Top Deck
What the nation's (& world's) top papers, news wires and sources have been saying about nanotechnology.

Wash-off cream could prevent nickel allergy, study suggests
Los Angeles Times
April 3
Eryn Brown

"A team of Harvard researchers may have discovered a new way to ward off the red, itchy rash caused by allergies to nickel. All it takes is a dab of topical cream, according to research published online Sunday in the journal Nature Nanotechnology."

Also noted by CNN.

IBM's Nanotechnology Rips Up Drug-Resistant Germ Cells in Study
BusinessWeek.com (Bloomberg)
April 4
Rob Waters

"International Business Machines Corp., the world's largest computer-services provider, is developing a technology that searches out drug-resistant germs in the body and destroys them, addressing a $34 billion-a-year."

Also noted by the Wall Street Journal, Daily Telegraph, Scientific American, Electrical Engineering Times, ABC News Australia, The Engineer, Fort Wayne (IN) Journal Gazette, among many others.

Soil Damage by Nanotechnology Could Threaten Vegetation
Kingston Herald (Australia)
April 6
Dick Matheson
"Queen's University researchers have discovered that nanoparticles, which are now present in everything from socks to salad dressing and suntan lotion, may have irreparably damaging effects on soil systems and the environment."

Also noted by UPI, Nanowerk, Popular Science,

Milk magician
*The Daily Star* (Bangladesh)
April 10
Reaz Ahmad

"A Bangladeshi scientist has developed a fibre from milk protein as medical suture for repairing damaged tissues, cut vessels and surgical incisions in a biodegradable way."

Batteries that Recharge in Seconds
*MIT Technology Review*
April 11
Katherine Bourzac

"A new process could let your laptop and cell phone recharge a hundred times faster than they do now."

Public sees nanoparticle risk as low
UPI
April 12

"The public is relatively unconcerned about nanotechnology risks compared with other environmental and health safety threats, a U.S. study found."

Carbon Nanotube Solution Could Eliminate Need for Indium Tin Oxide in Electronic Displays
*IEEE Spectrum* Nanoclast blog
April 13
Dexter Johnson

"It is altogether possible that the best solution to the current rare earth mineral squeeze is for countries other than China to restart their mining of the minerals that they more or less abandoned over twenty years ago."

Business Transforms What Science Began - Nanotechnology in the next decade
*IndustryWeek*
April 13
Scott E. Rickert

"Did you hear that satisfying thump? That's nanotechnology reaching the tipping point -
and hitting the ground running as an everyday-all-the-time business. What started as a wide open research field has garnered 30 years of maturity, taking it from the lab to the real world."

**Nano Press**
What nano-centered publications are reporting

**A new nanotechnology application to manufacture a one terabyte USB stick in the near future**
Nanowerk
April 7

"Dr. Simon Elliott from the Tyndall National Institute in Ireland is coordinating the EU research project REALISE and working on the next generation of USB flash memories. Rare earth oxides have been introduced to improve their storage capacity. An interview by Rebecca Parsons."

**Are we only a hop, skip and jump away from controlled molecular motion?**
Nanowerk
April 8

"We may very well be, according to a study in this month's *Nature Chemistry* ('Gradient-driven motion of multivalent ligand molecules along a surface functionalized with multiple receptors'). Controlling how molecules move on surfaces could be the key to more potent drugs that block the attachment of viruses to cells, and will also speed development of new materials for electronics and energy applications. The study is the culmination of a EU-funded collaboration between Tyndall National Institute, UCC researcher Dr. Damien Thompson and colleagues at University of Twente in the Netherlands. Dr. Thompson performed computer simulations that enabled a greater understanding of how two-legged molecules move along patterned surfaces, in a kind of molecular hopscotch."

**Does anyone know how much nanomaterials are produced? Anyone...?**
Nanowerk
April 11

"Life cycle assessment - a cradle-to-grave look at the health and environmental impact of a material, chemical, or product - is an essential tool for ensuring the safe, responsible, and sustainable commercialization of a new technology. With missing data about the large scale impact of nanotechnology, life cycle assessments of potential nanoproducts should form an integral part of nanotechnology research at early stages of decision making as it can help in the screening of different process alternatives. Unfortunately, life cycle studies of emerging nanotechnologies are susceptible to huge uncertainties due to issues of data quality and the rapidly evolving nature of the production processes."

**European Commission's nanotechnology policy lost in definition**
"The European Commission’s hesitance to define nanotechnology underscores diverging opinions among stakeholders and is causing uncertainty in the sector."

**Why we don’t need a regulatory definition for nanomaterials**

"Engineered nanomaterials present regulators with a conundrum - there is a gut feeling that these materials present a new regulatory challenge, yet the nature and resolution of this challenge remains elusive. But as the debate over the regulation of nanomaterials continues, there are worrying signs that discussions are being driven less by the science of how these materials might cause harm, and more by the politics of confusion and uncertainty."

**Other (science) issues related to nanotechnology**

**Building a ‘Nano-Brick’ Wall Around Fresh Food**
*Discovery News*
April 1
Nic Halverson

"A group of scientists from Texas A&M University recently announced a development that could put a cap on flat soda and stale crackers."

**Nanopolymer shows promise for helping reduce cancer side effects**
*EurekAlert*
April 5

"WEST LAFAYETTE, Ind. - A Purdue University biochemist has demonstrated a process using nanotechnology to better assess whether cancer drugs hit their targets, which may help reduce drug side effects."

**Work Could Aid Cancer Treatment**
*EdHat.com*
April 6

"Chemical engineers at UC Santa Barbara expect that their new process to create molecular probes may eventually result in the development of new drugs to treat cancer and other illnesses."

**Nanopolymer Helps Determine if Cancer Drugs Have Reached Desired Target**
*Daily Tech*
April 6

"Nanotechnology helps assess whether the cancer drug has arrived at the desired location and targeted the correct proteins."

Huge scientific discoveries start with tiny technology
Drovers Cattle Network
April 10
Debra Levey Larson

"Jozef Kokini’s description of the ways nanotechnology can be utilized in food science and agriculture is reminiscent of the 1966 science fiction film Fantastic Voyage in which a specially designed nuclear submarine and a team of researchers are miniaturized and injected into a patient's bloodstream. But Kokini is talking about real science, not fiction."

Study Finds Public Relatively Unconcerned About Nanotechnology Risks
dBusinessNews
April 12

"A new study finds that the general public thinks getting a suntan poses a greater public health risk than nanotechnology or other nanoparticle applications. The study, from North Carolina State University, compared survey respondents' perceived risk of nanoparticles with 23 other public-health risks."

Yes or No on Nanoparticles in Food?
Triple Pundit.com
April 12
Michael Passoff

"You may have read that nanoparticles are used in literally hundreds of products on supermarket shelves. This new technology is reported to be prevalent in U.S. food applications, including nutritional additives, stronger flavorings and colorings, and antibacterial agents for food packaging and kitchenware. Meanwhile, the scientific community is raising serious concerns about the safety of nano-based technology."

Study: Nanotech destroys soil
San Francisco Chronicle - Thin Green Line blog
April 15

"Nanotechnology is a booming business, with new uses found almost everyday. Use of silver nanoparticles is especially widespread, because the tiny particles bring antibacterial properties to surgical tools, water treatment, wound dressings, and so forth. They're also used in batteries - another fast-moving area of innovation."