

NCTF 5th Online Session Transcript
Joined on March 13, 2008 at 9:00 PM

John E WI to Patrick Hamlett, bob, Tina Ndoh: Patrick, Bob: re: the question of current NBIC technologies from Tues (team 1)--I just starting looking thru the "C's" on the nanotechproject.org site... e.g.'s: 1) SportMedix products are nan-structured bioregulators, controlling the biological processes responsible for normal functionality of all organs and tissues... 2) and a host of other supplements, and foods (Canola Active Oil), and toothpaste, and of course, cosmetics

foster f GA to REXXOR A GA: got ya me too

john k nh: no clue

Teresita B CA: I see, I think...yes, I get it!

Richard S (GA): gold = means that that person is TYPING SOMETHING

Angel D. NH: Neat.

john k nh: We are counting on California to go after upholding ethical standards in human testing.....go for it please.

Richard S (GA): freegin technology..... lol....

john k nh: Berkeley is not renowned for no reason...as is Madison. Those thrilling days of the 1960s!!!

REXXOR A GA to foster f GA: There are a few I think I respect, and then some others that I wish would grow up and see the scope of what we may be accomplishing.

Teresita B CA: Yeah, Bayer a local pharmaceutical here is doing some research in nanotech...

john k nh: Berkeley

foster f GA: Please active groups hold the "experts" accountable

john k nh: This preliminary list of issues needs some work still....don't ya'll think?

Catherine J NH: Yes, and focus on the environment, please.

Teresita B CA: Madison...a very nice college town!

Moderator (bob): Hi folks - We're still logging people in. We'll be starting in 3-4 minutes.

Angel D. NH: Ok.

Dana A WI: Lovin Madison...

James B AZ: I'd still like to know what countries are doing what.

Angel D. NH: If they will tell us.

Teresita B CA: I'm crossing my nano fingers that the software stops kicking me off tonight...

john k nh: Durham isn't bad either....pero mucho neive.

Catherine J NH: Why?

James B AZ: good point

john k nh: nieve

Don S WI: On Wisconsin, On Wisconsin...

Teresita B CA: Never been to Durham.

Angel D. NH: *yawns tiredly*

foster f GA: Nano is world wide not inclusive

Jane L NH: hello all..

Moderator (Patrick Hamlett) to bob: In a couple minutes, I will stop everyone's chat & make Team 2 active

john k nh: Es bonito.

Catherine J NH: No matter where you go, there you are.

john k nh: One must like ice and snow

john k nh: 5 months of the year.

Moderator (Patrick Hamlett): In a couple minutes I will stop everyone's chat and make Team 2 active

Teresita B CA: okeedokee...

Catherine J NH: And the ocean and beautiful mountains.

foster f GA: dang it

Angel D. NH: I love living in NH.

Angel D. NH: Except the cost.

john k nh: right Catherine...exactly...

Angel D. NH to Patrick Hamlett, bob, Tina Nдох: But that is everywhere these days.

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: Hello everyone.

Moderator (bob): We're about ready to start. Team 2 is chat active.

Diana I GA to Patrick Hamlett, bob, Tina Ndoh: I would like to know what research safeguards are in place to protect humans and the environment.

charles az: hey how is everyone feeling? ready for some extreme nanotechnology discussion?

Moderator (bob): Please note the slide. Those not active, please refrain from discussion commentary.

Diana I GA: I would like to know what research safeguards are in place to protect humans and the enviro

Teresita B CA: OK. I have a layered question from Berkeley's F2F list...

An L CO: Consent is important rather than mandatory or compulsory NBIC.

Diana I GA: environment

Moderator (bob): Here is tonight's agenda.

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: I apologize for being absent Tuesday. I was bitten by a neighborhood cat on Monday night, and my hand became very infected, necessitating a trip to the doctor and antibiotics. In dealing with all of the pain, and confusion over what to do ... whether to go to the doctor or not ... I forgot about Tuesday night's session. I am so sorry, and will not be absent again.

Alexander T NH to Patrick Hamlett, bob, Tina Ndoh: did my teams get switched again or is my inability to chat a mistake??

Alexander T NH: thanks!

Moderator (bob): Sorry Alexander we got you now.

Moderator (bob): Clear on the agenda Team 2?

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: Could we please not run over time-wise tonight?

Alexander T NH: yep

Teresita B CA: Need tech advice... I want to cut and paste question from F2F Berkeley session... how to do this...no printer to copy from doc.

Frank C NH: aye aye

Diana I GA: does anyone else share concern about human safety?

An L CO: uh huh.

Frank C NH: are you talking about fallout from accidents?

Moderator (bob): Please note new slide.

Diana I GA: no-was referring to how would nano be used for and on humans

trisha b. AZ: I like that , in the hands of experts

Moderator (Patrick Hamlett) to Catherine J NH: Catherine: We will try, but must get tasks completed

Moderator (Tina Ndoh): Teresita, you can cut and paste any text that is 'grabbable' into the chat box.

kokila r ga to Patrick Hamlett, bob, Tina Ndoh: Yea, Diana, that is a very important concern - side effects of NBIC

Frank C NH: I would like to ask an expert to be specific about the most promising areas of NBIC: Eradicating Down's Syndrome? Alzheimers? Parkinson's? Birth Defects? What are they?

Second, I'd like to ask a sociologist/religious expert to provide a view what those human "defects" bring to the Greater Society that would be missed if they were gone?

An L CO: Like as in how our differences actually make us much more valuable than would otherwise.

Moderator (bob): These are the two questions from last.

Marissa S WI: Very good questions.

Teresita B CA: Not sure what that means...not a techie. Why wastes are generated from nanomaterials? Can they be recycled/removed from environment/body once introduced? What is lifecycle of nanomaterials?

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: There is a typo I think at the end of question B.

Moderator (bob): For your convenience we are listing the final 5 questions voted on last time, in case you want to re-nominate one of the ones not chosen.

Frank C NH: Also, I'd like to know if We the People can dictate to science what problems we want them to solve: i.e. Not a dime for Super Soldiers until you fix Downs or some such.

Moderator (bob) to Jonathan R GA: Jonathon - We see the typo. Sorry!

Marissa S WI: I agree Frank.

Diana I GA: also-what about knowing what other countries are doing--are they further along that US--if so what area are they working on

An L CO: Fixing assumes that there is inherently wrong with downs as in an emergency to eradicate. Not so.

Frank C NH: Wonder if the intelligence community is working on that. Good question

Teresita B CA: Can nano materials be restored to bulk size? iF SO DO THEY RETAIN NANO PROPERTIES OR GO BACK TO "NORMAL"

Rexxor A GA: This is an important question to me. What is the state of affairs in the government to adequately assign responsibility for regulation and control of these NBIC through a new or redesigned agency through an appointment process or an act of congress?

Moderator (Tina Ndoh): Frank, do you think question B covers your concern?

Moderator (Tina Ndoh): Also, to all the questions with the ** represent the two selected

les k wi to Patrick Hamlett, bob, Tina Ndoh: hello all... a lil late

Marissa S WI: Rexxor, that question could be added to E, maybe.

trisha b AZ to Darlene J AZ: glad to see you Dar. Sorry, I said the wrong thing about Az time not changing. it did.

Frank C NH: To me the greater question is would the public be listened to if it had input?

Moderator (bob) to Jonathan R GA: Rexxor - Marissa scooped me. Can your question be added to E on the whiteboard?

Rexxor A GA: Perhaps?

Moderator (Tina Ndoh): Rexxor, do you think that question E addresses your concerns?

Darlene J AZ: that's o.k...I was hoping you were right i had to change my whole schedule around to accomodate...

Alexander T NH: Here's one - What choice will an individual (or a minor, for that matter) have about receiving these technologies??

An L CO: Right.

Darlene J AZ: Anyway, what is the purpose of tonights session anyway???

Moderator (Tina Ndoh): Sorry, REXXOR, I'm a little behind in reading the chat!

An L CO: The choice to say yay or nay

Moderator (bob): Frank - it seems your concern is covered in B which was chosen for experts last time. I'm not sure anyone could answer whether the public voice would be heard.

Diana I GA: I agree a/Frank--wouldn't we also want to know if a process is in place (beside what we are doing) so that the public can give input

REXXOR A GA: No. I don't think E is specific enough. Again how does this agency get created, congressional act or presidential appointment?

An L CO: Not public individually

Frank C NH: OK

Marissa S WI: Darlene, The purpose of tonight's session is to decide on more questions to ask the experts.

Moderator (Tina Ndoh): REXXOR, would you like that specificity added to E, or the creation of a new question?

Moderator (bob) to Darlene J AZ: We are generating questions to be sent to the experts in advance without duplicating the ones chosen last time.

Eldrine Rich CO: what roll has the us taken on nanotechnologies and other countries

Darlene J AZ: other than the ones already up or do we have to stick to those?

An L CO: Authority figures using the technology against people's wills

Teresita B CA: Another Question - Funding. How to set funding priorities? Is it possible to fast track urgent needs? For ex, could develop to help finance healthcare (the point was that apparently frivolous but profitable uses can help reduce cost of necessary but unprofitable/healthcare. Priorities for funding - focus on real needs.

REXXOR A GA: E could be included into it I suppose.

Moderator (Tina Ndoh): Eldrine, do you want to put question D back on the table?

Teresita B CA: What initially motivated creation of nanotech and how did Congress decide to spend over \$1B on development of it?

Moderator (bob): Darlene - You are free to ask any question. We only put the nominated questions from last time as a reference.

Frank C NH: Teresita, yes. Setting priorities via grants and awards etc. In the end, Democracy is about how the money is spent.

Teresita B CA: There's nanotech dvlopt going on in Japan.

Moderator (Patrick Hamlett): Teresita: Right now, federal funding agencies (NSF, NIH, etc.) do set priorities for funding. Are you asking about public involvement in setting those priorities?

Frank C NH: Perhaps we need an expert from teh intelligence community, CIA anyone?

An L CO: public is too broad a term\

Diana I GA: don't you think that we need to know more than bits and pieces about what other countries are doing---

An L CO: exactly

Teresita B CA: Yes, public involvement .. like report card sessions that local congress-people here conduct.

Moderator (Patrick Hamlett): Teresita: There is substantial nanotech development in many industrialized societies. Much of it, however, is not focused on human enhancement technologies

An L CO: like mass media hyper mania

Frank C NH: But would knowing what other countries are doing simply push us toward competing with them?

Rexxor A GA: Diana, that's a big assumption that they want/would want to share their info.

Moderator (Tina Ndoh): Diana, would you like to see question D back on the table? Perhaps a different form of the question?

An L CO: please no

Frank C NH: Scratch that response.

JASON L AZ to Patrick Hamlett, bob, Tina Ndoh: Would area 51 be involved with nano?

Diana I GA: yes- D is a good start==I agree that they might not want to share but I bet people working in nanotech already know some of what is going on elsewhere

Moderator (Patrick Hamlett): Jason: Area 51, the UFO site? Not that I've heard...

JASON L AZ to Patrick Hamlett, bob, Tina Nдох: ok

An L CO: area 51 as a international site

Darlene J AZ: I have an interesting question...as a member of a sovereign government that does not have adequate representation in Congress or at any governmental levels for that matter but yet holds over 1/4 of the land mass of Arizona and only 1.5% of the US population and believes that nanotech is harmful to the planet...how do we get heard??? How do even get anyone to listen to us when we say we do not want this in our hospitals...many tribal clinics and hospitals rely on traditional medicines from earth...what happens when we can no longer grow our medicines to treat our people because the land has been polluted?

An L CO: it is already

Moderator (bob): I need clarification on the public involvement in development & regulation issue. I need to see how that is different that B - which has already been sent to an expert. Is there some new question here I'm not seeing. It seems awfully popular.

Marissa S WI: Interesting question Darlene. I think experts can't help us on that one. Well, maybe a grassroots initiatives expert.

foster f GA to Patrick Hamlett, bob, Tina Nдох: bob got booted never got an answer from you on a fix? Running high profile firewall 64 integration

trisha b. AZ to Darlene J AZ: We grow it above the land Dar hydroponics

Rexxor A GA: I would like, somehow, legislatiely perhaps, to keep religious zealots out of the policy making proceedure.

Darlene J AZ: I don't know about that...somethings very not right about that...

An L CO: religious people are not necessarily fanatics

trisha b. AZ to Darlene J AZ: religious zealot could be any of us

Frank C NH: Rexxor: I am opposed. I want all the religious zealots in.

An L CO: lol

alan h ca to Patrick Hamlett, bob, Tina Nдох: sorry ...im late

Rexxor A GA: I don't include all religious ppl as zealots.

trisha b. AZ: Maybe we are the religious zealots

Teresita B CA: Pollution is now a deadly sin.

An L CO: maybe religious zealots have a clear perspective

Frank C NH: The religious bring legitimate arguments to the table , sometimes, but I'd rather have them heard than have them complain they haven't been heard.

Darlene J AZ: I just want ALL people of all races, religions, cultures, etc...to have a say in what happens...it's always the same people that make the decisions and policy for everyone....

Rexxor A GA: I did not mean to spark an issue about fanaticism here.

An L CO: equality is paramount

Frank C NH: No no, it's an excellent point.

Moderator (bob): Well, we have 11 questions generated so far - We need to get to 5 you can vote on to select your 2 questions to nominate to the entire conference.

JASON L AZ to Patrick Hamlett, bob, Tina Ndoh: Would being X-rayed harm nano bot's inside the human body?

trisha b. AZ: Put it to a vote we can be finished in two minutes

Diana I GA: anyone want to formulate a? About remediation vs. enhancement use of nano

Moderator (bob) to JASON L AZ: You are not chat active. You have to wait until the next hour to join in the discussion.

An L CO: sure

Marissa S WI: The environmental issue isn't up there in any direct form yet. We could ask someone about the ways they know of so far that nanotechnology specifically and generally might harm the environment. We know a lot of the generals: more pollution, etc. But what about nanotechnology specifically might pose environmental harm?

An L CO: environmental impact is rather random

Moderator (Patrick Hamlett): Marissa: the environmental impacts of nano are important, but isn't that a bit off the topic of human enhancement?

An L CO: Yes

Rexxor A GA: I like the idea of repairative tech and enhancement tech.

Teresita B CA: Re: funding priorities, as I understand it from an advocacy issue on WWII vets, a legislator champions an issue and puts a dollar figure to it and pushes sponsorship, then depending on political will the issue gets debated on Congress' floor --- advocates will alert constituencies to lobby for passage yeah or nay.

Darlene J AZ: I think it is very important...without a health environment to live in...It doesn't matter how much nanotech there is if there's no one here to use it...

Frank C NH: It would be important to see where the line is, what is remediation and what is enhancement. Eye of the beholder and all that.

Moderator (bob): We're almost ready to post the questions you've generated so far, so you can start to work on weeding out the chaff.

Marissa S WI: Environment is off topic in a way. At the same time, I don't see how we can analyze the impact of enhancements only in relation to ourselves. That seems like it's been an error of the past all too often.

An L CO: separate issues

Darlene J AZ: I give up trying to explain...

trisha b. AZ: Don't give up DAr... without a bed where do we sleep... keep going girl.

Moderator (bob): What you should be doing now is winnowing down to 5 Qs. Are #10 and #11 the same?

Darlene J AZ: It's the same old stuff...the majority decides for everyone...

trisha b. AZ: where is 11

les k wi to Patrick Hamlett, bob, Tina Ndoh: and the minority is screwed

Moderator (Tina Ndoh): Marissa, do you think your concern is covered in #5?

Frank C NH: Humm ... like 8, like 4.

Moderator (Tina Ndoh): Trisha, 10 and 11 were duplicates, I've deleted one

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: I'm only showing 10 questions,

Rexxor A GA: I think delete 3

Moderator (bob): Darlene - It seems that #5 addresses environmental issues. If that doesn't address your issue, how is your issue different?

Rexxor A GA: sorry 4

trisha b. AZ: I thought you added one in your head

Moderator (Tina Ndoh): Any agreement on deleting #4?

Teresita B CA: Question 9 has an example, enhancements may be profitable, can they help reduce cost of necessary/unprofitable disease treatment in healthcare.

Darlene J AZ: Yes 5 is close enough

Diana I GA: we could fold #2 into 10 and make it a longer, more involved question?

Marissa S WI: Tina, It's partially covered by 5. I would add a question to 5 about other known or hypothesized effects of nanotechnology on the environment.

trisha b. AZ: Number four is my favorite I think it stays

An L CO: 4 can go along with 8

Teresita B CA: Yes, 5 and 7 were same layer of question about by-products of nano dvlpt.

Moderator (Tina Ndoh): Ok, I'll add known/speculated effects

Marissa S WI: Thanks, Tina!

Moderator (Tina Ndoh): Agreement to add #2 and #10?

An L CO: sure

Rexxor A GA: 3 6 and 9 are similar in concept to me

Diana I GA: I agree w/Rexxor

Moderator (bob): Concentrate of what are the MOST important questions you want to get feedback on from the experts.

An L CO: Yes on 3 6 9

Frank C NH: Yes on 3 6 9

Rexxor A GA: I agree that 5 and 7 talk about post application

Teresita B CA: Who would be the expert on funding priorities?

Moderator (Tina Ndoh): Alright, will combine 3, 6, and 9

Darlene J AZ: I don't think 3 is the same as 6 & 9

Moderator (bob): I think 3, 6 & 9 could be rolled into one questions. Thoughts?

Frank C NH: Is No. 1 a given and therefore deletable?

Diana I GA: still think we need to ask a more detailed? About remediation vs. enhancement

Teresita B CA: Yes, Bob, ok.

An L CO: Not perfectly. But related

Theresa B WI: I agree w/ Frank NH

An L CO: 1 is clearly a given

trisha b. AZ: they are both human

Moderator (bob): Frank - Clarify your statement that #1 is a "given".

Teresita B CA: wouldn't remediation consider those diseases that have markedly high impact on population --- cancer, heart problems, diabetes --- with an aging population, arthritis.

Frank C NH: I assume the overall conversation involves nano in humans.

Frank C NH: I could be wrong.

Moderator (bob): Looks like most agree with you Frank. Any major objections to dumping #1 off the list?

An L CO: That's correct Frank

Diana I GA: dump #1

Rexxor A GA: No delete it

Teresita B CA: Enhancement to me is cosmetic, physical, plastic surgery.

An L CO: Kick it off

Marissa S WI: I'm ok with deleting 1

Moderator (Tina Ndoh): I am dumping #1

Teresita B CA: So dumped, Tina. I admire your tackling the recordkeeping.

Diana I GA: I agree w/you Teresita but where do you think the profits can best be made from Nano--

An L CO: Yes

Moderator (bob): Alright! We're down to 7. We need to reduce the list by two more.

An L CO: Promising areas can be included within 4

Alexander T NH: what combing 4+5??

trisha b. AZ: can't we vote as a team and get rid of two

Diana I GA: still would like to combine 1 and 7 but expand specifically what we want to know--I am concerned that profits will guide development (like it usually does)

An L CO: 4 into 5 sure

Moderator (Tina Ndoh): Agreement on combining 4 & 5?

Frank C NH: Yes.

Teresita B CA: All those superhuman enhancements like regeneration, mind reading (hee, hee...) or like taxing the heck out of the plastic surgeons that are into enhancements now.

Rexxor A GA: I think 6 should go. I am sure these tech would not be compulsory and as for minors they don't have a choice, they are not of majority.

An L CO: these are good and could combine

An L CO: rather than vote off

Teresita B CA: Yes, let #6 go!

Moderator (bob): Trisha - Trouble is in order to an orderly vote, we need to get down to 5 - all the responses the system will allow on a poll. So we have to this part verbally.

Diana I GA: ok w/me to drop 6

An L CO: six is very important

Moderator (Tina Ndoh): Agreement on dropping #6?

Darlene J AZ: no

Teresita B CA: Are 4 and 5 related?

Alexander T NH: I like 6...

Frank C NH: I like 6. Raises the issue of choice if a parent decides to make his son a left-handed pitcher and the kid grows up to be a painter.

Marissa S WI: Im ok with dropping 6. I could write a policy recommendation about it without talking to experts about it.

Moderator (bob): NEED CLARIFICATION - We aren't sure what question #5 means - Can nanomaterials be restored to bulk size.

Theresa B WI: I don't agree with REXXOR

Moderator (Tina Ndoh): It sounds like we need to keep #6

An L CO: well if 6 goes than maybe you wouldn't mind being forced into compliance if not answered

Diana I GA: if you think about it-we already have lost lots of our free will especially w/regard to medical care etc.

Darlene J AZ: that's very true

Teresita B CA: Consent is a question for all invasive procedures.

Moderator (bob): Enough have objected to dropping 6 that we're dropping the idea of dropping it. However, my question about #5 - what does it mean - needs to be addressed.

REXXOR A GA: Do we not all agree that should these nbic tech come to fruition they would have to be chosen by us or those use them

trisha b. AZ: Bob we could have two sets of voting.

Diana I GA: yep consent is required but think about how often people are talked into doing something they might not want to do but fear has been put in their minds

Frank C NH: I'd drop No. 5

Moderator (Patrick Hamlett): Trisha: what do you mean about two sets of voting?

Moderator (Tina Ndoh): Question #2- public involvement has already been asked somewhat in one of the two questions selected on Tues.

Darlene J AZ: I think 5 can be combined with 6...

An L CO: yes by slowly eroding their ability to decide for themselves

Darlene J AZ: I mean 4 and 5 sorry

Theresa B WI: I am confused about 5 too, maybe it isn't as important as 4

REXXOR A GA: again as for children, they are minors, not of the age to choose for themselves

An L CO: exactly

Moderator (Tina Ndoh): Here is the question from Tuesday:2.
Public Involvement issues- How unrepresented groups are heard (groups w/o congressional representation)? Public input on funding priorities? How will/should those priorities be set? Is this close enough to #2?

An L CO: have parents taking their prodigy into risky rehms

Teresita B CA: Choice, an area that nanotech may not have any application per the pitcher/painter kid.

Alexander T NH: and how would you feel if you were unwillingly subject to the latest fad - except you couldn't get rid of it

Alexander T NH: ?

Moderator (bob): Since no one can explain what Q #5 means. We should dump it. An expert won't know what it means either.

trisha b. AZ: get rid of five and seven and then vote

Darlene J AZ: I think it is related...what is the effect if they cannot return to bulk and is there a consequence?

An L CO: 5 has a bit of a vagueness about it

Rexxor A GA: Tina I agree that it is too similar to keep

Teresita B CA: That's fine, bye bye # 5.

Marissa S WI: Tina, It is similar enough to #2, yes.

Moderator (Tina Ndoh): Agreement to dump #5?

An L CO: the permanence of these

Alexander T NH: yes

Moderator (bob): #5 is out.

Rexxor A GA: I agree 5 out

Moderator (Tina Ndoh): Agreement to dump #2?

janine ca to Patrick Hamlett, bob, Tina Ndoh: bob, I think the issue of reversibility is legitimate!

Rexxor A GA: Yes 2 out

Marissa S WI: Yes

Darlene J AZ: NO!!!!

Mark Philbrick CA to Patrick Hamlett, bob, Tina Ndoh: Tina: No, you posted today's as yesterdays

Diana I GA: yes dump 2

An L CO: Further explaining whether or not someone can get out of their enhancements if they fail to satisfy

trisha b. AZ: Nope that is important

Teresita B CA: No obn #2 out.

An L CO: 2 is imperative

Rexxor A GA: It was already stated on yesterday's questions for the experts

An L CO: equality and marginalized groups

Darlene J AZ: Are we a democracy or are we a dictatorship?

Moderator (bob): #2 is a lot like the question voted in last night, but if you want to send a duplicate question out and waste a bullet.....

janine ca to Patrick Hamlett, bob, Tina Ndoh: I think the issue here is if we manufacture something "bad" is it fixable??

Rexxor A GA: Do we want to have the same question answered twice?

An L CO: is it close enough?

Teresita B CA: thanks team, #2 is relevant...the budget in 2009 is already heavy on dept of defense research area.

Diana I GA: what about 1 and 7 being combined--we are running out of time?

An L CO: defense is becoming obsolete

Darlene J AZ: Can we add our #2 question to the one last night??? and make one big question?

An L CO: especially if it closely meshes

Rexxor A GA: We are nat saying that its not important, but it will be asked already.

Teresita B CA: It's now 1 and 6. A timeline of dvlpt since 2001 to 2010.

Diana I GA: right-1 and 6

An L CO: Will the financial benefits outweigh the expense

Moderator (Patrick Hamlett) to Javiera B CA: Javiera: I get the problem of nano accumulation in environmental systems, but isn't that a bit off topic? We're looking at human enhancement technologies, not environmental impacts...

Moderator (bob): We could pass that version on to the expert who already has last night's version. If that is the case can we dump #2.

Darlene J AZ: I am concerned about the unrepresented groups in #2 - for obvious reasons...

An L CO: like pay for themselves due to improvements across the board

Rexxor A GA: 2 out for me

Moderator (bob): OK - We need to get to the final 5.

An L CO: combine then

Moderator (Tina Ndoh): Sorry guys, error on the cut and paste earlier!! B. **what role do experts see for public involvement in development and regulation? And how do we ensure public involvement? How is information dissemination being handled?

Moderator (bob): Darlene - I understand your concern, but it has been asked already & we can simply add #2 to the question sent out lastr night.

Teresita B CA: Yes, places like Samoa, Marshall Islands -- they don't get to vote, and who knows where this technology will be tested?

Theresa B WI: I think 2 is incredibly important but it is part of a much wider issue than nanotechnology and would need to be addressed in a much larger scale

Darlene J AZ: Are we going to add the wording of our #2 with the wording of last nites question?

Moderator (bob): Darlene - We can do that. Yes.

Moderator (Tina Ndoh): So, are we removing #2 from tonight's vote?

An L CO: That would sure get us ready to vote

Teresita B CA: Adding # 2 to last night's question is fine as long as it delineates how public opinion impacts policy -- like our task for this project.

Alexander T NH: that's fine by me...

An L CO: yes

Darlene J AZ: I've concerns regarding testing done on Aborginal people as recently as the 1960's by the government without any one's permission...

Javiera B CA to Patrick Hamlett, bob, Tina Ndoh: I just wanted to let you know the context of it since now no one could explain it, Im not arguing for or against, just adding clarification. Sorry to interrupt!

An L CO: that is wy 5 stays

Teresita B CA: So did we combine 1 and 6?

Darlene J AZ: some of those were my family...obviously I'm very passionate about this...

Frank C NH: Yes, 1 and 6

Moderator (Patrick Hamlett) to Javiera B CA: Javiera: toxicity IS a problem and is relevant to human enhancement issues. I was just worried that the group was going to wander off into broader, but not relevant, environmental issues.

An L CO: Being able to consent is necessary

Diana I GA: before we stop--think about we could get more bang for our buck from the experts if they have to answer 1 and then go in greater detail w #6

An L CO: right 1 and 6 go good

Teresita B CA: What about Tuskegee, re: testing?

Moderator (bob): OK - Now we are at 5 questions. You can now vote (ONLY TEAM 2 MAY VOTE) to select the best question from the lsit above.

Diana I GA: pleaaaaaaaase put one and six together

Diana I GA: A and E, I mean

Moderator (bob): We are running out of time TEAM 2 - Vote using the A,B, C, etc. buttons on the tool bar.

Moderator (bob): Poll results in a moment.

An L CO: we're not getting anywhere they are each tied at 2 votes per letter question

Alexander T NH: d has 3...

Theresa B WI to Darlene J AZ: Darlene, is there any info you can give me on testing of Aboriginal people? Is there a term I should google to learn more about it? Thanks

Diana I GA: but if a and e were together we would have four votes!!

Teresita B CA: Why couldn't A and E be combined?

Alexander T NH: maybe we should vote on combining a and e and then revote...

Darlene J AZ to Patrick Hamlett, bob, Tina Ndoh: Residential school survivors and forced sterilization and 'guinea pig' projects

Alexander T NH: ahhh democracy at work...

Moderator (bob): OK - D is one. But we have a four way tie for the second question. Vote now for A, B, C or E. D already selected. Do not vote for it.

Moderator (Tina Ndoh): We can combine A and E now

Diana I GA: ok--please do

Marissa S WI: Yes, combine A and E

Moderator (bob): We combined A and E. Now vote on A, B or C.

Moderator (bob): Choose between A and C

Moderator (bob): You can vote for A or C only.

An L CO: congrats c close one

Moderator (bob): OK - C is it. Now we MUST get to Team 3.

An L CO to Patrick Hamlett, bob, Tina Ndoh: bye

Moderator (bob): Winning questions will be posted in a moment.

Teresita B CA to Patrick Hamlett, bob, Tina Ndoh: The process is getting better! Kudos to moderators.

Moderator (bob): TEAM 3 - You are now chat active. Your turn to suggest questions for the experts.

Moderator (bob): We have reposted the final voting list of questions from Tuesday night just as a reference.

Moderator (Patrick Hamlett): Remember everyone: we're voting on the most important questions to put to the experts, but you will have the chance to ask additional questions once they are on-line with us

James B AZ: are insurance companies being consulted about cost ?

John B WI: I feel a need for a regulatory/risk assessment question, e.g. What is different about these technologies that makes them different

from a regulatory standpoint? Or: What are the risks inherent in these technologies that are not susceptible to regulatory controls used for other technologies? Something along that line.

Lynda Z AZ to Patrick Hamlett, bob, Tina Ndoh: I feel great enthusiasm for the possibilities of medical remediation and even more enthusiasm for Human Enhancement. I feel upbeat that the benefits will far outweigh the drawbacks. Since the government has set aside over a billion dollars for nanotechnology, and since research money is doled out according to a set of priorities.....I'd like to know the priorities by which money is now being doled out.

Lynda Z AZ to Patrick Hamlett, bob, Tina Ndoh: sorry-I wanted that to go to everyone. do i have to retype it?

Moderator (Patrick Hamlett) to Lynda Z AZ: Lynda: Be sure to sent your message to "This Room," so everyone can see it

emily m nh: Do we know how much \$ our govt is already spending on human enhancement NBIC research?

Angel D. NH: For medical, military or what areas?

Moderator (bob): Again, we want to get to two questions by the end of Team 3's hour. Then everyone will be able to vote on the two questions from the combined list of questions generated tonight. Same process as last time.

Moderator (Tina Ndoh): Lynda Z AZ to Patrick Hamlett, bob, Tina Ndoh: I feel great enthusiasm for the possibilities of medical remediation and even more enthusiasm for Human Enhancement. I feel upbeat that the benefits will far outweigh the drawbacks. Since the government has set aside over a billion dollars for nanotechnology, and since research money is doled out according to a set of priorities.....I'd like to know the priorities by which money is now being doled out.

James B AZ: what is being done to prevent technology from being used by extremists?

Mark Philbrick CA to Patrick Hamlett, bob, Tina Ndoh: Shouldn't Angela C be active as part of team 3?

Angela C CA to Patrick Hamlett, bob, Tina Ndoh: This is kind of a new Q. What about the actually methods/means of testing safety? Such testing would require its own set of technologies. Are these methods sufficient/well enough developed in order to be reliable?

Angela C CA to Patrick Hamlett, bob, Tina Ndoh: Hmm, I'm on team 3 but don't seem to be able to send to the entire group.

Moderator (Tina Ndoh): Angela C CA to Patrick Hamlett, bob, Tina Ndoh: This is kind of a new Q. What about the actually methods/means of testing safety? Such testing would require its own set of technologies.

Are these methods sufficient/well enough developed in order to be reliable?

Moderator (Patrick Hamlett): Angela: we just made you active

Moderator (bob): Sorry Angela. You should be active now.

Angela C CA: Thanks.

emily m nh: With increased research on "fixing" people through nano human enhancement, will we be even less inclined to focus efforts/dollars on preventing illness/disease/bad health/pollution/waste etc.? I find this troublesome.

Moderator (Patrick Hamlett): We've had a number of technical questions & questions of policy priorities, etc. Are there ethical questions that you want experts to address?

Angela C CA: I tend to feel the technical & policy Qs are more important.

Angela C CA: The both tend to encompass ethical issues.

James B AZ: what is being done to prevent any nazi-esque experimentation?

Moderator (bob): Angela - That's OK. Priorities are up to you & the rest of the group.

Lynda Z AZ: e to Patrick Hamlett, bob, Tina Nдох: I feel great enthusiasm for the possibilities of medical remediation and even more enthusiasm for Human Enhancement. I feel upbeat that the benefits will far outweigh the drawbacks. Since the government has set aside over a billion dollars for nanotechnology, and since research money is doled out according to a set of priorities.....I'd like to know the priorities by which money is now being doled out.

Me to Patrick Hamlett, bob, Tina Nдох: sorry-I wanted that to go to everyone. do i have to retype it?

Moderator (Patrick Hamlett): Lynda: Be sure to sent your message to "This Room," so everyone can see it

ethics differ by experience, knowledge, religion. there are always ethical questions, the devil is in the answering

Abbey J WI: Perhaps a question pertaining to the ethics of testing on human subjects. I don't particularly know much about he current guidelines for human testing.

Moderator (bob): I'm not seeing a lot of activity. Concentrate of what you would MOST like to know to help you formulate policy recommendations.

Angela C CA: Does anyone else have thoughts on the safety/testing issue? We talk a lot about whether enough safety precautions are taken, but part of this involves even having the adequate means to evaluate safety in the first place.

Moderator (bob): Angela - Please clarify what you mean by "evaluating safety"/ Can you be more specific?

Angela C CA: If we don't have the technology to detect the effect of NM in the air we breathe or on our cells, how can we understand their effects?

Angel D. NH: We won't understand it until we activate it...kinda damned either way.

Moderator (bob) to Lynda Z AZ: Lynda - We have your question on spending priorities on the list. (Not the one showing.)

An L CO to Patrick Hamlett, bob, Tina Ndo: is team 3 asleep?

Angela C CA: How do we determine what a nanoparticle will do in our bodies? This all requires new technologies to test.

Abbey J WI: I think safety is an extremely important issue, but I am struggling to formulate a succinct question.

Angel D. NH: We can test all the rats in the world, but who knows what effects will happen in the real world.

alan h ca to Patrick Hamlett, bob, Tina Ndo: protocols...sorry

Angela C CA: Angel: It doesn't have to be that way. For pharmaceuticals, we don't just feed pills to patients & see what happens. We do lots of testing first.

Angela C CA: In vitro tests.

Moderator (bob): Abbey & Angela - How is this wording - Will it require new technologies to determine the effects of nanotechnologies?

emily m nh: and some companies put their products out there claiming they're safe and then we later learn of all the ill effects (that they may or may not be aware of) - there is so much \$ to be made, so I am guessing safety will take a backseat - and that certainly includes pharmaceuticals

Angela C CA: Actually, I agree on the rats issue. We'll never know the full effects.

James B AZ: How accessible is and will info be

JASON L AZ: Do we first test nano on lab rats?

Angel D. NH: Sure, things are tested, but we also pull items off the market after they are fda approved.

Angel D. NH: And I doubt other countries will put so much caution into testing.

Moderator (Patrick Hamlett): If you look in the background Materials, there is a description of the testing protocols used by FDA for medical products

Angela C CA: Angel: And I believe that reflects the short-comings of the FDA. Nano needs to be better regulated than pharma.

James B AZ: Who is watching the watchers?

Abbey J WI: How is an expert going to answer that for us James?

Angela C CA: Bob: How about something along the lines of "Are the existing technologies utilized in safety testing sufficient?"

Lynda Z AZ: i like that ,Angela

Angela C CA: Or "Do we have the sufficient means/methods to thoroughly evaluate safety of NM"

Angel D. NH: It NEEDS to be, but WILL it be?

Angel D. NH: That is a pretty good question Angela.

Moderator (bob): Good one Angela. Nice succinct wording.

Angela C CA: Angel: Hopefully it will be if we crank out a moving report!

Nichole C Co: I agree with Angela. The FDA would not be a good regulatory agency for this type of technology

Angel D. NH: We are moving.

Abbey J WI: Excellent question Angela!

Lynda Z AZ: what kind of regulatory agency do the experts see as useful

Angela C CA: Thanks abbey

Moderator (bob): We are getting ready to post the questions you've suggested so far.

Angela C CA: Could someone clarify A for me?

Moderator (bob): There they are. Comments? Thoughts?

JASON L AZ: they should open a new agency for nano

Angel D. NH: What would insurance companies cover?

Abbey J WI: I think A addresses necessary versus selective enhancements

Angela C CA: Jason: It seems that Nano cuts across so many industries & applications that it makes more sense for existing agencies to taken on the appropriate sector.

Lynda Z AZ: i would still like to know what the existing funding priorities are. i think that gives us a hint as to what is to come

Angela C CA: Rather than create something new from scratch, when many agencies already deal with nano.

Moderator (bob): Are B, D and G driving at the same point? Could they be combined?

emily m nh: and, how much money our government is currently spending on research into nanotech for human enhancement?

James B AZ: Insurance could be used to pay for some types of enhancement/improvements as well as help funding of research to ease tax payer burden.

Abbey J WI: I woulf vote off B and D- Keep G

Angel D. NH: Hell I can't even get full coverage now...You expect them to pay for nano?

Angela C CA: I think D & G are the same, but B is a separate Q.

emily m nh: i agree

Moderator (Tina Ndoh): agreement on combining d and g?

Angel D. NH: Yes...D and G can be condensed.

Nichole C Co: I agree

Abbey J WI: The money trail is important, but I think we could better utilize our experts. With the right amount of research we could track SOME of the spending

James B AZ: agree

Angela C CA: I think A is too vague. Insurance companies will make decisions about specific services to cover strictly based on costs. And the technologies are not far enough to along to say.

John B WI: Sure, combine d/g

emily m nh: yes -

Abbey J WI: combine d & g

Angela C CA: Yes, combine D& G.

Moderator (bob): It seems that most agree D & G can be combined. We'll do that and leave B as a separate question.

Moderator (Tina Ndoh): will combine d and g

John B WI: I don't get A.

Angel D. NH: Um, can we get a larger font?

Nichole C Co: Why assume we have to involve insurance with this type of technology.

Moderator (Patrick Hamlett): Tina's working on it...

Nichole C Co: Too many individuals do not have insurance as it is.

John B WI: It seems to me that the insurance industry is basically another world.

Moderator (bob): It seems there is much sentiment for dumping A. We know they don't want to pay for anything anyway.

emily m nh: right

Angela C CA: At least with pharmaceuticals, it seems they will be used to enhance existing drugs or drug delivery, so I wouldn't envision "Nano" be something insurance companies could single out.

Moderator (Tina Ndoh): agreement for dumping A?

Angela C CA: I say dump A.

Abbey J WI: Dump A, Boo to Insurance companies anyway

Nichole C Co: Agreed

Angel D. NH: I don't see how a expert could help us on that.

John B WI: agreed

Angela C CA: Abbey said it right!!

Moderator (Tina Ndoh): a will be dumped, we'll be done to 5 q's!

Moderator (bob): We'll have the revised list up in a moment.

John B WI: Is E worded correctly?

James B AZ: Again, most of the funding is supplied by govn. ins. cos. will eventually profit from enhancement procedures anyway

John B WI: Now D - sorry

Moderator (Tina Ndoh): is there elaboration on E?

Abbey J WI: I feel like E needs a bit more "meat" if it is to stand on it's own, but I don't fully understand it (I guess)

Angel D. NH: Would that fall under confidential information, proprietary?

Moderator (bob): Any suggestions on wording question E? What does it mean to all of you.

Moderator (Tina Ndoh): This came out of the discussion on test results being made public

James B AZ: what meat would you add?

Nichole C Co: Insurance does not cover cosmetics; I doubt they will cover non-medically necessary enhancements

Ricky L. Co: It is weak. Maybe more direct

Angela C CA: I'm also confused on D. Is it meant to imply that we should reduce the use of preventative medicine?

emily m nh: for D:

Abbey J WI to Patrick Hamlett, bob, Tina Ndoh: I would choose the socially responsible Boca, but for this purpose I think E is addressing freedom of information

John B WI: That's my question to

John B WI: too

Moderator (Tina Ndoh): Question D came out of concern that enhancement will lead to reduction on prevention. I'll modify wording

JASON L AZ: when it comes to technology, it always comes down in price

emily m nh: D: that NBIC human enhancement may become a funding priority, and may lead to less attention/focus/money on preventing disease/illness/pollution/waste/etc.

Angela C CA: Perfectly said, emily.

emily m nh: thanks

Moderator (bob): Tell you what - I haven't seen many good suggestions on clarifying E, so let's leave E the way it is.

Angela C CA: And preventative medicine may be much more cost efficient.

Angela C CA: And safe.

emily m nh: exactly - and maybe simpler too

Angela C CA: Is E meant to convey "Does the public have access to current test results concerning the safety of NM?"

Abbey J WI: I feel ready for a vote...

Moderator (bob): Let's do the TEAM 3 vote to select your favorite question from the list. ONLY TEAM 3 MAY VOTE.

Angel D. NH: One question?

Moderator (bob): You may vote now.

Moderator (bob): One question.

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: Can we get spaces between the words to make it more legible?

Moderator (bob): Top two vote getters are the winners.

emily m nh: for E - is it partly, that we will be afraid of some type of "executive privilege" type thing over info?

James B AZ: yes

Angela C CA: I'm not sure if we all understand E in the same way...

Moderator (bob): We'll post the poll results in a moment.

Moderator (bob): A & C are the winners!!!! No ties!!!!

James B AZ: that was easy

Abbey J WI: Group 3- we are damn efficient

Moderator (bob): Our next task is to have EVERYONE vote on the questions suggested by Teams 2 & 3 tonight. When we post the final list, you'll vote for the one question you like the most & the top two vote getters get passed on to the experts.

Don B NH to Patrick Hamlett, bob, Tina Ndoh: those % don't make sense

Moderator (bob): Just to clarify - All can vote on this, whether chat active or not.

James B AZ: bring it on

Moderator (Patrick Hamlett): Again, you will be able to ask other questions, too

Moderator (bob): Here they are. You may ALL cast a vote with the A, B, C, D tabs on the tool bar.

Virginia P WI to Patrick Hamlett, bob, Tina Ndoh: while voting....are we actually meeting on Easter evening? Thanx!

Moderator (Patrick Hamlett): Everyone: I will be posting the written responses of the two specialists (and their bios) who will join us on Tuesday evening on the project web site (<http://www4.ncsu.edu/~pwhmds>), so look for them

Jane L NH to Patrick Hamlett, bob, Tina Ndoh: when?

Moderator (bob): We will cancel the session for Easter evening as a reward for your efficiency & diligence.

Angel D. NH: Oh woot!

Lynda Z AZ: thanks

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: When is Easter?

James B AZ: aren't you kind

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: yea, baby!

Starlyn F CO to Patrick Hamlett, bob, Tina Ndoh: Great!

John B WI: When's Easter?

emily m nh: is that march 23?

Angel D. NH: 23rd yes.

Moderator (Patrick Hamlett): But we expect you to be especially good the next session!!!

Teresita B CA to Patrick Hamlett, bob, Tina Ndoh: thank you! The system did not kick me off for the first time. How satisfying!

Starlyn F CO to Patrick Hamlett, bob, Tina Ndoh: Yes. the 23rd

Dana A WI to Patrick Hamlett, bob, Tina Ndoh: What about the other questions we've generated that did not make it into the top ones? Will a list of those be posted someplace?

les k wi to Patrick Hamlett, bob, Tina Ndoh: when's Easter?

Juan N GA to Patrick Hamlett, bob, Tina Ndoh: exactly my question
john

Virginia P WI to Patrick Hamlett, bob, Tina Ndoh: but, of course!

JASON L AZ: ok

James B AZ: always a price

Moderator (bob): Besides - when we drew up the schedule noone expected that Easter was that early this year. We were only going to hold a session if absolutely necessary.

Nichole C Co: come on people vote

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: I don't mind doing extra credit since I missed Tuesday

Moderator (Patrick Hamlett): We will also post all of the questions generated on the web site

Starlyn F CO to Patrick Hamlett, bob, Tina Ndoh: WHY do my submissions say "to Patrick Hamlett, et al...???"

Emily H to Patrick Hamlett, bob, Tina Ndoh: where you do post these?

Moderator (bob): Some have not voted. Remember EVERYBODY can vote, chat active or not.

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: can we close the voting soon?

Moderator (Patrick Hamlett): You should go to the project web site (<http://www4.ncsu.edu/~pwhmds>) to see all this information

Teresita B CA to Patrick Hamlett, bob, Tina Ndoh: signing off, nano...nano

Moderator (bob) to Starlyn F CO: Because your chat isn't activated.

charles az to Patrick Hamlett, bob, Tina Ndoh: WHAT IS THE VOTE BETWEEN?

Starlyn F CO to Patrick Hamlett, bob, Tina Ndoh: OH - okay

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: There is a serious typo in "B"

Moderator (Tina Ndoh) to Nathan_C_WI: Nathan, pls vote

Moderator (Patrick Hamlett) to charles az: Charles: Vote for the question you think is most important on the Whiteboard

charles az to Patrick Hamlett, bob, Tina Ndoh: I'm going to have to go with D

Moderator (Tina Ndoh) to janine ca: Janine, pls vote

foster f GA to Patrick Hamlett, bob, Tina Ndoh: pat please confirm project web site; think there is a f/ missing at the end

Lynda Z AZ: results?

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: What about the "actual" methods/means of testing safety. This might actually have affected the vote, possibly

Moderator (Tina Ndoh) to Ashley Anderson WI: Ashley, pls vote

Moderator (Patrick Hamlett) to charles az: Charles: Click on the letter you prefer at the top-right of your screen

Nathan_C_WI to Patrick Hamlett, bob, Tina Ndoh: E

Moderator (Tina Ndoh) to Catherine J NH: Bret, pls vote

Moderator (Patrick Hamlett) to charles az: Charles:L That's top-left of your screen

Moderator (Tina Ndoh) to Brett K CO: Brett, pls vote

Moderator (Tina Ndoh) to Catherine J NH: sorry Catherine

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: Let's not wait any longer; they lost their chance to vote.

Moderator (Tina Ndoh) to Ashley Anderson WI: Sorry Ashley

Moderator (Patrick Hamlett) to Nathan_C_WI: Nathan: are you going to vote?

Jennifer C GA to Patrick Hamlett, bob, Tina Ndoh: Will there be results to vote on - again - I have a car waiting! Sorry!

alex r co to Patrick Hamlett, bob, Tina Ndoh: still taking votes?

Nathan_C_WI to Patrick Hamlett, bob, Tina Ndoh: D

Moderator (bob): Those not voting - We will be cutting off the vote in a moment. Last chance to be heard.

Ashley Anderson WI to Patrick Hamlett, bob, Tina Ndoh: np! you are doing a great job, tina

Lynda Z AZ: i mean may we see the results of the last vote?

Virginia P WI to Patrick Hamlett, bob, Tina Ndoh: aren't all the votes cast?

charles az to Patrick Hamlett, bob, Tina Ndoh: how do i vote???????

Nathan_C_WI to Patrick Hamlett, bob, Tina Ndoh: got it?

Moderator (Tina Ndoh) to charles az: Use the buttons at the top of the screen

Moderator (Patrick Hamlett) to Jennifer C GA: Jennifer: We'll put the transcripts and the slides on the web site

Moderator (Tina Ndoh) to charles az: A through D

charles az to Patrick Hamlett, bob, Tina Ndoh: ok i got it nevermind

Moderator (bob): Look up on the tool bar - you'll see A, B, C, D. Click on one.

Moderator (bob): Voting is over.

Moderator (bob): Results posted in a moment.

Jonathan R GA to Patrick Hamlett, bob, Tina Ndoh: Since B got quite a few votes, I guess we can assume that the typo did not deter or confuse anyone from choosing B

Nathan_C_WI to Patrick Hamlett, bob, Tina Ndoh: doesn't seem to work

Jennifer C GA to Patrick Hamlett, bob, Tina Ndoh: Gotta go. Thank you! See you Sunday!

Moderator (bob): B & C will be passed to the experts appearing next Thursday (March 20).

Virginia P WI to Patrick Hamlett, bob, Tina Ndoh: good night!

Moderator (bob): Thank you all for hanging in there & have a great evening.

Catherine J NH to Patrick Hamlett, bob, Tina Ndoh: Okay, goodnight!

Moderator (Patrick Hamlett): Good work all -- look at the project website for new information from the experts