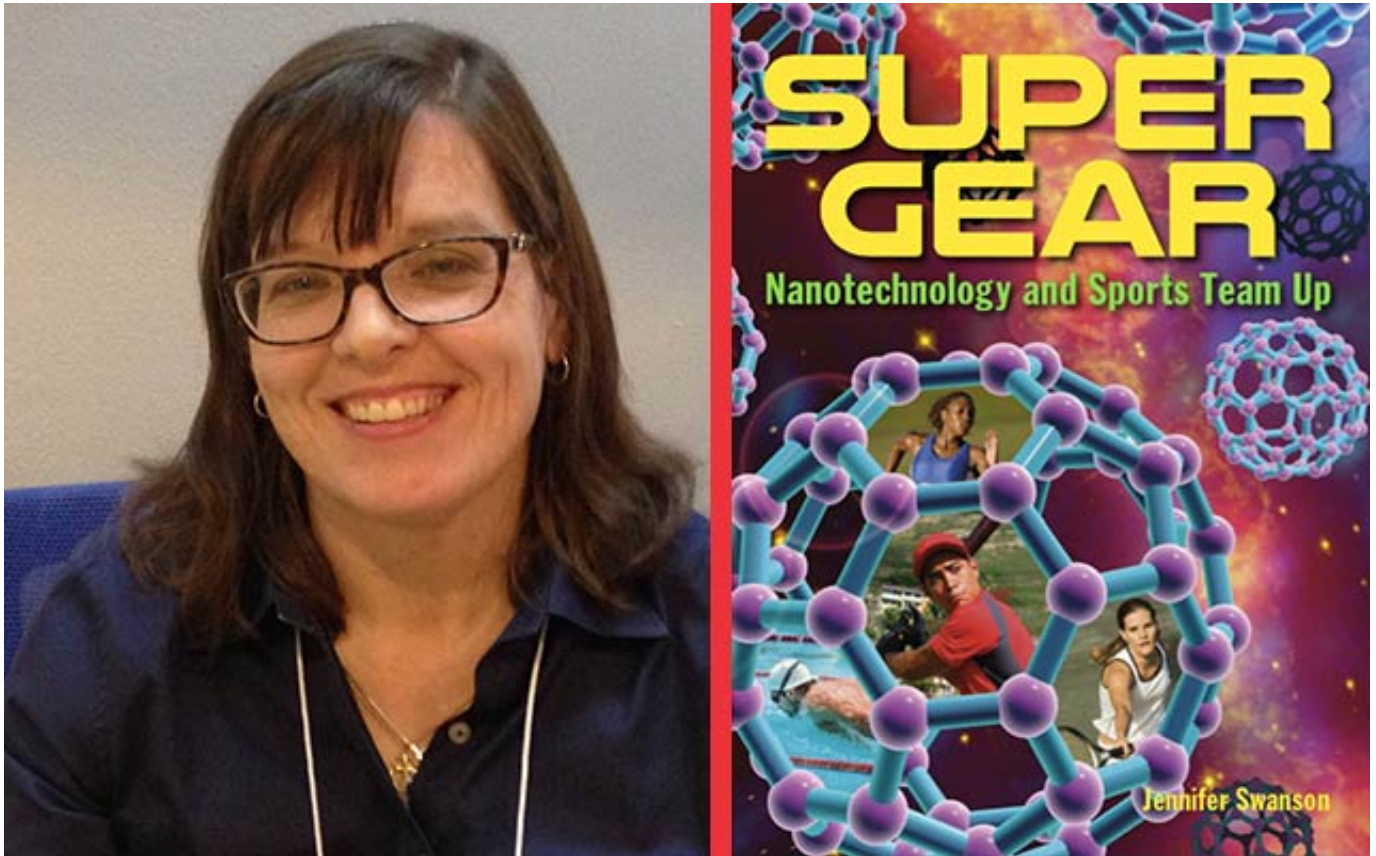


The Science of Sport!

A book tells about special tech that helps Olympic athletes.



Jen Swanson with her book!

The Olympics begins on Friday in Rio de Janeiro, Brazil. Viewers will cheer for their country's athletes. They will see the athletes' muscles. They will watch the bikes, balls, and boats. One thing most viewers *won't* notice is the technology that created the gear. It's called nanotechnology.

Nanotechnology is the science of tiny things. Jennifer Swanson wrote *Super Gear*, a book about nanotechnology and sports. (Hear from her in the Video!) She told *News-O-Matic* that many different Olympic sports use the special tech to create high-performance

gear. This gear is stronger and can improve performance.

For example, nanotechnology can make clothing stronger and faster. Most clothes companies cut fabric to a certain shape and size. Nanotechnology allows companies to build a shirt at the molecular level. This way, tiny particles form a shirt. This results in a stronger material that is more resistant to wear and tear.

Swimmers wear a lot of super suits. “The LZR Racer suit by Speedo was developed with nanotechnology to reduce drag,” explained Swanson. “That allows the swimmer to cut through water faster!” (See the suit in the Slide Show.) However, this suit was banned from the Olympics after 2008.

The Olympics Committee controls the use of nanotechnology. It wants the focus to be on super talent, not super gear. So there are limits. “Swimsuits cannot be made of waterproof materials, like rubber,” said Swanson. “They cannot have zippers. This would make them much tighter, like a wetsuit. But some sports use lots of nanotechnology. These include golf, tennis, and cycling.”

Nanotechnology is here to stay, Swanson explained. She said athletes will always be looking for lighter, stronger, more durable materials for all types of sports equipment. Why? “To win, of course.”

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By Pamela Brunskill

Photo credits: Super Gear, Peter Foley/EPA. Citations: Super Gear by Jen Swanson. Charlesbridge 2016. Email interview with Jen Swanson 7/27/16