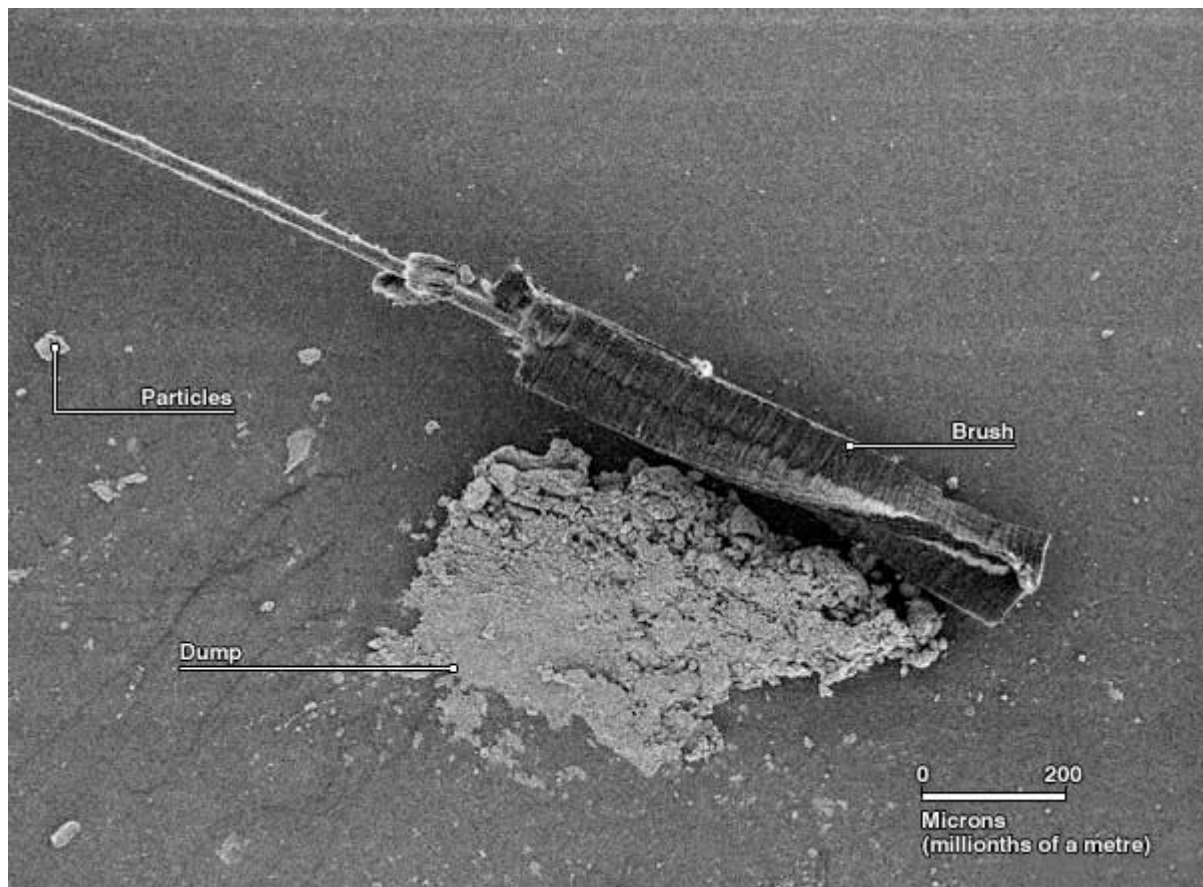


## Interaction Design Project 04: Nanotopia -- Utopia or Dystopia?



*“As we move towards knowledge societies that rely on innovation to drive economic growth, science and technology are likely to become increasingly contested sites of public debate.... Nanotechnology is only one of several areas where the pace of innovation is accelerating. Others such as genomics, neuroscience, pervasive computing and artificial intelligence are giving rise to distinct sets of ethical and social dilemmas.*

*Debates are too often framed in terms of 'Is it safe?', with the implication that the likelihood of certain outcomes is susceptible to rational calculation. More challenging questions which flow from ignorance about the long-term social consequences of a technology's development are never asked, let alone answered.*

See *through Science, Demos, August 2004* ([www.demos.co.uk](http://www.demos.co.uk))

This project is an opportunity to familiarise yourselves with some of the key issues surrounding nanoscience and nanotechnology, especially its potential social, cultural and ethical impact on society.

After some initial familiarisation and research you should identify either a hope or fear for nanotechnology and develop it into a 'what if...?' scenario. Treat it as though it has already happened, and bring back some compelling evidence from your scenario (artefacts from the future) to present in the final crit.

The project has two other important elements: separating fact from fiction in relation to future time scales; and identifying, making contact with, and consulting experts. You will be expected to consult an expert to help accurately locate your scenario in the near, mid or far future.

With such an intangible subject it is essential that you visualise your thinking at every stage of the project. Please do not bring stacks of print outs to tutorials -- process, edit, summarise, visualise!

## SCHEDULE

### Week 1

#### Research (familiarisation)

- Tues 14 Feb Project Launch, 2.00 pm  
Dr David Kirby, Lecture/Discussion 5.00 pm
- Thurs 16 Feb Roundtable, 4.00 pm

### Week 2

#### What if...? (contact an expert)

- Tues 21 Feb Studio Tutorials  
Update on contact with experts.  
Prof Richard Jones, author of *Soft Machines* Lecture and discussion 2.00
- Thurs 23 Feb Studio Tutorials  
Andrew Jackson, Foresight, presentation/discussion, 10.00 am  
CHS Lecture by Future Foundation, 1.30

### Week 3

#### Communication Experiments (evidence from the future)

- Tues 28 Studio Tutorials
- Thurs 2 Studio Tutorials

### Week 4

#### Presentation

- Tues 7 Studio Tutorials  
Dr Jack Stilgoe (co-author *The Public Value of Science*), Demos,  
Lecture /discussion 2.00 pm
- Thurs 9 Project Crit 10.00 am

## REFERENCES:

### **Very Good Downloadable Introduction (essential reading)**

[www.wellcome.ac.uk/node5954.html](http://www.wellcome.ac.uk/node5954.html)

### **Excellent Webcast exploring different aspects of nanotech**

[www.danacentre.org.uk/calendar.asp?filter=date&date=01/03/05](http://www.danacentre.org.uk/calendar.asp?filter=date&date=01/03/05)

### **Prof Richard Jones' Blog**

[www.softmachines.org/wordpress/](http://www.softmachines.org/wordpress/)

### **Key UK Report (read summary)**

[www.royalsoc.ac.uk/landing.asp?id=1210](http://www.royalsoc.ac.uk/landing.asp?id=1210)

### **A Public Engagement Project**

[www.demos.co.uk/projects/currentprojects/ESRCnanotech/](http://www.demos.co.uk/projects/currentprojects/ESRCnanotech/)

### **Organisations**

[www.foresight.org](http://www.foresight.org)

[www.nanotec.org.uk](http://www.nanotec.org.uk)

[www.nano.org.uk](http://www.nano.org.uk)

### **Popular Fiction**

*Prey*, Michael Crichton, HarperCollins, London: 2003

### **Early nano sci-fi**

*Fantastic Voyage*, Richard Fleischer, 1966

### **One of very few art-meets-nanotech projects**

[www.nano.arts.ucla.edu](http://www.nano.arts.ucla.edu)

### **Some Nano Products**

[www.forbes.com/2006/01/10/apple-nano-in\\_jw\\_0109soapbox.inl.html?boxes=popstories&boxes=custom](http://www.forbes.com/2006/01/10/apple-nano-in_jw_0109soapbox.inl.html?boxes=popstories&boxes=custom)

### **Glossary**

[www.nanotech-now.com/nanotechnology-glossary-N.htm](http://www.nanotech-now.com/nanotechnology-glossary-N.htm)

### **The Institute for the Future (lots of links to 'futures' places)**

[www.future.iftf.org/](http://www.future.iftf.org/)

### **General Books**

*Engines of Creation: The Coming Era of Nanotechnology*, Arthur Drexler, 1987

*Soft Machines: Nanotechnology and Life*, Richard Jones, Oxford University Press, 2004

*Nanotechnology for Dummies*, Richard Booker and Earl Boysen, Hungry Minds Inc, 2005

*NanoCulture: The New Technoscience and its Implications for Literature, Art, and Society*, N. Katherine Hayles (ed), 2004