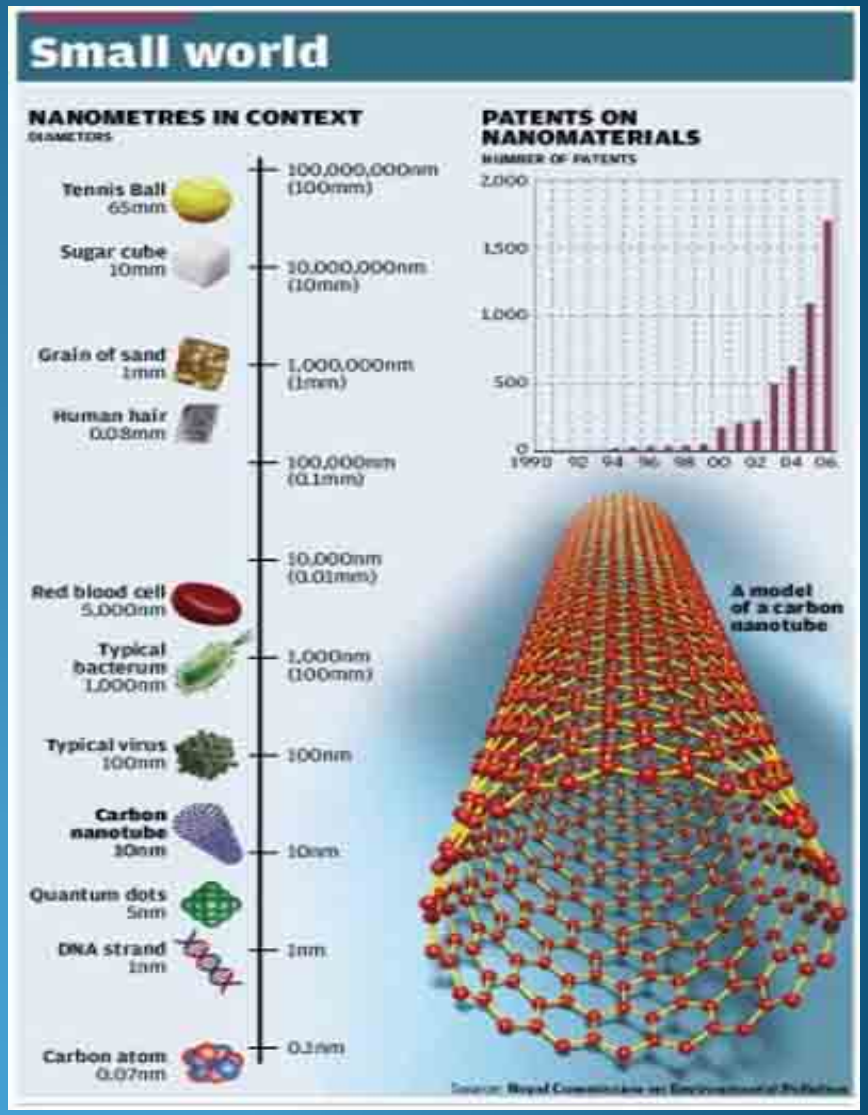
ARE NANOPARTICLES SAFE?

Peter Adamis

WHAT IS NANOTECHNOLOGY?

Nanotechnology is “the collective term for a range of technologies, techniques and.processes that involve the manipulation of matter at the nanoscale—the size range from approximately 1 nanometre (nm = one millionth of a millimetre) to 100 nm”. [21]



MISUNDERSTANDING NANOTECHNOLOGY

Until we know what we are exposed to, we do not know how to measure or quantify exposure levels.

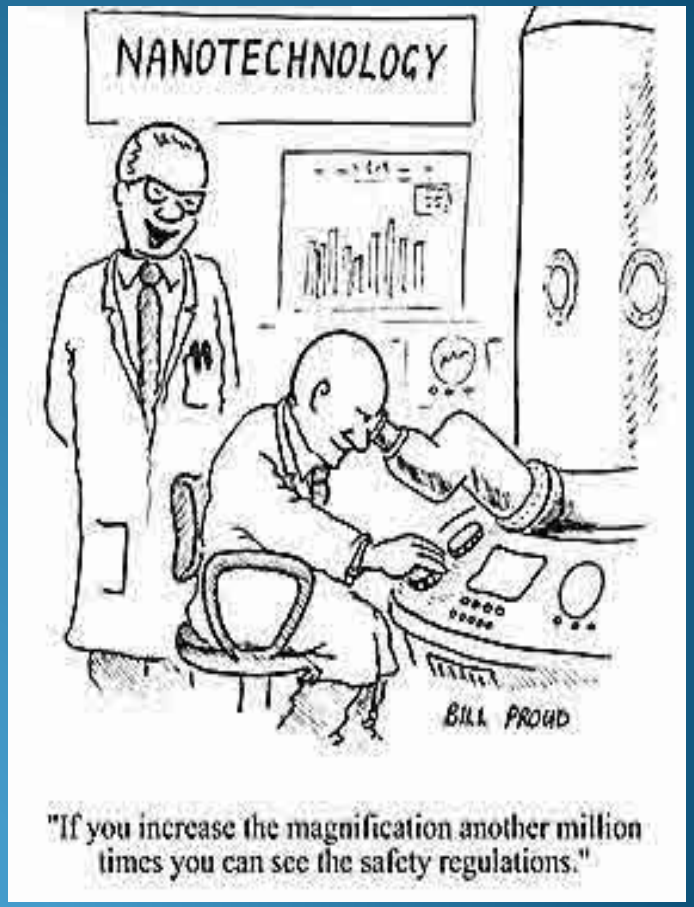
NANOMATERIALS & EXPOSURE

Humans are exposed to this technology in their everyday lives

- Health care products and services
- House cleaning products
- Varnishes chemistry
- Agriculture
- Food technology
- Lubrication agents
- Mobile phones
- Cooking utensils
- Sunscreens
- Pharmaceuticals
- Medical devices

WHAT DON'T WE KNOW?

- Relevance of animal data to humans
- Risk assessment is hazard identification
- Toxicity assessment
- Exposure assessment
- Risk characterisation
- Disposal of nanotechnology products
- Personal Protective Equipment controls
- Impact on Infrastructure
- Human Health and Safety
- Environmental
- Commercial and societal impacts
- Life cycle of nanotechnology
- Acute risks - short term
- Chronic risks - long term



WHAT DO YOU CARE?

- Health and safety?
- Personal safety?
- Worker safety?
- Consumers?
- Environment?
- Ecological?
- Societal?

WHAT CAN WE DO?

- Risk Assessments
- Comparative studies
- Personal Protective e equipment
- Monitoring and reporting systems
- Regulating the nanotechnology industry
- Collaboration between industry and community

WHAT CAN GO WRONG?

We know enough about nanotechnology to be dangerous and if we don't implement safeguards future generations may suffer the consequences

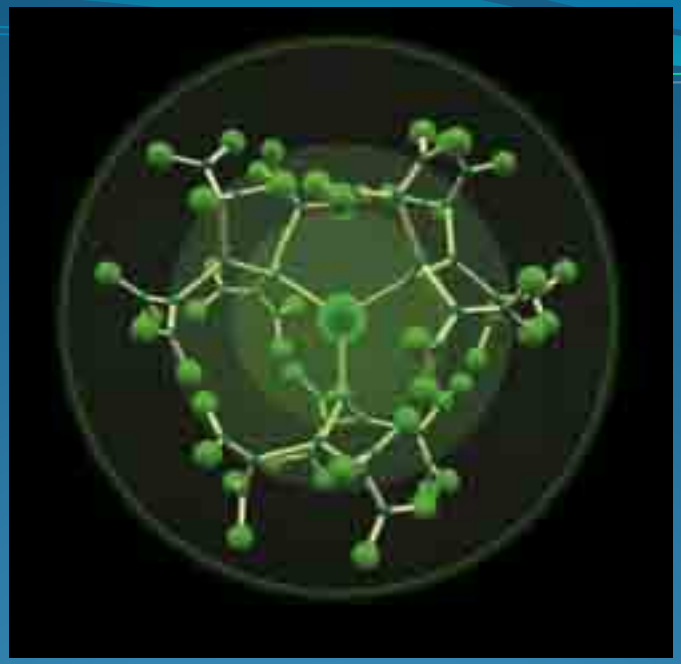
- Complacency
- Duty of Care failures
- Misuse of technology
- Lack of controls measures
- Release of untested products
- Nanomaterials & ecological systems unchecked

WHAT HAVE WE TO LOOK FORWARD TO?

- New way of working
- A world free from pollution
- Medical advances
- Enhanced Health care products & services
- Possibilities are only limited by our lack of vision

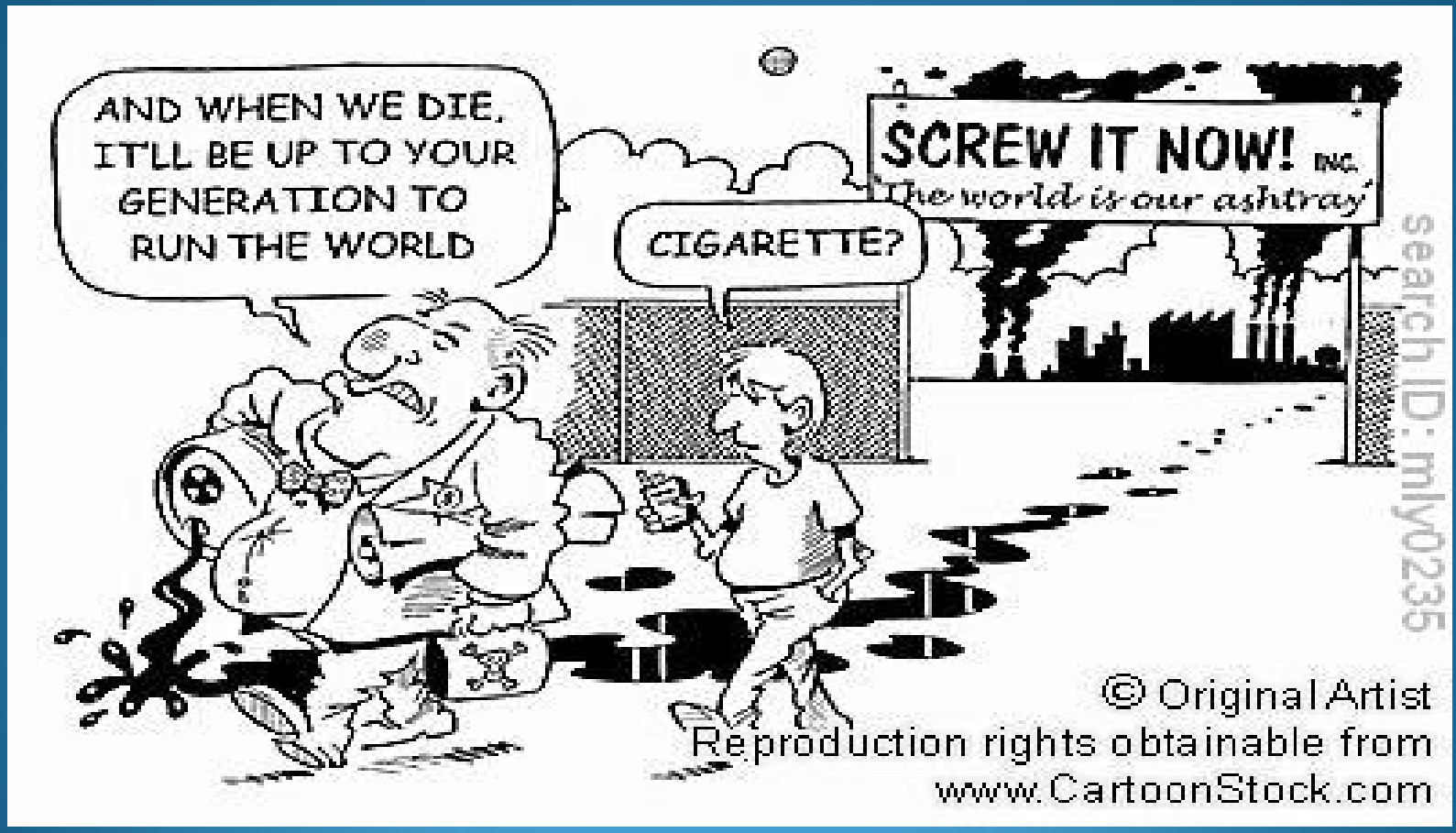
SUMMARY

- **WHAT IS NANOTECHNOLOGY?**
- **MISUNDERSTANDING NANOTECHNOLOGY**
- **NANOMATERIALS AND EXPOSURE**
- **WHAT DON'T WE KNOW?**
- **WHAT DO YOU CARE?**
- **WHAT CAN WE DO?**
- **WHAT CAN GO WRONG?**
- **WHAT HAVE WE TO LOOK FORWARD TO?**



If responsible safeguards are not implemented, to identify potential *nanotech sicknesses,* future generations may be facing a '*potential explosion of nanoscale illnesses'* simply because we failed to act.

QUESTIONS


AND WHEN WE DIE, IT'LL BE UP TO YOUR GENERATION TO RUN THE WORLD
CIGARETTE?
SCREW IT NOW! INC.
The world is our ashtray
search ID: mly0235
© Original Artist
Reproduction rights obtainable from
www.CartoonStock.com