

## **INNOVATION: FROM LAB TO REALITY - PART TWO**

As we continue to be introduced to new products, in every field of life, the word "innovation" certainly applies. Following last month's ideas, here are a few more real possibilities that could be mass marketed in the coming years:

- 8. **Medic Aboard:** Many upward scale vehicles today have the technology built in to send an emergency call when an accident occurs...and more. Researchers at the University of Michigan Center for Automotive Medicine have been working on cross-referencing car crash data with car sensor data: speed, where on the vehicle the impact occurred, etc. With this information, paramedics know in advance injury types and hence, the best treatment, i.e. trauma center, specialty unit.) Now THIS is a valuable idea that hopefully will materialize and save a few lives.
- 9. All in your sleep: While on a medical theme, Dr. Philip Low and his team at tech firm Neuro Vigil are researching ways to earlier diagnose diseases like schizophrenia, depression, and Alzheimer's. By wearing a small sensor on the head during sleep, the brain is continuously scanned and evaluated, on the alert for potential disease even without any symptoms. Like other serious diseases, the earlier the detection, the better the chance for treatment and recovery. The state of sleep as a window to the brain is indeed a 21<sup>st</sup> century discovery.
- 10. **Ultimate recycling**: Already in use is Prof. David Edwards' edible packaging Wikicell (<a href="www.wikicells.com">www.wikicells.com</a>). Why create more refuse when one could eat the contents of the package as well as the packaging itself? The overuse of plastics and cardboard containers could be a thing of the past, thus helping the planet's tremendous ecological challenge...now that's a big help. Read more at: <a href="http://www.businessinsider.com/how-the-wikicell-edible-packaging-is-made-2012-8?op=1">http://www.businessinsider.com/how-the-wikicell-edible-packaging-is-made-2012-8?op=1</a>
- 11. **Artificial pets:** It is well known that having pets is good for mental health, and petting them releases mood-enhancing endorphins and lowers blood pressure. But when at work or stuck in a hospital bed, having a live animal around is impossible so University of British Columbia researchers developed "smart fur" a furry looking device whose sensors react when stroked, mimicking the reactions of a live animal. It will never replace the live, breathing kind but in the worst case scenario, it certainly can help.
- 12. **Target gardening**: We know all too well that spraying water, fertilizer and pesticides over every field and garden is common practice, but much is usually wasted. The Field Intelligence Lab at M.I.T. is amplifying current technology, such as wireless soil sensors and GPS-enabled equipment to let the grower know which areas need attention. The next step is to produce small, affordable sensors that can be spread across a lawn or garden and track the things you need to know: mineral deficiencies, bugs on the attack, and so on. The gardener then needs to act accordingly, pinpointing the spray, fertilizer or bug killer at specific areas rather than over the entire property.

There is always room for improvement in every field of endeavor. As consumers, some of these "crazy" ideas may end up being a boon to many.