

Center for Nanotechnology in Society
University of California, Santa Barbara

www.cns.ucsb.edu

WEEKLY CLIPS

July 6 - 26, 2010

10 YEARS AGO IN NANO NEWS . . .

[Examining genetics through the lens of faith](#)

Pittsburgh Post-Gazette

July 16, 2000

Byron Spice

"Ronald Cole-Turner has always associated religion with healing. His father was a minister in the Christian and Missionary Alliance, a denomination that incorporates healing as part of its mission.

'I grew up with the notion that people of faith ought to be interested in healing,' he said, recalling the prayers and laying on of hands that occurred in his father's congregations in Indiana, North Carolina and Ohio."

[Religion Grappling With Tech](#)

Wired

July 21, 2010

Jordan Lite

"DEERFIELD, Illinois - Before there was a cloned sheep named Dolly and a human genome map, 200 theologians signed a petition urging a moratorium on the patenting of human life forms.

The petition immediately caused a sensation, its contents reported in the United States' leading newspapers. Annoyed biotech industry leaders declared that these clergy, whose scientific knowledge they believed extended no further than that of the average high school student, seriously misunderstood the goals and nature of their business."

Top Deck

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

[Time to Start Using New Examples for Nanotechnology Applications](#)

IEEE Spectrum Nanoclast blog

July 6, 2010

Dexter Johnson

"At some point in most discussions of nanotechnology and its impact, we get definitions (with or without Greek etymology), it's current and projected market value and a list of its applications whether they be its current ones or possible ones in the future.

Getting something other than this is sort of like asking someone to describe a spiral staircase without using their hands, it can be done but they have to concentrate for a moment. The same goes for nanotechnology. You can either stop for a moment and consider some new way of describing nanotechnology's impact or you can do what's usually done and give the same answers people have been offering for the last 10 years."

[Nanotech in Our Food: Should We Be Afraid?](#)

The Atlantic

July 14, 2010

Marion Nestle

"Nanotechnology involves the ability to control matter at the scale of a nanometer - one billionth of a meter. The world market for products that contain nanomaterials is expected to reach \$2.6 trillion by 2015.

So says a report from the Government Accountability Office (GAO): *Nanotechnology: Nanomaterials Are Widely Used in Commerce, but EPA Faces Challenges in Regulating Risk.* [GAO-10-549, May 25, 2010.](#)"

[New-Gen' comic book series merges classic superhero tale with hi-tech nanotechnology](#)

New York Daily News

July 21, 2010

Patrick Montero

"Though similar to other superhero teams, the nanopowered creatures of the futuristic action comic series, [New-Gen](#), are not your average mutant superheroes. What sets them apart is the seamless blending of your classic superhero with real science-based fact.

'Nanotechnology is a real science,' exclaims J.D. Matonti, creator and co-writer of the New-Gen series, 'I reached out to NASA scientist, Dr. Brad Edwards, [to learn about] the possibilities of nanotechnology. What if someone was composed of nanobots? What sort of incredible powers could manifest?' "

[How Safe Are Cosmetics?](#) New Bill Wants to Find Out

AOL News

July 21, 2010

Andrew Schneider

"Most Americans use about 10 personal care products each day. The toothpaste, shampoo, deodorant, baby powder and other things that we routinely douse or slather on our bodies expose us to at least 100 different chemicals. Many of these, public health experts say, have been linked to adverse health effects like cancer, birth defects and learning disabilities.

There is nothing that the Food and Drug Administration can legally do about it.

But that may begin to change as two Democratic lawmakers - Reps. Jan Schakowsky from Illinois and Edward Markey from Massachusetts - introduced the Safe Cosmetics Act of 2010 today. If passed, it will be the first meaningful effort to give the FDA the teeth, tools and mandate to protect consumers from harmful products that are used by almost everyone."

[Invisible Engineering](#): Chemist Angela Belcher looks to manufacture high technology out of viruses

Smithsonian Magazine

August 2010

Michael Rosenwald

"Angela Belcher, a materials chemist at the Massachusetts Institute of Technology, is using nanotechnology to grow batteries. Out of viruses. Batteries that could last weeks or months and be thinner than a credit card. How did she get such an idea? Abalone shells.

'I'm really interested in how biology makes materials,' Belcher says. 'I've always been fascinated, for instance, with shells.' "

On Deck

What Local Sources are Reporting

[Super Chewing Gum? Not So Fast](#)

New Haven (CT) Independent

July 21, 2010

Thomas MacMillan

"Chicago - Food companies are working on ways to concoct a fluid that acts like oil but is made of water, and a food coating that changes color in the presence of E. Coli bacteria. But without a definition of 'nanotechnology' from the Federal Department of Agriculture (FDA), we may not be frying potatoes in water anytime soon."

[Nanotech firm's trial by fire](#) - A Blacksburg-based company tried out its new fire retardant with a real-world test, and the results were plain to see.

The Roanoke (VA) Times

July 21, 2010

Duncan Adams

"BLACKSBURG - Fire poked through the roof about 8:25 p.m. Tuesday. Soon after, flames fully engulfed the left half of the abandoned duplex. The right half simply smoldered.

And smoldered. Firefighters participating in the training exercise checked their watches and wondered when flames would take the right side, too.

'It's amazing, the difference,' said Curtis Whitt, training officer for the Blacksburg Fire Department."

[A lesson in reading sunscreen labels](#)

Times-Picayune (New Orleans, LA)

July 13, 2010

Susan Langenhennig

"Sunscreen is one of those amazing inventions. Rub or spray it on, and you've gone a long way toward heading off sunburn, prune-like wrinkling and skin cancer.

But what exactly are you putting on your skin? It's a question more and more people are asking after reports from an environmental group have raised health concerns about some sunscreen ingredients."

[Feds Look To 9/11 For Nano Health Clues](#)

New Haven (CT) Independent

July 26, 2010

Melissa Bailey

"Keystone, Colorado - After the World Trade Center collapsed on 9/11, the City of New York kept track of tens of thousands of people who breathed in the toxic dust that billowed out through city streets . . .

Federal officials are now looking at that tracking system, called an exposure registry, as a possible tool to track the health of workers exposed to other particles - those that are manipulated on the near-atomic level to form engineered 'nanomaterials.' "

Nano Press

What nano-centered publications are reporting

[Nanomaterials in the construction industry and resulting health and safety issues](#)

Nanowerk

July 13, 2010

"Tailing after emerging nanotechnology applications in biomedical and electronic industries, the construction industry recently started seeking out a way to advance conventional construction materials using a variety of manufactured nanomaterials. The use of nanotechnology materials and applications in the construction industry should be considered not only for enhancing material properties and functions but also in the context of energy conservation. This is a particularly important prospect since a high percentage of all energy used (e.g., 41% in the United States) is consumed by commercial buildings and residential houses by applications such as heating, lighting, and air conditioning. [A recent review](#) by scientists at Rice University has looked at the benefits of using nanomaterials in construction materials but also highlights the potentially harmful aspects of releasing nanomaterials into the environment."

[Nearly as hard as steel: Aluminum with fullerenes](#)

Nanowerk

July 16, 2010

"Russian researchers with Siemens Corporate Technology (CT) are using special carbon nanoparticles to optimize materials. They are adding fullerenes - soccer ball-shaped molecules comprising 60 carbon atoms - to aluminum to obtain a new material that is roughly three times harder than conventional composites, yet weights much less. The lightweight yet strong aluminum could be used to improve the performance of compressors, turbochargers and engines."

[Other \(science\) issues related to nanotechnology](#)

[Wound Dressing Uses Medical Nanotechnology to Detect, Treat Infection](#)

TMCNet.com
July 12, 2010
Erin Monda

"An international team of researchers is working to develop an advanced wound dressing that will release antibiotics from nanocapsules when triggered by disease-causing bacteria. The dressing is designed to begin treatment before infection takes hold, and to change color in order to alert healthcare professionals of the presence of infection. The Bacteriosafe project is collaboration of 11 partners across Europe and Australia, including chemists, cell biologists, clinicians and engineers, coordinated by Dr. Renate Förch, at the Max-Planck-Institute for Polymer Research."

[Reflections on the Safety of Nanotechnology-Based Sunscreens](#)

Institute for Ethics and Emerging Technologies
July 19, 2010
Andrew Maynard

"A few weeks ago, I set Friends of the Earth a challenge - *What is your worst case estimate of the human health risk from titanium dioxide and/or zinc oxide nanoparticles in sunscreens?*

The challenge came out of an article from FoE on nanomaterials and sunscreens, which I subsequently critiqued on *2020 Science*. Georgia Miller and Ian Illuminto from FoE kindly responded to my challenge - not by rising to it as such, but by fleshing out the justification for the position that they take on nanomaterials and sunscreens."

[Food companies go quiet on nanotech research activity](#)

FoodProductionDaily.com
July 19, 2010
Caroline Scott-Thomas

"Many major food companies have become hesitant to promote their research into the potential of nanotechnology for fear of piquing consumer concerns while it is still in its infancy, according to an expert from market researcher Lux Research.

Nanotechnology refers to controlling matter at an atomic or molecular scale measured in nanometers, or millionths of millimeters. In the food industry, the technology could

have a variety of uses including detecting bacteria in packaging, delivering nutrients in smaller doses but with better bioavailability, or producing stronger flavors and colorings."

The Humorous, Fascinating & Unique

[Magnetic Nanoparticles Can Remotely Control Worms](#)

Wired

July 7, 2010

Jess McNally

"Using magnetic nanoparticles, scientists have found a way to remotely control neurons and affect animal behavior.

The nanoparticles, which are targeted to attach to cell membranes, heat up when exposed to a magnetic field. Researchers have demonstrated that the heat can open calcium ion channels in cells, activate neurons and even cause *C. elegans* worms to recoil, according to a paper released in *Nature Nanotechnology* June 27."

Also noted by [UPI](#) and [Popular Science](#).

[Nanotechnology Makes Poop Power 20 Times More Efficient](#)

Inhabitat (blog)

July 23, 2010

Cameron Scott

"Engineers at Oregon State University have their minds in the gutter. They're working on getting more energy from sewage, and they've made a discovery that boosts electricity production substantially. By applying a nanoparticle coating to the anodes in fuel cells that turn crap into currents, they increased production nearly 20-fold."