dogs can use their noses to help alleviate this problem. After extensive training that can run up to US\$15,000 per pooch, dogs can help homebuyers and pest control companies by sniffing around walls and baseboards to look for termites or bedbugs. Once a dog has found the offending insects, exterminators can take care of the problem, then bring their canine friend back in for a second pass to make sure the bugs are really gone.

Ethan Trex *Mental Floss* blog March 24, 2009 <http://blogs.static.mentalfloss.com/blogs/archives/23928.html>

## Freedom to Surf: Workers More Productive If Allowed to Use the Internet for Leisure

Surfing the Internet at work for pleasure actually increases our concentration levels and helps make a more productive workforce, according to a new University of Melbourne study.

“People who do surf the Internet for fun at work – within a reasonable limit of less than 20% of their total time in the office

– are more productive by about 9% than those who don’t,” says Dr. Brent Coker, from the Department of Management and Marketing.

University of Melbourne April 2, 2009 <http://uninews.unimelb.edu.au/news/5750/>

## Pop-Up Garage

Hidden parking spaces, which pop up from your driveway, have become a must-have home improvement in London. The £40,000 parking spots can be hidden beneath a flowerbed, lawn or even another parking space. Owners simply press a button on a key ring to raise the car out of the ground. There is already a four-month waiting list to get the sci-fi style parking space installed, and bosses of Cardok – the company behind the hydraulic platforms – say orders are pouring in faster than they can fill them.

*news:lite* March 24, 2009 <http://newslite.tv/2009/03/24/popup-garage-is-latest-london.html>

