

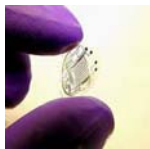
North Central Texas InterLink, Inc.
An Affiliate of the North Texas Commission

BIONIC EYES

We may soon be seeing our world through electronic eyes, and they'll be as easy to use as popping in a contact lens.

A bionic display consisting of electronic circuits and lights imprinted on a contact lens would allow wearers to see electronic information superimposed over their view of the world in front of them. Potential applications include virtual reality enhancements for video gamers and heads-up displays for pilots and drivers.

One key challenge was to find materials that are safe for use in the body, according to Babak Parviz, assistant professor of electrical engineering at the University of Washington, where the device is being developed. Because the electronic circuits can be built from layers of metals only a few nanometers thick, they can be printed on the delicate, biologically compatible plastic materials used for contact lenses.



Though the prototype device does not correct the user's vision, future models will do so. Other enhancements may include the addition of wireless communication powered by radio frequency and embedded solar cells.

Source: University of Washington
<http://uwnews.washington.edu/ni/article.asp?articleID=39094>

FULLY ROBOTIC OBSERVATORY SET UP IN ANTARCTICA

A team of scientists representing six international institutions, including Texas A&M University have installed a fully robotic observatory in Antarctica. It will operate autonomously for up to 12 months at a time while sending back data via the Iridium satellite network.

Source: Science Daily
<http://www.sciencedaily.com/releases/2008/02/080201215412.htm>

ROBOT TO MIX CHEMOTHERAPY DRUGS AT U.S. HOSPITAL

The University of Colorado Hospital is about to start using a robot to mix chemotherapy drugs for patients, which its developers say will eliminate human error and protect technicians from potentially dangerous drugs.

Source: NY Times
http://www.nytimes.com/idg/IDG_002570DE00740E18002573CD005A4377.html?ref=technology

MANUFACTURING'S TOP CHALLENGES

Capturing the power of nanotech, integrating information technology throughout manufacturing processes, and developing hydrogen energy technologies are the three top priorities for research and development in manufacturing, according to a report from a U.S. government interagency working group.

Selection of these interrelated priorities will help industry focus resources on meeting future needs, such as job creation, transforming research into competitive products, and ensuring a cleaner environment.

Nanotechnologies are expected to be a "critical driver of future economic growth, affecting potentially every industry from aerospace and energy to health care and agriculture," according to the report.

The emphasis on hydrogen energy R&D, such as developing affordable and reliable fuel cells, is intended to help ensure a more secure energy future.

Sources: Interagency Working Group on Manufacturing R&D report, MANUFACTURING THE FUTURE, <http://www.manufacturing.gov>

NIST: http://www.nist.gov/public_affairs/releases/manufacturing.html

FABRIC MAY MAKE FIRST REAL POWER SUIT

Georgia Institute of Technology researchers have made a yarn out of nanofibres that produce a charge when rubbed against one another. Materials woven from these yarns could be used for self-powering clothes, shoes or biological implants such as pacemakers.

Source: Nature News
<http://www.nature.com/news/2008/080213/full/news.2008.572.html>

IMPLANTS CREATE INSECT CYBORGS

Cornell University researchers have succeeded in implanting electronic circuit probes into tobacco hornworms that then mature into long-lived moths whose muscles can be controlled with the implanted electronics.

Source: Live Science
<http://www.livescience.com/strangenews/080204-cyborg-insect.html>

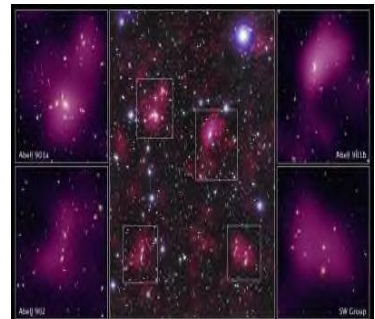
CONTACT INTERLINK
P.O. Box 610246
DFW Airport, TX 75261-0246
Email: candy@interlink-ntx.org
Website: www.interlink-ntx.org

FIRST DETAILED MAP OF DARK MATTER IN A SUPERCLUSTER

For the first time astronomers are able to see indirect evidence of dark matter and how this invisible force impacts on the crowded and violent lives of galaxies. University of British Columbia researcher Catherine Heymans has produced the highest resolution map of dark matter ever captured before.

Scientists believe that dark matter is the invisible web that houses galaxies. And as the universe evolves, the gravitational pull of this unseen matter causes galaxies to collide and swirl into superclusters. The University of Nottingham led an international team to test this theory that dark matter determines the location of galaxies. "For the first time we are clearly detecting irregular clumps of dark matter in a supercluster," says Heymans, a postdoctoral fellow in the Dept. of Astronomy and Physics.

Using NASA's Hubble Space Telescope, Heymans and her team viewed an area of sky approximately the size of the full moon. They mapped the invisible dark matter scaffolding of the massive supercluster Abell 901/902.6 billion light-years from Earth, measuring more than 16 million light-years across, and the detailed structure of the individual galaxies embedded in it.



The images above reveal the distribution of dark matter in the supercluster Abell 901/902, composed of hundreds of galaxies. The image in the center shows the entire supercluster. Astronomers assembled this photo by combining a visible-light image of the supercluster taken with the MPG/ESO 2.2-meter telescope in La Silla, Chile, with a dark matter map derived from observations with the NASA/ESA Hubble Space Telescope. The magenta-tinted clumps represent a map of the dark matter in the cluster. Dark matter is an invisible form of matter that accounts for most of the Universe's mass. The image shows that the supercluster galaxies lie within the clumps of dark matter.

Source: PhysOrg.com
<http://www.physorg.com/news119182387.html>
