From:	Cathy Boggs
To:	Cathy Boggs
Subject:	Fwd: [CNS-weekly-clips] CNS-UCSB News Clips, August 16-31, 2011
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Subject: [CNS-weekly-clips] CNS-UCSB News Clips, August 16-31, 2011
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From: CNS - Weekly News Clips from UCSB <cns-weekly-clips@lists.isber.ucsb.edu>
Reply-To: cns-weekly-clips@lists.isber.ucsb.edu
To: cns-weekly-clips <cns-weekly-clips@lists.isber.ucsb.edu>

CNS-UCSB
Center for Nanotechnology in Society

University of California, Santa Barbara
www.cns.ucsb.edu

News Clips

August 16-31, 2011

Top Deck

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

Nanotechnology Goes Macro
AOL Energy
August 16
Shifra Mincer

"About 1,000 times narrower than the width of an average human hair, nano materials may hold an ability far larger than their size."

Start small, think big
Nature
August 17

"The United Kingdom and others must not overlook the potential for nanotechnology to boost regenerative medicine."

Nanotechnologists Are Targets of Unabomber Copycat, Alarming Universities
Chronicle of Higher Education
August 21

Marion Lloyd and Jeffrey R. Young

"A package bomb that injured two professors at a university here this month is the latest in a string of attacks by a new terror group inspired by the Unabomber."

Also noted by Popular Science.

Can Nanotechnology Improve Lithium-ion Batteries to Make a Difference for Electric Vehicles?
IEEE Spectrum Nanoclast
August 22
Dexter Johnson

"I have followed carefully the nanotechnology-related developments for improving Li-ion batteries for use in mobile phones and other gadgets. However, I have been less enthusiastic about the prospects of nanotechnology in improving Li-ion batteries for use in electric vehicles (EVs)."

Shoes redefine "power walking"
MSNBC
August 24
John Roach

"Going on a power walk could soon do more than blow off steam; it could recharge your cell phone and other portable electronics, according to engineers working on a new way to harvest the mechanical energy in the human gait."

Nanoparticles Can Impair Cell Function
Forbes
August 25
Alex Knapp

"Nanoparticles, which are particles between 1-100 nanometers in diameter, are currently being heavily researched as a potential method of drug delivery or as a means of detection for certain maladies, such as tumors."

Scientists Measure Electron Orbitals for the First Time
PC Magazine
August 29
Peter Pachal

"Much of microscopic science remains abstract. While tools and experiments have allowed scientists to infer how things like electrons and atomic nuclei behave, no one has ever really seen an electron. At least, not until now."

Local

Green For Safety, Gray For ... ???
New Haven (CT) *Independent*
August 16
Gwyneth K. Shaw

"One of the biggest challenges facing scientists, academics and policymakers exploring the pros and cons of manmade ultra-small particles is explaining to the general public what's potentially dangerous-and what's not."

Nanotechnology: Will Teeny Tiny Ever Make It Big?
Oregon Public Broadcasting
August 17
Kristian Foden-Vencil

"Hundreds of researchers and business executives are in Portland this week for a three-day conference on nanotechnology."

Also noted by The Republic (Columbus, IN)/Oregonian.

Fear The Photocopier?
New Haven (CT) *Independent*
August 18
Gwyneth K. Shaw

"Here's what researchers at the University of Massachusetts/ Lowell *don't* want you to conclude about their ongoing research on copiers and printers: These linchpins of the modern office throw off nanoparticles, and therefore they're dangerous."

Nano Press

What nano-centered publications are reporting

Nanotechnology researchers develop color-changing stress sensor
Nanowerk
August 18

"It is helpful - even life-saving - to have a warning sign before a structural system fails, but, when the system is only a few nanometers in size, having a sign that's easy to read is a challenge."

Nanotechnology's rapidly growing footprint on the scientific landscape
Nanowerk
August 23

"It is quite difficult - not least because there is no consensus about a proper definition - to assess the scope of nanotechnology research and its impact on the overall scientific body as well as its commercialization prospects."

Other (science) issue related to nanotechnology

NC State Researchers Develop Technique To Scale Up Nanofiber Production
Textile World
August 16

"Researchers at North Carolina State University (NC State), Raleigh, N.C., have developed a nanofiber production technique that will enable significantly increased output compared with the traditional needle electrospinning (TNE) method and allow industrial-scale production of nanofibers comparable in quality to those formed by needle electrospinning."

Carbon nanotube structures changed by 'attack' from within, researchers discover
EurekAlert
August 16

"A team of researchers involving scientists from The University of Nottingham has shown for the first time that chemical reactions at the nano-level which change the structure of carbon nanotubes can be sparked by an 'attack' from within."

Carbon Nanotube Reliability is questioned by NIST research
ThomasNet News
August 22

"While carbon nanotubes can theoretically carry 1,000 times more electric current than metal conductor of same size, recent tests at NIST suggest device reliability as a major issue. Specifically, results show nanotubes can sustain extremely high current densities for several hours but slowly degrade under constant current and fail when currents rise above certain threshold. Failures were also identified in carbon nanotube networks, where electrons physically hop from tube to tube."

Safeguarding the Promise of Nanotechnology
Medgadget
August 22
Sara A. Brenner, M.D., M.P.H

"Amid global competition, collaboration lifts everyone's boat. At least in certain areas where the stakes are high, risks are unknown, and social responsibility is in the public spotlight."

Nickel nanoparticles may contribute to lung cancer
R & D Magazine
August 24

"All the excitement about nanotechnology comes down to this: Structures of materials at the scale of billionths of a meter take on unusual properties. Technologists often focus on the happier among these newfound capabilities, but new research by an interdisciplinary team of scientists at Brown University finds that nanoparticles of nickel activate a cellular pathway that contributes to cancer in human lung cells."

Fighting flames with greener materials
Science News
August 24
Janet Raloff

Materials scientists in Texas have developed flexible coatings mere billionths of a meter thick that keep cotton clothing from going up in flames and plastic foam from

melting.

ACS Podcast Discusses Lethality of Nanoparticles in Edible Plants
Azonano
August 26
Cameron Chai

"There is a large gap in knowledge about the impact of nanomaterials on edible plants, according to the latest episode of 'Global Challenges/Chemistry Solutions', an award-winning podcast series of the American Chemical Society."

UNC study shows potential for nanotechnology-based therapy for ovarian cancer
Health Canal
August 30

"Scientists at UNC Lineberger Comprehensive Cancer Center and Duke University Medical Center conducted a preclinical study using nanoparticle technology to deliver doses of chemo- and radiotherapy that specifically targeted metastasized ovarian cancer cells."