

NCTF 3rd On-line Session Transcript
Joined on March 9, 2008 at 9:00 PM

Moderator (bob): Hi folks, we'll be ready to go in a moment, still checking people in. Team 4 will be active first hour.

Tim H GA to foster f ga: yup

Jennifer C GA: Oh, I am so nervous.

Tim H GA to Tina Ndoh, NC, Patrick Hamlett, bob: can't wait for your input

Moderator (bob): Chat for all but Team 4 will be deactivated.

foster f ga to Tina Ndoh, NC, Patrick Hamlett, bob: Jennifer you will be fine

Moderator (bob): Refer to the list on the whiteboard to see who is active. The rest of you should stop inputting messages since they now can be seen only by the moderators.

Moderator (bob): Hello Team 4 !

Santiago M AZ: hello

Dan W NH: hi

Emily H NH: Hi !

Nathan_C_WI: Hello

marc s NH: hello there

Jennifer C GA: Howdy do

Tara V CO: Hi!

Moderator (bob): Please note instructions on the whiteboard. All but Team 4 are now observers.

Moderator (bob): This next slide is a quick review of our goals in these internet sessions.

Moderator (bob): Do you have any questions?

Tara V CO: No.

Emily H NH: nope

Dan W NH: no

Moderator (bob): This slide is our agenda for tonight. Any questions on that?

Nathan_C_WI: nope

Tara V CO: no

foster f ga to Tina Ndoh, NC, Patrick Hamlett, bob: no looks good

Jennifer C GA: No.

Charles P CA to Tina Ndoh, NC, Patrick Hamlett, bob: I don't see this slide

Teresita B CA to Tina Ndoh, NC, Patrick Hamlett, bob: Does each area create their own final report? Or will there be only one final report?

Moderator (bob): OK - Now for the \$64,000, did those on Team 4 get a chance to review the issues list from the local groups we finalized last time?

Tara V CO: yes

Dan W NH: yup

Moderator (Patrick Hamlett) to Teresita B CA: Teresita: Each location will write its own Final Report

Jennifer C GA: Yes

Nathan_C_WI: yap

Emily H NH: i re-read the threads, but couldn't find where the list was

Teresita B CA to Tina Ndoh, NC, Patrick Hamlett, bob: Thnx.

Santiago M AZ: yes

Charles P CA to Tina Ndoh, NC, Patrick Hamlett, bob: I now see 1/4 of the slide...

Moderator (Tina Ndoh, NC) to Charles P CA: What speed connection are you on? Are you seeing anything on the whiteboard?

patrick m CO to Tina Ndoh, NC, Patrick Hamlett, bob: YES

Moderator (Tina Ndoh, NC) to Charles P CA: Ok, hopefully it is coming up

Moderator (bob): Great - Let's begin tonight's discussion by asking this - How many common threads did you find between the concerns of local groups?

Tara V CO: between 7-10

Moderator (bob): This is a jump ball. Anyone may answer.

Santiago M AZ: well, the biggest issue coming up (at least number wise) seemed to be regarding regulation

Charles P CA to Tina Ndoh, NC, Patrick Hamlett, bob: My connection is DSL, but I still only see a quarter of the screen.

patrick m CO: and accessibility

Madhavi D WI to Tina Ndoh, NC, Patrick Hamlett, bob: and remedies

alex r co to Tina Ndoh, NC, Patrick Hamlett, bob: risks

Rose M CO to Tina Ndoh, NC, Patrick Hamlett, bob: regulatory issues seemed important to everyone

Catherine J NH to Tina Ndoh, NC, Patrick Hamlett, bob: I see access as a common thread.

alex r co to Tina Ndoh, NC, Patrick Hamlett, bob: test

Moderator (Tina Ndoh, NC) to Catherine J NH: Catherine, please wait until team 5 is up before you make comments

Nathan_C_WI: privacy, too

Moderator (Patrick Hamlett) to Charles P CA: Charles: try logging all the way out and coming back in

Catherine J NH to Tina Ndoh, NC, Patrick Hamlett, bob: Sorry.

Charles P CA to Tina Ndoh, NC, Patrick Hamlett, bob: okay

Jennifer C GA: My major issue/concern has been regulation (policing) (control) and it appears that each has that concern. Who controls what and who controls 'them'? Accessibility. Availability? (Same thing?) security.

alex r co to Tina Ndoh, NC, Patrick Hamlett, bob: im not sure how to fix this so all can see

marc s NH: vcsxxgcxgcsxgcq

Tara V CO: Are we listing the common threads, or saying how many there are?

Tara V CO: thats mature

Santiago M AZ: i do think the 'who' as far as regulation goes is important however

Moderator (bob): ONCE AGAIN - THose of you Not on Team 4 - Please do not send messages on the discussion. They come only to the moderators and we don't have time to deal with them. Please do NOT comment on the discussion if you are not chat active.

Nathan_C_WI: regulations would come down from several agencies.

Santiago M AZ: it doesn't matter 'who' is regulating it as long as the basis of how they regulate it is fair and correct

Moderator (Patrick Hamlett): If the chat icon is not lit" next to your name, you are not chat actstive

Tara V CO: and where/who do the regulators recieve orders/funding from

Jonathan R GA to Tina Ndoh, NC, Patrick Hamlett, bob: When I look at my name in the list of participants, it does not say "GA" for Georgia, at the end of it ... but, I typed Jonathan R GA to log in, but the GA is not showing up, AM I DOING THAT WRONG?

Jennifer C GA: I believe 'who' is a matter of concern because we must be sure 'who' can do the job.

Nathan_C_WI: government. u.s. government sent \$1.3 billion last year on nano research. less than 1 percent went to risk research

Santiago M AZ: yes, but we must first establish what job is it that they are suppsed to do

Moderator (Tina Ndoh, NC): Tara, and all, we are listing common threads noted from the lists created at the last session

Jennifer C GA: Money talks . . . and everyone else walks. Who's on first is my question. Does the largest contributor get to make the major decisions?

marc s NH to Tina Ndoh, NC, Patrick Hamlett, bob: Sorry, I've been having some technical problems w/ my computer, I'll chime in in a bit.

Tara V CO: i.e. regulation, jennifer?

Moderator (Patrick Hamlett) to Jonathan R GA: Jonathan: your name on the participants list shows up Jonathan G GA, and that's what shows up when you make a comment.

Santiago M AZ: just saying well... regulate this, isnt nearly objective enough. I think it is important to first establish which kind of regulations we look for instead of worrying about who will implement them first

Nathan_C_WI: regulation would likely originate from congress or state legislatures

Moderator (bob): Tara & all Team 4 members. It seems regulation is one of the most important threads & some have begun to discuss what that entails. Let's pursue that issue. What is the source of the concerns & what is it you, as panelists, need to know about that process.

Nathan_C_WI: we can't expect something this large to self-regulate

Jennifer C GA: Precisely. Who decides who makes the decisions? Then . . . who polices them?

Emily H NH: how will whomever regulates these technologies be qualified? is the FDA? will there be a checks-and-balances system with another government agency?

Nathan_C_WI: first we need to learn about the toxicity of the nanomaterials in use today

Jonathan R GA to Tina Ndoh, NC, Patrick Hamlett, bob: Thanks. I just wanted to be sure.

Santiago M AZ: how will you qualify someone to be ethically correct?

Tara V CO: A major source of concern is that the FDA does not do good job of regulating food and drugs...we need another regulatory body entirely responsible for nbic

Santiago M AZ: is there some sort of resume for being a good person with the general good in mind?

Santiago M AZ: because if there is one I sure have not seen it

Santiago M AZ: I think making a layout of what we expect to be regulated and how would be more important than choosing someone else to take those same decisions

Tara V CO: we already know that some are toxic i.e. carbon nanotubules..can we not assume that other technologies will have the same toxicity?

Jennifer C GA: Does what "we" (the common man/woman) think really matter? I think not. Do we have a real vote? No, so I guess we/I should move on to what others think is of great need for discussion (and I agree) - I guess.

marc s NH: The founders of bthis country were able to come up with a Constitution that has effectively steered our democracy, why can't we do the same with a new technology?

Nathan_C_WI: each particle is different, so naturally the toxicity will differ

Santiago M AZ: i tend to differ as far as voting vote

Tara V CO: agreed, Santiago

Santiago M AZ: as voting goes, sorry

Jennifer C GA: Because it is too simple to do that. There must be controversy. This is crucial and . . . are we in search of agreement here

Santiago M AZ: although I have to grant that MY vote matters very little, I have to urge for a distinction between MY vote and OUR vote

Santiago M AZ: it is when voting comes from the communal source that it carries some weight

Nathan_C_WI: is this a forum for disenfranchised voters????

Tara V CO: I feel like we are gettin off topic, voting is not of issue

Tara V CO: regulation is.

Santiago M AZ: voting is an issue if we are to expect someone to follow a regulatory guideline

Dan W NH: I thought we were coming up with common threads?

Tara V CO: do you vote for the FDA?

Nathan_C_WI: lol

Santiago M AZ: otherwise, well, the guidelines become null

Nathan_C_WI: government continues to work regardless who is in office

Jennifer C GA: We are and I am sorry. However, I have little to no faith in our government, that they will do the right thing - history has proven to me that it is better to find out NOW -

Nathan_C_WI: anyhow....

Santiago M AZ: in fact, you vote for senators and presidents, and so on which in turn have a certain effect on the FDA

marc s NH: We've had the same problems with every new advancement: fire, explosives, combustion engines, atom bombs, we can pretty much guess what the problems will be here, so lets regulate accordingly

Moderator (Patrick Hamlett): Tara: No, FDA regulators are not selected by balloting

Jennifer C GA: How well does our government work - is there protection for the common man.

Tara V CO: I know it was rhetorical

Moderator (bob): OK - I think we've established that regulation is a critical common thread. Let's put it aside for the moment because there are many facets to it. What other common threads were noted - I know accessibility was mentioned earlier. Any others?

Tara V CO: and woman

Moderator (bob): Common threads across the concerns raised by all groups that is.

Dan W NH: what about the possibility of unseen consequences

Santiago M AZ: there was also the concern of how the technology may affect humans

Santiago M AZ: both physically and mentally

Tara V CO: I think the issue is to set regulations before unforeseen consequences have deadly affects

Emily H NH: the definition of what it means to be human - the human condition....death and dying

Dan W NH: ideally- but we aren't going to be able to test foe everything

Tara V CO: loss of human characteristics

Nathan_C_WI: controlling the levers of evolution would be pretty awesome...weed out undesirable mutations from the gene pool

Mary D CA: Another critical issue is environmental - specifically how will waste be handled and another aspect is ownership of what is created throughout its lifecycle.

Tara V CO: yes, but the whole idea behind the conference is set ideals before nbic hits the market full force

Emily H NH: whose decision is it to alter the gene pool

Nathan_C_WI: whoever is lucky enough to be in power

Jennifer C GA: Will the 'quality of life' be irreversibly altered? Will empathy for others still exist? What are major possibilities once we are off and running (out of control maybe). The mental and physical possibilities are more than I can bear to think about. However, humans need limitations in all areas, yes? the human characteristics - humor - sadness - empathy - joy - what happens here?

Tara V CO: what about nbic in the hands of terrorists, or those with harmful intentions

marc s NH: How about making a blanket statement "No public funding of NBIC for military uses, or alterations to the human genome"

Nathan_C_WI: we should promote those things

Nathan_C_WI: with safeguards in place

Jennifer C GA: control? regulation?

Emily H NH: marc - can you elaborate?

Tara V CO: it would be nice to say that, marc, but do you really think the military complex will listen?

Tara V CO: listen*

Emily H NH: also - other countries/economies/ will surpass us...

Jennifer C GA: I do not.

Nathan_C_WI: of course they won't which is why it's silly to even think of trying to create barriers for military

Jennifer C GA: This IS a race, yes?

Tara V CO: but, does it need to be?

Emily H NH: we can't make that decision for the rest of the world

Jennifer C GA: It is already! Yes?

Santiago M AZ: it seems futile to approach this project, that is directed to public policy, from the approach that it wont be even considered

Tara V CO: in our f2f we talked about a kyoto protocool of nbic

Santiago M AZ: i think we should at least grant the benefit of the doubt

marc s NH: If we as the voters and the paying public insist on these two things, it will at least slow the military down.

Emily H NH: how about communist countries like China? they will most likely pursue these full-force

Nathan_C_WI: there are areas the public can influence, military not being one of them

Santiago M AZ: and worry less about the, IF they will listen

Nathan_C_WI: i think how local law enforcement will use technologies to monitor behavior and what if any constitutional breaches may arise

Tara V CO: also, if "they" don't listen, and we refuse to partake, they will have no choice to reconcile

Jennifer C GA: I learned about stem cells today. This is a concern. Genetic manipulation has tremendous possibilities and tremendous ramifications. The US - of course - MUST RULE! Where is collaboration (for the common good)? Does it exist?

Emily H NH: privacy issues seemed to be a common thread

Moderator (bob): Are you debating policy here? Perhaps we should get back to listing the issues that were common threads across all local groups.

marc s NH: If we in a democracy can't have an affect on public policy and regulation, than all of this chit chat is useless.

Jennifer C GA: I agree.

Moderator (bob): Marc - Talk about your \$64,000 question, right?

Ashley J GA to Tina Ndo, NC, Patrick Hamlett, bob: Hello, apologies for being late. My flight was delayed and I just walked in the door.

Tara V CO: Ok, so far we have: regulation, accesiblility, affect on human genome, unforseen consequences, loss of human characteristics, nbic for terrorist/harmful intent

Jennifer C GA: Are any of really being realistic - think - if this 'business' were to get out of control (in the wrong hands if you will), how prepared can anyone be for the 'worst common scenario?'

marc s NH: I'm not sure what you mean Bob...

Ashley J GA to Tina Ndo, NC, Patrick Hamlett, bob: What are we discussing? I think my group is 'on' tonight.

Moderator (Patrick Hamlett) to Ashley J GA: Ashley: Welcome aboard -- your team is up!

Jennifer C GA: Hey, you're the boss.

Moderator (bob): Marc - Just agreeing with you that we've got to have some hop that public opinion will make a difference.

Tara V CO: what about environmental damage

Moderator (bob): That was hope obviously.

Tara V CO: also, remediation vs. enhancement

Jennifer C GA: Will there still be oxygen? Grass?

Tara V CO: yes, composed of nanoparticles

Nathan_C_WI: that is why toxicity regulations and testing to me are ground zero. only from there can you begin to develop meaningful regulatory frameworks

Moderator (bob): Tara - Do you mean where the line is drawn between remediation & enhancement? Please clarify.

Mary D CA: I was thinking more in terms of waste disposal from the nanotechnology processing.

marc s NH: Can't we also make a blanket regulation that bans all use of NBIC that would alter ANY biological genome?

Tara V CO: yes, the need for a distinction for the use of nbic for each

Ashley J GA to Tina Ndoh, NC, Patrick Hamlett, bob: I want to join in, but I'm not sure what's being discussed... is there a summary slide?

Jennifer C GA: I am poor - need a liver. My uncle is rich - wants a new liver (he's a drunk). What happens?

Santiago M AZ: but we alter the biological genome everyday

Tara V CO: your uncle gets the liver, you don't

Santiago M AZ: just the fact that we envision some people more attractive than others is a choice and has an effect on our genome

patrick m CO: accessibility

Tara V CO: if nbic manifests in our current capitalist society

Mary D CA: In the liver scenario, who gets to decide?

Emily H NH: whomever can pay for that liver

Tara V CO: so the issue here is, we all agree that equal access is very important?

Emily H NH: capitalism - every man for himself - endless possibilities (if you have \$\$)

Jennifer C GA: The way of the world. Now, on a larger scale. what do we do? What happens when our ozone layer is no more. It won't matter.

Santiago M AZ: I think hospitals have a transfer list that is sorted according to age, need, and potential

Moderator (Tina Ndoh, NC) to Jennifer C GA: Hi Jennifer, note the slide on the whiteboard. We are in the process of listing common threads found from the lists generated the other night. Please add any common threads that you noted

Mary D CA: Yes, it should be, if not.

Santiago M AZ: capitalism for transfer organs applies only to the black market

Tara V CO: hah

Tara V CO: what about health insurance?

marc s NH: Santiago, I'm all for altering the genome the old-fashioned way, but not in a lab.

Santiago M AZ: but on which case, the doctors used for said transplant are unregulated

Santiago M AZ: What is the distinction between the old fashion way and the lab, we are altering it either way

Jennifer C GA: MY concern is the environment.

Santiago M AZ: health insurance is a mess, but we have to admit that the introduction of new medical technologies changes the way insurance companies do business

Tara V CO: the old fashioned way takes millions of years, the lab is instantaneous

marc s NH: If scientists get in there and alter my gene sequence so that I am synthetically impacting not only myself but subsequent generations.

Tara V CO: but does it change them for the better?

Tara V CO: I think not

Santiago M AZ: hence we can see the results of adaptation before its too late

Santiago M AZ: well, what is the "better"?

Tara V CO: no, after it is too late

Santiago M AZ: how do we measure what is a change for the better?

Tara V CO: equal access is the better

Tara V CO: true it is subjective

Santiago M AZ: couldnt we say that something that increases the standard of basic living

Ashley J GA: I'm late signing in excuse me... I agree the equal access is the better, but I don't think it's realistic in today's society

Santiago M AZ: something that keeps people from starving to death

Tara V CO: yes, but for who?

Santiago M AZ: works for the better?

marc s NH: I'm all for altereing the genome personally, but given all the potential horror-stories that could follow, I think we're better off spending money elsewhere.

Tara V CO: if you can't afford food, chances are you can't afford nbic

Dan W NH: how will we know if it is right or not, until future generations are ok, and don't have genetic defects?

Mary D CA: That was my question, too, who decides what is the betterment of basic life?

Santiago M AZ: that could follow?

Santiago M AZ: since when do we make policies out of unjustified fear?

Santiago M AZ: there is lots of things that could happen, both good and bad

Dan W NH: law of unintended consequences?

Tara V CO: what is unjustified about it?

patrick m CO: quality and quantity of life is a thread

Santiago M AZ: the "could"

Santiago M AZ: there is a difference, and a big one at that between it 'will' happen and it 'could' happen

marc s NH: We do it all the time - airbags, seatbelts, no public smoking policies,

Tara V CO: just b/c you could grow two heads, means your not willing to regulate?

Santiago M AZ: regulation is one thing, but completely staying away from it because of the potential of growing two heads is copmpletely different

Tara V CO: seatbelts, airbags, no smoking...all of this has been shown to reduce risk of death

Santiago M AZ: there is a distinction between regulations and prohibition

Tara V CO: so you are for, or against regulation, which is it?

Tara V CO: no one is talking about prohibition

Santiago M AZ: i never spoke against regulation

Emily H NH: i think hi is talking about "implementation" not regulation

Emily H NH: "he" not hi

Emily H NH: no one is saying it shouldn't be regulated.

Santiago M AZ: is yes, there was a slight talk about prohibiting work on the human genome

Santiago M AZ: i believe that goes agaisnt regulation

Santiago M AZ: and becomes in fact a prohibition

marc s NH: Given that the most common use of NBIC is currently sun-tan lotion, and given that we don't understand our own minds yet, we're not ready to be messing with our genes.

Tara V CO: work on the human genome goes against regulation?

Mary D CA: Whose regularions?

Tara V CO: if no one is regulating it, where do you see prohibition?

Santiago M AZ: no Tara, prohibiting work on the human genome goes against regulation

Tara V CO: right, it's not regulation

Santiago M AZ: its a prohibition

Ashley J GA: Are you all against researching work on the human genome? Or the potential applications of the research?

Moderator (Patrick Hamlett) to Vanessa L: Vanessa: Are you bouncing in and out?

Tara V CO: but, there is no prohibition

Santiago M AZ: its telling people they can't do something

Vanessa L to Tina Ndoh, NC, Patrick Hamlett, bob: problem with connection

Santiago M AZ: that is a prohibition

Tara V CO: But no one is doing that!

Moderator (bob): It seems like one area in which you'll need expert input is: exactly what applications of NBIC are currently off limits, if any.

Santiago M AZ: its not even setting guidelines about how to do it safely

Santiago M AZ: its saying, you can't do it

Tara V CO: who is saying this? I just don't get where you are coming from.

marc s NH: Why don't we just stick to gaining a clear understanding of the human genome, and tamper with it at a much later date...

Tara V CO: agreed

Emily H NH: i agree with marc

Dan W NH: how is that realistic?

Santiago M AZ: if we cant tamper with it, we cant gain an understanding of it

Dan W NH: realistic

Emily H NH: we can gain understanding without tampering

Tara V CO: maybe you should offer yourself for research then

Mary D CA: True, isn't the whole idea behind the genome, how to make application to "better" mankind?

Santiago M AZ: dont exagerated, there is different forms of genetic research that don't require horrific human testing

marc s NH: Scientists can do what they want in the lab, just not apply the knowledge to the masses.

Santiago M AZ: we can test on individual cells

Dan W NH: we can't stop everyone worldwide from doing research into nantech uses on the human genome

Jennifer C GA: Better now when modification/adjustment/change is good rather than "later" - when it is too late

Santiago M AZ: etc

Moderator (bob): It seems to me that, based on this discussion, the issues of "regulation" and "unintended consequences" (including testing for effects) are very closely realted in your minds. Is taht pretty much unanimous?

Nathan_C_WI: aren't there concerns more immediate than ones far off into the future?

Mary D CA: Agreed.

Dan W NH: I agree with that

patrick m CO: yes

Tara V CO: Yes, bob.

Jennifer C GA: I guess

Nathan_C_WI: yes

Tara V CO: Also, accessibility

Emily H NH: yeah Bob, I definitely think regulation directly ties into unintended consequences

Ashley J GA: yes

marc s NH: I need to know how expensive it is to do this research-the Manhattan Project required the backing of the entire U.S. Government-is NBIC the same?

Mary D CA: Good comparison.

Moderator (bob): In a moment, we'll post a summary slide of the issues Team 4 picked out as common threads across all groups & we'll want Team 4's comments of that summary before switching over to Team 5.

Emily H NH: NH wanted to know the relative costs of such research and development with respect to other types of government research

Jennifer C GA: Will/Can cost become a secondary consideration?

Santiago M AZ: cost changes over time

Santiago M AZ: look at computer for example

Tara V CO: I don't think it can in our society

marc s NH: If a mom and pop outfit can do meaningful research, NBIC will be almost impossible to regulate.

Santiago M AZ: awfully expensive at the beginning

Santiago M AZ: more accessible nowadays

Tara V CO: but not to all

Santiago M AZ: i think we shouldn't assume cost will be a constant

Tara V CO: right, but we do we want equal access for all?

Moderator (Patrick Hamlett) to Vanessa L: Vanessa; sorry you're having such problems, but appreciate your tenacity!

Jennifer C GA: oh, okay. yes

Emily H NH: i think we were getting at - can this be privately funded or is there inherent government involvement based on cost?

Santiago M AZ: people can have access to a computer at a library

Santiago M AZ: which i believe still are free of charge

Moderator (bob): OK - Ready with that slide. Look it over Team 4 & give us your comments on it.

Tara V CO: so we can get free nbic at the library too?

Santiago M AZ: nbic is a wide area

patrick m CO: list looks good

Tara V CO: List looks good

Santiago M AZ: you would have to be more specific

foster f ga to Tina Ndoh, NC, Patrick Hamlett, bob: bob can you make the font larger

Jennifer C GA: Couldn't have said it better myself.

Nathan_C_WI: word

Mary D CA: I agree with this slide

Emily H NH: looks really good

Vanessa L to Tina Ndoh, NC, Patrick Hamlett, bob: concerned w/ environmental...where is waste going..

Jennifer C GA: You do good work. You're hired.

Ashley J GA: looks good

marc s NH: I agree. Same concerns, different day.

Vanessa L to Tina Ndoh, NC, Patrick Hamlett, bob: off-shore, foriegn country, our neighborhood??

Jennifer C GA: This list tends to mirror all our original concerns. Not much different stuff.

Moderator (Patrick Hamlett): I will switch to Team 5 now -- hold on!

marc s NH: I agree with Jennifer, we need to get practical now.

Moderator (Tina Ndoh, NC): Team 4- great work!

Moderator (bob): Marc - Same concerns, but today's exchange between team members brought some light onto what is meant by these issue categories - a good step in the right direction.

Jennifer T NH to Tina Ndoh, NC, Patrick Hamlett, bob: j

Jennifer C GA to Tina Ndoh, NC, Patrick Hamlett, bob: We are good, huh!?

Emily H NH to Tina Ndoh, NC, Patrick Hamlett, bob: i think we did a good job fine-tuning the list from the previous two sessions. we have a good starting point for the experts

Catherine J NH: What'a the diference between #2 and #11 on the slide?

Jonathan R GA to Tina Ndoh, NC, Patrick Hamlett, bob: Aren't #2 and #11 the same thing?

Moderator (bob): TEAM 5 - Get ready to roll. Patrick is activating you for chat. And I'll want your comments on the list of common issues posted on the whiteboard.

Don S WI: I think something that we all need to know more about and discuss as part of making policy recommendations is the current state of development with these technologies, i.e. what has already been done or is being done now, in both the tech and regulatory areas? I don't really see that reflected on the Common Threads slide

Angel D. NH to Tina Ndoh, NC, Patrick Hamlett, bob: if you need another NH person I can help for team 5.

Moderator (Tina Ndoh, NC): We will leave this as separate issues for now, but may combine later as conversation develops.

Virginia P WI: I would need to know the past, the present before I could intelligently ask or predict what is needed in the future.

Don S WI: Yes, that's what I meant, thanks Virginia

foster f ga: I agree with Catherine that 2 & 11 seem similar and also think that 6 & 13 are similar

Don S WI: Can we get the slide back up if we're supposed to comment on it?

foster f ga: One our groups concerns was "balanced information" i.e. do we know that there is currently full disclosure of available technology

Moderator (bob): Hello Team 5! Are there common threads between the local group issues that you'd like to add to the list posted on the whiteboard?

Moderator (Tina Ndoh, NC): Sorry for the small font size, but I want you all to be able to see all text on one slide

Catherine J NH: I agree with Foster that #6 and #13 are similar.

Andrea C WI: I was a little alarmed by some of the "prohibition" type comments in the first hour. We can't logically expect the military or other corporations to cessate their work, or stop genome manipulation. We can still offer ethical guidelines, however.

Angel D. NH: Thanks god I have 20/20 vision.

Abraham E CO: 1) What regulations are currently in place (at the FDA, EPA, etc) that NBIC Tech would fall under? Do these regulatory agencies have a plan to deal with these emerging technologies yet?

Richard S (GA): the list looks fine.. these seem to be the main recurring themes among all groups..

Angel D. NH: And yes 6 and 13 are damn close.

Andrea C WI: Also, I definitely have the list of common threads prioritized differently. I'll type them out in a second here.

Moderator (Tina Ndoh, NC): I will combine 2 & 11, and 6 & 13

Angel D. NH: *nods in agreement*

Abraham E CO: 2) What steps are in place to get the world community on board with NBIC regulatory decisions? If we introduce a variant into the human genome, there really isn't a way to prevent it from entering the gene pool in foreign countries (and vice-versa). Also, if a country bans the use of human enhancement for warfare (which I think we should) and another country doesn't, that is game-theory in action and every other country will be forced to adopt such tech to stay a player on the world stage.

Charles P CA: Who is regulating the regulators?

Moderator (Tina Ndoh, NC): Andrea- they are not priorities, just the order that they come out

Catherine J NH: One issue that hasn't been included is the difference between intelligence and wisdom. Just knowing the technology doesn't give us the wisdom to use it correctly.

Vanessa L: My focus is on environmental waste....where is it going? off-shore, foreign country, or our neighborhoods???

Moderator (bob): The list posted is not in priority order, we'' be doing that down the road.

Abraham E CO: 3) Do police, firemen, and other civil servants/government employees have protection from the forced or coerced implementation of human enhancement tech? Will all cops be required (either by policy or by pressure) to install bionic eyes, for example?

Angel D. NH: Can they say no?

Catherine J NH: Good question!

foster f ga: AH Equity/Choice

Abraham E CO: 4) Considering language development is so instrumental to the development of the human mind, if we circumvent that by direct communication devices, how will that affect the development of consciousness? Or, put another way, the biological boundary that separates the "me" from the "everything else" is easily defined now, it's our skin, but if we circumvent that boundary how will that affect our sense of self?

Angel D. NH: What about people who do say no, are they still able to do certain jobs?

Charles P CA: Who would be prevented from these enhancements? Felons?

Virginia P WI: I will keep harping that we all need information which would reflect what is currently in place and/or available. We can generate a multitude of questions about the status of regulations, etc., but need some up to date information.

Angel D. NH: But what enhancements would we refuse them?

Abraham E CO: 5) What will an increase in average lifespan do to population dynamics? How many more people will be on the planet if we live an average of 1 more year? 5 more? 10 more? Can we sustain that many people or do we need to upgrade our infrastructure and food supplies first?

Catherine J NH: Abraham, love those metaphysical questions!

Angel D. NH: Tis mind bogging.

Abraham E CO: Thank you, Catherine

Virginia P WI: and...future problem solving is simply an educated guess!

foster f ga: Virginia CUDOS, without knowledge of what is NOW, what is in the WORKS, progress, etc, how can anyone begin to make logical defined statements regarding regulation, policing, policy, etc.

Richard S (GA): one my my major concerns is that the scientist wont study the loooooong term effects of all this stuff on humans /environment.... long term in todays sense can mean 10 years! thats nothing when looking at the loooooong term effect on humanity..

Vanessa L: Will the powers that be use this information and technology to eliminate entire groups of people

Juan N GA: I agree with Abraham we should concentrate on our infrastructure and food supplies first to be prepared for longevity

Virginia P WI: who knows?

Catherine J NH: I'd like to see more overall emphasis in nano. on societal issues, as opposed to individual ones.

Angel D. NH: I was in cardio class last week and my mp3 player was playing something I did not like so I was trying to change it with boxing gloves and I am thinking "Imagine this as an implant and teh damn thing got stuck playing Brittany Spears over and over."

foster f ga: ?example of societal issues thanks

Don S WI: The WI group categorized these kinds of issues as a choice vs. imposition issue - what kind of NBIC enhancements could be mandated (or allowed for parents to choose for their kids) vs. what would be elective?

Charles P CA: I am again reminded of the question of what is just around the corner vs. what is theoretically possible twenty years from now

foster f ga: Given the history of the FDA and disclosure, I concur

Charles P CA: There is also the concern over an implanted chip being hacked

Juan N GA: well it will lead to each other so its all tied together

Catherine J NH: Societal issues like developing a SAFE way to deal with our radioactive waste, or better, to eliminate the need for it.

craig f CA: what about the military using these technologies against the general public and who is going to monitor this craig f CA

Angel D. NH: What about out of date implants?

Abraham E CO: 6) What is the level of genetic diversity that is necessary for the health of a population? In eliminating "undesirable" genetic effects could we be inadvertently disadvantaging ourselves for some sort of future crisis?

Don S WI: Angel D - you reminded of the guy in the news a few months ago who had big thick thumbs and had them surgically enhanced to be pointier so he could text easier on his cell phone.

Teresita B CA to Tina Ndoh, NC, Patrick Hamlett, bob: This conversation seems to be a re-hash of ideas from last session!

Angel D. NH: Please tell me you are joking.

Juan N GA: wow that's crazy

Catherine J NH: Abraham, that issue definitely came up in our group discussions.

Don S WI: Nope

Juan N GA: why not just get a cell phone with bigger buttons

Virginia P WI: would you please describe the task we are trying to complete right now?

Angel D. NH: I thought women having their toes operated on to wear stilettos was bad enough.

Vanessa L: what would or who would decide what is undesirable?

Abraham E CO: We are trying to agree on questions to ask experts

Johan B Ga to Tina Ndoh, NC, Patrick Hamlett, bob: Johan B Ga. what if there were software viruses on the chips, then what

Virginia P WI: about the common threads?

Don S WI: I thought we were settling the list of common issues to deal issues

Angel D. NH: Do we agree with the questions already there?

Richard S (GA): the UNFORSEEN CONSEQUENCES have reareded its ugly head in nature many time... ex. the snakehead fish showing up in americas waters caused devistation to some ecosystems... same with the burmese python in florida.... or hampster/gerbills in California... these things were introduced and the ecosystem was messed up ... something liek this could easily happen if we're not careful and "messup" something genetic...

Andrea C WI: 1.) Regulation: What steps are the FDA taking to treat nanotech differently, i.e. stricter standards for toxicity; Who polices the military, if anyone? 2.) Accessibility: 3. Privacy concerns: We should have the right to privacy with respect to our own genomes; right to privacy with respect to our location -- no involuntary GPS tracking, etc. 4.) Social impacts: social stratification, losing humanity, permanent enhancements/gene pool changes; 5. Health impact: toxicity, health care industry issues, insurance industry manipulation of information; 6. Quest for immortality: (Not really a concern for me, but it popped up on other peoples' lists); 7. Allocation of spending: corporate and military driven (Again, not a huge issue with me as we live in a free market).

Don S WI: to deal with, I meant

Moderator (bob): Virginia - We'll do our best to get experts who can comment on the "State of the art". The problem is some of that is proprietary info - hard to come by & not even many experts will know the answer.

Moderator (Patrick Hamlett): Abraham came loaded for bear!

Vanessa L: 4 and 5 are most important to me

Richard S (GA): Andrea C from WI -- that's was a GREAT SUMMATION of the commonalities of the groups!!

Catherine J NH: So Andrea, you like the way your money is being spent by this administration?

Vanessa L: they affect our entire existence

foster f ga: Inequality/Classism; regulation; policing of technologies; over reliance of technology

Juan N GA: many are already on the list

Abraham E CO: That's just the way I am, the CO group can attest to that

foster f ga: So BOB if it is proprietary who is the PROPRIETOR

Catherine J NH: Can we get clarification of the difference between #2 and # 11?

Juan N GA: our group talked about reliance on the technologies and if we have any back up plans

Don S WI: Will people like Abraham lead to bear enhancements through NBIC?

Angel D. NH: I thought they were going to be combined.

Rose M CO: Is anyone concerned about testing on human? and the possible exploitation of those disadvantaged by their circumstances.

Abraham E CO: Rose, can you think of any additional CO questions that I missed?

Vanessa L: I am Rose

Moderator (Tina Ndoh, NC): Catherine, you guys can offer what you see as the difference (or lack thereof) between 2 and 11

Juan N GA: you know many kids know how to text at lightning speeds but once their cell phone breaks they cant even remember their parents phone number

Rose M CO: What happens to the old technology, especially if its still needed

Don S WI: They'll be first in line for the phone book brain implant

Angel D. NH: You mean our chip becomes a DVD instead of a blue-ray?

Juan N GA: and when that breaks

Juan N GA: lol

Vanessa L: eliminating entire ethnic groups or undesirable is a real potential...

Angel D. NH: Would we get loaded up for "upgrades?"

Angel D. NH: Hell my cell didn't even change the damn time this morning.

foster f ga: I'm still working on difference bt 2 & 11

Catherine J NH: Maybe #2 refers to accessibility by the general public, while equal access means that everyone has the same chance to use nano.?

Abraham E CO: Oh yeah Rose, good point. It's easy to use other animals for human analogs for biological systems, but how can we test technology that affects our minds? What is a human analog when it comes to the brain? Or do we just go to human tech right away?

Vanessa L: who will they test on? Prisoners, you

Moderator (Patrick Hamlett): Catherine: Maybe #2 & #11 should just be combined?

Moderator (bob): Foster - The proprietor depends on the research. A medical company developing nano techniques, an electronics company developing an iPod you can plant in your ear, etc. There is no ONE proprietor.

Angel D. NH: Russia just ordered a ton of white mice.

foster f ga: And who are the research subjects? or is it statistical modeling

Angel D. NH: Maybe it starts there.

foster f ga: I understand BOB but a general disclosure would seem appropriate

Vanessa L: will they secreting test patients

Moderator (Patrick Hamlett): Foster: most of these technologies are still a long way from clinical trials

Angel D. NH: We might not, but other countries will.

Catherine J NH: I do know there has been much discussion about the "haves'" in our society v the "have-nots", and this being of great concern with nano.

Vanessa L: there has been testing before and no disclosure was given

Juan N GA: all im saying is that we shouldn't rely totally on nano technology. We still need pen and paper around even when we will all have computers

Vanessa L: malfunctions happen all the time

Angel D. NH: I need memo pad by Microsoft installed.

Virginia P WI: I am amazed that we "know" what others will do with this nano...I think it is speculation!

Catherine J NH: Believe it or not, I'm self-employed, and all of my work is hand-written!

Juan N GA: exactly so we need back up plans

Don S WI: Patrick - how do we know that (about the clinical trials)?

Angel D. NH: But what happens when your brain blue screens?

Vanessa L: look back at history

Rose M CO: Communication of technological information needs to be understandable to the layperson and include the risks and name safeguards that will be in place

Angel D. NH: It calls work for you?

foster f ga: Thanks; BUT when you refer to clinical trials I intuitively move toward medical issues, enhancements; surely there are other developments that will benefit society as a whole with respect to pollution etc

Richard S (GA):Juan - very true.... if we RELY on technology too much (especially things like artificial intelligence and messing w/ DNA to allow us to go crazy things in the body - we may be headed for trouble...

Moderator (Patrick Hamlett) to Shannon Dinapoli AZ: Shannon: the chat area is still open; we've had several people bounce in and out, so it should be accessible.

Shannon Dinapoli AZ to Tina Ndoh, NC, Patrick Hamlett, bob: okay - i'll tell her to try again ...thanks

Catherine J NH: I just don't want to see nano. Used to prolong Paris Hilton's life!

Angel D. NH: *just laughs*

foster f ga: Juan thanks; one of our bit concerns was reliance on emerging technologies without knowing consequences

Angel D. NH: It would concern me also in future generations.

Catherine J NH: Yes, risks came up for us a lot, too.

Angel D. NH: We are just not tinkering with us, but our kids, grandkids.

Vanessa L: do we really believe we will ever have full disclosure?

Abraham E CO: Can I just ask: Are we listing more concerns or are we supposed to be formulating questions for the experts?

Angel D. NH: I am more forgiving of a oops/fault in something that just takes out one person, but a few dozen down the gene line...no.

Catherine J NH: So maybe the idea of remediation instead of enhancement is preferable?

Charles P CA: But if nano could provide Paris a functional brain....

Catherine J NH: Good luck with that!

Angel D. NH: Oh please...there is not a enough computing power in silicon valley for that.

foster f ga: In GA remediation seemed to more acceptable as I recall

Don S WI: Hey everyone - a big concern with WI group (I think) was social impact of such revolutionary technologies, e.g. the growing gap between haves & have-nots, family dynamics when your great-great-great-great-grandparents are still alive, and on and on.... Do any of the categories on the slide cover that?

Rose M CO: PTSD will probably be as common as a cold

Juan N GA: i see something interesting in our discussions. Many of us want equal access to all but we want it to be out of extremists hands. That's not exactly equal access to all....I guess thats another reason for regulation

Angel D. NH: Quality and quantity of life?

Moderator (Tina Ndoh, NC): Don, do you think that the difference have and have-nots is covered in accessibility?

Andrea C WI: Don: I think that we may be able to put "social stratification" as a sub-category under accessibility.

Catherine J NH: What if only the mean people want to live longer?

foster f ga: ?Unforeseen consequences; quality/quantity of life

Angel D. NH: How do we determine how long, is long enough?

Juan N GA: teach them to be nicer

Don S WI: Tina, I meant the social effects of that difference, not the regulation and control of it

Mary D CA to Tina Ndoh, NC, Patrick Hamlett, bob: How would we teach someone to be nicer?

Catherine J NH: I like you, Juan!

Juan N GA: thanks

Angel D. NH: But teaching everyone to play nice, doesn't that take away our drive to win, to succeed, to beat another in a friendly game, or create?

Juan N GA: nope

Angel D. NH: I think it does.

Catherine J NH: No, playing nice still can mean someone wins.

Vanessa L: so they live longer... where is the waste going???

Abraham E CO to Tina Ndoh, NC, Patrick Hamlett, bob: Can I just ask: Are we listing more concerns or are we supposed to be formulating questions for the experts?

foster f ga: I agree with Juan

Juan N GA: I don't. There is a thing called sportsmanship.

Don S WI: Why teach them to be nice when we can just implant the prisoner juice in them and zap 'em when they step out of line?

Juan N GA: Nicer doesn't mean complacent

Vanessa L: I mean waste

Catherine J NH: Right on, Juan!

Angel D. NH: Who knows how the earth could support the extra people.

foster f ga: AH the barless jail!

Angel D. NH: That concept bothered me.

Angel D. NH: The jail.

Vanessa L to Tina Ndoh, NC, Patrick Hamlett, bob: Are my comments coming through???

Juan N GA: oh that was horrible the last barrier in the jail

Charles P CA: No one should be without a bar...

Catherine J NH: Given that 2 million people are in prison in this country, we need to do something.

Moderator (Patrick Hamlett) to Vanessa L: Vanessa: Yes -- can't you see them?

Don S WI: So did anyone else think "societal impacts" or something similar should possibly be another topic on list?

Angel D. NH: Can't we just "make them nice?"

Juan N GA: drug them

foster f ga: Much discussion in our group as well. As for what the earth can support, profound question; hopefully the developments will proceed with equal consideration for the social consequences

Juan N GA: lol

Vanessa L to Tina Ndoh, NC, Patrick Hamlett, bob: Yep...just checking, still having a bit of a problem

Catherine J NH: Don, do you mean other than #(on the kist--the need to compete with other nations?

Juan N GA: something like what abraham was saying. we should prepare for more people before they come

Angel D. NH: and stuff em where?

Catherine J NH: Sorry, I meant #9.

foster f ga: Well I always try!

Angel D. NH: The moon?

marc s NH to Tina Ndoh, NC, Patrick Hamlett, bob: Decriminalize Marijuana and you'll reduce the current prison population significantly WITHOUT NBIC.

Juan N GA: food stocks, waste etc

Angel D. NH: Maybe we could make people need less food, air...

Moderator (Patrick Hamlett) to Abraham E CO: Abraham: I think Bob wants to unpack some of the issues some more before generating questions...

Juan N GA: i like food though

Vanessa L to Tina Ndoh, NC, Patrick Hamlett, bob: waste!!!!!!! We are running out of places for our current waste

Abraham E CO: Ok, thanks

Virginia P WI: I would like to see #9 changed to "collaboration" with other nations

Angel D. NH: Yeah me too, but we all make sacrifices here :P

Vanessa L: We are running out of places or our current waste

Richard S (GA): ...as far as that jail thing goes - has anyone ever seen that movie with Wesley Snipes and Sylvester Stallone - where the prisoners by cryogenically frozen and implanted with things to help them to adjust in society - like knitting...and to her nice stuff..... lol

Catherine J NH: I like the idea of making "societal concerns" a separate phrase on the list --#14?

Angel D. NH: how about a compete/collaborate?

Angel D. NH: We will do both.

Andrea C WI: Don: Yeah, I put "social impacts" on my list that I posted above, that now seems to be lost in favor of Team 4s list. That would encompass virtual world taking over human interaction, social stratification, cultural, racial and gender discrimination/genocide, gene pool changes, Gattaca-like consequences, and so on.

Moderator (Patrick Hamlett) to Vanessa L: Vanessa: You need to select "This room" next to the send button for this to appear in the general discussion area

Juan N GA: i think we are increasingly going for the easier answer... just zap them, just implant them.

foster f ga: THANKS VIRGINIA I suspect that if the entire development process does NOT international input we are in DEEP _____

Juan N GA: I don't think that's right

Moderator (bob): We have a boatload of issues on the table (and you wondered why we had to use a team approach!). Shall we turn our attention to taking one or two of the issues & start getting into detail about

those issues? Team 4 started getting into detail about Regulation and unintended consequences. I suggest we you pick one of the issues Team 4 did not deal with and start clarifying that issue - what is involved in it, what about that issue do you feel you need to know?

Abraham E CO: I already listed my questions; do you need me to post them again?

Vanessa L: Illegally dumping could affect our food supply

Andrea C WI: Privacy or accessibility?

Charles P CA: I think the privacy issue is huge

Juan N GA: ok so now we are going to talk about Regulation and unintended consequences?

Catherine J NH: How about societal concerns as a discussion point?

Angel D. NH: I was pondering that today with the black boxes in planes.

Angel D. NH: What if your nanostuff tattled on you doing something wrong?

Juan N GA: many people here would zap you Angela

foster f ga: I think the that there that has to be a point regarding full public disclosure (stipulate to techno sensitive area for security etc)

Moderator (bob) to Abraham E CO: Abraham - Please don't post your questions again. They are noted, but others need to have their innings to clarify the issues & generate questions. Not everyone is as prepared as you.

Juan N GA: yes transparency

Vanessa L: I agree

Catherine J NH: Charles, could you say more about privacy? Are you most concerned about government access to your brain, for instance?

Angel D. NH: We can't even stop getting junk mail.

Vanessa L: But don't believe that will really happen

Abraham E CO to bob: sorry, bob.

Charles P CA: That, access to health info, etc

Richard S (GA): I LIKE "UNFORSEEN CONSEQUENCES"i would add the " unforeseen LONG TERM consequences on plants/animals/ and especially humans..... a couple of trial on some mice & rabbits in a lab aren't like the test of 5-6 generations of HUMAN beings!!

Rose M CO: My concern of human testing would coincide with no 5

Juan N GA: we want transparency but dont let the terrorists find out how to do those things

foster f ga: GO RICHARD! I concur

Catherine J NH: Yes, we don't know WHAT could happen in many cases.

Moderator (bob) to Abraham E CO: No problem - just remember we've got a lot of people to pull along.

Angel D. NH: Nope.

Andrea C WI: I agree on privacy. I can't emphasize enough how important it is to retain NOW some control over our own information. Specifically, we should set some kind of guideline prohibiting the government and health-care agencies from testing our genomes for defects. We most assuredly want to avoid the insurance industry abusing that information. Also, I don't think it will be a stretch if we are all "wired" in our brains online to be constantly monitored via GPS. We could theoretically get a speeding ticket simply by the local authorities monitoring our location points.

Abraham E CO to bob: no prob, bob

Angel D. NH: We already have altered things with just breeding and moving creatures, what will this do?

foster f ga: So do we need a separate issue of SECURITY to cover getting in the wrong hands, bad uses, etc.

Richard S (GA): ...but of course scientist don't have time to wait to see what happens to 5-6 generation of HUMANS... that could takes hundreds of years!!! so they test on 5-6 generations of rats..... and then make their conclusion... and say these 5-6 generations of rats are ok...so the SAME THING will happen to humans....

Juan N GA: yes i think so

Moderator (bob): Let's go with accessibility for right now, which is a social issue. This seems to be one of the more popular suggestions.

Juan N GA: or combine with 10

Angel D. NH: I don't think it will ever be 100% accessible.

Juan N GA: nope

foster f ga: so give use a clear definition of accessibility

Catherine J NH: It's interesting that the health insurance industry has convinced so many people that they want their genome information, and that it will help them.

Abraham E CO: If the technology is successful, than eventually it will be ubiquitous

Charles P CA: And who decides what is accessible to whom? Insurance companies? Gov?

Richard S (GA): me neither.... I will be too expensive for some people.... even when its "common" and the price drops down...

Angel D. NH: Yeah as they start denying coverages for known diseases in your genes.

Moderator (bob): Accessibility - the ability of all people to have equal access to technology.

Angel D. NH: Even common can't be afforded by all.

foster f ga: SO DISCRIMINATION?

Angel D. NH: Some people can't even eat.

Andrea C WI: Oh crap, we switched again. Let me just add to the comment that the "government won't really be able to read our minds." There was an article out just this week that discussed scientists essentially reading someone's mind by reading the magnetic images a certain way. If we are all wired online... I would say that anything is possible. Maybe not this generation, but possible.

Virginia P WI: My question would be: Is equal access to all information equal?

Juan N GA: So many of us think nano tech will be capitalist driven. That puts this technology in terms of \$\$\$\$. How long before it will be more accessible to those that don't have much money. Our goal should be to make that the shortest time possible

Catherine J NH: Then we have to trust, if it's fully available, that people will generally make the right choice.

Angel D. NH: Prices will go down.

Angel D. NH: All tech does.

Vanessa L: Targeting certain classes of groups: poor, ethnicity

Moderator (bob): A flip side of the coin - if accessibility to all is not possible - what effects will the technology have in creating an underclass.

Virginia P WI: and, what happens to the people who can access it?

Catherine J NH: It will reinforce the underclass which unfortunately, already exists.

Angel D. NH: Have to create laws to protect them...like we currently have hiring handicapped or minorities.

Juan N GA: Yes im ok with an underclass as long as im not in it

foster f ga: I suspect that is the argument; I know in GA we discussed the consequences of this technology creating classism

Virginia P WI: but, who knows what the burden of accessing nano technology might have?

Angel D. NH: because at some point...a unaltered person will be a minority.

Vanessa L: true

Virginia P WI: we will have various classifications of people, not necessarily those we currently use

Juan N GA: i dont think it will but it is a possibility

Catherine J NH: But to me there's a huge difference between someone getting cataracts fixed, and someone getting a fancy facelift.

Richard S (GA): --> BOB said "Accessibility - the ability of all people to have equal access to technology" -- it is a very good definition... but I still think the poorest of the poor (or even low middle class) won't be able to afford to buy some of this stuff..... Even though its accessible and available in the market..... just like today with the PC or laptop... some people STILL don have one... In 2008!! Some people still cant afford cable.... in 2008!! even though is "available" everywhere...

Angel D. NH: Even today it is...one is a need, one is vanity.

Virginia P WI: perhaps that is a personal decision

Virginia P WI: perhaps some people who don't have the things don't want the things

Catherine J NH: The decision is made if you don't have money.

Charles P CA: The unaltered will be unable to compete with the enhanced, so it will be harder and harder to climb up out of the depths

Juan N GA: i guess thats evolution

foster f ga: all people having access does not necessarily mean all can afford it

Angel D. NH: Of course not.

Andrea C WI: As far as categorizing things, I think "Accessibility" of enhancements will have more social impacts, while remedial accessibility is more of a health-care issue.

Angel D. NH: Not with heating prices.

Virginia P WI: a question we don't like to address which nano could possibly help is "why" people don't have money?

Vanessa L: Availability in this county possible, third world would be extremely limited and would be based on \$\$\$\$

Rose M CO: I think that is a point in favor of stockpiling the old technology especially medicine

Catherine J NH: I think it's regressing as a society to make these enhancements available to the wealthy, when they already have access to so many things.

Virginia P WI: i know many third world countries who are not like "us" but are wonderful

Angel D. NH: Always going to be about haves and have nots.

Juan N GA: equal access means the wealthy too

Angel D. NH: Russia tried to fix that, we know what happened.

Vanessa L: i agree, but they don't have finances

Juan N GA: Its like that saying we are all equal but some people are more equal than others

Catherine J NH: Yes, access to the wealthy-- to the same degree that they are accessible to all.

Charles P CA: But could ever widening gaps lead to revolution?

foster f ga: so back to Bob's ? i suspect that the flip side of the ? is that not being able to "get" the tech will indeed create a inferior class and what is the potential for the class rebelling?

Vanessa L: Never in this history has there ever been equal access, let's just be real

Angel D. NH: Pretty good...they do now, why not then.

Juan N GA: i agree with Vanessa

Charles P CA: but there sort of has been the illusion of equal access..

Moderator (bob): OK - If inequality is inevitable. Is this an issue we should even bother asking of the experts?

Angel D. NH: I think it should be concentrated on those with medical needs.

Virginia P WI: I think "equal access" is not truly available to anyone

Abraham E CO: No it isn't bob

Catherine J NH: I know, I just don't like to see classism continue.

Johan B Ga to Tina Ndoh, NC, Patrick Hamlett, bob: Johan B.Ga:the more people that get the access to technology the cheaper it will become.

Vanessa L: No it isn't

Virginia P WI: do you want socialism

Vanessa L: Waste of time and thought!!! It will never happen

Angel D. NH: I kinda would still like to see what they say.

foster f ga: Concur with Abraham' seems like it is more of an ethical issue

Juan N GA: well we need to make inequality gap smaller not larger and nanotech will be a big determinant of that

Angel D. NH: What they hope for.

Juan N GA: so i think we should still ask

Virginia P WI: I don't know that we know this for certain

Moderator (Patrick Hamlett) to Johan B Ga: Johan: Glad you can joini us! However, your team is not active right now, so please hold your comments for now.

Catherine J NH: I guess I am a socialist, if it means sharing our resources.

Vanessa L: I would really like to know about waste considerations

Juan N GA: thats number 7 vanessa

Charles P CA: waste considerations and what waste is being produced already. Dowe even know?

Vanessa L: we have waste floating around our oceans being rejected by countries,

Catherine J NH: And yet, as a society, we keep consuming more and more...

Vanessa L: Ever notice our beaches and how many times they were closed because of waste?

Andrea C WI: While it may be inevitable (it already exists), we can try to mitigate its effects. We can slap-down the insurance industry now so they don't block entire segments of the population from getting coverage. We can try to predict scenarios where new treatments would be available and offer ways to expand those treatments. It's not easy -- just look at the big pharma companies today. They manipulate their products and patents like crazy to maximize their profits.

Angel D. NH: Maybe we should alter our bodies to eat this waste...solves the waste and food problems!

Vanessa L: where is this new waste going to go

Richard S (GA): SOYLENT GREEN IS PEOPLE!!!!

Catherine J NH: Go, Andrea!

foster f ga: and so if nano is truly unique, etc. then is it reasonable to assume that the technology will lead to waste reductions

Juan N GA: i dont eat waste

Vanessa L: what form will this waste manifest its' self

Vanessa L: yes you do.

Juan N GA: We are trying to go the easy route and easy is not always the best answer

Charles P CA: as far as you know, Juan

Angel D. NH: Hey, like our food supply is totally healthy currently?

Catherine J NH: Good question! Radioactive??

Juan N GA: no i dont its nasty

Juan N GA: thats why its waste

Vanessa L: we all eat waste iyt's in everything

Juan N GA: well maybe in trace amounts

Angel D. NH: We create bacteria eating germs.

Angel D. NH: For water supplies.

Angel D. NH: Why is this different?

Catherine J NH: I did read, as an aside, that each person eats at least 10 spiders a year without knowing it.

Johan B Ga to Tina Ndoh, NC, Patrick Hamlett, bob: Johan B Ga can the waste be used as an alt. energy source

Juan N GA: you are talking about altering humans to eat waste thats extremely different

Angel D. NH: Or add bacteria to our yogurt to make us healthier.

foster f ga: look at the bigger pic; if the nanotech is as great as it is touted, is it reasonable to assume POSITIVE influence

Charles P CA: I am eating a spider as we speak

Angel D. NH: Fine...we can upgrade dogs.

Nichole C Co to Tina Ndoh, NC, Patrick Hamlett, bob: where is this going?

Catherine J NH: LOL Charles!

Juan N GA: ok dogs

Juan N GA: i dont know what peta will say but ok

Vanessa L: what form will the waste be in? fluid, solid??

Angel D. NH: We can program peta to accept it.

Juan N GA: fluids go down easier

foster f ga: as for spiders, look up the "acceptable limits" for vermin, bugs, etc in cereal grains used for human consumption. PS laws have been affect for years

Juan N GA: i think we just want to push the staples easy button too soon

Moderator (bob): Well, you seem to be running down on energy. So, let's change the subject for now. I am going to post the revised list of Common Thread issues, as amended by Team 5.

Angel D. NH: I find it funny we are ok with dogs doing this and not people...so classist.

Moderator (bob): Running dogs?

Juan N GA: yeah they run

Andrea C WI: I am perfectly fine with upgrading myself and my progeny. Bring it on.

Angel D. NH: Greyhounds make really good pets.

Catherine J NH: Thinking about risks, I just read an article about a woman who went to the hospital to have a baby, ended up with flesh-eating bacteria, and lost all of her limbs. She lived and flourished without her limbs.

foster f ga: Irish wolfhounds are big but gentle

Angel D. NH: People adapt.

Moderator (bob): Look over the list on the whiteboard. Any comments and/or questions?

Angel D. NH: Can we get the type larger?

Abraham E CO: When are we supposed to be asking our first questions to our experts?

Virginia P WI: unreadable on my screen

Angel D. NH: ty.

Charles P CA: No 9, should it be compete AND cooperate with other countries?

Juan N GA: if she lived and flourished without her limbs just imagine what she would have done if the hospital didnt contaminate her with the flesh eating virus

Moderator (Tina Ndoh, NC): What do others think about the comment Charles made?

Abraham E CO: Charles is right

Juan N GA: i agree

Catherine J NH: Charles, I like including "cooperate".

foster f ga: I agree with Charles; maybe 9 & 14 could be combined to reflect argument and oversight

Virginia P WI: i like adding cooperate or collaborate

Moderator (Tina Ndoh, NC): Sounds good

Vanessa L: Testing on humans. Which humans, selective participation, secret testing, specific ethic groups

Santiago M AZ to Tina Ndoh, NC, Patrick Hamlett, bob: i think iy dhoulf be interaction

Juan N GA: I'm for volunteers

Andrea C WI: I would bump terrorism and choice v. imposition (nos. 10 and 13.) way up the list in importance. I guess we are not necessarily ranking them yet though, so never mind.

Santiago M AZ to Tina Ndoh, NC, Patrick Hamlett, bob: oops sorry, i thought it was open for all

Vanessa L: sounds good

Catherine J NH: What is #12 referring to/

Juan N GA: i think its relates to transparency

foster f ga: think that goes back to do we really know what is available now

Moderator (Tina Ndoh, NC): I can add transparency if you all agree

Catherine J NH: Like honest information about what's available?

foster f ga: ditto

Moderator (Tina Ndoh, NC): that is add transparency to #12

Catherine J NH: Yes, I agree.

Rose M CO: Information about NBIC technology to the public

Andrea C WI: I saw the quest for "immortality" come up on more than one list -- social consequences, costs of more elderly, quality of life, health-care concerns, etc.

foster f ga: i'm in

Juan N GA: we will know whose doing what and for what purpose ets

Juan N GA: etc

Catherine J NH: Yes, and immortality isn't listed..

Moderator (bob): WE hope to start getting on line with experts either the 18th or 20th. So we'll probably need to generate questions by next Sunday night. Sound OK?

foster f ga: that a choice issue?

Abraham E CO: ok

Charles P CA: OK

Angel D. NH: Should be ok.

Juan N GA: k

Virginia P WI: ok

foster f ga: Good for me

Andrea C WI: To reiterate though, I am all for immortality.

Catherine J NH: We already have questions for the experts as a group.
(NH).

Moderator (Tina Ndoh, NC): Catherine, immortality is listed under #6

Juan N GA: not me

Andrea C WI: Oh o.k. Voldemort has spoken.

Catherine J NH: Okay, thanks.

Juan N GA: i hope to die one day

Rose M CO: 12, information aboutNBIC to the public including risk and safeguards

Juan N GA: hopefully not any time soon

Andrea C WI: I was referring to myself as Voldemort, not you Catherine,
btw.

foster f ga: GA group actually has a list of ?s for experts that were
posed by teams and individuals

Moderator (bob): Tuesday Team 6 and Team 1 are active and we'll continue
to get into discussion of the issues and start deciding on the top
priority questions to put to the experts in advance. Remember - that
doesn't mean you won't be able to ask other questions when they are on
line.

Juan N GA: did others do the same?

Richard S (GA): ok

Angel D. NH: Ok.

foster f ga: thanks

Moderator (bob): Any final questions for us?

Virginia P WI: night

Angel D. NH: Night.

Vanessa L: no, thanks

Moderator (Patrick Hamlett): Great work, Team 4 & Team 5!!!

Juan N GA: yay

Catherine J NH: So anyone can ask questions, or only teams 1 and 6?

allison a ga to Tina Ndoh, NC, Patrick Hamlett, bob: nite

foster f ga: BOB could you provide on the transcript view a brief overview of the background of the "experts"

Jennifer C GA to Tina Ndoh, NC, Patrick Hamlett, bob: Thank you!

Emily H NH to Tina Ndoh, NC, Patrick Hamlett, bob: nite everyone/ thanks moderators!!!!!!!!!!!!!!!!!!!!!!

craig f CA: GOOD NITE AL Craig f CA

Charles P CA: See you in the funny papers!

Moderator (Patrick Hamlett): Foster: We will have information about the experts to post on the web site

Moderator (bob): Good Night All. See you Tuesday