

# NANOTECHNOLOGY Spin-a-Prize!

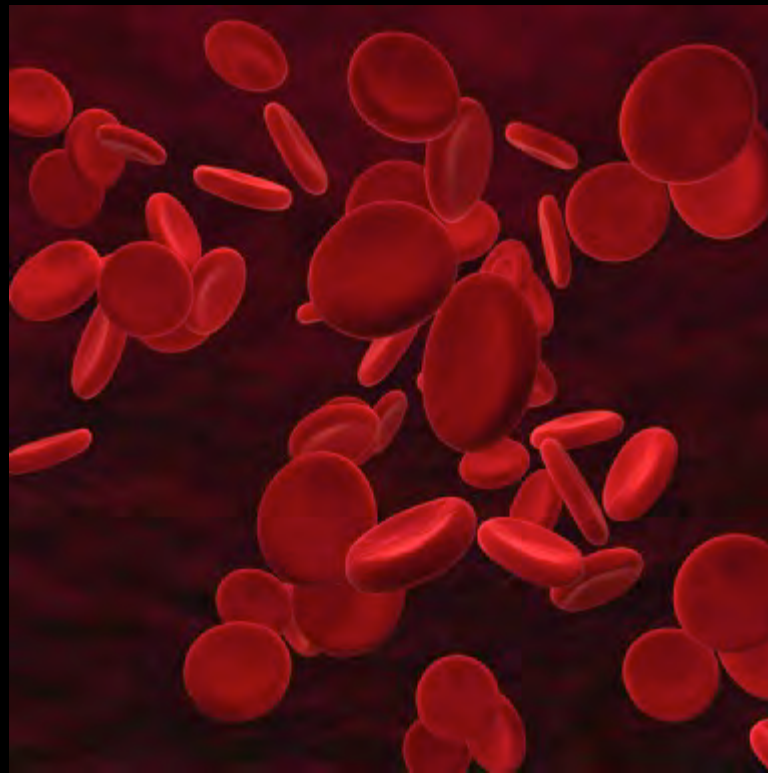
Round 1

What is nanotechnology?

“Nano” means small:  
a nanometer is a billionth of a meter



meters



micrometers



nanometers

# Nano is different: properties like color can change



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nanoComposix

Gold



# Nano is all around us: in nature

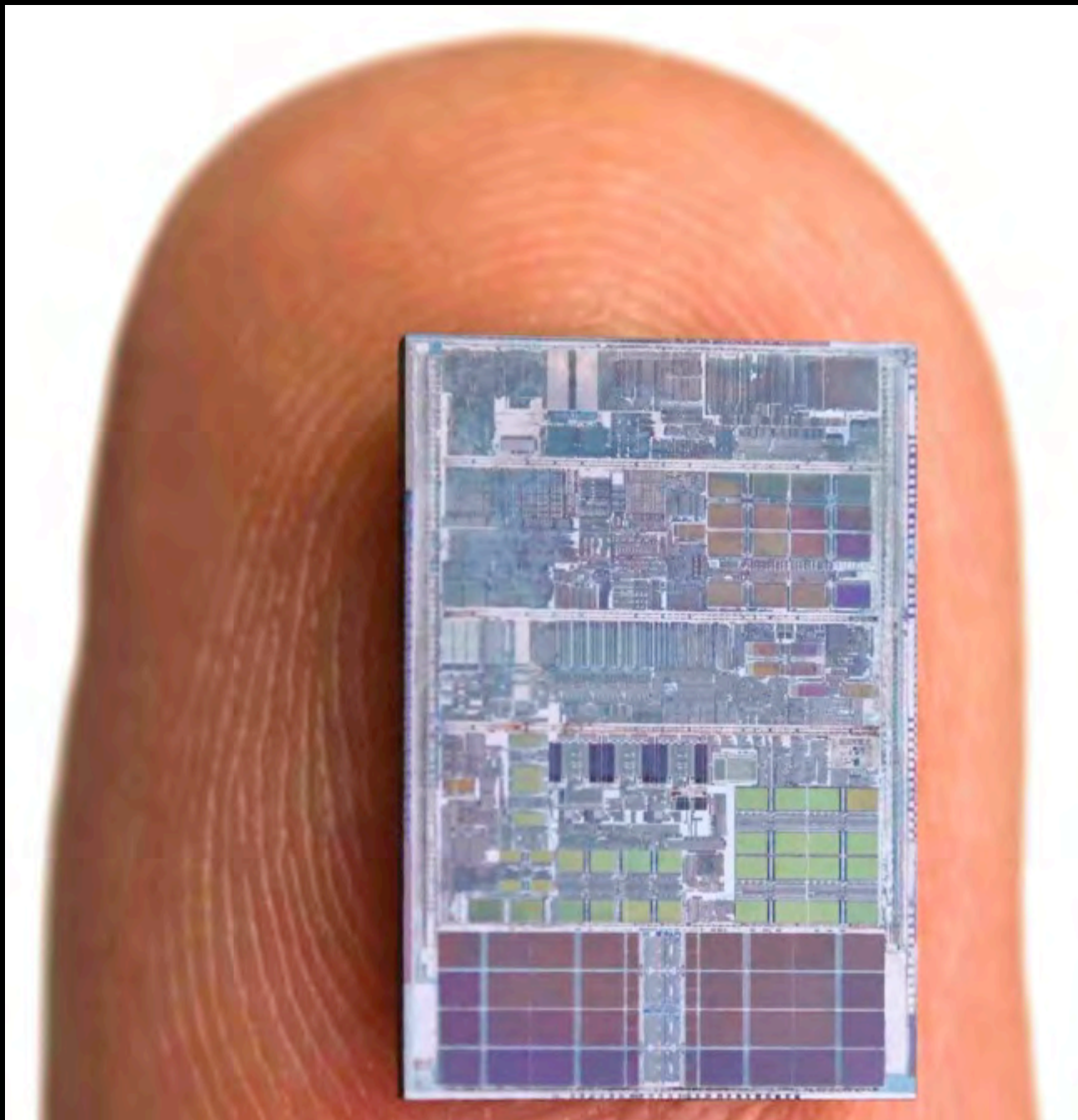


Blue Morpho butterfly



Gecko

# Nano is all around us: in technology



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Computer chips



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Liquid crystal displays



# Nano researchers use special tools and equipment



Cornell Nanoscale Science & Technology Facility/Charles Harrington Photography

Researchers use special tools



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You can use your nose!



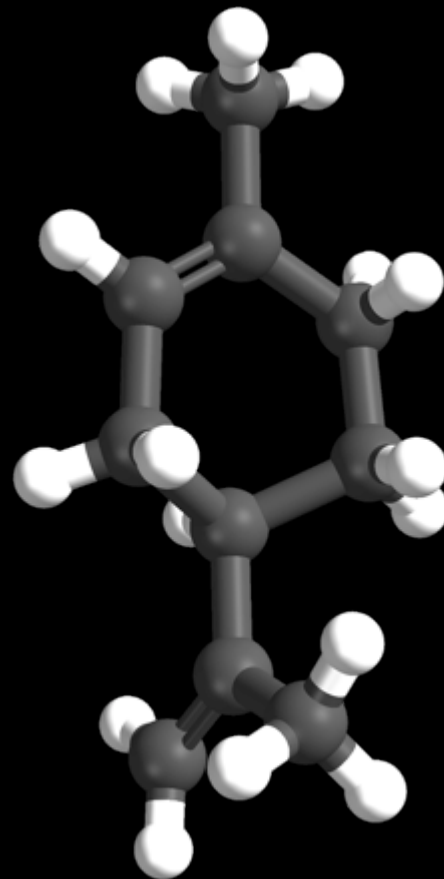
Time to spin the wheel!

True or False?

A nanometer is  
a billionth of a meter.

True!

A nanometer is  
a billionth of a meter.



Public domain, Wikimedia Commons

Limonene molecule



True or False?

Nano is found only in  
technology.

False!

Nano is everywhere—  
in nature and in technology.



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Lotus leaf

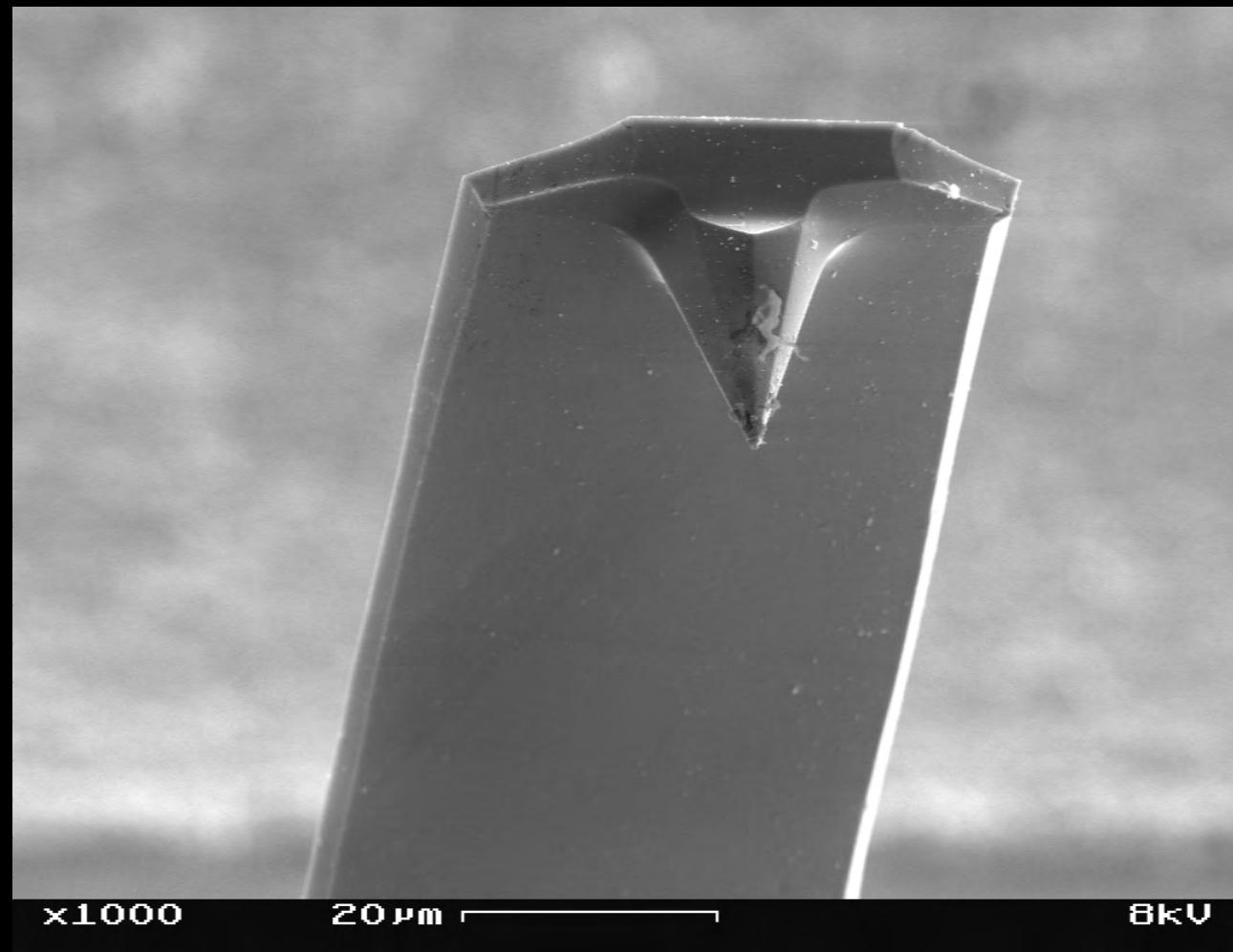
True or False?

Scientists use tools that “feel”  
nano-sized things.



True!

Scientists use tools that “feel”  
nano-sized things.



Atomic force microscope tip

True or False?

Things always behave the same,  
no matter what size they are.

False!

Things can behave differently  
when they're nano-sized.



Aluminum



APPLAUSE!

Round 2

Nano is part of  
our lives today and our future



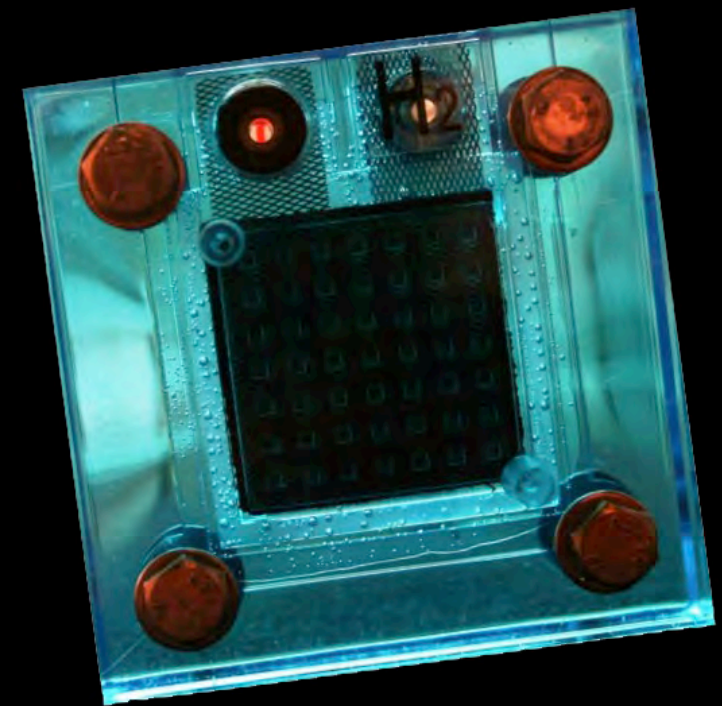


# Nano is helping us create new sources of energy



Konarka Technologies

Thin film solar cell



iStockphoto

Fuel cell



# Nano is helping us provide access to clean water



Stellenbosch University Water Institute

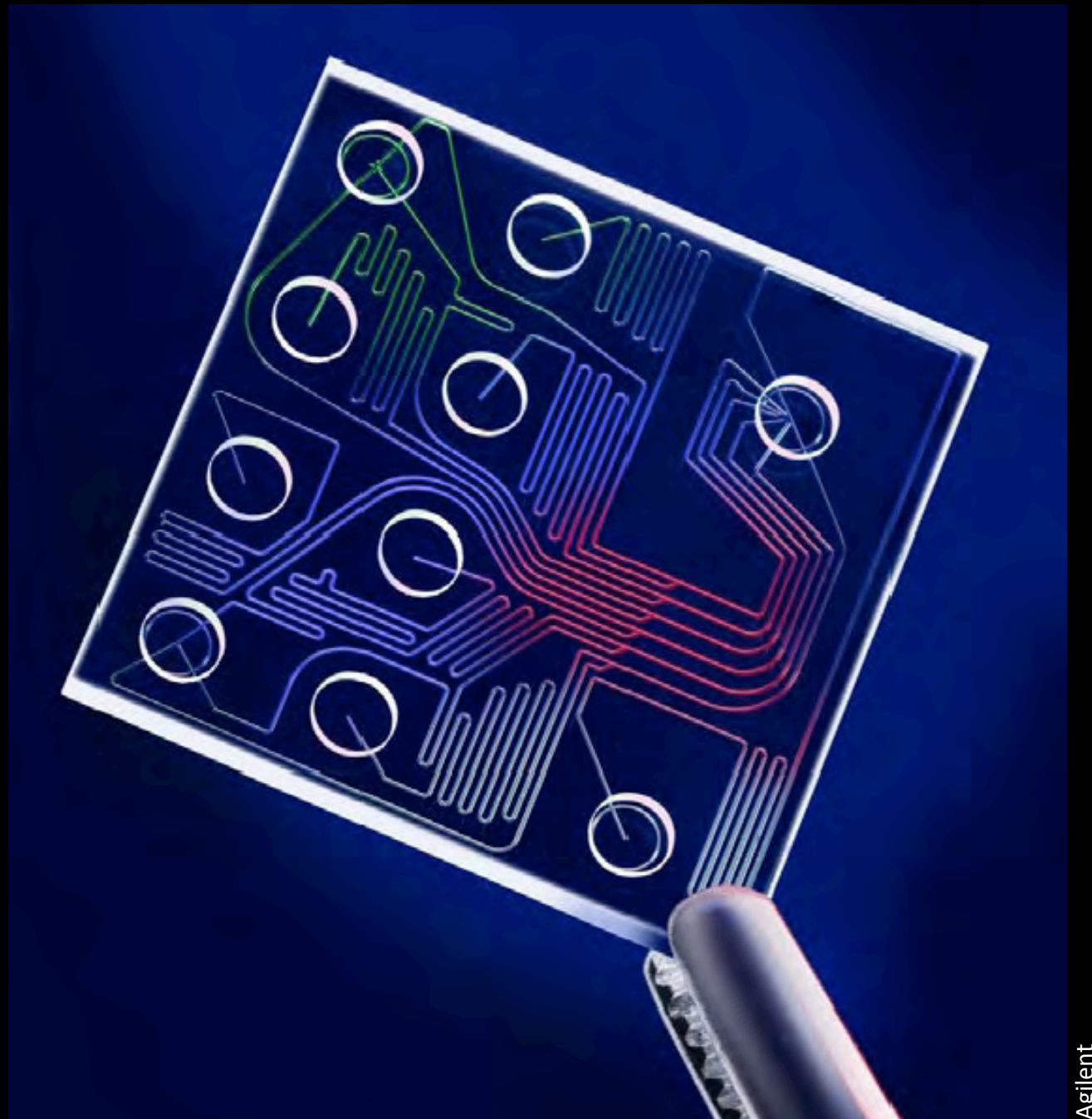
“Tea bag” water filter



Lifesaver Systems Ltd.

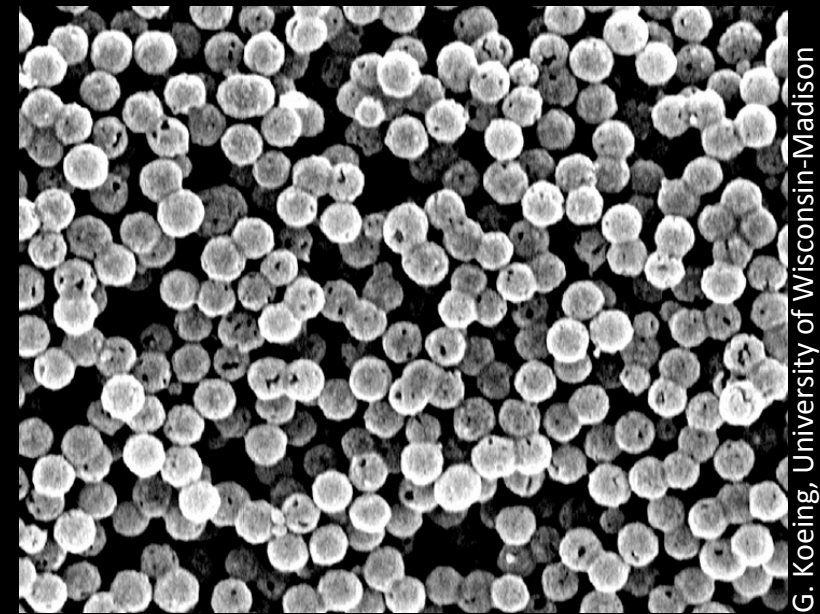
Filter with nano-sized pores

# Nano is helping us develop new medical treatments



Agilent

“Lab on a chip”



G. Koeing, University of Wisconsin-Madison

Gold nanoshells

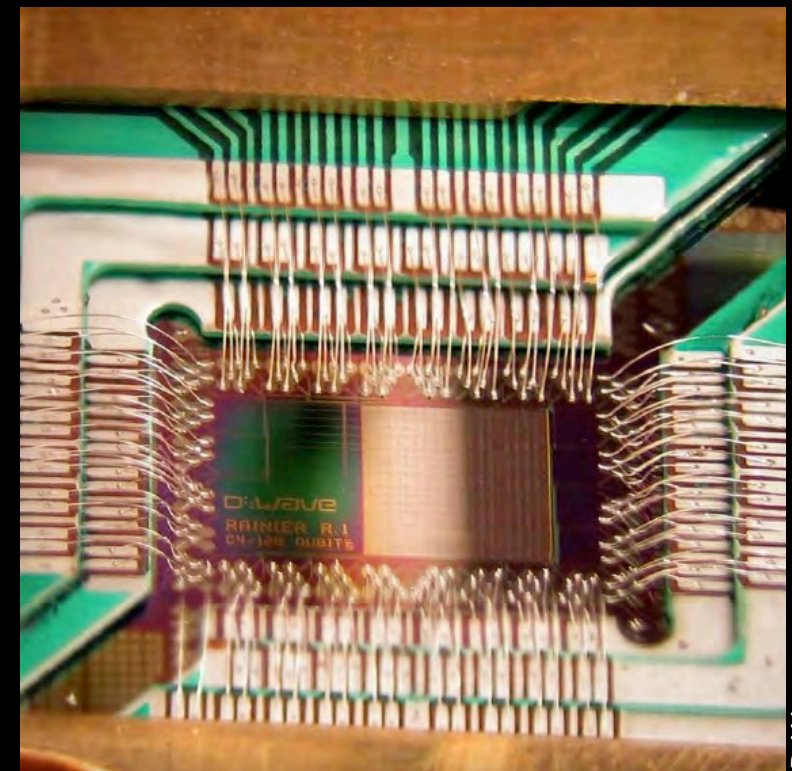


# Nano is helping us develop innovative technologies



Dan Roam

Space elevator



D-Wave

Quantum computer

# Thinking ahead with nanotechnologies



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Fire



# Everyone has a role in shaping nanotechnology



Getty Images

Sunblock



Time to spin the wheel!

True or False?

Nanotechnology is  
far off in the future.

False!

Nanotechnology is  
already part of our lives.



Emily Maletz/NISE Network

Nanosilver socks

True or False?

Nanotechnology might lead  
to amazing innovations.

True!

Nanotechnology might lead  
to amazing innovations.



Emily Maletz/NISE Network

Invisibility cloak



True or False?

Nanotechnology involves  
both risks and benefits.

True!

All technologies involve  
both risks and benefits.



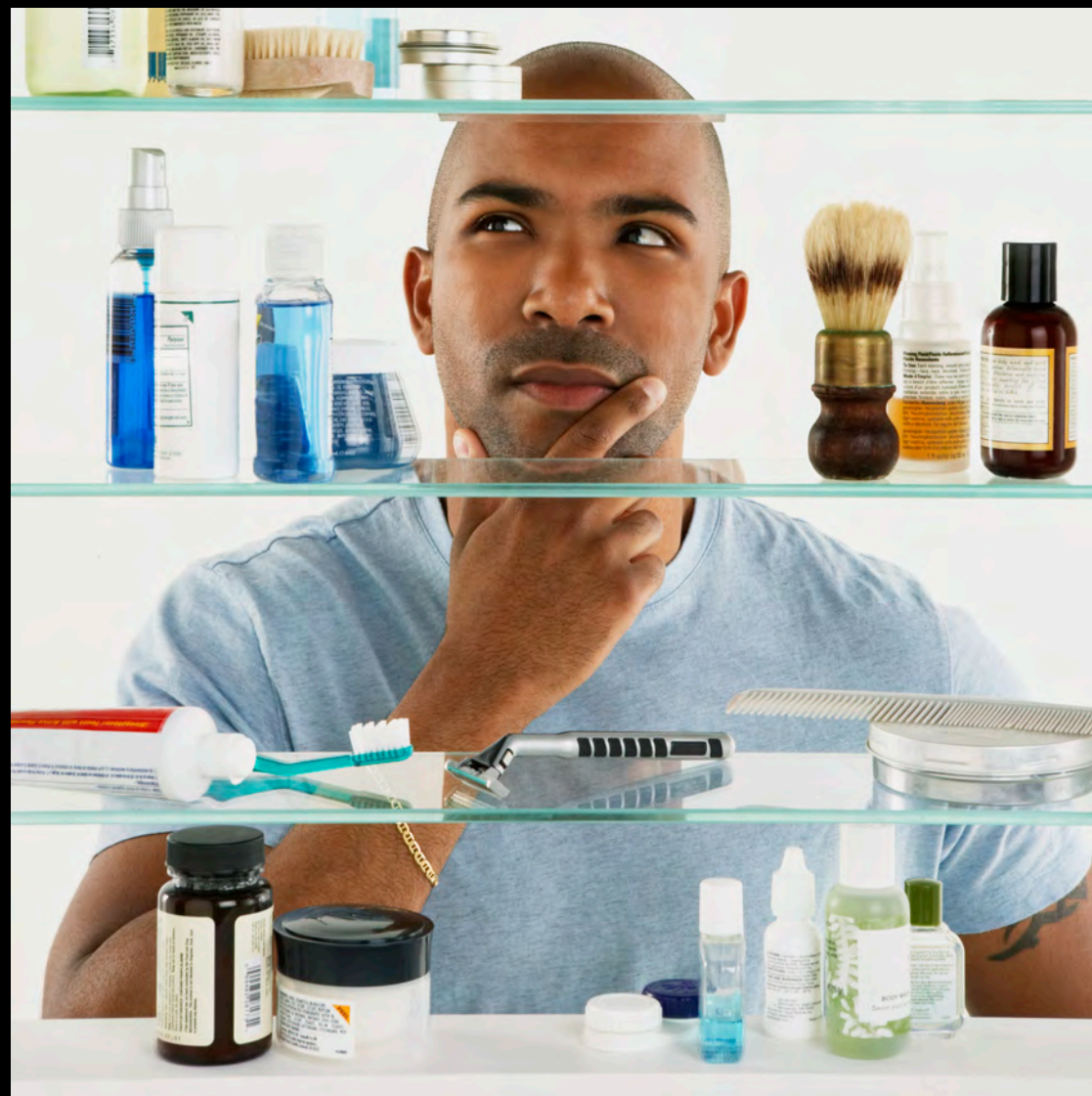
Gasoline

True or False?

Ordinary people can't  
influence nanotechnology.

False!

We all have a role  
in shaping our nano future.



APPLAUSE!



# THANK YOU!



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Any opinions, findings, and conclusions or recommendations are those of the author and do not necessarily reflect the views of the Foundation.