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Welcome to the September edition of What's Emerging.

We would like to announce that Sandy is now working full time for Emergent Futures. Sandy has left her job at the Queensland Department of Primary Industries, and after a well earned holiday will start full time next month. You can check out Sandy's updated biography on the consultants page at our website. Sandy will be working out of Brisbane so if anybody out there is looking for assistance in foresight work up that way contact her on sandy@emergentfutures.com

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Business Tip

Skype has launched a beta service where you can take calls on Skype and get paid for the minute for giving out advice or information.

<http://www.jyvepro.com/>

Emerging issues from around the world

Click on the titles to read the full stories.

Artificial nano kidneys

Nephrologist William Fissell is working on a system of nano-pore membranes that may allow him to create miniature dialysis machine that could be implanted into the body of people suffering from kidney disease, freeing them from the problems of standard dialysis.

Watching a thought

Researchers at the University of New Mexico have refined a functional MRI technique so that they can observe a single thought forming in the brain. The fMRI technique monitors blood flow in the brain to track brain activity. The ability to track thoughts in real time has huge implications for our understanding of brain function and cognitive abilities.

Car of the future

This is a YouTube video that shows a car that GM has built that will run on hydrogen. However there is more than just that to it. Because it does not have an engine or a drive

train, or gears it is enormously flexible. You can unbolt the sedan body version and change it in to a ute, or a sports car. At a cost of 5 million pounds it is currently a little expensive but may be the car of the future.

Liquid armour

Soldiers are trialing a liquid silica based armour that solidifies when hit by bullets or shrapnel. If the work is successful then soldiers will have a more flexible armour, that weighs less and gives greater protection

Portable Oil Plant

A company in Ottawa, Canada is developing a portable plant that can turn forestry waste into biofuel on site, avoiding the costs of transporting forestry waste long distances for processing. The plant uses pyrolysis – heating biomass to high temperatures on low oxygen environments to produce the fuel.

Virtual Hotel Marketing

Starwood Hotels and Resorts are launching a new chain of hotels called the Aloft Inn in 2008. To market the chain they have creating a virtual version of the first hotel in Second Life, the on line multi-playing game. Is this the new marketing space?

Nano against heart disease

Scientists have managed to target blood vessel plaque build up by attaching a drug to a nano particle that targets the plaque site blood supply.

New knee cartilage

Doctors are experimenting with using stem cells to assist in cartilage repair in knee injuries. Knee cartilage is commonly damaged but has very poor ability to repair and regenerate itself. The researchers are hoping that the injection of mesenchymal stem cells will stimulate cartilage to regrow.

Cloud Computing

Amazon has launched a new service which supplies servers on a demand basis to developers, small businesses that need to scale up, etc. This continues an interesting trend in computing services that allows businesses to scale up computing capacity very quickly if they have the demand

Nano saviour or problem

A company called Xonica has created a nano-particle of cerium oxide that it claims can increase fuel efficiency by 5% and reduce pollution by 15% in diesel engines. On the surface this appears to be a no brainer however there is a catch. In bulk form cerium oxide is about as toxic as table salt but in nano form there are concerns it could penetrate the lung and cause health problems. This is the key barrier to implementation of the

technology.

Dry Olympics anyone

The Chinese are adapting their cloud seeding program for rain creation to try and stop rain falling on the Olympics. Using old anti-aircraft guns they plan to fire silver iodide into rain clouds to see if they can get them to rain away from the Olympic site.

Do you really need chemotherapy?

New tests are in clinical trials that will determine if the tests can predict whether you need chemotherapy or not. Cancers vary in their susceptibility to chemotherapy but clinicians do not know which is which so they err on the side of caution. The tests will look at genetic markers to characterise the cancers more closely and determine which need chemotherapy and which do not. Hopefully this will reduce unnecessary treatment and the severe side effects that come with chemotherapy.

New supersonic jets

New private jets are being designed that could fly at 2000kmh and have 1/100th of the sonic boom that plagued the Concorde. These private jets are aimed at the corporate business market.

What Are We Writing About

This month's article is an opinion piece that Paul had published in the Melbourne Age a couple of weeks ago about the ethanol industry and its business prospects. Paul argues that what the industry needs to do is to innovate rather than look for mandating or further public subsidies. You can access the article by going to our website and downloading it from the front page.

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