

# Make science glamorous, says top US scientist

That's the way to inspire young minds to embrace the discipline

By FENG ZENGKUN

PROMOTE the idea that a scientist's job can be as glamorous as that of a professional athlete, singer or actor.

This is the advice of top American scientist Professor Chad Mirkin, on how to take Singapore's scientific ambitions to another level.

He noted that the country has done well in creating institutions with state-of-the-art equipment. These tools, such as powerful microscopes, for example, allow scientists to better understand nano-

science. Nanoscience refers to the study and manipulation of extremely small matter, usually at the atomic or molecular scale.

"Part of nanotechnology is the discovery of new materials, which has an impact on everything we do, from electronics to medicine," said Prof Mirkin, 48, one of the most-cited scientists in this field and an adviser to US President Barack Obama.

"But getting to the next level will also require a lot of basic research, and balancing that with the need to translate them into products," he added.

This is why he is urging that

more be done to excite young minds about the sciences, for example, by exposing them to laboratory and research work at a younger age.

Apart from promoting the profession as equally glamorous as other jobs, he noted the appeal of another trump card.

"There's nothing that will inspire young people more than the thrill of discovering something that no one else in the world has discovered," he said.

Prof Mirkin is in Singapore this week to give two lectures on nanotechnology, including one at Nanyang Technological University (NTU), where he is a visiting professor at the School of Materials Science and Engineering.

The professor of chemistry at Northwestern University in the



Nanyang Technological University will confer an honorary degree of Doctor of Engineering on Professor Chad Mirkin tomorrow in recognition of his contributions. PHOTO: LIANHE ZAOBAO

US will also receive an honorary NTU degree of Doctor of Engineering tomorrow.

At an interview yesterday, he gave several examples of discoveries powered by nanotechnology.

One of the companies he found-

ed, for example, came up with a diagnostic tool that uses tiny gold particles to test for sepsis, a potentially deadly condition where the immune system over-reacts to an infection.

The new test cut the diagnosis

## LECTURES

PROF Mirkin will give two public lectures this week.

### ■ Revolutionising medicine through nanotechnology

Today, 3.30pm to 5pm  
Tan Chin Tuan Lecture Theatre, NTU

### ■ Nanotechnology: Learning to think big in a field focused on the small

Thursday, 3.30pm to 5pm  
University Hall Auditorium, NUS

time from three days to two hours and helped doctors determine which drugs would be most useful for patients.

Many skin-care products such as sunscreen also use nano-particles to make them transparent and easier for the skin to absorb, said Prof Mirkin.

"We're also looking at nano-structures in future that can go into cells and flip genetic switches to transform diseased cells into healthy cells, or even selectively kill diseased cells like cancer cells," he said.

In Singapore, scientists have come up with ultra-small particles that seek out bacteria in the body and destroy them.

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