

COLORADO CONCERNS & ISSUES

Discussion Log March 2

Applications other than strictly medical:

Artificial Intelligence

Smart (driverless) cars

One transcendent issue = potential toxicity of nanoparticles

Nanoparticles in consumer products and potential dangers

Adding to excitements, concerns, questions

Excitements

AI

Synthetic life – synthetic personal assistant

Simulation or modeling of evolution

Space exploration – adapting humans to live in space or different gravitational environment

Nanoparticles seeded into Moon or Mars to alter it – Terraforming

Human testing – Where will it take place – volunteers?

When it is the body that is the testing concern, then animals can be used. But when the testing concerns the brain, how will it be testing?

Nanotechnology in relation to Third World country development

Countries that want to import – What about this impact

NBIC technology products and procedures will minimize natural selection – We need regulation

– Solution = space colonization?

New forms of crime: Stealing hands that have chips in them

Are we really ready to live longer? If people live only 10 years longer then there are quickly too many people. Living longer might also remove a sense of urgency in life – We could put off things indefinitely – One set of kids at 25, another set at 85

Public servants enhanced by NBICs to function better (fire fighters, police, etc.)

Questions

-- What companies right now have the capacity to do nanotech work?

-- Longer life = greater loneliness

-- Different cultures may respond differently

-- Science is productive of certain truths. What will be the new truths (replacing old truths)?

Maybe more scientific revolutions

-- What are the legal ramifications of AI – When do we bridge the gap from object and organism?

(Smart car kills someone: Who is responsible – Car user? Designer? Manufacturer? Is this like a dog that bites someone?)

Difference between nano haves and have-nots on the fabric of society?

What if Western culture embraces but Eastern doesn't: Do we speciate?

Are we as a world culture prepared for having two intelligent species on the planet?
But will there be any have nots? Do people have an obligation to accept or adopt?

How do persons qualify for nano to repair disease or injuries caused by chosen behaviors?

Cost to individuals vs society as a whole
What are companies doing?

Excitements: Categories

1. improving health (physical and mental)
2. improving quality of life (including enhancement of convenience, entertainment, remediation)
3. expansion of knowledge, abilities, and communication (including remediation)
4. increased environmental and engineering systems (including space exploration)
5. increased safety/security

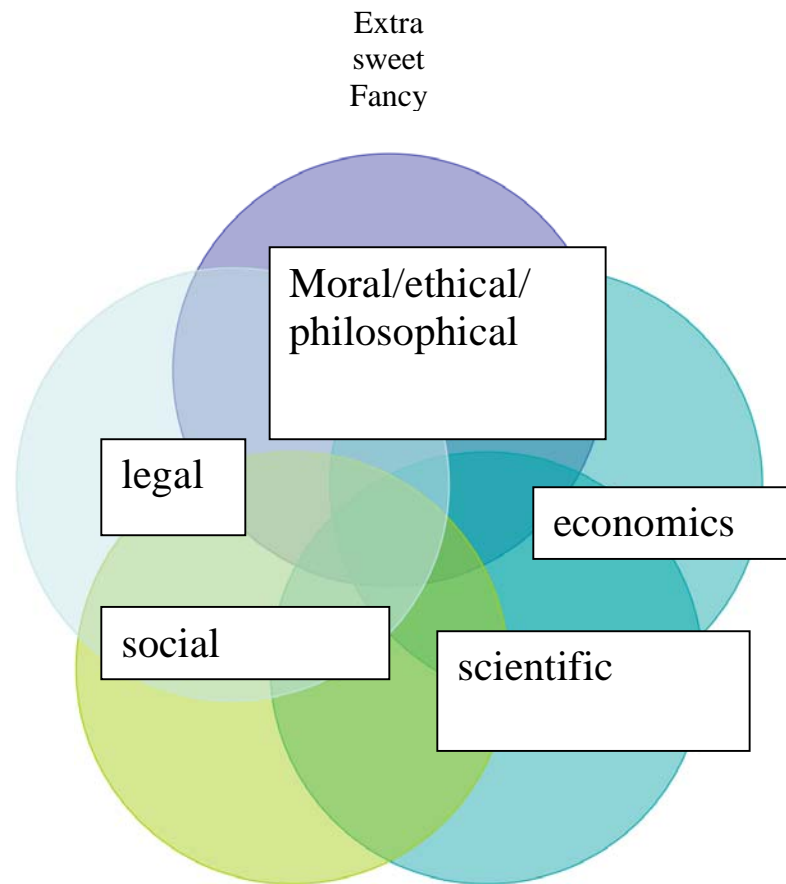
Concerns: Categories

1. How do we distinguish between remediation (therapy) vs. enhancements?
2. Who is controlling this technology?
3. Who is keeping the controlling organizations accountable? (govt., companies, insurance companies, NGOs, consumers, etc.) (Covers health and safety concerns; privacy and right to choose) (oversee the overseers)
4. What qualities and values will have to be re-adapted or lost by implementing NBIC products and procedures?

Questions: Categories

1. economic
2. social
3. moral

4. legal



Nichole: Tara, Brett, An

Ariel: Abe, Patrick, Elly

Eric: Teri, Rose, Ricky

1. Is there an advisory body specific to NBIC?
2. Is there any groundwork being laid to establish a regulatory body specific to NBIC?
3. What is being done to promote and ensure equitable access to NBIC products and procedures?
4. What kinds of products currently employ NBIC? And which are being released?
5. How much will infrastructure have to change to accommodate a longer living population?

6. What current regulations are in place that will cover these technologies?
7. What is the general consensus among the scientific community on this type of technology being implemented?
8. What efforts are in place to get a world consensus on these technologies (i.e., Kyoto protocol of NBIC)
9. What steps are in place to keep the public informed of the implementation of NBIC?
10. Where do the scientists see this going?
11. Has there been sufficient analysis performed considering crosscultural and socioeconomic values?
12. What was the methodology/parameters of the analysis?
13. What happens to existing technology and science?

Goal: Refine questions, condense overlapping areas

1. Is there an advisory body specific to NBIC?
2. Is there any groundwork being laid to establish a regulatory body specific to NBIC? What current regulations are in place that will cover these technologies? What efforts are in place to get a world consensus on these technologies (i.e., Kyoto protocol of NBIC)?
3. How will standing regulatory bodies (i.e., FDA, EPA, etc.) have to change their (potentially outdated) processes to regulate this new technology? Will congress have to handle this, and how? Are they ready to?
4. What is being done to promote and ensure equitable access to NBIC products and procedures? What steps are in place to keep the public informed of the implementation of NBIC?
5. What kinds of products currently employ NBIC? And which are being released?
6. What are potential challenges to infrastructure as people live longer or survive in greater numbers? If we increase the average age by five years, for example, what resources and systems will be impacted and how?
7. What is the general consensus in specific scientific disciplines on this type of technology being implemented? Has there been extensive peer review on research into these implemented technologies? Who are the biggest proponents in various fields? Who are the major detractors? Can one example of each be available for K2K sessions?
8. We would like to speak with someone who is from Europe, Asia, or somewhere other than the US about crosscultural impacts, or an expert on international perspectives. We would also like to talk to someone who is doing work on the socioeconomic/environmental justice/civil liberties impacts of this, perhaps someone from under-represented groups? What sort of methodologies/parameters do these experts use to study these issues?
9. What happens to research money as nano “crowds out” other forms of research? How will money used to fund “traditional” technologies and research be diverted to nanoresearch? Who decides this, and how?