

# Center for Nanotechnology in Society University of California, Santa Barbara

[www.cns.ucsb.edu](http://www.cns.ucsb.edu)

## WEEKLY CLIPS

Jan. 16-131, 2011

### Top Deck

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

[Just Because It's Smaller Doesn't Make It Nanotechnology](#)

*IEEE Spectrum* Nanoclast blog

Jan. 18

Dexter Johnson

"Andrew Maynard is often the first stop for mainstream journalists when they need to cover the story of nanotech. This is no doubt due to Maynard's unique blend of scientific knowledge and his ability to communicate the science effectively to both the layman and his fellow scientist."

[Surrey company developing high-tech security feature inspired by butterfly](#)

The Surrey Now (Canada)

Jan. 17

Tom Zytaruk

"SURREY - A Surrey company is flying high over a high-tech breakthrough inspired by a shimmering blue butterfly. The idea, developed at Simon Fraser University's campuses at Surrey and Burnaby, involves some really small stuff."

[Carcinogenic nanoparticles found in some cosmetics](#)

World Radio Switzerland [Includes audio of interview]

Jan. 19

"A nanotechnology health warning with a link to a major carcinogen: asbestos. Nano

particles found in everyday products such as toothpaste and lipstick may be as toxic as asbestos, which is banned the world over after countless deaths. That alarming connection has been made by biochemists at the University of Lausanne. WRS's Susan Flory spoke to Professor Jurg Tschopp who led the study team[.]"

### [Introducing the world's tiniest rope](#)

MSNBC

Jan. 20

"Scientists have braided a rope that is less than a millionth of a meter in diameter, a major step toward self-assembling materials important for nanoscale construction and medicine."

### [Nanotech can filter toxins from animal products](#)

*The Times of India*

Jan. 24

"Can nanotechnology be effectively used in removing toxins from animal products?"

While a number of methods including heat and acid treatments have failed to remove mycotoxins from animal products, the experts are now looking at nanotechnology that uses clay as filter to remove the poisonous toxins from animal products before they are ready for human consumption."

### [New 'Breast on a Chip' Will Allow Experimentation Into Nano-Treatment of Breast Cancer](#)

*Popular Science*

Jan. 25

Rebecca Boyle

"Purdue University researchers have built a chip-sized replica of a portion of the human female breast, and aim to use it to study nanoparticles for detection and targeting of tumor cells. The ['breast on a chip'](#) is the first step in studying the mammary ducts from the inside, which could help doctors diagnose and treat the disease in its earliest stages, researchers say."

### [Nanotechnology Gets Star Turn at Speech](#)

*The New York Times*

Jan. 25

Kenneth Chang

"The presence of Amy Chyao, a 16-year-old from Richardson, Tex., in Michelle Obama's box during the State of the Union speech puts a spotlight, as it were, on using nanotechnology and light to kill cancer."

### [SFU-linked company takes aim at counterfeiters with 'nanoholes'](#)

*The Vancouver Sun* (British Columbia)  
Jan. 27  
Scott Simpson

"It only took one look to convince Doug Blakeway to jump in.

As Simon Fraser University's entrepreneur-in-residence, it is Blakeway's role to refine potential new businesses that arise from the university's fertile research and development labs."

[Glasgow University in hydrogen fuel project](#)

BBC News  
Jan. 28

"New research could pave the way for hydrogen to be used as a pollution-free alternative to conventional fuels.

Scientists at Glasgow University are using nanotechnology to find a way of storing the element in a solid state."

## **On Deck**

### What Local Sources are Reporting

[California Wants To Know More About Nano-Metals](#)

*New Haven (CT) Independent*  
Gwyneth K. Shaw  
Jan. 17

"California's Department of Toxic Substances Control is asking in-state nanotechnology companies and researchers to share how they're keeping tabs on several nano-sized metals, as evidence continues to emerge that these substances might have long-term implications for the environment."

[Small technology means big business](#)

*The Oklahoman*  
Jan. 18  
Susan Simpson

"The big news for Oklahoma businesses is very, very small, said Jim Mason, executive director of the Oklahoma Nanotechnology Initiative."

[New nanotechnology to advance prevention, treatment of cholera](#)

Medill Reports

Jan. 20  
Frank Jackson III

"Thousands of deaths occurred in the most recent major cholera outbreak in Haiti late last year after the country suffered massive earthquake damage earlier in the year. However, researchers at the University of Central Florida in Orlando, Fla. developed nanotechnology that may help prevent and treat such outbreaks."

[U.S., European Officials Peek Behind The Curtain](#)

*New Haven (CT) Independent*

Jan. 20

"In a [commentary](#) in the journal Nature Nanotechnology, a team of American and European officials discuss the numerous challenges facing the regulation of nanomaterials, and give readers a glimpse of what's going on behind the scenes."

[Nanoparticles: Boon or bane to our health?](#)

Asbury Park Press (New Jersey)

Jan. 23

Todd B. Bates

"You may never have heard of microscopic nanoparticles, but they could have a major impact on your health - both good and bad - in the years ahead."

[Insuring the Unknown](#)

*New Haven (CT) Independent*

Jan. 25

Gwyneth K. Shaw

"People in the risk management business (not to mention Donald Rumsfeld) are famous for talking about the 'unknown unknowns.' With nanotechnology, there are a lot of them? a fact that's got insurance companies as eager as researchers and regulators to find out what potential dangers lurk amid some of the economy's most promising new technologies."

[What Do We Think About Nano? And Why?](#)

*New Haven (CT) Independent*

Jan. 31

Gwyneth K. Shaw

"As with many scientific concepts and fields, 'nanotechnology' has entered the public lexicon, but few laypeople have more than a vague understanding of what it actually entails."

**Nano Press**

## What nano-centered publications are reporting

### [Nanotechnology's contribution to reconstructive surgery](#)

Nanowerk

Jan. 18

"To rebuild damaged parts of a human body from scratch is a dream that has long fired human imagination, from Mary Shelley's Doctor Frankenstein to modern day surgeons. Now, a team of European scientists, working in the frame of the EUREKA project [ModPoIEUV](#), has made a promising contribution to reconstructive surgery thanks to an original multidisciplinary approach matching cutting-edge medicine to the latest developments in nanotechnology."

### [Thailand pushing forward on nanosafety regulations](#)

Nanowerk

Jan. 18

"Thailand is making advancement in pushing for the country's first strategy plan on nanotechnology safety and ethic which is expected to be submitted to the government in 2011."

### [Researcher warns of health risks with carbon nanotubes](#)

Nanowerk

Jan. 18

"Carbon nanotubes, which are extremely small fibers used in many new light and strong materials, may present health risks if inhaled, in the worst case leading to cancer, according to new research from Lulea University of Technology."

### [Silicon Nanocrystals Map Location of Spreading Tumors](#)

Nanotechnology Now

Jan. 19

"Nano-sized fluorescent particles known as quantum dots have shown promise as powerful imaging agents capable of detecting a wide range of diseases, but these nanoparticles are usually made with toxic metals such as cadmium. Now, researchers at the University of Buffalo have developed a novel synthetic method that enables them to design and create biocompatible fluorescent nanocrystals made of non-toxic silicon. More importantly, the investigators have used these silicon nanocrystals to image tumors and spot spreading cancer in lymph nodes."

### [Researchers use nanoscale transistors to study single-molecule interactions](#)

Nanowerk

Jan. 23

"An interdisciplinary team from Columbia University that includes electrical engineers from Columbia's Engineering School, together with researchers from the University's departments of Physics and Chemistry, has figured out a way to study single-molecule interactions on very short time scales using nanoscale transistors. In a paper to be published online January 23 in *Nature Nanotechnology*, they show how, for the first time, transistors can be used to detect the binding of the two halves of the DNA double helix with the DNA tethered to the transistor sensor. The transistors directly detect and amplify the charge of these single biomolecules."

### [Nanotechnology and public opinion](#)

Nanowerk

Jan. 24

"Patterns of news coverage on nanotechnology are developing in ways that mirror issue cycles for previous technologies, including agricultural biotechnology. In particular, early coverage of nanotechnology was dominated by a general optimism about the scientific potential and economic impacts of this new technology (Dudo, Dunwoody, & Scheufele, forthcoming; Friedman & Egolf, 2005; Friedman & Egolf, 2007). This is in part related to the fact that a sizeable proportion of nanotechnology news coverage - at least in newspapers - continues to be provided by a handful of science journalists and business writers (Dudo, Choi, & Scheufele, 2011; Dudo et al., forthcoming).

### [Unethical Nanotechnology](#)

Institute for Ethics and Emerging Technologies

Jan. 24

Sascha Vongehr

"Nanotechnology has been my own field of research for 12 years now. It is one of the, if not *the* most important emerging technology, and it is widely believed to be the vital ingredient for many of transhumanism's most desired transformations, be it slowing down aging, computer to brain network-neuron interfaces, or the development of ever faster (quantum) computers. Nano is still the big buzz word and I am afraid to be the uninvited party-pooper."

### [Nanotechnology research lays the foundation for smart implants](#)

Nanowerk

Jan. 25

"Imagine intelligent medical implants that can continuously monitor their condition inside the body and autonomously respond to changes such as infection by releasing anti-inflammatory agents. Thanks to nanotechnology, medical research is moving quickly towards this goal."

### [How safe Is Nano? Nanotoxicology: An interdisciplinary challenge](#)

Nanowerk

Jan. 28

"The rapid development of nanotechnology has increased fears about the health risks of nano-objects. Are these fears justified? Do we need a new discipline, nanotoxicology, to evaluate the risks? Harald F. Krug and Peter Wick of the Swiss Federal Laboratories for Materials Science and Technology discuss these questions in the journal *Angewandte Chemie* (['\*Magnetic Bistability of Molecules in Homogeneous Solution at Room Temperature\*](#)')."

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

### Nanotechnology is focus of draft recommendations

Risk and Insurance Magazine

Jan. 17

"The health implications of working with nanomaterials are unknown. Yet nanotechnology is becoming more widely used, causing concern among occupational health experts."

### Health concerns raised over nanoparticles

SwissInfo

Jan. 20

Simon Bradley

"Titanium dioxide (TiO<sub>2</sub>) nanoparticles, widely used in sun creams and cosmetics, provoke similar inflammatory effects on the lungs as asbestos, new research has found."

### Detecting Chemical and Biological Agents on the Nanoscale

*Armed with Science* (U.S. Military)

Jan. 23

"Researchers and students at Northwestern University have developed a new way to look for chemical and biological agents using miniaturized detectors that work at nanoscale dimensions. The research is being done in the laboratory of Dr. Chad Mirkin, a National Security Science and Engineering Faculty Fellow (NSSEFF) funded by the Department of Defense. NSSEFF supports world-class faculty members and their development of the next generation of leading scientists."

### ASCO GI: Agent Shows Promise in Pancreatic Cancer

MedPage Today.com

Jan. 27

Dori F. Zaleznik, MD

"SAN FRANCISCO - A liposomal formulation of irinotecan (CPT-11) passed an early clinical test in metastatic pancreatic cancer, meeting survival and safety endpoints for continued evaluation."

Also noted by [Medill Reports](#).

[Steel nanotechnology can reduce the weight of our cars](#)

Autoblog.com  
Jan. 31  
John McElroy

"The world's largest steel maker, ArcelorMital, says it has come up with a new kind of steel that the world has never seen before. Thanks to nanotechnology, the company says automakers can now match the weight of aluminum cars, but do it in steel at far lower cost."