INTERAGENCY AUTISM COORDINATING COMMITTEE

SUBCOMMITTEE FOR BASIC AND TRANSLATIONAL RESEARCH

STRATEGIC PLAN QUESTION 3 PLANNING GROUP

CONFERENCE CALL

TUESDAY, SEPTEMBER 18, 2012

The Planning Group convened via webinar, Lyn Redwood, Chair, presiding.

PARTICIPANTS:

- LYN REDWOOD, R.N., M.S.N., Chair, Strategic Plan Question 3 Planning Group, Coalition for SafeMinds
- GEMMA WEIBLINGER, Designated Federal Official, National Institute of Mental Health (NIMH)
- ELIZABETH BADEN, Ph.D., Office of Autism Research Coordination (OARC), (NIMH)
- MATTHEW J. CAREY, Ph.D., Left Brain Right Brain
- CINDY LAWLER, Ph.D., National Institute of Environmental Health Sciences (NIEHS) (representing Linda Birnbaum, Ph.D.)
- LINA PEREZ, Office of Autism Research Coordination (OARC), (NIMH)

EXTERNAL PARTICIPANTS:

- CRAIG NEWSCHAFFER, Ph.D., A.J. Drexel Autism Institute and Department of Epidemiology and Statistics, Drexel University
- ISSACH PESSAH, Ph.D., M.S., Center for Children's Environmental Health, University of California, Davis
- MATTHEW STATE, M.D., Ph.D., Psychiatry, Yale University School of Medicine

TABLE OF CONTENTS

Roll	Call	and	0pe	ning	Re	∋ma	arł	٢S	•	••	•	••	•	•	•	••	•	•	•	5
Discu	ussior	ı	•••		•••	••	••	••	•	•••	•	•••	•	•	•	••	•	•	•	8
Adjoı	ırnmer	ıt	• • •			••	•••	•••	•		•		•	•	•	••	•	•	4	4

PROCEEDINGS:

Ms. Gemma Weiblinger: Hi, this is Gemma Weiblinger, and I am the designated Federal official. I am temporarily taking the place of Susan Daniels, who is out on maternity leave.

I am going to quickly turn the call over to Lyn Redwood, who is the leader of this group of experts and IACC Subcommittee members dealing with Question Number 3 updating the Strategic Plan. Lyn?

Ms. Lyn Redwood: Thank you, Gemma. Can everyone hear me okay?

Dr. Matthew Carey: This is Matt. I can hear you.

Ms. Redwood: Wonderful. The leader just said we would be on listen-only mode, so I wanted to make sure that everyone was able to hear me.

First, I want to thank everyone for taking time out to be on this call today, especially our external experts. I know how busy your schedules are. And Isaac thanks so much for being flexible to be able to make this time work.

I thought we should start with a quick roll call and brief introductions for the people that don't know each other on the call. It'll also give us an idea of who's here and who may not have joined us yet.

So Isaac, do you want to start?

Dr. Isaac Pessah: Yes. I'm Isaac Pessah. I'm at the University of California, Davis. I've been the Center Director for the UC-Davis Center for Children's Environmental Health, and I've been trained as a neurotoxicologist.

Ms. Redwood: Great. What about Matt State? Is Matt on?

Dr. Matthew State: Yes, I am. It's Matt State. I'm a child psychiatrist and human geneticist working on autism spectrum disorders, and I'm at Yale University.

Ms. Redwood: Great. Thanks, Matt. Craig? Dr. Craig Newschaffer: Hi, everybody. I'm Craig Newschaffer. I'm an epidemiologist who studies autism risk factors, and I'm at Drexel University in Pennsylvania.

Ms. Redwood: Very good. Thanks, Craig. Matt Carey?

Dr. Carey: This is Matt Carey. I'm a parent and a public member to the IACC.

Ms. Redwood: And Cindy Lawler?

Dr. Cindy Lawler: Hi, this is Cindy Lawler. I'm the program director for autism research here at NIEHS, and I'm representing our director Linda Birnbaum today.

Ms. Redwood: Thanks, Cindy. I also thought we should run through staff real quickly so the committee would have some familiarity with the people from the staff who will be supporting us in this endeavor. Elizabeth?

Dr. Elizabeth Baden: Hi, my name's Elizabeth Baden. I'm a policy analyst in the Office of Autism Research Coordination.

Ms. Redwood: Elizabeth, is Lina on? Dr. Baden: Yes. Ms. Lina Perez: Lina Perez. I'm management analyst with OARC.

Ms. Redwood: Great, thanks. Thanks Lina and Elizabeth. Gemma?

Ms. Weiblinger: Yes, I'm Gemma Weiblinger at NIMH. I direct the Office of Constituency Relations and Public Liaison. And as I mentioned earlier, I'm currently acting as designated Federal official in the place of Susan Daniels.

Ms. Redwood: Great. Thanks, Gemma. What about Tracey Aiken or Deborah Wolf?

Ms. Weiblinger: I believe they're assistants.

Dr. Lawler: Yes, those are assistants for Linda Birnbaum.

Ms. Redwood: Oh, okay. Great. I wasn't certain.

Dr. Lawler: -- but I'll be representing NIEHS on the call today.

Ms. Redwood: Okay, very good. I wasn't certain. I knew I had been cc'ing them on this message, so I just wanted to make sure that they were acknowledged.

I just wanted to start real briefly with sort of going over the strategic planning updating process. The Subcommittee for strategic planning had a call with Dr. Insel back on September 7. And at that time, we discussed what we thought would be the best process for moving forward with the required update, given the time constraints that have been sort of put upon us by reconvening a new IACC committee.

The Subcommittee decided that we would utilize the same template that we used in 2011 for the update to the Plan. So basically, what we're planning to do -- hold on, let me get to this slide real quick -- is update the sections "What do we know?" and "What do we need?" only.

And in doing the update for the 2010 IACC portfolio analysis report. Also, the 2011 summary of advances in ASD research that helps us in answering those questions.

I want the members to know that we have

not yet completed a 2012 summary of advances, so also these include research that's transpired since 2011 up to today in this update.

We also are going to include funded and unfunded gaps as identified by the annual portfolio analysis and also any input that we may need from the NIH program officers.

I spent a couple of days pulling together for the cumulative total of funding to date for Question 3, and I sent that as an attachment and [inaudible]. I thought that might be helpful in looking at the objectives and which ones have been met and which ones we need to focus on.

So Dr. Insel also wants this to be very brief, approximately two pages long; it can be a little bit over that. He wants the substance to be sort of a 30,000-foot overview. He asks that there be a volunteer leader from each group who would help coordinate the update process, and I volunteered for that position.

With regard to deliverables, these updates are going to be due to the Office of Autism Research and Collaboration on Monday, October 22nd. So we have a really short timeframe for turning this around.

Those updates will be presented and discussed at the in-person strategic planning workshop, which is going to take place on October 30. And I don't know if that's going to be in D.C. Do we have a place yet for the workshop?

Dr. Baden: We're still working on those details, and we'll let everyone know as soon as possible.

Ms. Redwood: Okay, great. Then after that workshop, the full IACC committee will review and finalize the updates, and then those will be submitted to Congress before the end of the year.

There's a slide here that includes the external experts and the IACC members who were specifically assigned to this question.

And I first put together with inputs

from the OARC staff and also from Geri Dawson an idea of how we should approach this. And I'm really flexible here, so I'm looking forward to comments from the external experts and the other committee members.

But I thought -- these are the specific questions. Let me go through the template for the updates, some specific questions that Dr. Insel wants us to answer. And it would be specifically what are the key findings for discovery and why they're important. What we have learned from the 2011 summary of advances and the 2010 portfolio analysis.

I hope that everybody got an opportunity to look over those. I sent links in several of the emails.

Also, include some of the newly funded research that may address some of the gap areas that were identified in the 2011 update. And also to include what gap areas remain and how we might address those. And then what the needs are of the community.

So what I thought might be best to do

would be to have the external experts provide a brief summary overview of the suggested topics based on their area of expertise. So Isaac, you would address some of the environmental issues and toxicological issues. Matt would look at genetics, and Craig would look at some of the epidemiological studies and report out what the key findings are or discoveries since our last update and why they're important. What have we learned since the 2011 summary of advances and the 2010 portfolio analysis. And again, what funded research gaps exist.

Does that sound doable? There's a deadline of October 1 to get that work done. So it would be possibly a page each.

Dr. Lawler: So, Lyn, this is Cindy Lawler from NIEHS. I'm just wondering what information we'll have available about newly funded research since the portfolio analysis is from 2010. And I think we could do it for NIH fairly easily for 2011 and maybe a little bit for the early parts of 2012, but that's

just a part of the portfolio. So just wondering what OARC might be able to do to help us understand what the newly funded research is.

Ms. Redwood: Right, that's a good question, and I'll let OARC answer. And I was thinking because I asked a very similar question, Cindy, and that may be where we need to actually go to the program officers at the different institutes to ask them specifically what's been funded in the last year that would relate to the Strategic Plan.

I don't know that we're going to be able to get the private foundations with regard to their research. That's something that Susan usually undertakes, and she would have started. As some of you know, she's currently out on maternity leave.

Dr. Baden: Hi, everyone. This is Elizabeth. As Cindy mentioned, the information is easier to come by for NIH, and we have already taken the questions that Lyn asked and run them past our Autism Coordinating Committee. And they are in the process of providing feedback and information that you all might be able to use.

But unfortunately, as Lyn mentioned, for the outside groups, other Federal agencies, and private organizations, there's not really a comprehensive way that we would be able to do that.

Ms. Redwood: Any other questions from the external experts?

Dr. Carey: This is Matt Carey. One thing I would throw out there is I think you did a good job dividing up the stuff for the external experts. By the nature I think we're kind of stuck in terms of the one overlap kind of area: gene environment.

Ms. Redwood: Right.

Dr. Carey: And probably either have, like, both Matt and Isaac try to do something on that or somehow pull something in, somehow organize something to -- to make sure that somebody has that in their purview or some people have that in their purview. Dr. Pessah: Yes, there's actually genetic epidemiology work ongoing, too, so I'll let --

Dr. Carey: Oh, I'm sorry.

Dr. Pessah: Yes, I think all three. And so I just want to make sure I have it clear. So the idea would be each one of us would prepare one page, and then it's going to have to be synthesized along with -- down to two total pages?

Ms. Redwood: Right, and I was looking to the plan, Isaac, and when we did it last year, we had a little bit more than two pages for the update. It's actually one, two -it's about three pages. So you know, I was thinking if we get at least one page. And if the three of you want to coordinate on what you're submitting to make sure there's not overlap, that's fine, too.

Dr. Lawler: Lyn, this is Cindy again. I think that's essential, because there are not these firm boundaries. We can't really expect them to do a reasonable job if Isaac just takes the toxicology piece and somebody else takes the -- the whole point is, you know, one of the gaps is -- there's not enough integration. So if it's -- to the extent that it's possible on a committee like this -- if there could be more coordination even in the initial writing of those pieces, I think that it would all be to the good.

Dr. Pessah: I think, with the expertise, if we all took, you know, an effort to include gene by environment as what we really wanted to summarize. But we of course will approach it from different views, because we have a geneticist; we have an epidemiologist and a toxicologist. I think that would serve to try to get us to a common point. Because we'll have different perspectives from different training perspectives anyway and research perspectives.

Dr. Baden: I wonder, for the benefit of everyone who's listening, if you could identify yourselves when you speak, it would be helpful. Dr. Pessah: Sure. This was Isaac.

Dr. Baden: Thank you.

Dr. State: So this is Matt. I agree. I mean, it would seem to me that instead of sort of establishing a priority the integration, that I think it would probably make sense because we are going to come at it from different perspectives based on what's been accomplished over the last couple of years, that then it might make sense then for the three of us to get together, exchange what we've written, and we could have a discussion about how - where the points of overlap are and sort of sort out what feels like the best way to approach it.

It may be that all three independently will kind of be sort of describing different parts of the elephant, or it may be that there's some overlap and we can trim in a way that doesn't make it redundant.

Ms. Redwood: That sounds perfect, Matt. And just to be clear, the IACC falls into the FACA guidelines, whereas the external experts

do not. So in terms of communication,

Elizabeth, would you like to be cc'd on that or is that not necessary?

Dr. Baden: I think just to make sure that communications [inaudible comment] well throughout the process. So copy [inaudible comment].

Dr. State: Sorry, you were breaking up. Could you -- this is Matt asking.

Dr. Baden: I think in order to make sure that communication flows freely throughout this process, if you could copy both myself and Gemma on all of the email exchanges that would be really helpful for us.

Dr. State: Please remind me who you are. I missed it, I'm sorry.

Dr. Baden: This is Elizabeth.

Dr. State: Got it. Okay, great.

Ms. Redwood: If you could also copy me as well, and then I can forward that information on also to Cindy and Matt.

Dr. State: This is Matt asking Craig and Isaac, does that sound like a reasonable plan to you guys?

Dr. Pessah: I think it is, yes. Isaac.

Dr. Newschaffer: This is Craig. It is reasonable. I'm a little worried about timing issues, given other things going on with an October 5 deadline and all that. So are we talking about -- is there a way that we could keep October 1 as a point for us to sort of do our initial individual syntheses and then try to maybe communicate with each other after that, Lyn? Or is that October 1 a hard, fixed deadline?

Ms. Redwood: No. Craig, all of this is very, very flexible. What we're thinking would work as the next step is that the IACC Subcommittee members, which would be Cindy, Matt, and myself, would take what the external experts came up with and review it and then add in the gap areas that remain and how they might be addressed.

And then also add in that piece that Tom asked for, which are the needs of the community, because that would come

specifically from past public comments that the IACC has received regarding the Strategic Plan. So we will then be working on it.

I was going to sort of have the torch passed off to the IACC members from the first till the eighth, but if you need longer and would like to take the eighth, I think that would be fine, too. Or if you could even get something to us maybe midweek. Again, none of this is set in stone, but we do have to have this finalized by the 22nd to get it to the OARC staff.

And, Elizabeth, is that also a hard date?

Dr. Baden: That really does need to be a hard date, because the plan is for us to take the drafts written for each question of the Strategic Plan and to circulate those to all of the IACC Subcommittee members prior to the workshop on October 30th. And we want everyone to have time to review those documents.

Dr. Pessah: Again this is Isaac. What

you're asking for here is a general view of where we've come since the last review and no real detailed citations of actual individual papers, or do you want an extensive bibliography that substantiates our sort of view or 30,000-foot view?

Ms. Redwood: Isaac, Tom had suggested the 30,000-foot view, but when you actually look at the addendum that we did in 2011, it does cite specific research. But it's very summarized in maybe a sentence or two.

Dr. Pessah: Okay.

Dr. Carey: This is Matt Carey. So maybe something between nothing and extensive.

[Laughter]

Dr. Pessah: This is a good space.

Ms. Redwood: Yes, I'm sorry. I know that that's difficult to do, but I think that would be best. If you want to add more and it's something we need to delete, we can always do that as necessary.

Dr. Newschaffer: Great. So this is Craig. And sorry to be hung up on process and deadlines, but that's the nature of life these days. So what if we kept like the first as a time where we could just keep one page as kind of a rough length and we can sort of reference, not reference, to our own individual preference. And then we can circulate that.

And then sometime like early in the week of the eighth, maybe the external experts can have a call to discuss what we've circulated with whomever else gets to listen in to that. And then we can sort of figure out how we're going to synthesize that into what we pass on to the IACC members.

Ms. Redwood: How is everyone else with that? Cindy? Matt?

Dr. State: This is Matt. I think that's a great idea.

Dr. Lawler: I think -- this is Cindy. I also support the idea.

Dr. Carey: I mean that works for me. This is Matt Carey.

Ms. Redwood: Yes, that sounds fine,

Craig.

Dr. State: This is Matt State again. I just wanted to make sure I understood. What you're asking from us, the external advisors, is -- will not address the issue of funding and gaps because we don't have that information at hand. We're going to provide a scientific overview and then pass that along and the committee members are going to work on aligning that with funding and gaps. Am I -- Is that what I understand?

Ms. Redwood: Right. Unless, Matt, there is something that you're aware of, you know, from your research that you think is a gap area that is not reflected anywhere in the Strategic Plan.

If you look at the plans that we've done previously, there's also a section that's called research opportunities. And it follows the addendum update, but it's before the specific objectives. So typically, we use these research opportunities to feed back into new objectives for the Plan.

On the call that we had with the Subcommittee, I asked Dr. Insel about that, and he did not want us to actually update the research opportunities at this time. But we decided to generate a list of research opportunities, because that's going to be one of the first things we'll need to do at the beginning of 2013. And we'll be able to start this whole process of updating the Plan early in the year versus getting started in September.

So if you could identify some research opportunities, that would be incredibly helpful for 2013, but it won't be something that we'll actually be officially updating this year. Does that --

Dr. State: It does, thank you. It's Matt State.

Ms. Redwood: Okay. Any other questions? Dr. Newschaffer: Yes. This is Craig again. Will someone facilitate the call that the three of us will have the week of the eighth schedule-wise? Ms. Redwood: Elizabeth?

Dr. Baden: Yes, this is Elizabeth. If the three of you could come up with a time that works with all of your schedules, let us know.

[Laughter]

Dr. Baden: I realize that is a challenge. Then we can schedule the conference call line for you if that will work for everyone.

Dr. Newschaffer: Sure.

Dr. State: This is Matt State. So, Craig, tell me the date again when we're going to try to do this? On the eighth?

Dr. Newschaffer: Sometime early that week.

Dr. State: Okay. So I will have Tasha Brooks-Boone in my office set up a Doodle for the three of us external experts for a bunch of times at the beginning of the week, and we'll see what we can come up with.

Dr. Pessah: Will we want to circulate our single pages before then? Is that the plan? Isaac here.

Dr. Newschaffer: I think so. Craig here.

Dr. Pessah: Okay.

Dr. State: Okay.

Ms. Redwood: That would be great. Thanks so much for coordinating the effort on your end. And, Cindy and Matt, we'll be working with OARC staff to be able to identify some of those gaps and how they might be addressed and also what the needs of the community are. So we should probably also look at scheduling a call as well, and we can do that by email after the call today.

Dr. Lawler: Okay. This is Cindy from NIEHS again. One thing that might be useful: You sent around plan objectives with a professional budget estimate for each of the existing sort of initiative areas, Lyn.

Ms. Redwood: Yes.

Dr. Lawler: And that's really very helpful, and I'm sure it took quite a bit of time to pull that together. But I'm wondering, as being part of the team that provided those professional budget estimates, another important and maybe even more important than the actual dollar amount or through the number of studies, because the estimates really arose from we tried to put -- to enumerate if we're going to initiate X number of new studies and how much each one might cost.

But I think sort of the number of studies that fall into each of these initiatives over the years is as important as the budget in terms of trying to understand where we're falling short. Because some things are, you know, we're left as sequencing costs come down or whatever may be less expensive than we anticipated early on. In other cases they may be more expensive. So I don't know if there's a way for OARC to maybe help provide that information as well. I think we collected those data.

Ms. Redwood: Right. For 2008, Cindy, I don't know that we actually have the number of projects. Dr. Lawler: Okay.

Ms. Redwood: I think we just have the funding amount. You know, each year that we've done this we've gotten a little smarter, and so 2009 and 2010 we do have specific projects. And we can go through that link that's on the IACC Website. I think it's the -- what is it, the Reporter --

Dr. Lawler: Right.

Ms. Redwood: -- and actually look at specific projects that were funded in those areas.

Dr. Lawler: NIH funding.

Ms. Redwood: Exactly. Now that's not going to be available for the private funding, though. And that's something we're hoping some of the program staff can help us -- you know, give us some ideas of whether or not there's any preliminary findings from those studies and if everything is still moving forward as planned.

And I don't know -- Elizabeth, I know when I asked Dr. Insel to help pull together

just the cumulative funding, he implied that there wasn't adequate staff to be able to do that, which is why I pulled it together for our work. Is that something that the staff can work on?

Dr. Baden: Are you -- sorry, just to clarify -- are you talking about pulling together the number of projects for 2009 and 2010?

Dr. Lawler: Right -- for each one of those goals.

Dr. Baden: For each objective.

Dr. Lawler: As opposed to -- just now it's just dollar amounts -- but whether that represents funding 10 new studies or 2 new studies. I just thought that number of studies is a good metric as well and could be even more important than the dollar amounts in some cases.

Dr. Baden: Right. I mean, I know that the information for the 2009 and 2010 portfolio analysis that's on our Website; with the Web tool, you can look very quickly at each objective for each of those years, and it lists how many projects.

Dr. Carey: Yes, I'm looking at it right now. This is Matt Carey. I'm trying to find out exactly -- but you're right, there's a column specifically that says projects.

Dr. Lawler: So the question is, would there be an easy way to get that information on the spreadsheet that Lyn sent around?

Dr. Carey: Yes.

Ms. Redwood: You'd have to go back in and add another column for projects for 2009 and 2010. It's not reflected. I don't believe that we collected that data for 2008 when I was working on pulling this together.

I don't think it would be that hard to do. I could go back and add a column and put that in. But again, looking at the projects -- because it does include private funders -you may have one very specific small project that really won't get at that particular question. So you really almost have to look at each of the projects and the funding level

as well, Cindy, and who's doing the funding.

Dr. Lawler: That's a good point. I just, I always like to see sort of one measure of the breadth of a portfolio following so many specific areas, how many independent studies are being funded, you know. As opposed to one massive study that's measuring everything under the sun, I'd rather have four smaller studies that are focused in different areas that have different individuals kind of driving the science. To me, it's useful information to reflect sort of the health of a portfolio area as much as the dollar amount.

Ms. Redwood: Well, maybe the three of us could have further discussion --

Dr. Lawler: Okay.

Ms. Redwood: -- in terms of trying to get that additional information and add it in.

Dr. Lawler: Okay.

Dr. Pessah: This is Isaac. At this point, the external reviewers don't have to

Ms. Redwood: Right.

Dr. Pessah: Okay.

Ms. Redwood: I think that would be a lot to ask the external experts to do, so that's why I thought it would be better to let the IACC members work on that.

Dr. State: This is Matt State. Thank you so much.

Dr. Pessah: Yes, I want to --

[Laughter]

Ms. Redwood: Also, what will happen next is that the IACC members are going to work with OARC to try to blend this input from the external experts and the IACC members into a cohesive document. And I'm thinking that a majority of the work that we will do moving forward can be accomplished through email, although we may need to set up a second conference call prior to the actual workshop just to discuss how we're going to break up these presentations.

When I spoke with Elizabeth earlier today, she was saying that -- with regard to the actual workshop when these will be presented -- that the morning would be spent with brief overviews of the update, and then the entire workgroup, which includes all the other experts from the other questions, will be at the meeting as well.

We'll ask questions and provide input, discussions, feedback. And then all our Question 3 workgroup will then break off and discuss the comments that we received and decide whether or not we want to try to incorporate those into the Plan -- which ones have merit, and which ones need to be included.

And then when we meet back again in the afternoon with the full workgroup, we'll report back out.

Dr. Lawler: Lyn, this is Cindy again with a question. Will the external experts have an opportunity to see the materials that are being prepared relative to the other questions prior to the October meeting?

Because if the three of the experts -if you looked over the Strategic Plan -- you see there's a lot of sort of shared interests. Question 2 is more about the neurobiology of autism, and you know, for instance, the gene-environment interaction issue is going to be an important one there, just as an example. And I just was wondering whether you'd have some advance notice of potential areas of -- I don't want to say overlap but some common themes before you get to that meeting.

Ms. Redwood: Right. I think that's why the OARC staff is requesting the 22nd as a hard deadline to be able to circulate those back out.

Dr. Lawler: Okay. So the external experts will get the full package, and they can -- our Question 3 experts -- will see what the workgroup from Questions 2 and 4 and 7 were thinking as well. And maybe that could

help.

Ms. Redwood: That's a good point. Elizabeth, will that information also be circulated to the external experts?

Dr. Baden: Yes. This is Elizabeth. And it will be posted online as well --

Dr. Lawler: Okay.

Dr. Baden: -- for the public prior to the meeting so that everyone can digest the information. So we can make sure that that gets out to everybody.

Dr. Lawler: Okay, good. I think that will be very helpful.

Ms. Redwood: That's great. And will that also -- will you be sending out a notice to the public as well if they would like to submit any comments in terms of areas they feel as though we may have missed in the Plan? Will we be soliciting public comment specifically for the workshop meeting on the 30th I guess is my question, Elizabeth.

Dr. Baden: I don't believe our general process that we follow is to solicit public

comments for workshops. We've not done that historically, and I don't think that there's a plan in place to do that at this time.

Ms. Redwood: Okay. Are there any other questions or comments or suggestions or clarifications that anyone has?

Dr. Lawler: This is Cindy again. Just -this is a question for the experts, as we're all so glad that you agreed to work on this. And now is probably a good time, if you've looked over Question 3 and I assume you're familiar with one another's work. Is there sort of an area relevant to this question that you feel like, you know, the three of you collectively don't cover well? Because I think the sooner we know that, sort of the better. And whether there may be opportunities to add someone else or plan for that in the larger workshop.

One of the other teams, I think, had one or two more than three experts. So I just want to make sure that there's not something that is going to be a big gap area.

Dr. Carey: This is Matt Carey. That sounds like a difficult question because they'd have to guess what the other people aren't covering.

Dr. Lawler: But I mean, I think they're familiar with one another's work. So that's my question -- is whether -- when you think about, okay, it's going to be the three of us, we've got X, Y and Z covered, but wow, it would be really nice to sort of have this other piece really well covered.

And good to know that now when we may be able to do something about it as opposed to get there at that October, the end of the October workshop and be in those working groups and have somebody say you know, we really needed to have this person around the table. We're really missing that. That's what I'm trying to avoid.

Dr. Newschaffer: This is Craig. I mean, this puts us on the spot a little bit, but I think at the level you're asking us to do this I'm not sensing any major gaps. You know, like none of us is like full bore into epigenetics, for example, but we all have some various experiences there and I think know what's going on in the literature as it pertains to the environmental exposures and genetics. So I feel like it's probably okay.

Dr. State: This is Matt State. Sorry?

Ms. Redwood: No, go ahead, Matt.

Dr. State: I was just going to say, actually, that was the same topic area came to mind. And I really think it's an issue of -- I completely agree with Craig that each one of us will have some experience with that. If you -- it seems to me it might be a little bit out of place to have someone who was simply there as an expert in epigenetic assays in developing human brain or something like that. So I think it's probably -- I mean I don't think it's going to be a major issue although -- yes.

Dr. Lawler: That's good. That's what I think I wanted to hear.

Dr. Pessah: I agree with what has been

said. This is Isaac. The one area where I don't think we can address is what's changed in terms of public policy. I don't know, maybe Craig can address that point.

Dr. State: That's interesting.

Dr. Lawler: I'm not sure what you mean.

Dr. Pessah: You know, has the research had any impact on --

Dr. Lawler: Oh, oh, right -- in 10 years. Yes, you know, the IACC -- just speaking on behalf of the IACC. Everyone is very interested in trying to sort of understand how to build a logic model or something else that would really begin to address what some of the potential short-term impacts of the research that we're funding might be. So that's a really timely comment on your part because we're struggling with how to do that and get that information.

Ms. Redwood: And, Cindy, to answer your question, too -- based on the discussion that we had with Dr. Insel at our meeting September seventh, the one sort of gap area I saw in the experts was with regard to immunology, because I think that's very important, and several of the immunologists that had been recommended by the Committee members were not able to actually attend the workshop. So I think that's an area we need to keep in mind.

I know that Isaac works with several immunologists at UC, Davis. So, Isaac, maybe you could help us in that area with regard to some of the findings.

And also, the other is actually having a treating physician. And I noticed, looking over the updates, that Geri had included last year some data from ATN. So you know, we may want to reach out to Geri.

Also, for the external experts, the two co-chairs that are overseeing this whole process are Dr. Tom Insel and Dr. Geraldine Dawson from Autism Speaks. So feel free if you need to reach out to either of them to get any additional information.

And, Isaac, we have been struggling.

That's kind of my sort of pet bugaboo is that we do not have any real metrics in place for evaluating the effectiveness of our Plan.

We can look at the number of studies published, but we don't really -- we haven't actually developed a way to assess how much that's moved the ball forward in terms of our knowledge and how close are we to actually understanding this disorder and what's causing it and what can be done to prevent it, which is key to this question. So if you have any insights on how to do that, please share them.

Dr. Pessah: It's a tough one. I just don't think that the three of us will be addressing that aspect in our initial document.

Dr. Lawler: Understood.

Ms. Redwood: And I hope when we move into the 2013 update for the Plan that the IACC will have a richer discussion with regard to how we can actually assess these studies. Dr. State: Great. This is Matt State again. It sounds like a great idea. I just want to make sure, you kind of skipped over the immunology part. And among the three, Isaac, are you --

Dr. Pessah: I'm aware of the advances that have been made in terms of immune dysfunction in kids with autism. I've worked with several of the folks in that area.

Dr. State: Right, I know.

Dr. Pessah: So I can try to address that.

Dr. State: Great.

Ms. Redwood: And also, if you look at the summary of advances for 2011, that will include several of the papers that have been published. We may also want to circulate some of what we feel to be the top publications that have come out between 2012 and today. That might be helpful as well.

Dr. State: Great.

Ms. Redwood: Anything else? We're actually 15 minutes ahead of schedule, which is wonderful.

Dr. State: Unbelievable.

Dr. Carey: I was going to say -- this is Matt Carey. The question that earlier came up with adding projects to the Word document that Lyn provided -- I just sent that out. So it was actually using a Web tool. It was actually pretty straightforward -- the number of projects. As you can imagine for a lot of them, yes, if it's got a lot of money, there are a lot of projects, and if zero, there are zero projects. But anyway, that will be out for anybody who wants to see the number of projects as well.

Dr. State: Thank you.

Ms. Redwood: Thank you. That was quick.

Dr. Lawler: Does that reflect just NIH funding?

Dr. Carey: That's whatever -- I think no. That's using the Web tool that was put up a couple of months ago. It doesn't say which projects they are, but it just says the number of projects for each one. Dr. Lawler: Okay.

Dr. Carey: And that as I recall from the Web tool includes the private foundations that are supplying information to OARC.

Dr. Lawler: Okay. Thanks for doing that.

Ms. Redwood: Now, is that just for the 2010 update?

Dr. Carey: 2009 and 2010 are the ones that are included in the Web tool. So yes, it doesn't go back to 2008, as you were saying before.

Ms. Redwood: Right. Okay. Very good. Okay. Any questions from OARC staff?

Dr. Baden: I don't think so.

Ms. Redwood: Okay. Well again, feel free to communicate via email. Once we get closer to our date of October 22, like I said, we may need to schedule another call. So I'll try to get something out the week before to set that up.

And again, thanks everyone for their time today. And I'll call the meeting adjourned. (Whereupon, the Basic and Translational Research Question 3 Planning Group adjourned at 1:09 p.m.)