



Presidential Commission
for the Study of Bioethical Issues

TRANSCRIPT

Robert Cook-Deegan, M.D.

Professor
School for the Future of Innovation in Society
Consortium for Science Policy and Outcomes
Arizona State University

Alexander M. Capron, L.L.B.

University Professor
Scott H. Bice Chair in Healthcare Law, Policy and Ethics
Professor of Law and Medicine, Keck School of Medicine
Co-Director, Pacific Center for Health Policy and Ethics
University of Southern California

Thomas H. Murray, Ph.D.

President Emeritus
The Hastings Center

Jonathan Montgomery, LL.M., HonFRCPCH

Professor of Health Care Law
University College London
Chair, Nuffield Council on Bioethics
Chair, Health Research Authority

Ruth Macklin, Ph.D.

Distinguished University Professor Emerita
Department of Epidemiology and Population Health
Albert Einstein College of Medicine

Harold T. Shapiro, Ph.D.

President Emeritus
Professor of Economics and Public Affairs
Princeton University

Rebecca Dresser, J.D.

Daniel Noyes Kirby Professor of Law
Washington University in St Louis

Eugenijus Gefenas, M.D., Ph.D.

Chairperson
Intergovernmental Bioethics Committee of UNESCO
Professor at the Medical Faculty
Vilnius University, Lithuania
Director, Lithuanian Bioethics Committee

Meeting 26, Roundtable Discussion
August 31, 2016
Philadelphia, PA

ROUNDTABLE DISCUSSION:

DR. GUTMANN: This is always, for the commission, one of the best opportunities. We have a – we have a tradition, which is – well, the first – the first tradition is to get everybody seated. Bob is coming up, and Alex will be right here. Did you see Alex?

UNIDENTIFIED SPEAKER: He's on his way.

DR. GUTMANN: He's on his way? Should I – okay. So Rebecca is here. Alex [Capron] will be here momentarily. So he'll hear me as he walks in. You've all given us a lot to digest and, we hope, carry forward, and we will find ways of doing that in some cases as a commission and other cases we may be calling on you for ways of doing that moving forward. But for now, to get us started, we have a tradition of asking you to give us if there's one thing, one takeaway, you would suggest for future bodies like our own. This is just so we can go down and then open it up.

DR. GUTMANN: So, prioritize your one takeaway. You can repeat. There's no need to come up with something new that you haven't thought of before, but what do you think, as you reflect on your own experience, on our commission's experience, on international/national bodies, what is the one takeaway for a commission like the ones you were on, or ours, but in the American context for the future? And I'll begin with one of the non-Americans. We'll start with Jonathan and just go down and then we'll open it up for general discussion.

DR. WAGNER: Eugenijus is going to have to start because –

DR. GUTMANN: Oh.

DR. WAGNER: – Jonathan is –

DR. GUTMANN: No, Jonathan is here.

PROF. MONTGOMERY: Okay. Sorry. Just not my –

DR. WAGNER: Oh, I'm sorry.

DR. GUTMANN: Right here.

PROF. MONTGOMERY: That's right.

DR. GUTMANN: And then, Eugenijus.

PROF. MONTGOMERY: That's right. I'm under the radar. I think my key thing is this sort of curation idea. I am completely, utterly fed up with reminding people in the UK that, actually, things have already been talked about and there are very good documents talking about how to do it. When they wound down the Human Genetics Commission, I was assured that everything would be archived properly, was able to do that.

PROF. MONTGOMERY: And I spent a considerable amount of time reminding people who should know better in government that, actually, these recommendations they're working up around human

genetics, they already have a set of recommendations which have been explored. So, I think the curation – the idea that we are the stewards of an enterprise that we inherited and are handing on is really, really important.

DR. GUTMANN: Thanks. Now, Eugenijus.

DR. GEFENAS: From the experience of the international body I was participating in, and it was already mentioned by someone from around this table, the continuity of the secretariat would be something, which would assure the continuity of the work. Because do I understand correctly that also the Secretariat changes –

DR. GUTMANN: Staff.

DR. GEFENAS: – when the –

DR. GUTMANN: Yes, yes.

DR. GEFENAS: Yeah, yeah, yeah.

DR. GUTMANN: Yes.

DR. GEFENAS: So the same name –

DR. GUTMANN: Yeah.

DR. GEFENAS: – and the continued –

DR. GUTMANN: Continuity.

DR. GEFENAS: – work for the Secretariat would make it, I think – continuity really function.

DR. GUTMANN: Yeah, okay. Rebecca.

PROF. DRESSER: I would say get out of the bioethics bubble. And my emphasis on doing that with – I agree with Harold about making it a practice and the value of experiential personal knowledge.

DR. GUTMANN: Yes. Harold.

DR. SHAPIRO: I think this will work. External review –

DR. GUTMANN: Yes.

DR. SHAPIRO: – what I talked about –

DR. GUTMANN: Yeah.

DR. SHAPIRO: – I'd choose that, if anything.

DR. GUTMANN: Yeah. Ruth.

DR. MACKLIN: I think about the diversity of the membership in as many parameters or features as possible; and that is, it may include, as Rebecca was pointing out, people with different points of view from one's own. It would be very difficult for me to have been on that committee, and I have great praise for –

DR. GUTMANN: Yes.

DR. MACKLIN: – Rebecca for having been on that committee where there were a majority of people who were very conservative. And, yet, the value of that – and when I say "diversity," I mean racially, religiously, politically and gender, of course, and disciplines –

DR. GUTMANN: Yes.

DR. MACKLIN: – fields from which people come, including members of the public.

DR. GUTMANN: Great. Bob.

DR. COOK-DEEGAN: I would say pick hot topics that you can anticipate are going to be facing real policymakers, and use your expertise to help them think through what the choices are.

DR. GUTMANN: Thanks. Alex.

PROF. CAPRON: I would say that it's important to remember that bioethics is really not a discipline, but a field of inquiry. And so I suppose I'm underlining part of what Ruth just said. I think it is very valuable

–

DR. GUTMANN: Yes.

PROF. CAPRON: – for all those good characteristics that the IOM committee talked about, including intellectual integrity, for people to bring to the table their own special knowledge, their personal experience as well, and see their joint work as being the product of the commission, not, narrowly, some subfield of philosophy or something called –

DR. GUTMANN: Yeah.

PROF. CAPRON: – "bioethics."

DR. GUTMANN: Tom.

DR. MURRAY: You know what it'll be.

DR. GUTMANN: One recommendation.

DR. WAGNER: A question often asked.

DR. GUTMANN: Just pick one recommendation just to – this will just wrap it up and we'll open it up for future bioethics commissions in the American –

DR. MURRAY: Develop a robust communications strategy for your key audiences.

DR. GUTMANN: Great. Terrific. Well – succinctly put. And we're taking note, all of these notes, to inform what we are going to do in our last – last stages. As I said, Tom, before you entered, some as a commission, but others just as individuals. And maybe – we may very well enlist some, if not all of you, in that to have – to make sure there are some of these – some access to lessons learned. The legacy, the continuity should, if we're going to take this to heart, begin. At least we should make some progress here. I'm going to open it up. First, Dan and then, Nita.

DR. GUTMANN: What? I think I got everybody. I think, but not – that won't be the last we hear from them. But I saw – Dan had a question held over, and Nita as well, so they'll go next and then we'll – you all should just tell me when – not all of you are going to answer every one of these questions, obviously, but I'm happy to have interchange among us. It doesn't have to be just question/answer. So, Dan, you had a big one, you said.

DR. SULMASY: Bigger than the one before. The first thing I'll say, though, is that I congratulate this panel on perhaps the most succinct, helpful, short, precise set of one-line recommendations we've ever had. Maybe, watch – maybe, watch the tapes and practice, but you were very –

DR. GUTMANN: Who's grading? But, you get a straight A. We've never had a panel where someone didn't violate the rule, and this has been fabulous. So, go ahead.

DR. SULMASY: This one was good. Yeah, it was great. That's right.

DR. GUTMANN: Yeah.

DR. SULMASY: But my question held over from before, I mean, we had some – in the last panel, some discussion about whether the purpose of the commission should be, you know, education and looking at the exposition of the best arguments on both sides versus attempting to achieve a consensus on particular issues. And I wondered whether that's not, in some ways, a false dichotomy – that we couldn't have, actually, both and wouldn't have to sort of fluctuate [from] commission to commission, and maybe continuity would help that as well. Sometimes trying to achieve consensus waters down some of the real controversy that's there, and that would be important to bring out. And sometimes not making any policy recommendations would just be wasting a good opportunity. So, I wondered whether people couldn't agree that we could have both.

DR. GUTMANN: Alex.

PROF. CAPRON: Since the President's Council was cited for being a group that was on the end of “Let's not worry about consensus,” and so forth, having spent a fair amount of time with Leon Kass in the fall of 2001 after he had been named – as you may recall in the President's speech in August, he identified that he was appointing Leon to this, [at the time, non-existent] group. And Leon was very concerned that having a consensus watered things down. I tried to persuade him, and we talked in specific terms about some of the President's Council's reports, that we had gone very far on some issues and taken a stand; that it was possible to do that not watering things down, but it was not possible to do it without what you suggested, which is, first, in the report, discussing what the contentions are and giving them as clear and as positive, for whichever view it is, a statement so that it is intellectually respectable. You say, “Yes, I see that you really grappled with these.” So, I think it is possible to do both. There may be times

when you'll have a division. And any number of the reports along the way has had separate statements.

Leon's had any number that were like that, but that's what he was encouraging people to do.

DR. GUTMANN: Ruth, you wanted to say something on this.

DR. MACKLIN: (Off the mic.)

DR. GUTMANN: You need your red light on. Counter-intuitively, red means go. You got it.

DR. MACKLIN: Oh, it's on. Okay. I didn't see. No, actually, I was going to underscore the point Alex made about, within the report, setting out as clearly as possible so that anybody who reads the report can see both sides. But, I think if there is no consensus at the end, the response among people who are looking for some guidance is to say, "Ah, these people who do bioethics, they can't make up their mind." One thing is as good as another. And without any kind of recommendation, even if it's a weaker consensus – I think a weaker consensus is better than none. Just to lay it all out. I mean, that's one of the criticisms. This is why my two grandchildren, who studied – who took courses in ethics, didn't like it, because they said, "Look, they don't even tell us what to do." I mean, this is a university level, and one of them is in the field of environmental science. And she really wanted to know what to do. And she thought, "Well, what good is all this stuff?"

DR. SHAPIRO: (Off the mic.)

DR. MACKLIN: Yeah, right. So – and I think that might be the response of a lot of people if you gave –

DR. GUTMANN: Yeah.

DR. MACKLIN: If this advisory body can't come to some consensus and make some recommendations, what good are they?

DR. GUTMANN: Yeah.

DR. SHAPIRO: You should always be nice to your grandmother. That is a –

DR. GUTMANN: So, this is something we talked a lot about at the beginning and it came up repeatedly. It's not – these commissions are not the same as academic seminars. We have lots of academic seminars which debate and are open. Many of them are open to the public; [many of them] debate issues, if we're asked.

And that's where – if you're asked to make a recommendation or we feel that we can make a recommendation, it's a publicly defensible agreement that you're looking for; not if you can't come to an agreement that you feel you can publicly defend, then you don't come [to an agreement]. I mean, you don't come to a false agreement. But, if you can come to a publicly defensible agreement, that has value for a commission that's being asked to help resolve difficult issues where there's no default. There's no neutral default here.

DR. GUTMANN: There's going to be some practice and policy for whether it's human cloning or synthetic – the synthetic biology or anthrax vaccine. There's no neutral position. And the government is asking us in all – you know, but if – in all cases but one, the government has constituted us to ask us for recommendations.

So, I think, Dan, what you said is absolutely right. It doesn't mean that every answer has to be a consensus recommendation. And I would argue against a consensus recommendation if there's no consensus on the commission that the members feel is publicly defensible; that's just watered down pabulum. That doesn't – that doesn't work. But I hope in “watered down”, people don't mean – so, the one thing I would sort of want, if “watered down” means that you don't have the – being a philosopher, I think I can say this – you don't have the full comprehensive defense, of the philosophical position as would be necessary, then, to rewrite or summarize John Stuart Mill or Immanuel Kant or Aristotle or Plato, then – then you shouldn't be in the public – that is, this is not going to be publicly accessible, right? So, it's going to be, not what I would call pejoratively “watered down”, but it has to be in accessible terms. Is that fair?

DR. WAGNER: Actually, I understand the “watered down” thing slightly somewhat differently and I think I identify with some of these concerns. Nevertheless, I agree we should do what we attempt to do. I understand “watered down” to mean to reduce that set of issues to only that set upon which people commonly agree.

DR. GUTMANN: Right.

DR. WAGNER: And the result is that you may leave a few key important issues undecided and so, some call that “watered down”. I think the risk of not even forming a consensus over the subset of issues that you can and leaving everything wide open and just explaining all of the issues –

DR. GUTMANN: That's another –

DR. WAGNER: – is far, far worse than that – my definition of being “watered down”.

DR. GUTMANN: Yeah, yeah, yeah.

DR. WAGNER: Do you agree with that, Alex?

PROF. CAPRON: I do. And I – from the experience that we had, there really was the possibility of working from the outside in.

DR. GUTMANN: Yeah.

PROF. CAPRON: And you approach areas where people, at the beginning, would not have predicted –

DR. GUTMANN: Yes.

PROF. CAPRON: They were going to have agreement –

DR. WAGNER: Right.

PROF. CAPRON: – and you arrive there. And in the situation that you described, if there is something on which there's just too much division to reach a decision about it, it doesn't mean it doesn't belong in the report. Dropping it off the table pretending it isn't an issue is a disservice. But you can say, you know, we have all this agreement. This remains to be decided.

DR. WAGNER: That goes back to the principle of making sure that you present all moral perspectives –

PROF. CAPRON: Yes.

DR. WAGNER: – on all issues.

PROF. CAPRON: Right.

DR. WAGNER: Yeah.

PROF. CAPRON: I'm also a believer in Ed Lindblom's 'science of muddling through', which is that sometimes you reach agreement on what should be done, but you're not all agreeing on exactly why it should be done. And that's okay, too, if what you're trying to recommend is the way forward. And I think of the Secretary's comment to you in your opening video where she was talking about the thanks for your work on the [anthrax vaccine research] and children. And she said, "We knew we had to do something, and these various considerations had to be weighed, and you really helped us get us there." And I think that's an example. As you say, there is no default, in a way. You can't just say, we're going to make this issue go away. You're going to do something.

DR. GUTMANN: That's a great example just from a philosophical and practical point of view to illustrate Alex's point. Because we knew we weren't going to agree on whether we're Kantians or Libertarians or [Utilitarians] – some form of Millian or Benthamite. There was no way we were going to agree on that. And we actually had a discussion of the multiple ways that you would defend the position that we took, and we didn't begin with that position and look for multiple ways.

DR. GUTMANN: We began hearing the greatest disagreement on this issue. And we, ourselves, sort of battled it out in a – it was housed in a respectful but very robust way – and we found a true overlapping consensus, but not a consensus on the reasons. And we expressed the different reasons for it. And we probably wouldn't have had as much ability to agree on the reasons if it weren't for the fact that we collected as many facts and viewpoints as we did. I think this has been very, very useful. It's a very important lesson, I think, for future commissions. Tom, on this? And I want to get to Nita's –

DR. MURRAY: Yeah, quickly.

DR. GUTMANN: – question.

DR. MURRAY: The way I described it to myself, what we were aiming for in the cloning report, to start with, was that every plausible point of view should find itself represented fairly in our description of the arguments around cloning. You may not prevail, but you should be able to look at that and say, “Yes, that's what I believe” and, you know, that's a fair representation.

DR. GUTMANN: Yeah.

DR. MURRAY: A second quick point is – many of you would know these sources, but for the young people in the world – if you want to read exactly how the President's Commission, the early one, dealt with different philosophical viewpoints coming to a consensus about practical measures, there's nothing better than Steve Toulmin and Al Jonsen –

DR. GUTMANN: Yeah.

DR. MURRAY: ...in their various publications.

DR. GUTMANN: Yeah, yeah. Nita.

DR. FARAHANY: I'm going to take us back to a couple of the conversations this morning and have a few different thoughts, so bear with me for a moment because I'm going to put them all out and then invite some conversation. So, the first was picking up on this conversation of consensus. You know, I think I understand watered down to mean one more thing, which is if you tinker with the wording of your recommendation to the point where it doesn't say very much, if anything at all, because the only way that you can get to consensus is by having the actual recommendation be thoroughly empty, then, you know, have you achieved much, if [anything] at all?

DR. FARAHANY: So, one, I think the value of consensus cannot be overstated; that it is so important for a bioethical [advisory] body to be able to find consensus. But, I worry that, in finding consensus, that it's empty rhetoric sometimes and – but that that's the way that you find agreement. And so I'm wondering if you have thoughts about how you might find a way to represent what the starker perspectives might have been, right? I mean, so, you know, a set of recommendations could include, from the one hand, you know, full access to everyone. Just giving an example, right?

DR. FARAHANY: Something we didn't take up. And on the other hand, you know, it's a matter of private individual responsibility and not something that is full access to everyone. Something in between would, you know, use words like "equitable access to everyone," where the word "equity" would remain for the person to define themselves however that might be defined. How do you represent the diversity of

viewpoints and have something meaningful that you can hope to achieve if you have ideological diversity, if you have all the different kinds of diversity that Ruth is talking about? So that's one issue.

DR. FARAHANY: The second is picking up on something, Bob, you said earlier, which I don't remember the exact wording of it, but it was – it was something to the effect where you felt like, in academe, that we could have these kind of more fulsome conversations; that not necessarily did it need to be within an executive branch or something like that. And I wonder the extent to which that ever gets at practical results.

So, I mean, at least in law, you know, judges regularly call out law reviews for being empty in terms of their utility and saying that they [law reviews] are so disassociated from reality of what's happening in legal practice to no longer have real utility.

DR. FARAHANY: And, you know, for me personally, being on this commission has really helped force me from the, “Oh, that's a really interesting question and here are all the different issues...” to actually having to stake out a position and being able to defend much more fully rather than being able to rest on the “Why don't you tell me what you think the answer might be?,” which is what I might have done as a law professor, instead. And the final issue I just wanted to put out there on the table is the ability of a commission to take on controversial issues. So, going back to both what Tom and Alex said this morning with respect to, you know, you mentioned healthcare access, you mentioned the third rail of reproductive technologies and, you know, while we acted as if we had total independence, we also recognize the political arena in which we operate.

DR. FARAHANY: And the inability, in some ways, to be able to take on the third rail unless there was something pressing at the moment which really would guide us to do so, like the synthetic biology paper which led us to [*New Directions*]. If there had been something like that, you know, that could have enabled the conversation to really be at the forefront. And there [have] been such smaller things, but nothing quite as controversial and in the public eye. And so, how does a commission take on these really controversial issues for which I think the guidance would be so incredibly valuable to provide and yet you see us shying away from in light of where it's situated within the political arena? So three relatively disparate topics, but I'm hoping to hear your views on those.

DR. GUTMANN: Who wants to begin?

DR. COOK-DEEGAN: I'll take a stab.

DR. GUTMANN: Bob, yes, take a stab.

DR. COOK-DEEGAN: So, let me just try to refine what I was trying to get at where I'm saying that we could have some – many of the discussions we could have, we could have in academe. And I think – if you think like an emerging technology or an emerging social problem, we do that all the time, right? Every university has symposia about ‘blah, blah, blah’.

DR. GUTMANN: Yeah.

DR. COOK-DEEGAN: And in those symposia we're really, really good at identifying facts, collecting facts, literature review and analysis. What we usually are not good at is actually figuring out the “So, what's the policy map...

DR. GUTMANN: Yeah.

DR. COOK-DEEGAN: – ...for going from where we are now to where we might want to be?” and “Who are the stakeholders?” and “How are they going to react to the solutions that are proposed?” That's the hard work of policy analysis, and I don't think you'll get that at very many academic centers. And even if you do it here where the linkage to government power is really important because you have a receptor that's at the back end –

DR. GUTMANN: Yeah.

DR. COOK-DEEGAN: – going to listen to your report. And when you guys, as a national commission, say, “Hey, we want the facts on ‘X’...””, everybody who answers the phone is going to say, “Yes, I'm going to be there”. That's a very, very powerful thing. It's not just the national commission; it's also the National Academy, it's OTA. There are a lot of places that can do that, but there's something about a national expertise with the prestige and linkage to power that matters. And I think there are many things that you can do in a political context that you cannot do in academe, but there's an awful lot of stuff that goes on in – that I think some bioethics commissions have done that could have been done as well or better in academia if you couldn't take advantage of that value add.

DR. GUTMANN: Yeah. Alex.

PROF. CAPRON: I agree with what Bob just said. I think part of it is that academe actually is more nimble in a certain way. Bioethics commissions, in terms of gearing up and getting the expertise they need, again, we might learn something from the Nuffield and the commission papers that they have. But, I wanted to specifically address your phrase about "shying away" with two examples.

One was that the President's Commission did not get to issues around the reproductive technologies. And it was – in that case, that was largely because we were doing so many other things. I mean, we existed for barely three years and had a dozen reports. And we're trying to have a lot of –

UNIDENTIFIED SPEAKER: His hair is still gray.

PROF. CAPRON: Yeah, exactly. But, the reason for not prioritizing it was a sense of it wasn't going to be welcome advice. And I don't call it repro-, that it would – the third rail is not reproductive. It's specifically around abortion. And that's what had become politicized. We had a woman who came to the last two years of the commission's meetings. Every meeting, she was there. She had a paper bag and inside the paper bag, she had what appeared to be a Chinese takeout box. And inside the Chinese takeout box, she had a fetus in formaldehyde. And I have no idea where the fetus came from, if it was a spontaneous abortion –

PROF. CAPRON: – but her message was clear to us and we – you know, it was a – there was controversy. I think we've given – Bob and I have given slightly the wrong impression about what happened to the Biomedical Ethics Advisory Committee, and let me just set the record straight. It wasn't anything we said. It was the fact that one of our carefully balanced membership had died before we had our first meeting.

PROF. CAPRON: The rest of us had the meeting and we decided here are topics that we can work on that don't have anything to do with reproduction, and people with wide variety of views on the reproductive topics thought that all this was going to be great. We started in on the work. I hired Bob. Greatest contribution I ever made to bioethics is hiring Bob. Worst contribution I made to two years of his life. But we started in working and then the board to which we reported couldn't agree on who would replace the member who had died, who was Dennis Horan, the chairman of Americans United for Life.

PROF. CAPRON: And there was a lot of political argumentation. And the Congressmen and Senators fell to fighting among themselves, and we were told we cannot – the committee cannot meet until the time that there would be [a new] member would be chosen. Never chosen. We became the frozen embryo and never really got born, but we didn't shy away. We just said, “Look, there's no way we can have useful advice on the subjects that are this controversial, but there's a lot of other useful advice we can provide,” and we're ready to go ahead. So, sometimes shying away means just looking at your audience, whoever appointed you, and saying, “They don't want to hear us about this. They know what they think about this.” The things they are going to decide on are not in a report from a bioethics committee. It's constituent –

DR. GUTMANN: Yes.

PROF. CAPRON: – politics, it's interest groups and everything else.

DR. GUTMANN: That was precisely our criteria. I mean, we – as Nita, you know, suggested in her question, it shouldn't be just that the government doesn't want to hear it. If there were a receptive public to hearing our recommendations – potential recommendations on a hot button issue and we thought we

could get important, you know – make an important contribution publicly, we were open to doing that.

DR. GUTMANN: But I have to say if anyone here thinks on the issue of abortion, for example, or I could name some other issues, our deliberation on that would add something that hasn't been said many, many times before and continues to be said, we just didn't see the opening. So, that – I think you said it very well. It's not accurate that – you don't shy away because you're shy about the issue. And that wasn't what Nita was suggesting. Is there receptivity to it somewhere? Because there are tradeoffs here. We have – our time is very limited. Even though we've spent countless hours over six years and we try to pick the topics – the ones that we pick – that we thought we could have some value added.

Rebecca.

PROF. DRESSER: I'll throw something out. As we're talking about topics, it seems to me, in our nation, physician-assisted death is a clinical issue that is being confronted in the states.

DR. GUTMANN: Yes.

PROF. DRESSER: Certainly previous groups have addressed it, but it's ready for a new look. And so perhaps that should be something the next commission takes on.

DR. GUTMANN: Yeah.

PROF. DRESSER: What do you all think?

DR. GUTMANN: Yeah, I think, actually, since you asked that, could I broaden it? People should answer what you all think, but any other issues, too. What issues, broad or narrow, do you think are likely, either

now or in the foreseeable future, to be ripe for discussion? Not just discussion. I would say deliberation because these are all being discussed. I mean, deliberation means making some action-guiding recommendation. Anybody, including commission members, are there issues that –

DR. COOK-DEEGAN: Well, one elephant in the room is the synthetic biology continuum of, especially now, CRISPR and particularly, gene drives.

DR. GUTMANN: Just bring it closer to you. [Referring to the microphone]

DR. COOK-DEEGAN: I think that's just a hot issue that's going to haunt the political environment for years.

DR. GUTMANN: Yeah. Right. Raju, you had –

DR. KUCHERLAPATI: I think in genetics there are actually some tremendously important ethical issues. For example, it is now possible to be able to identify, in the population, people who are susceptible to have diseases, and some of these diseases are really devastating, and it is really possible to – the technologies are available today to actually eliminate them from the population. So, the technology is available. On the other hand, some people think that, you know, those types of people who, you know, have a tremendous disease should be a part of the society, for example. This is a very important issue.

DR. GUTMANN: Yeah.

DR. KUCHERLAPATI: This is going to – this is going to bubble up. And this is the kind of thing that I was talking about earlier. Amy said we should be thinking about those types of issues that we know are going to surface and that commissions such as ours should identify those and to tackle them now. Some of our guests today talked about that – to be able to be ahead of the curve.

DR. GUTMANN: Yeah. And –

DR. KUCHERLAPATI: That's just one example.

DR. GUTMANN: Yes. And that's part of thinking about the future, why there ought to be a commission available to address these issues before they're already so far down the road.

Steve. Challenging technology. There you go.

DR. HAUSER: Thank you. But it's better to be more dexterous than [the advisory body] from New York. An issue that we have wondered how to package for a bioethical purpose is, of course, healthcare. And in an era of affordable care and an enlarging umbrella in the United States, hopefully for everyone, how do we think about value and how can we, perhaps – how could a bioethics commission help to advance a discussion about value from an FDA approval mechanism that, as we know, in the United States, deals mostly with proof of efficacy and safety and not effect size or relative value for the benefit for the cost? And, also as individuals, where we may not want for ourselves or family members expensive or very intensive therapies that have incremental value only?

DR. GUTMANN: Could I just ask anybody if – Tom, did you have – go ahead. I was just going to – I was going to re-up Nita's question about specificity versus generality. Harold said something in his

comments about the importance of specific – making recommendations that are specific. And I'll give an example. I think it's important for us to be critically reflective. I'll give an example that I think Harold alluded to.

We are very specific in many of our – most of our reports, but in the education and deliberation, I think we could have been a lot more specific. And so deliberation – Harold meant – deliberation is – not everything should be deliberated. Not every decision requires deliberation. For example, political campaigns are not deliberative exercises, nor should they be. They shouldn't be as long as our political campaigns are. They shouldn't be permanent and perpetual. But you can't expect the competition for power in a campaign to be a deliberative exercise. The point of candidates is to show that they're better than the other.

DR. GUTMANN: But in our deliberation, – you know, Dennis Thompson, a coauthor of mine, said to our commission – and we put it in the report, but we didn't focus on it, that existing [advisory] bodies, if we have – we have fewer and fewer forums of deliberation in our society, so fewer and fewer juries, for example. But existing bodies like the National Academy, like commissions, should go out of their way to become more deliberative forums because they're so needed.

DR. GUTMANN: If we could have focused on that and shown the ways in which that's totally feasible and would add a lot to the public's ability to be heard – this goes to Rebecca, your – the outreach that commissions do, the mixing of experts and public, the diversity and to show, as Harold said, and I think Nita has said many times now, that even when and especially when you disagree, you can show respect for the sides that you – you can economize disagreement and come to some actionable important conclusions.

I think that would be, if we had – we would have been better off not making such a broad – so broad and focusing on things that are doable. I stand behind everything we said in that report, but I think it would have had more impact if we had been more specific. Jonathan. What?

UNIDENTIFIED SPEAKER: (Off the mic.)

DR. GUTMANN: They still don't have – that's why we're talking about it. It's not over. We can – not even – there's time even beyond our commission. Yes.

PROF. MONTGOMERY: One of the things that we would do in that sort of context is – this is almost a challenge or delegation – we would pick the people we think could take those things forward. So, I step out of this because of my conflict of interest.

DR. GUTMANN: Yes.

PROF. MONTGOMERY: The Nuffield Council of Bioethics has recommended to the Health Research Authority that it produce some guidance on brain surgery, which it initially declined to do, and then there was a series of negotiations going on. And we would see ourselves the same and say, 'Who could take this forward?' And then – so, some of the recommendation being this should be done. It would be, "You should take responsibility for seeing that through."

DR. GUTMANN: Yeah, another thing that we should pass on because we have tried to specify who, but we haven't always succeeded in doing that. But when we have, it's had much greater impact. Much greater impact. So, that's a really, really good point. Other questions and comments? Tom, okay.

DR. MURRAY: This is principally in response to Nita's challenge to, how do we take on really hard issues? And there's not a simple answer here, but my strategy is not straight on, but there are going to be issues, and we don't know exactly what they will be, although one guess will be the first mitochondrial – approved mitochondrial transplant resulting in a child; that that will attract a lot of public attention and will raise interest – raise public interest in things like our reproductive technologies. And you can do that and you can begin to get at the issues that Alex characterized as all about abortion. I think it's actually – even more deeply, it's about women's roles in culture.

PROF. CAPRON: That's the class.

DR. MURRAY: Yeah, yeah. But you can get at that without going and saying, I'm going to prove that this is the right issue – right take on abortion. But you go at it by saying, 'What's the meaning of parenthood?' You know, and how – what's the role of experts in, you know, altering the genes or the characteristics of children? Those are questions I think people could be receptive to across – in a much broader – much broader spectrum of people could be receptive to. And you that – you know something is going to happen. You may not know what it is. So, I would say be prepared and be ready to jump in and say, 'Oh, okay, we're going to have an inquiry about this'.

DR. GUTMANN: Jonathan.

PROF. MONTGOMERY: Okay. So, what we're doing with gene editing is we've convened a sort of oversight working party which will – has developed a sort of positional framework for discussion which should be being published in the autumn – I'll use the English terminologies – in the fall, which means it

could be any time between now and the end of the year. If I were at home, I'd probably have a clearer idea because it's going through this sort of external review on process.

PROF. MONTGOMERY: We won't publish that as a paper report. We'll only publish it on the website. And it's a platform from which we'll then be doing a number of particular follow-up reports. So, we will be looking at gene editing in humans. We've been exploring plants, animals. We've been looking at gene drives. So, our sense is that in order to be able to move sufficiently swiftly to have an engagement with the public debate, we need to be prepared in a way that does a bit of groundwork early on, but then can become a very extensive or a very short program, depending on whether [or not] that emerges.

PROF. MONTGOMERY: Now, our biggest weakness in the council is we take an awful long time to do anything. People like it when it arrives, but sometimes the train has left the station. So, that's our attempt to get on with this. We can see this coming. We can see we can do a certain amount of thinking now, but, actually, our way of working needs something a bit more concrete to bite on before we could complete it, but it doesn't mean we can't start.

PROF. CAPRON: Just on that note – and I can leave this to Rebecca to elaborate – but it would be worth looking back at one of the reports of the President's Council on reproduction and responsibility, which was one of those – it was one of the ones that was on clinical medicine and was very much speaking to the general public about the way to think about these things not just narrowly, this is scientific research and these are the issues that come up. The social implications have taken different approaches to reproduction. And all of these documents can be valuable for future commissions. That's part of what I was calling the heritage –

DR. GUTMANN: Yeah.

PROF. CAPRON: What you're bequeathed.

DR. GUTMANN: Yes. Nita.

DR. FARAHAANY: So, a different issue. I'll start by saying I think if there was some form of the continuity – that would be terrific. And so, the conversation we've been having about continuity and finding ways to implement that I think is really important. But, on building on this kind of idea of can you take on controversial issues, in some ways each of the past commissions have – you know, have their own characteristics. They have a description and, in some ways, a brand as to how to approach their reports and how to think of their reports from, you know, the outsider's perspective.

DR. FARAHAANY: And I wonder if there isn't some value to that, too, and if you were to keep the same name, the extent to which you wouldn't be able to have your own brand, have your own characteristic, but also be able to take on some really lightning rod issues. I mean, you could – you could imagine a particular approach at the end of a commission's term rather than just sort of quietly go in to, you know, in essence, take on some of the really controversial issues that you couldn't otherwise take on.

DR. FARAHAANY: Not because you necessarily have a receptive political party, but because they're important issues that if the bioethics commissions are serving a public function and not just a political function, might be able to do. So, how do you balance the opportunities to create unique characteristics, whether it's the more philosophical commission or the more pragmatic commission or the more, you

know, controversial commission, whatever it is, and then not have that be an albatross that the next group of people who come in wear and enable them to be able to go forward with their own work?

DR. GUTMANN: So, we're not strictly speaking – you know, we don't have a clear product for this – this two sets of meeting. We're not expecting to issue another report. So, by my strict, you know, understanding of deliberation, we're actually discussing rather than deliberating. We don't have, actually – we're not going to come out with a clear set of recommendations. That said, I've had my mind up. I came in being convinced, at the last meeting, that it would be good to have continuity, but what Harold said about access actually led me to raise a question in my mind.

DR. GUTMANN: If a commission – imagine that this commission is never disbanded, it stays on the books, but the new administration has really no interest in it. No matter – it's just not – it's going to be DOA, that is, we could still sit and deliberate, but having an administration that has a stake in having put you together and appointed you and believes in the mission statement because it is something that members of the White House spent significant amount of time deciding on, you begin by having access to a set of people who share your interest and have a greater interest than you do, actually, when you take this on, because they really want the commission to produce something valuable.

DR. GUTMANN: So, whether that could happen, as Nita – you know, with an ongoing commission with a generic title that the administration either takes it or leaves it, I'm not sure. And this goes to the context point that Harold made. Every point I – Harold made really – you have to look at the context, in which you're operating, and it's not only a political context, it's also a social context. The two are inextricably intertwined. And where – what are the places you can actually not have a delusion of having influence, but actually make a – make some difference. Alex.

PROF. CAPRON: I think if you asked President Obama whether he was glad when the news broke about the Guatemala STD [experiments], if he had a commission ready to hand it off to, he would say yes.

DR. GUTMANN: Absolutely.

PROF. CAPRON: And I think if you were to ask President Clinton whether when Dolly was announced, he was glad to have a commission –

DR. GUTMANN: Yes.

PROF. CAPRON: ...to hand it off to; if you ask President Carter whether when the religious groups said, ‘We have this horrible problem of human genetic engineering that’s going to be on the horizon now, he was glad that he had a group to hand it off to’; and I suspect that –

DR. GUTMANN: Yes.

PROF. CAPRON: President Nixon would have been glad to have a group to hand Tuskegee off to, instead we got an ad hoc panel –

DR. GUTMANN: Yes.

PROF. CAPRON: And then that led to the national commission and so forth. I think part of the advice would be there is going to be stuff coming down the pike. And you can have a group working on some of these other issues that you have, the continuing issues about human subjects, the continuing issues about

social impact, about healthcare, the ones that have been mentioned today about CRISPR and mitochondria and the wonderful question that was asked about the value of healthcare and where the marginal dollars go and what –

DR. GUTMANN: Yes.

PROF. CAPRON: But there's going to be something else where the – where a President is going to say, ‘Who – to whom can I give this?’ Oh, I have a commission. And

DR. GUTMANN: Necessary, but not sufficient. Necessary –

PROF. CAPRON: I agree.

DR. GUTMANN: – to have a commission; second, you have to have a commission you have confidence in.

PROF. CAPRON: Yes.

DR. GUTMANN: So, you had to have paid attention to the membership [of that commission] before something hot comes. Because you'll be – it'll have more legitimacy, too, if it was constituted not just specifically for this issue.

PROF. CAPRON: Absolutely. And so I guess the question is: Can there be a diverse enough group...

DR. GUTMANN: Yeah.

PROF. CAPRON: ...of people around the table? Led by people that – I mean, any President is going to have confidence in Amy Gutmann, Harold Shapiro, Morris Abram. I could go down the list of the people who headed these commissions, and they're going to say, This is someone who I can give a difficult issue to; he or she has around the roundtable with them people from a variety of backgrounds; they're –

DR. GUTMANN: Right.

PROF. CAPRON: Going to hold open meetings; they're going to reach out –

DR. GUTMANN: Yeah.

PROF. CAPRON: – they're going to get experts in; they've done it before; and I'm very glad to have that available. And, yes, not sufficient if they have no confidence, if they don't know it exists, if it's the –

DR. GUTMANN: Yeah.

PROF. CAPRON: – Civil War Memorial Commission, which I think still meets.

DR. GUTMANN: Yeah. And we lost – when we lost Lonnie Ali, we lost a very – I mean, when we lost John Arras – we've already spoken about John – we also need to say Lonnie, who had to – who was with us for most of our time and had to step off to care for Muhammad in his last days. Having more – you know, making sure you have people who are not representing academia or a profession, but see

themselves as patient advocates or people who have been – who have been in the nonacademic, nonmedical profession, non-engineering profession, that's just hugely important.

DR. GUTMANN: And it's not that you need a lot of those people or you don't – any more than you need a lot of any of us, but that and what we do have today more than ever before is the ability to bring the widest range of people, including we have a lot of patients speaking about incidental findings and things, have very different stories to tell. That's – that's really important. I saw Dan's hand. Yes.

DR. SULMASY: Just to go back to your point, Amy, about continuity and access and buy – I'll just say that from the experience in the New York State Task Force on Life and the Law, that even under administrations that were not as enthusiastic about bioethics, the reports still mattered.

DR. GUTMANN: Yeah. Good.

DR. SULMASY: And, in fact, there were a couple of cases in which there still was policy impact because something came up like a flu pandemic and how to, you know, allocate ventilators during that. So, I think that while access is important, the continuity allows bioethics to stay alive within the government, even if the particular administration doesn't seem to be –

DR. GUTMANN: Right.

DR. SULMASY: – as interested. So, that's to argue in favor of it.

DR. GUTMANN: So, Ruth, we haven't changed our mind from the last meeting. I just wanted to – because we were all nodding, I just wanted to make sure we were seeing whether we could make sure nothing is lost if there is continuity. So – and Alex made the point, really importantly, that doesn't mean continuity of membership. I think there has to be rotation. That's just –

DR. WAGNER: And in that sense, continuity becomes a part of the confidence that you talked about, right?

DR. GUTMANN: Yeah.

DR. WAGNER: That there's a sense that this is a competent process. Yeah.

DR. SULMASY: And then I was just going to list for you a few other sorts of potential topics I think some of which were already mentioned from the science perspective. I think the 14-day rule, I think, is going to be an important issue. There's already pressure on that. Germline therapy, again, as Jonathan mentioned, I think will be important from science, a science perspective. From the clinical perspective, ESPAS, I think, is at the top of the list.

DR. SULMASY: But, I think some things we have not thought about that I have to tell you, as a clinician, are important to people at the – as the British say, at the coalface, right? So, it's, you know, the questions of population health versus the care of individuals; the impact of the electronic medical record on the physician-patient relationship; the time availability to patients, which is enormously shrinking, to the consternation of clinicians as well as patients. Financial incentives. Again, Wharton is famous for this, but, you know –

DR. GUTMANN: Yes.

DR. SULMASY: You know, the – either through the ACOs or directly to patients or to – or to clinicians or the more general topic of sort of what I call "behavioral public health." How much should –

DR. GUTMANN: Yeah.

DR. SULMASY: ...we really be manipulating a behavior? Public health is no longer about clean water. It's about changing people's behavior. Have we noticed? And what are the ethical implications of that? Those are just a few we can think for the – for the next commission.

DR. GUTMANN: Right.

DR. SULMASY: So, yeah.

DR. GUTMANN: Ruth.

DR. MACKLIN: I have another one, but –

DR. GUTMANN: Put your light on.

DR. MACKLIN: If they had words instead of icons, I would do better. This is probably too politically loaded even to mention or to think about recommending, but there's a lot of conflict of interest in the medical and research world; conflict of interest in the committees that sit [within] the FDA. And when

these things are blown open by somebody blowing a whistle or looking back or finding the numbers of people who get money from the drug company who were then on the committee that approved Vioxx, just for one example, and there are many such examples, I mean, this goes to the very heart of the way the government works, the regulatory agencies work.

DR. MACKLIN: But, the more I hear about conflict of interest in the – broadly speaking, in the medical and research world, the more troubling it is. So, I can't imagine. I mean, it's a political issue and it certainly has to do with policy. But what it would really amount to is criticizing a lot of things that are going on with our very own government. So, I wonder if there are just some topics that are either, A, too hot to handle, or ones that the government will just summarily reject.

DR. GUTMANN: Yeah.

DR. MACKLIN: But it seems important if we really care about conflict of interest and think that it's something that one should grapple.

DR. GUTMANN: Yeah. I don't think our – well, let me put it in a positive way. I think our most productive role is not to say, Here are the Top 3 or Top 10, but I can't imagine – but having – here are a possible range of issues that would be – could be productive and important to have a deliberative commission see if they could make recommendations on.

DR. GUTMANN: The bottom line here is: Can we imagine, in the next two to four years, there not being any issues that an administration would want a bioethics commission to be – to hand off to a bioethics commission some – you know, is that conceivable? I mean, we were in – Harold had the

experience of Dolly not foreseen. We knew it wasn't going to be cloning, but we couldn't imagine that the – you know, the announcement that – by Craig of the creation of life, and that just happened out – you know, out of – so to speak, out of the blue, out of nothing. But we know it didn't happen out of nothing. So, can anyone imagine there not being a – and I think it would be helpful to have a range of issues that fall, strictly speaking, in the bioethics area. Anita.

DR. ALLEN: So, on the subject of topics that we can expect to be significant enough in the coming years to warrant a bioethics commission, so big data. Now the – all the stories of Target being able to predict that a young woman is pregnant before her family does – knows she's pregnant, the collection of individual bits of behavioral data that's based on our – information that's based on our behavior in the marketplace can lead to combinations of data that reveal conditions of which we, ourselves, may be aware and may want to keep secret or which we may not even be aware. So the sharing of health information that comes about in this way as opposed to through clinical care or research is something, which we have to focus on.

DR. ALLEN: And it's a really hard issue because the whole concept of big data and the algorithms that are used to compile it are somewhat obscure to people. I mean, the terms "big data" are short words and so, in some sense, they're very catchy and people can sort of grasp them, but the underlying, as it were, science of big data, it's not – it's not simple, and trying to piece together whether we should care, whether we do care, what's really at stake, how does it relate to traditional concerns about privacy and data protection are going to be big questions because there are privacy issues, confidentiality issues, data security issues. So, I think that this is something, which we'll probably need to be prepared to suggest commissions take on in the future.

PROF. MONTGOMERY: I think what strikes me as most important.

DR. GUTMANN: I'd love to ask – we're going to wrap up – ask any of our wonderful guest presenters if you want to say anything in conclusion before we wrap up. And, Jonathan, I saw your hand up.

PROF. MONTGOMERY: Thank you very much. I just want to pick big data. And we published our report 18 months ago, so it's in our curation category now. But I think what is – what strikes me as most significant of that for the work of commissions like ourselves is that the target audiences are becoming different.

PROF. MONTGOMERY: So, we've just had a recent – you've probably even picked it up over here – big issue around Google and DeepMind accessing data from one of our hospitals which started as a – a clinical support tool, and that is being expanded. And one of the key issues there is that they had no idea about what you would call the IRB oversight process.

PROF. MONTGOMERY: We have a similar set of issues on our long list about citizen science. The people who are becoming – who need to understand the type of things that some of the current actors regard as quite familiar, you know, is a different group of people. It will require a different set of skills, a different set of communication techniques to understand how they think, how they decide what to do; if it's about regulation, how to regulate. I mean, you've already got into direct consumer testing territory, as did the Human Genetics Commission. So I think that's a sort of shift. As well as the topics, there's a shift that the job is going to be different going forward.

DR. GUTMANN: Harold. The red light. You got it.

DR. SHAPIRO: Regarding the issue of deliberation and so on, communication, young people, at least, and increasingly everyone is communicating in a quite different way than has ever been the case. And I don't think we understand yet just what role all these new communication devices and capacities and potentials would – how they would work for you, for example, in trying to generate deliberation and communication. I think that's worth some more serious consideration than I've given it.

DR. SHAPIRO: I'm old enough so whatever happens there, it's probably – I'm not going to participate in some way, but the – but I think for the commission, you have a terrifically difficult problem in communication and deliberation. I mean, you know, you're talking about a society and here you are, 12, 15 people trying to figure out what to do, and it might be that these new technologies, these new habits, provide a vehicle which has not been exploited. We are really using the same vehicles as we've always used. We have websites and so on, but that's not going very far down the line. And it seems to me that's worth some careful consideration in the future.

DR. GUTMANN: We've branched out there, but no – you know, with webinars and simulcasts, but there's so much more.

DR. SHAPIRO: Right.

DR. GUTMANN: Tweeting. We tweet. I mean, I would never have guessed that I'd be the chair of a commission that Tweets and, you know – and has webinars and simulcasts, and we have had classes that tune in. So, there's access, but you're absolutely right. We have just touched the tip of this iceberg.
Rebecca.

PROF. DRESSER: This is nuts and bolts. Some thought to preparation for council members; that is, basics that you need to know. Something like what other commissions have done. Think about all the things – you know, the first few months you come here, first few meetings; you're like, 'What the hell is going on?' You know? And is there a way – especially the more diverse – diverse – diverse that you are and if you're bringing in more public members, some kind of baseline understanding/education for the council I think would be useful.

DR. GUTMANN: Yes. Terrific. And I want to read from Adam Shriver, who's a fellow. Allen, where are you? Great. Thank you for this. "You asked about specific issues that should be addressed. Tom Beauchamp suggested at the last meeting that it is embarrassing that the field of bioethics is not engaged more with research on animals. I agree with this and think there are a number of obvious topics related to this that would be good fits for the presidential commission." Terrific. Do you want to say anything more on this, or just open it up for the members to respond to?

MR. SHRIVER: If I could say a little, I would love to.

DR. GUTMANN: Good. Please.

MR. SHRIVER: Do I have to find a mic, or just from here?

DR. GUTMANN: Yeah, we can hear you.

MR. SHRIVER: If I could say a little more, I'd love to. Okay, so, just to give a couple of examples – the neuroethics report, Gray Matters, which I really enjoyed – they came up with 17 different

recommendations, and although in the transcripts, it mentioned research on animals a couple times, none of the recommendations really had anything to do with animals. So, I think there are opportunities like that that come up every once in a while but, just for whatever reason, it's not on the tip of people's brains, you know, to think about animal ethics. And I think there are a couple of issues that are pending at the moment that would also be good opportunities.

MR. SHRIVER: Next week, the NIH is going to be having a symposium on the research of – the ethics of primate research, and they were asked by Congress to do that. It's kind of instructive in a way where there aren't too many ethicists involved in the discussion and the topics are, sort of, not ethically focused, so, I think that would be a great realm for this commission that has expertise both in science and ethics to jump into. And then, also, I'm sure everyone has heard of this idea of the proposal to lift ban on human-animal chimeras and there are a lot of really interesting issues on that that I think would be a really nice fit for the Presidential Commission.

GUTMANN: Thanks. Anyone want to follow up on that? Jonathan.

PROF. MONTGOMERY: Yeah. I mean, we did our report on animal search in 2005. It's one of the most downloaded reports, and we periodically go back and ask ourselves, "Is there something sufficiently new that requires revisiting?" It's not quite made it yet to a topic –

DR. GUTMANN: Yes.

PROF. MONTGOMERY: – but we made quite a lot of interventions and comments based on reiterating principles that were for there. We did get quite close to an exploration of whether or not there were

sufficiently interesting and novel issues on research involving animals for the benefit of animals to set up a working party, but it didn't quite get defined well enough because – so most of the inquiries have been about research involving animals for the benefit of humans, but we're aware of the whole series of animal research as well.

DR. GUTMANN: Well, this is terrific. So, what's left here is – for this meeting, the closing credits, if you will. So I'd like to begin those, first of all, thanking all of you, our guests, but our fellow members of bioethics, broadly speaking, and I think, strictly speaking, you all were – and especially those of you who traveled far to come here, we want to – we owe you our thanks.

[Applause.]

DR. GUTMANN: And then I just want to take a few moments, a really few moments, to thank our staff, our commission staff, led by our incredible executive director, Lisa Lee, and a – just a terrific staff, which is smaller in number now that we're at the last year of our deliberations, but it's as high in quality as ever, and we truly couldn't do our work without – without you. And that ranges from the highest level intellectual work to arranging for travel and meetings; all of that, absolutely essential. So, we really want to thank you. [Applause.]

DR. GUTMANN: I also want to give a special shout-out and thanks for someone who's been with me from the beginning, without whom I couldn't do the work of a bioethics commission, and that is Adam Michael. So, Adam, thank you. [Applause.]

DR. WAGNER: You caught him by surprise.

DR. GUTMANN: Right. He's probably doing something for us at this – at this very moment.

And, of course, this feels like thanking a collective in which I'm just a part of and just have the privilege to serve and help lead, but we have really bonded as a commission. I knew very few of the members of the commission before starting. I think some of you knew more of one another, but none of us knew a majority of the members of this commission, and now we know each other very, very well.

DR. GUTMANN: And we've gone from, in human biological terms, from the beginning to the end of human life on this commission. We've celebrated Nita Farahany's child, Ella's, birth, and we've mourned the loss of Lonnie Ali's husband, Muhammad, and the loss of our own commission member, John Arras. And throughout, we – we really could not be more appreciative than to have the opportunity to serve our country and to try to move the ball forward in this topic area. And, finally, I just want to thank my partner in all of this, Jim Wagner. So, thank you, Jim. And thank you, commission members. [Applause.]

DR. WAGNER: Thank you, Amy. I add my thanks to our guests. I don't know if you recognized, as we did, actually, that at some point in each of your presentations or comments, I think each one of you somehow commended and complimented this commission for its work. Because of your history, you know that what Amy says is true; that those successes come from a great staff that supports it, so I add my thanks there, and to a brilliant set of – set of commissioners.

DR. WAGNER: The one ingredient that Amy left out, of course, is the importance of leadership, and her leadership, which has had such a determined sense of purpose, driving us forward to draw the best out of this group and guided by real moral courage that I think is an example of – example for the commission, but also for the nation and the world in what it will take to fight our way through these important issues in

bioethics. Just been a privilege to work under your leadership, and I know I speak for everyone in thanking you. [Applause.]

DR. GUTMANN: Thank you. We are adjourned. I just want to welcome any member of the public listening in, or who will listen, to send us your comments at bioethics.gov. Thank you, all. Safe travels.

(Whereupon, the Bioethics Meeting was concluded at 3:29 p.m.)