

UCLA



IMPACT

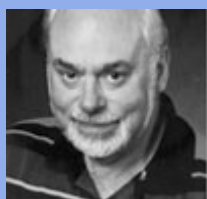
UCLA ...

inviting fresh perspectives and new ways to wonder.

Small is the Next Big Thing

This fall, the California NanoSystems Institute (CNSI), a research center run jointly by UCLA and UC Santa Barbara, will open a new, 188,000 square foot world-class research facility on the UCLA campus.

Click on the links below to hear from Fraser Stoddart, professor of chemistry and biochemistry and director of CNSI, about the institute and its research.



[The Institute](#) (Real Player / 1:47 min)

[The People](#) (Real Player / 1:20 min)

[The Research](#) (Real Player / 2:03 min)

- **CNSI has raised more than \$300 million in federal research grants and industry funding**
- **In 2005, alone CNSI had 119 patent filings and five patents issued**

While most of us know very little about the study of nanoscience – it is a term we hear more and more. Products that we use every day are becoming smaller, lighter, faster and stronger – sometimes all at the same time.

But what is nanoscience?

Simply put (and there is nothing simple about it), nanoscience is the science of making things very small, creating machines and materials at a sub-molecular level - but the potential impact on the world is huge.

At UCLA, our scientists are hard at work each day measuring, modifying and manipulating the very building blocks of our world: atoms and molecules. Scientists in the areas of biology, chemistry, biochemistry and physics, just to name a few, are all conducting research at the nano-level, creating new possibilities for breakthroughs in medicine, information technology, manufacturing, environmental protection, homeland security and multimedia entertainment.

And our scientists are not just busy in the lab, they are helping to cultivate our future science and technology leaders.

Each summer, UCLA faculty show high school science teachers from low-income schools around Los Angeles how to teach nanoscience to their students.

[<more>](#)

Spin Control

As electronics are on the verge of getting about as small as they can get, UCLA engineers, led by Professor Kang Wang, are researching a new frontier – harnessing the power of spinning electrons. This technology that will make the next generation of electronics run more efficiently and use less power.

[<more>](#)



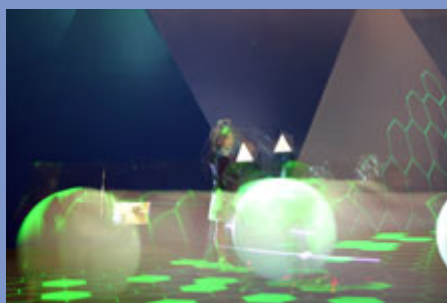
Running on Hydrogen

Researchers at UCLA and at the University of Michigan are making great strides toward new nanotechnology that will allow not only our cars to run on hydrogen, but our laptops, cell phones and digital cameras too. Read more about Professor of Chemistry Omar Yaghi and this amazing new possibility.

[< more>](#)



Art Imitates Nano



Art is often used to explain the unexplainable. In this article by [National Geographic Magazine](#), read about two UCLA faculty - an artist and a scientist - working together to help people understand life at a molecular level.

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