

BEFORE THE  
INDEPENDENT CITIZENS' OVERSIGHT COMMITTEE  
TO THE  
CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE  
ORGANIZED PURSUANT TO THE  
CALIFORNIA STEM CELL RESEARCH AND CURES ACT  
REGULAR MEETING

LOCATION: LUXE HOTEL, SUNSET BOULEVARD  
11461 SUNSET BOULEVARD  
LOS ANGELES, CALIFORNIA

DATE: DECEMBER 12, 2012  
9 A.M.

REPORTER: BETH C. DRAIN, CSR  
CSR. NO. 7152

BRS FILE NO.: 92689

**BARRISTERS' REPORTING SERVICE**

**I N D E X**

ITEM DESCRIPTION	PAGE NO.
<b>REPORTS &amp; DISCUSSION ITEMS</b>	
1. CALL TO ORDER.	4
2. PLEDGE OF ALLEGIANCE.	4
3. ROLL CALL.	4
4. CHAIRMAN'S REPORT.	183
5. PRESIDENT'S REPORT.	150
6. PRESENTATION AND DISCUSSION OF THE INSTITUTE OF MEDICINE REPORT ON CIRM.	8
<b>ACTION ITEMS</b>	
8. CONSIDERATION OF APPLICATIONS FOR RFA 12-01: CIRM NEW FACULTY PHYSICIAN SCIENTIST TRANSLATIONAL RESEARCH AWARDS.	66
<b>CLOSED SESSION</b>	
<b>ACTION ITEMS</b>	
10. CONSIDERATION OF BASIC BIOLOGY V CONCEPT PLAN.	119
11. CONSIDERATION OF FINAL ADOPTION OF CIRM CONFLICT OF INTEREST CODE AMENDMENTS.	137
12. CONSIDERATION OF APPOINTMENT OF NEW SCIENTIFIC MEMBERS OF THE GRANTS WORKING GROUP.	117
13. CONSIDERATION OF AWARD OF SUPPLEMENTAL FUNDS TO EXISTING GRANTEE, VIACYTE.	109, 181

**BARRISTERS' REPORTING SERVICE**

I N D E X (CONT'D.)

14. CONSIDERATION OF UPDATE TO CIRM'S RESPONSE TO THE PERFORMANCE AUDIT RECOMMENDATIONS. 139

DISCUSSION ITEMS

15. DISCUSSION OF A COMMERCIALIZATION AND INDUSTRY ENGAGEMENT PLAN. 141

16. COMMUNICATIONS UPDATE. 170

17. PUBLIC COMMENT. NONE

PROPOSED ADDITIONAL AGENDA ITEM 179

**BARRISTERS' REPORTING SERVICE**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

LOS ANGELES, CALIFORNIA;  
WEDNESDAY, DECEMBER 12, 2012; 9 A.M.

CHAIRMAN THOMAS: GOOD MORNING, EVERYBODY.  
I'D LIKE TO WELCOME YOU ALL ON THIS MOST UNUSUAL  
12/12/12 TO THE DECEMBER MEETING OF THE ICOC HERE IN  
BEAUTIFUL BRENTWOOD.

I'D LIKE TO START WITH CALLING THE MEETING  
OFFICIALLY TO ORDER. AND, MARIA, WILL YOU PLEASE  
LEAD US IN THE PLEDGE OF ALLEGIANCE.

(THE PLEDGE OF ALLEGIANCE.)

CHAIRMAN THOMAS: MARIA, WILL YOU PLEASE  
CALL THE ROLL.

MS. BONNEVILLE: DAVID BRENNER. SUSAN  
BRYANT.

DR. BRYANT: HERE.

MS. BONNEVILLE: FRANK CHISARI.  
ANNE-MARIE DULIEGE. JAMES ECONOMOU.

DR. ECONOMOU: HERE.

MS. BONNEVILLE: MARCY FEIT.

MS. FEIT: HERE.

MS. BONNEVILLE: LEEZA GIBBONS.

MS. GIBBONS: HERE.

MS. BONNEVILLE: MICHAEL GOLDBERG. SAM  
HAWGOOD.

**BARRISTERS' REPORTING SERVICE**

1 DR. HAWGOOD: HERE.  
2 MS. BONNEVILLE: STEPHEN JUELSGAARD.  
3 DR. JUELSGAARD: HERE.  
4 MS. BONNEVILLE: TED KRONIRIS.  
5 DR. KRONIRIS: HERE.  
6 MS. BONNEVILLE: SHERRY LANSING.  
7 MS. LANSING: HERE.  
8 MS. BONNEVILLE: BERT LUBIN. SHLOMO  
9 MELMED. CLAIRE POMEROY.  
10 DR. POMEROY: HERE.  
11 MS. BONNEVILLE: ROBERT PRICE.  
12 DR. PRICE: HERE.  
13 MS. BONNEVILLE: FRANCISCO PRIETO.  
14 DR. PRIETO: HERE.  
15 MS. BONNEVILLE: CARMEN PULIAFITO.  
16 DR. PULIAFITO: HERE.  
17 MS. BONNEVILLE: ROBERT QUINT.  
18 DR. QUINT: HERE.  
19 MS. BONNEVILLE: DUANE ROTH. JOAN  
20 SAMUELSON. JEFF SHEEHY.  
21 MR. SHEEHY: HERE.  
22 MS. BONNEVILLE: JONATHAN SHESTACK.  
23 OSWALD STEWARD.  
24 DR. STEWARD: HERE.  
25 MS. BONNEVILLE: JONATHAN THOMAS.

**BARRISTERS' REPORTING SERVICE**

1 CHAIRMAN THOMAS: HERE.

2 MS. BONNEVILLE: ART TORRES.

3 MR. TORRES: HERE.

4 MS. BONNEVILLE: CARL WARE.

5 DR. WARE: HERE.

6 CHAIRMAN THOMAS: THANK YOU. WE ARE GOING  
7 TO HOLD OFF FOR A BIT ON THE CHAIR AND PRESIDENT'S  
8 REPORT. WE'RE GOING TO MOVE FIRST TO THE REPORT BY  
9 THE INSTITUTE OF MEDICINE AND HAVE DISTINGUISHED  
10 GUESTS HERE, THE CHAIR AND VICE CHAIR OF THE IOM  
11 COMMITTEE THAT DID THIS REPORT, DR. HAROLD SHAPIRO  
12 AND DR. TERRY MAGNUSON.

13 AS YOU WILL ALL RECALL, A NUMBER OF MONTHS  
14 AGO IN MID-2011 WE COMMISSIONED THE IOM TO DO A TOP  
15 TO BOTTOM REVIEW OF CIRM, ITS PROCESSES, ITS  
16 PROGRAMS, ITS FUNDING MODEL, AND A VARIETY OF OTHER  
17 ATTENDANT ITEMS. THEY BEGAN THEIR STUDY IN OCTOBER  
18 OF 2011 AND JUST RECENTLY HAVE RELEASED THE REPORT  
19 WHICH WE'LL BE DISCUSSING HERE AT THE MEETING TODAY.

20 HAVING SOUGHT TO GET THEIR BLUE RIBBON  
21 THOUGHTS AND EXPERTISE ON WHAT WE'RE DOING, WE ARE  
22 VERY INTERESTED, OF COURSE, IN THE REPORT, WHICH WE  
23 HAVE READ IN GREAT DETAIL, AND ARE GOING TO BE  
24 TAKING THE NUMEROUS RECOMMENDATIONS OF THE IOM VERY  
25 SERIOUSLY. AND ONCE WE'VE HAD THE DISCUSSION AND

**BARRISTERS' REPORTING SERVICE**

1 PRESENTATION BY DR. SHAPIRO, WE WILL SAY A FEW WORDS  
2 ON THE PROCESS THAT WE HAVE PUT IN PLACE TO EVALUATE  
3 THE REPORT AND WHAT WE WILL BE DOING GOING FORWARD  
4 TO IMPLEMENT THE SUGGESTIONS.

5 SO WITHOUT FURTHER ADO, I'D LIKE TO TURN  
6 IT OVER TO DR. SHAPIRO WHO WILL BE MAKING A  
7 PRESENTATION. AND I BELIEVE, ARE YOU INVITING Q AND  
8 A ALONG THE WAY, OR HOW WOULD YOU LIKE TO PROCEED?

9 DR. SHAPIRO: IT'S WHATEVER THE COMMITTEE  
10 IS COMFORTABLE WITH. IF THEY HAVE QUESTIONS OR  
11 CLARIFICATION OR ANYTHING, CERTAINLY INTERRUPT ME.  
12 I WILL TRY TO KEEP MY PRESENTATION NO MORE THAN HALF  
13 AN HOUR BECAUSE I KNOW YOU HAVE A FULL COPY OF THE  
14 REPORT AND YOU'VE GOT THE POWERPOINT SLIDES. SO  
15 I'LL TRY TO MOVE QUICKLY, BUT WHATEVER SUITS THE  
16 BOARD WILL BE FINE WITH ME.

17 CHAIRMAN THOMAS: BEFORE I TURN IT OVER TO  
18 DR. SHAPIRO, I WOULD LIKE JUST TO NOTE THAT, AS  
19 YOU'VE READ THE REPORT, YOU WILL SEE THAT THERE ARE  
20 MANY STATEMENTS IN THERE VALIDATING CIRM, ITS  
21 PROCESS, WHAT IT WAS ABLE TO ACHIEVE IN THE YEARS  
22 SINCE PROP 71 WAS PASSED, LOTS OF DISCUSSION ABOUT  
23 THE FUNDING MODEL, ABOUT HOW CIRM HAS REALLY  
24 ENERGIZED THE AREA OF STEM CELL RESEARCH WORLDWIDE,  
25 GALVANIZED THE BIOTECH INDUSTRY IN CALIFORNIA, AND

**BARRISTERS' REPORTING SERVICE**

1 SO ON. AND WE ARE VERY GRATEFUL THAT THE IOM HAS  
2 MADE ALL OF THOSE STATEMENTS. PERHAPS DR. SHAPIRO  
3 COULD AMPLIFY A BIT ON THOSE AS WELL AS FOR THE  
4 NUMEROUS RECOMMENDATIONS THAT THEY'VE MADE ON HOW WE  
5 COULD TAKE SOMETHING WHICH IS ALREADY A GREAT  
6 EXPERIENCE AND IMPROVE IT EVEN EITHER. SO WITHOUT  
7 FURTHER ADO, DR. SHAPIRO.

8 DR. SHAPIRO: THANK YOU VERY MUCH. I WANT  
9 TO THANK THE BOARD FOR ITS WILLINGNESS TO SPEND SOME  
10 TIME TO HEAR A LITTLE BIT ABOUT THIS REPORT. IT'S  
11 MY GREAT OPPORTUNITY FOR MYSELF AND PROFESSOR  
12 MAGNUSON SITTING RIGHT OVER HERE ON MY LEFT TO BE  
13 HERE TODAY WITH YOU.

14 I REALLY WANT TO BEGIN BY THANKING THE  
15 CIRM STAFF FOR THEIR COOPERATION. WE MADE MANY,  
16 MANY REQUESTS AS WE WROTE OUR STUDY. THEY ALWAYS  
17 RESPONDED IN FULL AND QUICKLY AND WITH VERY GOOD  
18 GRACE, I HAVE TO SAY. I'M SURE THAT REFLECTS THE  
19 ATTITUDE NOT ONLY OF STAFF, BUT THE BOARD AND  
20 MANAGEMENT OF CIRM. WE ARE VERY, VERY GRATEFUL FOR  
21 THAT.

22 IT'S CLEAR TO EVERYONE THAT THE ICOC, THE  
23 BOARD, HAVE VERY MANY DISTINGUISHED AND EXPERIENCED  
24 MEMBERS WITH A LIFETIME OF EXPERIENCE IN CIRM-LIKE  
25 ACTIVITIES EITHER AS PATIENT ADVOCATES OR AS MEMBERS



**BARRISTERS' REPORTING SERVICE**

1 OF THE BIOMEDICAL OR RESEARCH COMMUNITY OR PEOPLE  
2 WITH INTEREST IN THAT PARTICULAR COMMUNITY. INDEED,  
3 I HAVE TO SAY THAT, GIVEN THE COMPOSITION OF THE  
4 BOARD AND QUALITY OF THE BOARD AND THE NUMBER OF  
5 STUDIES THAT HAVE ALREADY TAKEN PLACE, I SAID TO  
6 SOMEONE LAST NIGHT IT'S ONE OF THE MOST OVERSTUDIED  
7 ORGANIZATIONS I'VE COME ACROSS IN THE VERY BRIEF  
8 HISTORY THAT YOU HAVE. WHEN I WAS FIRST ASKED TO  
9 TAKE THE CHAIRMANSHIP, MY FIRST RESPONSE WAS WHY DO  
10 WE NEED ANOTHER STUDY OF CIRM? THERE'S BEEN SO MANY  
11 STUDIES.

12 NEVERTHELESS, WHAT GOT ME INTERESTED WAS  
13 THAT I DIDN'T KNOW A LOT OF THE DETAILS OF CIRM, BUT  
14 I HAD BEEN CHAIRMAN OF THE NATIONAL BIOETHICS  
15 ADVISORY COMMISSION WHEN HUMAN EMBRYONIC STEM CELLS  
16 FIRST BECAME AN ETHICAL ISSUE, THAT BEING THE  
17 THOMSON EXPERIMENTS WHICH CULTURED THE CELLS AND  
18 STUDIED THEM AND SO ON. AS FAR AS I KNOW, THAT  
19 COMMITTEE WAS THE FIRST TO OPINE IN AN OFFICIAL WAY  
20 ON THE ETHICAL ISSUES. AND I THOUGHT THIS WOULD BE  
21 AN OPPORTUNITY FOR ME TO SEE JUST WHERE THE SCIENCE  
22 HAD COME AND HOW CIRM HAD DONE. SO IT'S ACTUALLY A  
23 VERY GREAT PLEASURE TO DO THIS STUDY.

24 THE FIRST THING I'D LIKE TO SAY BEFORE I  
25 GET TO THE POWERPOINT PRESENTATION AND SO ON IS YOU

## BARRISTERS' REPORTING SERVICE

1 ALL HAVE A GREAT DEAL TO CELEBRATE. WE RECOGNIZE  
2 THAT -- THE COMMITTEE RECOGNIZES THAT CIRM IS  
3 CERTAINLY A SOCIAL INNOVATION. MANY INNOVATIVE  
4 ASPECTS OF CIRM'S OPERATIONS, SOME OF WHICH I'LL  
5 DISCUSS, SOME OF WHICH ARE IN THE REPORT AND I WON'T  
6 HAVE TIME TO DISCUSS THIS MORNING, BUT AS I'VE  
7 ALREADY SAID, IT REALLY IS A SOCIAL INNOVATION.  
8 THESE DON'T COME ALONG EVERY DAY IN THE BIOMEDICAL  
9 RESEARCH COMMUNITY, AND CIRM DOES REFLECT AND IS A  
10 REMARKABLE SOCIAL INNOVATION.

11 AND WE ALL OWE YOU A DEBT OF GRATITUDE,  
12 THOSE OF YOU WHO HAVE HAD LEADERSHIP IN THIS EFFORT,  
13 FOR ALL YOU HAVE DONE, NOT ONLY FOR CIRM ITSELF AND  
14 CALIFORNIA, BUT FOR THE GENERAL AREA OF BIOMEDICAL  
15 RESEARCH. YOU HAVE EVERY REASON TO FEEL VERY GOOD.  
16 SELF-SATISFIED DOESN'T SOUND RIGHT. SOUNDS LIKE  
17 THAT'S UNDESERVED SATISFACTION. BUT YOU HAVE A VERY  
18 WELL-EARNED SATISFACTION WHICH I HOPE THAT YOU FEEL  
19 BECAUSE IT'S VERY GENUINE FROM OUR POINT OF VIEW.

20 NOW, THERE'S MANY VERSIONS OF THIS REPORT.  
21 IN A SENSE THIS IS TYPICAL OF AN IOM REPORT. WE  
22 HAVE A TWO- OR THREE-PAGE VERSION, WE HAVE A SUMMARY  
23 AT THE BEGINNING OF OUR REPORT, AND WE HAVE A PRESS  
24 RELEASE. SO IF YOU WANT TO READ TWO PAGES, YOU GO  
25 TO THE PRESS RELEASE. IF YOU WANT TO READ A QUICK

**BARRISTERS' REPORTING SERVICE**

1 SUMMARY, WE HAVE ONE THAT'S THREE PAGES LONG, AND  
2 THE SUMMARY IS ABOUT EIGHT PAGES LONG, THEN THERE'S  
3 THE WHOLE REPORT. SO YOU CAN LOOK AT THIS IN ANY  
4 WAY YOU LIKE THAT SUITS YOU. JUST DEPENDS HOW MUCH  
5 DETAIL YOU WANT.

6 AND SO LET ME GO AHEAD NOW AND MAKE THE  
7 PRESENTATION. I THINK I HAVE ABOUT 25 OR 26 SLIDES.  
8 I WILL NOT GO OVER ALL OF THEM CAREFULLY. IT WILL  
9 TAKE MUCH TOO LONG. I'LL TRY TO GO TO THE ONES I  
10 THINK ARE MOST IMPORTANT AND HAVE MOST TO SAY AND  
11 THINGS THAT MIGHT GENERATE SOME INITIAL DISCUSSION.

12 NOW, BEFORE I GET TO THAT, I JUST WANT TO  
13 ADD ONE FURTHER THING. OUR HOPE IS IN MAKING THIS  
14 STATEMENT AND THE REASON WE'VE DONE THE STUDY IS  
15 THAT WE HOPE THAT OUR INDEPENDENT PERSPECTIVE WILL  
16 BE OF ASSISTANCE TO YOU AS YOU TRY TO GUIDE CIRM  
17 INTO THE FUTURE. WE DON'T PRETEND TO HAVE ALL THE  
18 WISDOM. WE JUST HAVE DONE OUR BEST JOB IN THINKING  
19 THIS PROBLEM THROUGH, THINKING OUR EVALUATION  
20 THROUGH; AND WE KNOW THAT YOU, THIS BOARD HERE, IS  
21 THE GROUP THAT'S IN THE BEST POSITION TO DECIDE JUST  
22 HOW CIRM SHOULD MANAGE ITSELF AND GOVERN ITSELF  
23 GOING AHEAD.

24 WE HAVE VARIOUS RECOMMENDATIONS, WHICH  
25 I'LL COME TO IN A MOMENT. MANY OF THESE

**BARRISTERS' REPORTING SERVICE**

1 RECOMMENDATIONS ARE IN SOME SENSE INDEPENDENT IN THE  
2 SENSE THAT ONE DOESN'T HAVE TO TAKE THEM ALL. ONE  
3 COULD TAKE SOME YOU LIKE AND SOME YOU DON'T LIKE  
4 DEPENDING ON YOUR OWN REACTION TO THEM. AND SOME OF  
5 THEM ARE INTERDEPENDENT; THAT IS, DEPENDENT ON EACH  
6 OTHER, BUT MOSTLY THEY ARE SEPARATE RECOMMENDATIONS  
7 WHICH YOU CAN CHOOSE TO ADAPT OR ADAPT PART OF OR  
8 ADAPT SLOWLY OVER TIME. WE MAY NOT HAVE BEEN FULLY  
9 WISE ON THESE ISSUES, BUT I WANT TO ASSURE YOU THAT  
10 WE WERE NOT NAIEVE ABOUT IT EITHER.

11 THE KINDS OF CHANGES THAT WE ARE  
12 RECOMMENDING WE KNOW TAKE TIME, NOT ONLY FOR YOUR  
13 CONSIDERATION TO SEE IF YOU FIND THEY'RE USEFUL, BUT  
14 EVEN IF YOU FIND THEM ALL USEFUL, IT WOULD TAKE SOME  
15 TIME. SOME WILL REQUIRE WORKING WITH STATE  
16 GOVERNMENT IN ORDER TO MAKE THESE CHANGES, SO WE'RE  
17 VERY MUCH AWARE OF THAT. AND AS I SAID BEFORE, WE  
18 ONLY HOPE THAT YOU CAN LOOK AT THESE, TAKE THEM  
19 SERIOUSLY, AND THEN DECIDE WHAT'S IN CIRM'S BEST  
20 INTEREST GOING FORWARD.

21 MS. LANSING: I JUST WANT TO PUT THIS IN A  
22 CONTEXT. FIRST OF ALL, THANK YOU. I CANNOT THANK  
23 YOU AND THE MEMBERS OF THE COMMITTEE ENOUGH FOR ALL  
24 OF THE HARD WORK THAT YOU'VE DONE. I HAVE READ THE  
25 REPORT, SHORT VERSION, THE LONG VERSION, WHATEVER.

**BARRISTERS' REPORTING SERVICE**

1 SO I JUST WANT TO PUT IN CONTEXT THAT, AND YOU  
2 MENTIONED IT JUST BRIEFLY, THAT IN SOME OF THESE  
3 THINGS, AND WE ARE GOING TO HAVE A WORKSHOP TO GO  
4 THROUGH THEM AND JAMES IS GOING TO HAVE TO GUIDE US  
5 THROUGH IT, SOME OF THESE THINGS, EVEN IF WE LIKE  
6 THEM, OUR HANDS ARE TIED BECAUSE OF THE STATE LAW  
7 AND THE CONSTITUTIONAL LAW, AND THEY REQUIRE A FULL  
8 VOTE BY THE CITIZENS. SO I JUST WANT TO SAY THAT.

9 I'M NOT GOING TO ASK JAMES TO TELL US WHAT  
10 EVERY RECOMMENDATION IS. BUT PERHAPS AT THE END,  
11 SINCE SOME OF THEM ARE ABOUT PATIENT ADVOCATES, AT  
12 THE END, NOT NOW, YOU COULD EXPLAIN TO US WHAT THE  
13 CONSTITUTIONAL THING IS. I JUST WANT TO KNOW THAT.

14 DR. SHAPIRO: WE ARE QUITE AWARE THAT THIS  
15 WOULD REQUIRE WHAT WE CALL COOPERATION OF STATE  
16 GOVERNMENT AND THE VOTERS, AND WE ARE AWARE OF THAT.  
17 WE'RE NOT THE EXPERTS IN THAT. YOU ARE THE EXPERTS  
18 SITTING AROUND HERE.

19 MS. LANSING: I REALLY APPRECIATE, I WANT  
20 TO BE VERY CLEAR, EVERYTHING THAT YOU'VE DONE AND  
21 HOW VERY, VERY SERIOUSLY ALL OF THE MEMBERS OF THE  
22 BOARD ARE TAKING THIS. BUT I WANT TO KNOW THE  
23 CONTEXT, AT LEAST AT THE END, JAMES, OR THE  
24 BEGINNING OF THE WORKSHOP, WHATEVER YOU'RE  
25 COMFORTABLE DOING, SO THAT WE KNOW WHAT WE CAN

**BARRISTERS' REPORTING SERVICE**

1 ADDRESS AND WHAT REQUIRES THE CITIZENS TO VOTE ON.

2 DR. SHAPIRO: OKAY. THIS IS THE  
3 BACKGROUND OF THE REPORT. YOU READ THIS, YOU ALL  
4 HAVE COPIES OF THIS. I'M NOT GOING TO READ THROUGH  
5 THIS WHOLE THING. IT JUST TELLS YOU WHAT OUR  
6 OBJECTIVES WERE AND SO ON. I JUST WANT TO LOOK TO  
7 AT THE THIRD ITEM ON HERE, THE ONE THAT'S READING  
8 DOWN HERE, THE THIRD ITEM. THE COMMITTEE WAS NOT  
9 CHARGED, I WANT TO BE CAREFUL, WITH RIGOROUSLY  
10 EVALUATING THE DETAILS OF CERTAIN SCIENTIFIC  
11 CONTRIBUTIONS AND SO ON. THAT'S A VERY IMPORTANT  
12 ISSUE, BEEN EVALUATED BY MANY PEOPLE. THAT'S NOT  
13 WHAT WE DID. OUR FOCUS WAS ON THE QUALITY OF THE  
14 PROCESSES IN PLACE AND WHETHER THEY SERVE THE  
15 OBJECTIVES OF CIRM AND THE CITIZENS OF CALIFORNIA.

16 THIS IS ALSO QUITE CRITICAL AND RELATES TO  
17 MS. LANSING'S COMMENT JUST MADE A FEW MOMENTS AGO  
18 THAT IT IS, FIRST OF ALL, WE WERE NOT ASKED AND WE  
19 DID NOT PRESUME TO OPINE ON THE WISDOM OF THE  
20 CALIFORNIA VOTERS OR THE CALIFORNIA LEGISLATURE WITH  
21 RESPECT TO PROP 71 AND SENATE BILL 1064. WE TOOK  
22 THAT AS GIVEN. IT WASN'T OUR AFFAIR.

23 THE SECOND POINT I WANT TO MAKE, THE POINT  
24 OF THE SLIDE IS THAT IN OUR OWN ASSESSMENT, WE DID  
25 NOT LIMIT OUR CONSIDERATIONS TO THE PARAMETERS

## BARRISTERS' REPORTING SERVICE

1 IMPOSED BY EITHER PROPOSITION 71 OR 1064. QUITE  
2 FRANKLY, IF WE HAD ACCEPTED THOSE, WE COULD HAVE  
3 PACKED UP OUR BAGS AND GONE HOME. THERE WAS REALLY  
4 NOTHING MUCH TO DO IF WE JUST ACCEPT THAT AS GIVEN  
5 AND UNCHANGEABLE. SO WE MADE THAT DECISION EARLY  
6 ON, THAT WE WOULD NOT CONFINE OUR RECOMMENDATIONS,  
7 RECOGNIZING, AS MS. LANSING JUST POINTED OUT, THAT  
8 THERE ARE SOME CONSTRAINTS HERE HOW QUICK YOU CAN  
9 MOVE AND IF YOU CAN MOVE. WE CERTAINLY UNDERSTAND  
10 THAT.

11           HERE'S THE COMMITTEE'S CHARGE. I'M NOT  
12 GOING TO GO THROUGH THESE DETAILS HERE. YOU CAN  
13 PICK THEM UP. WE DID LOOK AT CIRM'S INITIAL  
14 PROCESSES, THE PROGRAMMATIC AND SCIENTIFIC SCOPE.  
15 THIS IS WHAT WE WERE ASKED TO DO IN THE CHARGE. WE  
16 LOOKED AT THE ORGANIZATION AND MANAGEMENT SYSTEMS.  
17 AND YOU CAN LOOK AT THE DETAILS HERE AT YOUR  
18 LEISURE. THE FUNDING MODEL, THE FUNDING MODEL WAS  
19 VERY INNOVATIVE IN CERTAIN WAYS, AND TRIED TO REACH  
20 SOME CONCLUSIONS REGARDING THAT AS A MODEL FOR  
21 OTHERS OR AS A MODEL FOR CIRM. AND, OF COURSE,  
22 CIRM'S INTELLECTUAL PROPERTY POLICY. THESE WERE THE  
23 THINGS WE WERE ASKED TO DO, AND WE DID OUR BEST TO  
24 LOOK AT ALL THESE FUNCTIONS.

25           I DON'T WANT TO STAY ON THIS SLIDE VERY

**BARRISTERS' REPORTING SERVICE**

1 LONG EITHER. THESE ARE JUST THE 13 MEMBERS OF THE  
2 COMMITTEE WHO, AS YOU SEE, HAD EXPERTISE IN A BROAD  
3 SET OF ISSUES BECAUSE CIRM ITSELF HAS A VERY BROAD  
4 SCOPE IN ITS OWN PORTFOLIO.

5 HERE I WANT TO SPEND JUST A FEW MOMENTS ON  
6 THE METHODS WE USED. WE TRIED TO GATHER AS MUCH  
7 INFORMATION AS WE COULD NOT ONLY ABOUT PROPOSITION  
8 71 AND SENATE BILL 1064. WE LOOKED AT THE ECONOMIC  
9 ANALYSIS REPORT THAT HAD BEEN THERE BEFORE. WE  
10 LOOKED AT THE STRATEGIC PLANS THAT HAVE BEEN  
11 DEVELOPED BY CIRM OVER TIME. WE LOOKED AT ALL THE  
12 OUTSIDE EVALUATIONS THAT HAVE MADE OF CIRM, WHICH  
13 WERE QUITE A FEW. WE MADE MANY REQUESTS FOR DATA.  
14 I WON'T GO OVER THAT RIGHT NOW.

15 WE HELD PUBLIC MEETINGS. WE HAD INVITED  
16 SPEAKERS; WE HAD OPEN FORUMS WITH THE PUBLIC. AS  
17 YOU SEE ON THAT SLIDE HERE, WE MET IN WASHINGTON,  
18 SAN FRANCISCO, AND IN IRVINE. THOSE ARE THE THREE  
19 PLACES WE MET. WE ALSO HAD, SO TO SPEAK, ADJUNCT  
20 MEETINGS MAINLY WITH THE GROUP THAT WAS WORKING ON  
21 THE SCIENCE AND SCIENCE ISSUES IN TORONTO AND  
22 BOSTON, TWO IMPORTANT CENTERS, NOT THE ONLY  
23 IMPORTANT CENTERS, BUT TWO IMPORTANT CENTERS IN  
24 REGENERATIVE MEDICINE.

25 WE MADE SITE VISITS TO UC DAVIS, STANFORD,



**BARRISTERS' REPORTING SERVICE**

1 AND UCSF. I MYSELF MADE VISITS TO STANFORD AND  
2 UCSF. PROFESSOR MAGNUSON, MY VICE CHAIR, WENT TO  
3 DAVIS ALONG WITH OTHER MEMBERS OF THE COMMITTEE.  
4 AND WE, OF COURSE, HAD A LARGE NUMBER OF INTERVIEWS  
5 WITH VARIOUS PEOPLE IN INDUSTRY AND ACADEMIC LIFE,  
6 SO ON AND SO FORTH. THE ONLY PURPOSE OF ALL THESE  
7 SLIDES IS JUST TO SAY THAT WE DID OUR BEST TO GATHER  
8 AS MUCH INFORMATION AND JUDGE THEM AS WE COULD.

9 FINALLY, WE SENT OUT A WHOLE SERIES OF  
10 QUESTIONNAIRES TO DIFFERENT GROUPS. AS YOU CAN SEE  
11 HERE, MEMBERS OF THIS BOARD, LEADERSHIP OF  
12 CIRM-FUNDED INSTITUTIONS, CIRM PRINCIPAL  
13 INVESTIGATORS, SO ON AND SO FORTH. WE TRIED TO BE  
14 AS COMPREHENSIVE AS OUR RESOURCES AND TIME ALLOWED.  
15 WE FOUND THEM INDEED EXTREMELY VALUABLE.

16 SO I'M NOT SURE QUITE HOW TO CHARACTERIZE  
17 OUR KEY MESSAGES, BUT I'LL TRY IN A FEW MOMENTS.  
18 FIRST OF ALL, THE FIRST BULLET ON THIS SLIDE REALLY  
19 CANNOT BE OVERSTATED. I'VE ALREADY STATED YOU HAVE  
20 EVERY REASON TO BE EXTRAORDINARILY SATISFIED WHAT  
21 HAPPENED DURING THE FIRST PERIOD. I CALL IT THE  
22 FIRST PERIOD SINCE 2006 OR 2004, WHICHEVER DATE YOU  
23 WANT TO USE, AND BEFORE THAT IN PUTTING THE CAMPAIGN  
24 TOGETHER. IT'S BEEN AN EXTRAORDINARY SUCCESS IN  
25 ALMOST EVERY DIMENSION.

**BARRISTERS' REPORTING SERVICE**

1 BUT WE DO THINK THAT AS CIRM GOES AHEAD,  
2 IT'S JUST NOT NECESSARILY THE CASE THE STRUCTURE YOU  
3 STARTED OUT WITH SHOULD REALLY SERVE CIRM BEST GOING  
4 FORWARD. NOT EVERYTHING YOU DID WAS PERFECT, NOT  
5 EVERYTHING WAS PUT IN PLACE, AND PROPOSITION 71  
6 ISN'T PERFECT, AT LEAST NOT IN OUR JUDGMENT, SO  
7 CONSIDERING SOME CHANGES IS REALLY VERY IMPORTANT.

8 AND THE THREE SUB-BULLETS UNDER THAT  
9 SECOND POINT THERE TALK ABOUT A COHESIVE  
10 LONGITUDINAL AND INTEGRATED EXTERNAL ADVICE. ONE OF  
11 OUR MAIN RECOMMENDATIONS IS TO APPOINT AN EXTERNAL  
12 SCIENTIFIC ADVISORY COMMITTEE ON A PERMANENT BASIS  
13 TO ADVISE BOTH MANAGEMENT AND THE BOARD. I'LL TALK  
14 A LITTLE LATER ABOUT RESTRUCTURING THE GRANT  
15 APPLICATION PROCESS AND SO ON. AND WHILE, AS IT  
16 SAYS HERE, THE GOVERNANCE STRUCTURE MAY HAVE BEEN  
17 EVEN OPTIMAL IN THE INITIAL STAGE, WE HAVE SOME  
18 SUGGESTIONS ABOUT HOW YOU MIGHT CONSIDER CHANGING.

19 SO HERE ARE THE KEY AREAS OF THE REPORT.  
20 WE GO OVER THE INITIAL PROCESSES AND FUNDING MODEL  
21 THAT CIRM PUT IN PLACE. WE THEN LOOKED AT THE  
22 GOVERNANCE, ORGANIZATION, AND MANAGEMENT STRUCTURE.  
23 WE HAVE RECOMMENDATIONS THERE. WE LOOKED AT THE  
24 NATURE AND SCOPE OF THE ACCOMPLISHMENTS OF CIRM'S  
25 SCIENTIFIC PROGRAM AND, OF COURSE, THEN CIRM'S

**BARRISTERS' REPORTING SERVICE**

1 INTELLECTUAL PROPERTY. THIS IS JUST REPEATING WHAT,  
2 IN FACT, WE WERE ASKED TO DO.

3 NOW, LET'S TALK ABOUT EACH OF THESE  
4 SEPARATELY. THIS IS THE INITIAL PROCESSES AND  
5 FUNDING CONCLUSIONS. AND, AGAIN, I'M REPEATING  
6 MYSELF, BUT I THINK THIS IS IMPORTANT TO US AND  
7 IMPORTANT TO YOU, THAT AT THE TIME OF ITS  
8 ESTABLISHMENT, SEEMS LIKE A LONG TIME AGO, BUT IT'S  
9 NOT VERY LONG AGO, CIRM WAS AN EXCITING, NOVEL,  
10 IMAGINATIVE, AND GENUINE SOCIAL INNOVATION. I KNOW  
11 I'VE ALREADY SAID THAT ONCE OR TWICE. I'M SAYING IT  
12 AGAIN NOW BECAUSE I THINK WHAT HAPPENED IN THOSE  
13 INITIAL YEARS IS QUITE EXTRAORDINARY.

14 IT'S CLEAR THAT THE STABILITY OFFERED BY  
15 THE NATURE OF PROPOSITION 71, THE FUNDING MODEL THAT  
16 WAS PUT IN PLACE WAS VERY ADVANTAGEOUS FOR A NUMBER  
17 OF REASONS. I WON'T GO INTO THEM. THE ONLY POINT I  
18 WANT TO MAKE HERE IS CIRM HAS TAKEN FULL ADVANTAGE  
19 OF THESE THINGS. HAVING PUT IT IN PLACE IS ONE  
20 THING, BUT TAKING FULL ADVANTAGE OF THE STABILITY OF  
21 FUNDING, PROTECTION FROM CURRENT CONTROVERSIES AND  
22 SO ON WAS EXTRAORDINARILY IMPORTANT, AND CIRM HAS  
23 TAKEN FULL ADVANTAGE OF THIS. AND FOR THAT YOU  
24 DESERVE A GREAT DEAL OF CREDIT.

25 NOW, THERE WAS SOME INTEREST IN THE

**BARRISTERS' REPORTING SERVICE**

1 STATEMENT OF TASK REGARDING LONG-TERM ECONOMIC  
2 IMPACT OF CIRM. THE SIMPLE AND VERY UNSATISFYING  
3 CONCLUSION IS IT'S NOT POSSIBLE TO DO ANYTHING BUT  
4 SPECULATE ON THAT AT THIS MOMENT. IT'S TRUE THAT  
5 SPENDING \$300 MILLION A YEAR GENERATES ECONOMIC  
6 ACTIVITY BESIDES SCIENTIFIC ACTIVITY; BUT THAT'S  
7 ALSO TRUE THAT ANYTIME YOU SPEND \$300 MILLION  
8 THOUGHTFULLY, IT GENERATES ECONOMIC ACTIVITY. CIRM  
9 IN SOME SENSE IS NOT COMPLETELY UNIQUE IN THAT  
10 RESPECT.

11 BUT WHAT IS REALLY MUCH MORE INTERESTING,  
12 AND I THINK WHAT THE BOARD WISELY HAD IN ITS MIND,  
13 IS THE LONG-TERM ECONOMIC IMPACT WHEN SOMETHING  
14 ACTUALLY COMES OUT OF THE SCIENTIFIC PROGRAM. OUR  
15 VIEW IS IT'S JUST NOT POSSIBLE TO DO ANYTHING BUT  
16 SPECULATE ON THAT AT THE MOMENT. IT IS VERY, VERY  
17 DIFFICULT TO GENERATE AND GET ESTIMATES OF ECONOMIC  
18 RATE OF RETURN ON ANY INVESTMENT IN SCIENCE AND  
19 TECHNOLOGY, BUT ESPECIALLY ONE THAT IS BOTH IN ONE  
20 PARTICULAR POINT OF THE SCIENTIFIC FRONTIER AND  
21 WHICH IS INTERACTING WITH WORK GOING ON ELSEWHERE  
22 AROUND THE WORLD ALL THE TIME. YOU'RE HELPING YOUR  
23 COLLEAGUES ELSEWHERE, THEY ARE HELPING YOU. AND  
24 TRYING TO TEASE THAT OUT, THAT'S NOT POSSIBLE. IT  
25 MAY NEVER BE POSSIBLE, BUT IT'S CERTAINLY NOT

**BARRISTERS' REPORTING SERVICE**

1 POSSIBLE AT THIS TIME.

2 SO I THINK ONE HAS TO BE MODEST IN ANY  
3 CLAIMS ONE MAKES IN THIS REGARD. CIRM HAS ENOUGH  
4 PERFECTLY DEMONSTRABLE CLAIMS TO TALK ABOUT. AND  
5 THIS IS ONE WHICH I THINK ONE JUST HAS TO SAY IT'S  
6 SOMETHING WE'LL KNOW A LITTLE BIT MORE ABOUT IN THE  
7 FUTURE.

8 WE HAVE A RECOMMENDATION WHICH IS REALLY  
9 NOT -- WON'T BE ANY USE TO YOU. WE CALL IT A  
10 SUSTAINABILITY PLATFORM. WON'T GO OVER THE DETAILS  
11 HERE. JUST THAT WE THINK, AS I THINK CIRM IS  
12 ALREADY DEEPLY ENGAGED IN, IT'S TIME TO DEVELOP SOME  
13 SCENARIOS REGARDING HOW CIRM WILL PROCEED IN THE  
14 FUTURE UNDER DIFFERENT ASSUMPTIONS ABOUT WHAT THE  
15 STATE'S LEVEL OF SUPPORT MIGHT OR MIGHT NOT BE  
16 DURING THAT PERIOD. WE THINK THAT'S SOMETHING WHICH  
17 IS PART NOT ONLY OF INTERNAL DISCUSSION, BUT  
18 EXTERNAL DISCUSSION BECAUSE CIRM HAS ASSETS. THOSE  
19 ASSETS BELONG TO IT AND THEY NEED TO BE DEPLOYED  
20 EFFECTIVELY IN THE FUTURE REGARDLESS OF WHAT THE  
21 STATE FUNDING SCENARIO IS. AND WE THINK THAT THAT'S  
22 IMPORTANT, AND IT NEEDS TO BE SUSTAINED AND  
23 DISCUSSED WITH THE PUBLIC WHEN THE TIME COMES WHEN  
24 YOU FEEL YOUR OWN THINKING HAS MADE SUFFICIENT  
25 PROGRESS.

**BARRISTERS' REPORTING SERVICE**

1           NOW, LET'S TALK ABOUT GOVERNANCE,  
2 ORGANIZATION, AND SO ON AND SO FORTH. HERE I WILL  
3 NOT GO THROUGH THE DETAILS OF THIS AT ALL BECAUSE  
4 YOU HAVE IT ALL BEFORE YOU, AND I DON'T WANT TO TAKE  
5 THE TIME.

6           PROBABLY IF I COULD TRY TO PUT MY FINGER  
7 ON WHAT I THINK ARE THE MOST IMPORTANT ELEMENTS OF  
8 THE GOVERNANCE STRUCTURE THAT WE THINK DESERVES SOME  
9 ATTENTION AND ARE RELATED TO SOME OF THE ISSUES WE  
10 WANT TO BRING UP WITH RESPECT TO SCIENTIFIC REVIEW  
11 AND SO ON IS, FIRST OF ALL, WE THINK IT'S HELPFUL TO  
12 SEPARATE MANAGEMENT FROM OVERSIGHT. IN OUR VIEW,  
13 THE KEY FUNCTION OF THIS BOARD IS TO PROVIDE  
14 LONG-TERM STRATEGIC PLANNING, LONG-TERM STRATEGIC  
15 VIEWS OF WHAT PROGRAMS YOU WANT TO CARRY OUT, AND  
16 PROVIDE INDEPENDENT OVERSIGHT OF MANAGEMENT.

17           TO THE EXTENT THE BOARD BECOMES FULLY  
18 INVOLVED IN MANAGEMENT, YOU LOSE YOUR CAPACITY TO  
19 HAVE ANY INDEPENDENT OVERSIGHT OF WHAT'S GOING ON.  
20 WE THINK THE COMMITTEE, THAT INDEPENDENT OVERSIGHT  
21 IS REALLY A CRITICAL ASPECT OF THIS GOING FORWARD.  
22 AND SO WE THINK THAT, TO THE EXTENT THAT YOU COME TO  
23 BELIEVE IT'S POSSIBLE OR DESIRABLE, TO THE EXTENT  
24 YOU CAN SEPARATE YOURSELF FROM THE ONGOING  
25 MANAGEMENT OF CIRM, I THINK EVERYONE IS WELL SERVED

## BARRISTERS' REPORTING SERVICE

1 AND FOCUSED ON THE VERY LONG-TERM STRATEGIC  
2 PLANNING, NOT EVEN VERY LONG-TERM STRATEGIC PLANNING  
3 GENERALLY, WHICH PROGRAMS YOU WANT TO SPONSOR, BUT  
4 NOT TO BE INVOLVED IN THE DAY-TO-DAY MANAGEMENT.

5 PROBABLY ONE OF THE IMPLICATIONS OF THAT  
6 IS THE COMPOSITION OF THE WORKING GROUPS. RIGHT NOW  
7 MEMBERS OF THE BOARD, NOT ALL MEMBERS OF THIS BOARD,  
8 MEMBERS OF THE BOARD ARE FUNCTIONING AS MEMBERS OF  
9 THE WORKING GROUP. SO THE MEMBERS OF THE BOARD ARE  
10 INTIMATELY INVOLVED IN MANAGEMENT, AND IT'S VERY  
11 HARD TO PROVIDE INDEPENDENT OVERSIGHT OF THOSE  
12 WORKING GROUPS AND THE RECOMMENDATIONS THEY COME AND  
13 BRING TO YOU REGARDING FUNDING AND SO ON. AND SO  
14 OUR VIEW IS MEMBERS OF THIS BOARD OUGHT NOT TO SERVE  
15 ON THE WORKING GROUPS. THE WORKING GROUPS ARE THE  
16 HEART OF THE MANAGEMENT STRUCTURE AND REPORTS  
17 THROUGH THEM, AND, OF COURSE, RESPONSIBLE TO THE  
18 BOARD ULTIMATELY.

19 WE ALSO THINK THAT THE PATIENT ADVOCACY  
20 COMMUNITY PLAYS A VERY IMPORTANT ROLE IN CIRM'S  
21 OPERATIONS. AND THAT SHOULD CERTAINLY BE CONTINUED  
22 AND EVEN ENHANCED BY, IN OUR VIEW, ONE WAY TO DO  
23 THAT IS TO HAVE ADDITIONAL -- NOT HAVE BOARD MEMBERS  
24 SERVE IN THE WORKING GROUPS, BUT PROVIDE AN EQUAL  
25 NUMBER OF PATIENTS FROM THE PATIENT ADVOCACY

**BARRISTERS' REPORTING SERVICE**

1 COMMUNITY WHO WOULD BE APPOINTED TO THESE WORKING  
2 GROUPS, SO THEY WOULD CONTINUE TO HAVE THE INPUT  
3 WHICH WE THINK IS HIGHLY APPROPRIATE REGARDING THE  
4 ONGOING GRANT REVIEW PROCESS. SO --

5 MS. LANSING: I'M SORRY I'M THE ONLY ONE  
6 THAT HAS ALL THESE QUESTIONS. SO WHAT YOU ARE  
7 SUGGESTING, I WANT TO BE CLEAR I UNDERSTAND THIS  
8 BECAUSE I DIDN'T GET THIS FROM THE REPORT, YOU'RE  
9 SUGGESTING NOT TO HAVE PATIENT ADVOCATES ON ALL THE  
10 COMMITTEES, BUT THAT THEY SHOULDN'T BE BOARD MEMBERS  
11 AND THEY WOULD STILL BE VOTING MEMBERS THEN?

12 DR. SHAPIRO: YES. JUST AS IT IS NOW,  
13 JUST THAT YOU HAVE OTHER PEOPLE THAT ARE PATIENT  
14 ADVOCATES -- FROM THE PATIENT ADVOCACY COMMUNITY ON  
15 THIS BOARD, WHICH CERTAINLY SHALL CONTINUE.

16 MS. LANSING: JAMES, IS THAT PART -- MAYBE  
17 THIS ISN'T THE PLACE TO DO IT. IF YOU WANT TO, WE  
18 CAN WAIT ON ALL THIS. IS THAT CONSTITUTIONALLY  
19 PERMISSIBLE FOR US?

20 MR. HARRISON: I'LL JUST STATE BRIEFLY  
21 THAT WE'RE PREPARING AN ANALYSIS OF ALL OF THE  
22 RECOMMENDATIONS TO IDENTIFY WHICH COULD BE  
23 ACCOMPLISHED BY POLICY, WHICH WOULD REQUIRE  
24 LEGISLATION, AND WHICH WOULD REQUIRE ANOTHER VOTE OF  
25 THE PEOPLE.



**BARRISTERS' REPORTING SERVICE**

1 I'LL JUST STATE GENERALLY THE RULE IN  
2 CALIFORNIA UNDER THE CONSTITUTION IS THAT AN  
3 INITIATIVE CAN ONLY BE AMENDED BY ANOTHER VOTE OF  
4 THE PEOPLE UNLESS IT EXPRESSLY PERMITS AMENDMENT BY  
5 THE LEGISLATURE. PROP 71 DOES PERMIT AMENDMENT BY  
6 THE LEGISLATURE TO FURTHER THE PURPOSES OF THE GRANT  
7 AND LOAN PROGRAM. THERE ARE A NUMBER OF CASES THAT  
8 ADDRESS THE SCOPE OF THE LEGISLATURE'S AUTHORITY  
9 UNDER SIMILAR CIRCUMSTANCES. SO WE WILL PROVIDE YOU  
10 WITH A DETAILED ANALYSIS RELATING TO EACH OF THE  
11 RECOMMENDATIONS AND EXPLAINING WHY IT COULD EITHER  
12 BE ACCOMPLISHED BY A POLICY, LEGISLATION, OR,  
13 INSTEAD, WOULD REQUIRE ANOTHER BALLOT MEASURE.

14 MS. LANSING: THANK YOU. THAT'S SO  
15 IMPORTANT FOR US BECAUSE I THINK THESE ARE ALL  
16 REALLY INTERESTING, BUT IF OUR HANDS ARE TIED OR IF  
17 THEY'RE NOT TIED, THAT MAKES OUR WORK --

18 DR. SHAPIRO: FULLY UNDERSTAND AND  
19 APPRECIATE THAT, AND THERE MAY BE OTHER ISSUES THAT  
20 COME UP YOU WANT TO DISCUSS.

21 MS. LANSING: THERE MAY BE WAYS OF  
22 ENHANCING THINGS EVEN IF OUR HANDS ARE TIED.

23 DR. SHAPIRO: WE ALSO THINK, AGAIN, TRYING  
24 TO HIT ONLY THE MORE IMPORTANT PARTS OF THE  
25 GOVERNANCE, WE ALSO THINK IT WOULD BE HELPFUL TO

**BARRISTERS' REPORTING SERVICE**

1 HAVE MORE INDEPENDENT MEMBERS OF THE BOARD. WE  
2 DON'T HAVE A PARTICULAR RECOMMENDATION, BUT, QUITE  
3 FRANKLY, THE MAIN SENSE OF WHAT WE HAVE IS YOU  
4 SHOULD INCREASE THE NUMBER OF INDEPENDENT MEMBERS OF  
5 THE BOARD WHO DON'T HAVE SUCH A DIRECT STAKE IN THE  
6 OUTCOME OF THE BOARD'S DECISIONS.

7 AND THAT'S SOMETHING WE JUST HOPE YOU WILL  
8 CONSIDER. HOW TO DO IT, OVER WHAT TIME TO DO IT,  
9 WHAT THE NUMBERS SHOULD ACTUALLY BE IS SOMETHING, OF  
10 COURSE, YOU WILL HAVE SOME INPUT ON.

11 CHAIRMAN THOMAS: WHEN WE'RE TRYING TO  
12 THINK ABOUT THE NOTION OF INDEPENDENT MEMBERS, IN  
13 THE CONTEXT OF CONFLICT OF INTEREST, GENERALLY THAT  
14 REFERS TO THOSE WITH POTENTIAL ECONOMIC INTEREST.  
15 ARE YOU INCLUDING THE PATIENT ADVOCATES ON THE BOARD  
16 FOR THE PURPOSES OF THAT CONFLICT OF INTEREST  
17 ANALYSIS?

18 DR. SHAPIRO: YES, WE DO. WE THINK  
19 FINANCIAL CONFLICT OF INTEREST IS NOT THE ONLY KIND  
20 OF CONFLICT. I WANT TO BE CLEAR. CONFLICT OF  
21 INTEREST DOES NOT DISQUALIFY SOMEONE FROM BEING ON  
22 THE BOARD. THE ONLY THING THAT'S IMPORTANT IS THE  
23 BOARD HAVE ITS OWN PROCEDURES ON MANAGING CONFLICT  
24 OF INTEREST. AND WE THINK ONE OF THE WAYS OF DOING  
25 THAT IS BY INCREASING THE NUMBER OF INDEPENDENT

## BARRISTERS' REPORTING SERVICE

1 MEMBERS ON THE BOARD, BUT YOU MAY HAVE OTHER WAYS  
2 YOU WANT TO MANAGE IT. SO THAT I UNDERSTAND YOU'RE  
3 NOT GOING TO HAVE ON THE BOARD SOMEONE WHO HAS NO  
4 INTEREST AT ALL IN WHAT YOU DO. THAT'S SORT OF  
5 SILLY. SO IF YOU TAKE THIS OUT TO SORT OF THE  
6 ULTIMATE THING, YOU GET TO SOMETHING WHICH IS PRETTY  
7 SILLY. BUT I THINK THE KIND OF CONFLICTS THAT EXIST  
8 RIGHT NOW ARE VERY DIRECT AND VERY MAJOR, AND SO  
9 THEY HAVE TO BE HANDLED IN SOME WAY.

10 YOU WILL HAVE TO DECIDE IN WHAT WAY YOU  
11 WANT TO HANDLE THEM. AND OUR JUDGMENT IS THAT IT  
12 WILL BE VERY HEALTHY FOR THE ORGANIZATION TO JUST  
13 HAVE MORE INDEPENDENT MEMBERS AS ONE WAY OF DEALING  
14 WITH THIS ISSUE. THERE MAY BE OTHER WAYS OF DEALING  
15 WITH IT ALSO.

16 MR. TORRES: ON THAT ISSUE I THINK ON A  
17 TELEPHONE CONVERSATION WE HAD EARLIER IN THE  
18 PRELIMINARY REVIEW, I REFERENCED THIS SUBCONSCIOUS  
19 BIAS THAT WAS IN THE REPORT THAT WAS AFFIRMED, AS  
20 THE REPORT SAID, BY BEHAVIORAL AND PSYCHOLOGICAL  
21 STUDIES. I NEVER GOT A COPY OF THOSE STUDIES, AND  
22 I'M TRYING TO FIGURE OUT WHAT DID YOU ALL HAVE IN  
23 MIND AS TO HOW TO MEASURE THAT SUBCONSCIOUS BIAS  
24 THAT IS NOT RELATED TO FINANCIAL CONFLICT OF  
25 INTEREST, BUT TO HOW YOU REFERENCE CERTAIN PEOPLE

**BARRISTERS' REPORTING SERVICE**

1 WHO HAVE DISEASES. FOR EXAMPLE, I'M A COLON CANCER  
2 SURVIVOR. DOES THAT MEAN I HAVE AN UNCONSCIOUS BIAS  
3 TO SUPPORT SCIENTIFIC GRANTS THAT DEAL WITH COLON  
4 CANCER? MY RECORD SHOWS THAT I HAVE NOT.

5 SO HOW DO I MEASURE THAT, WHETHER I'M  
6 ALLOWED TO CONTINUE TO SERVE AS A PATIENT ADVOCATE,  
7 IF I HAVE A, QUOTE, PSYCHOLOGICAL, BEHAVIORAL,  
8 SUBCONSCIOUS BIAS AS THE REPORT ALLUDES TO?

9 DR. SHAPIRO: MANY CONFLICTS OF INTEREST  
10 COULD BE HANDLED BY DISCLOSURE, NOT NECESSARILY BE  
11 HANDLED BY HAVE YOU NOT SERVE ON THE BOARD. I'M NOT  
12 SUGGESTING AND WE'RE SUGGESTING THAT PEOPLE WITH ANY  
13 CONFLICT, WHETHER FINANCIAL OR OTHERWISE, NOT BE  
14 ELIGIBLE FOR THIS BOARD. WE JUST THINK IT'S  
15 IMPORTANT FOR THE BOARD TO MANAGE THIS CAREFULLY AND  
16 THOUGHTFULLY, HAVE INTERNAL DISCUSSIONS ON IT. AND  
17 I KNOW THAT WE PROMISED AND I'M GOING TO SEND YOU  
18 SOME REFERENCES.

19 MR. TORRES: THANK YOU AGAIN BECAUSE  
20 YOU'VE BEEN VERY FORTHCOMING IN ALL THE  
21 CONVERSATIONS THAT YOU AND I HAVE HAD. BUT THE FACT  
22 THAT, IN YOUR OPINION, THAT I DISCLOSED EARLY ON  
23 BEFORE I WAS ELECTED VICE CHAIR OF THIS BOARD THAT I  
24 AM A COLON CANCER SURVIVOR MIGHT BE SUFFICIENT TO  
25 DEAL WITH THE PERCEIVED CONFLICT OF INTEREST.

**BARRISTERS' REPORTING SERVICE**

1 DR. SHAPIRO: MY OWN VIEW, AS LONG AS  
2 THOSE DISCUSSIONS ARE OPEN AND DISCUSSED AMONGST  
3 YOURSELVES, THE BOARD, THAT'S JUST FINE. BUT I DO  
4 THINK THERE IS NO SUBSTITUTE FOR HAVING, THIS IS MY  
5 OWN VIEW, HAVING MORE INDEPENDENT MEMBERS OF THE  
6 BOARD WHO DON'T HAVE SUCH A DIRECT CONFLICT. I'M  
7 NOT TALKING ABOUT PATIENT ADVOCATES NECESSARILY, BUT  
8 PEOPLE WHO ARE DIRECT RECIPIENTS OF GRANTS.

9 MR. SHEEHY: I GUESS I DO WANT TO KIND OF  
10 DRILL DOWN ON THIS PATIENT ADVOCATE ISSUE BECAUSE  
11 THE REPORT SAYS THAT THERE'S AN INHERENT CONFLICT  
12 WITH THE PATIENT ADVOCATES. I KIND OF SCRATCH MY  
13 HEAD BECAUSE I AM FROM THE HIV COMMUNITY, AND THAT'S  
14 WHY I WAS PUT ON THIS BOARD. YOU KNOW, I LOST MY  
15 DAD LAST WEEK TO ALZHEIMER'S. I LOST MY MOM TO  
16 OVARIAN CANCER. IF I WERE TO QUEUE UP WHAT WAS MOST  
17 IMPORTANT TO ME, IT'S A HARD RACE TO SAY WHAT'S  
18 TOUGHER TO WATCH, YOUR MOTHER DIE FROM OVARIAN  
19 CANCER OR YOUR FATHER FROM ALZHEIMER'S.

20 I GUESS WHAT YOU'RE TALKING ABOUT IS THAT  
21 WE SHOULD ALL TALK ABOUT BEFORE WE ENGAGE IN ANY  
22 DISCUSSION ABOUT HOW OUR FAMILY MEMBERS, OUR  
23 IMMEDIATE FAMILY MEMBERS, HAVE BEEN IMPACTED BY THE  
24 VARIOUS DISEASES AND CONDITIONS THAT WE MAY BE  
25 VOTING ON. AND I WONDERED SHOULD WE ALL HAVE A

**BARRISTERS' REPORTING SERVICE**

1 DISCLOSURE THAT INCLUDES THE PERSONAL HEALTH  
2 INFORMATION ABOUT OURSELVES, ABOUT OUR FAMILY  
3 MEMBERS? AND SHOULD THAT ALSO PERTAIN TO STAFF?  
4 I'VE HAD VERY INTERESTING DISCUSSIONS WITH STAFF  
5 ABOUT THE IMPACT OF DISEASE ON THEM. AND I DON'T  
6 KNOW WHERE YOU DRAW THE CIRCLE.

7 IT'S ALMOST -- IT'S HARD FOR ME TO SEE HOW  
8 YOU MIGHT SAY I WOULD BE CONFLICTED WITH HIV WHERE I  
9 REALLY DO HAVE A FAIRLY REASONABLE GRASP OF THE  
10 SCIENCE AND WHAT'S GOING ON IN THE FIELD. AND SO  
11 I'M MUCH MORE LIKELY TO BE RATIONAL IN MY  
12 DECISION-MAKING AND, IN FACT, I'VE NOT SUPPORTED  
13 GRANTS IN HIV THAT I DIDN'T THINK MOVED THE SCIENCE  
14 FORWARD. WHEREAS, IN ANOTHER DISEASE, PERHAPS  
15 ALZHEIMER'S, WHICH I CAN'T CLAIM A GREAT DEAL OF  
16 KNOWLEDGE ABOUT THE PROCESSES AND THE STATE OF THE  
17 SCIENCE, I MIGHT BE MORE PRONE TO BE EMOTIVE. AM I  
18 JUST DISQUALIFIED AS A PATIENT ADVOCATE BECAUSE  
19 THERE'S SOME SUGGESTION THAT PATIENT ADVOCATES -- I  
20 JUST DON'T UNDERSTAND WHAT YOU SEE THE ROLE OF  
21 PATIENT ADVOCATES IS IN THIS WHOLE PROCESS BECAUSE  
22 WE HAVE SOMETHING, AND I TRIED TO EXPLAIN TO YOU,  
23 YOU GAVE ME THE OPPORTUNITY, THE POWER AND THE  
24 IMPACT.

25 IT SEEMS LIKE ONE OF YOUR KEY

**BARRISTERS' REPORTING SERVICE**

1 RECOMMENDATIONS IS TO DECONSTRUCT THE ROLE OF THE  
2 PATIENT ADVOCATES IN THIS ENTERPRISE. JUST  
3 EVERYBODY TALKS ABOUT HIV AS A MODEL. AND WE DIDN'T  
4 CREATE THAT MODEL. WE DIDN'T FURTHER THAT MODEL BY  
5 TRYING TO CUT THE LEGS OFF PATIENT ADVOCATES AT THE  
6 FIRST OPPORTUNITY. I THINK OTHER PEOPLE HAVE KIND  
7 OF TAKEN THAT MODEL AND MOVED IT FURTHER.

8 I HAVE A CLOSE FAMILY MEMBER SUFFERING  
9 FROM CANCER THEY INITIALLY DIAGNOSED AS BREAST  
10 CANCER. SHE WAS ACTUALLY DISAPPOINTED IT WASN'T  
11 BREAST CANCER BECAUSE OF THE INCREDIBLE WORK IN THE  
12 BREAST CANCER COMMUNITY IN ADVANCING THERAPIES. AND  
13 THERE'S SEVERAL PHENOMENAL GROUPS WORKING IN BREAST  
14 CANCER. IT WOULD SEEM TO ME THE FUNDING, THE  
15 ADVANCEMENT OF SCIENCE THAT TAKES PLACE WITH THE  
16 ACTIVE, DYNAMIC PARTICIPATION OF PATIENT ADVOCATES  
17 SHOULD BE SOMETHING THAT THE INSTITUTE OF MEDICINE,  
18 THE BIOMEDICAL RESEARCH COMMUNITY AS A WHOLE WOULD  
19 WANT TO FURTHER INSTEAD OF TRIP.

20 THERE'S SUCH A STRONG RELATIONSHIP BETWEEN  
21 THE ABILITY OF OBTAINING FUNDING FOR ALL THE WORK  
22 THAT WE'RE DOING AND THE HEAVY INVOLVEMENT,  
23 COMMITTED, PASSIONATE WORK OF PATIENT ADVOCATES. I  
24 JUST -- I SAID IN THE REVIEW GROUP, I CAN'T TELL YOU  
25 HOW MANY TIMES REVIEWERS HAVE THANKED US FOR BEING

**BARRISTERS' REPORTING SERVICE**

1 THERE, FOR OFFERING OUR INPUT. AND EVEN THOUGH  
2 SOMETIMES THE STUFF WE SAY ISN'T RIGHT TO THE POINT  
3 AND IT'S NOT SCIENTIFICALLY ACCURATE, WHAT WE BRING  
4 IS A REAL-WORLD KIND OF DEALING WITH THE SUFFERING  
5 THAT THESE DISEASES AND CONDITIONS, IT'S A REMINDER  
6 OF THE REALITY, RIGHT, THAT FAMILIES AND INDIVIDUALS  
7 ACROSS THIS COUNTRY LIVE WITH EVERY DAY, THE  
8 TERRIBLE, HORRIBLE REALITY.

9 AND A LOT OF THESE SCIENTIFIC DISCUSSIONS,  
10 WHICH I THINK IS WHERE YOU ARE KIND OF SUGGESTING WE  
11 GO, ALMOST GETS ESOTERIC, ALMOST FAIRY FEEL LIKE,  
12 WELL, THEY DIDN'T WRITE A GOOD PROPOSAL, THEY DIDN'T  
13 DOT A T, THEY DIDN'T CROSS AN I, INSTEAD OF, LIKE,  
14 THINKING THAT THEY'RE REAL PEOPLE WHOSE LIVES COULD  
15 BE IMPACTED BY THE OUTCOMES OF THIS SCIENCE.

16 AND I JUST DON'T KNOW HOW YOU CAN  
17 RECONCILE EVERYTHING YOU SAID IN YOUR FIRST SLIDE  
18 ABOUT THE TREMENDOUS WORK OF PROP 71 AND CIRM AND  
19 THE DEFENESTRATION OF THE PATIENT ADVOCATES THAT YOU  
20 HAVE RECOMMENDED IN THIS PROPOSAL.

21 DR. SHAPIRO: WELL, FIRST OF ALL, VERY  
22 SORRY TO HEAR ABOUT YOUR FATHER. I REMEMBER YOUR  
23 TESTIMONY TO OUR COMMITTEE VERY WELL. I DON'T  
24 THINK -- I DON'T RECOGNIZE OUR RECOMMENDATIONS THE  
25 WAY YOU DESCRIBE THEM. WE HAD NO INTENTION TO



**BARRISTERS' REPORTING SERVICE**

1 REDUCE THE ROLE OF PATIENT ADVOCATES WHATSOEVER. IN  
2 FACT, A NUMBER OF PATIENT -- IF YOU WERE ADOPT EVERY  
3 SINGLE ONE OF OUR RECOMMENDATIONS, THE NUMBER OF  
4 PATIENT ADVOCATES WORKING WITHIN THE CIRM  
5 ORGANIZATION WOULD, IN FACT, INCREASE, NOT DECREASE.  
6 IT'S THE QUESTION OF JUST WHAT ROLE THEY WOULD HAVE  
7 IF THEY'RE ON THE BOARD AND WHAT ROLE THEY WOULD  
8 HAVE IN THE WORKING GROUPS.

9 SO, LASTLY, WE DIDN'T HAVE ANY NOTION THAT  
10 PATIENT ADVOCATES SHOULD BE EXPELLED FROM THE  
11 ORGANIZATION OR THEY SHOULD BE RELEGATED TO SOME  
12 UNIMPORTANT. THAT WAS NOT OUR INTENTION AT ALL. I  
13 DON'T WANT TO SORT OF ARGUE THIS OUT NOW, BUT I'M  
14 JUST SAYING THAT THAT WAS CERTAINLY NOT OUR  
15 INTENTION. I DON'T THINK THIS IS THE RESULT OF OUR  
16 RECOMMENDATION.

17 MS. LANSING: JEFF, AND, AGAIN, I'M VERY  
18 CURIOUS AS TO THE CONSTITUTIONALITY OF ALL THIS.  
19 THAT'S REALLY SUCH A KEY THING. I WANT TO SORT OF  
20 BE THE HENRY KISSINGER IN THIS, I DON'T KNOW WHAT  
21 THE WORD IS, MEDIATOR IN THIS BECAUSE I THINK  
22 EVERYTHING JEFF SAID IS TRUE. SPEAKING AS THE  
23 CANCER PATIENT ADVOCATE, I THINK THAT EVERYONE  
24 WORKED VERY HARD TO GET THIS BILL PASSED. AND A  
25 HUGE COMPONENT OF WHY IT WAS PASSED WAS ALL THE

**BARRISTERS' REPORTING SERVICE**

1 DISEASE GROUPS COMING TOGETHER AND ALL THE PATIENT  
2 ADVOCATES COMING TOGETHER TO GET THIS PASSED.

3 AND WHEN WE TOOK OUR OATH, ALL OF US,  
4 NEVER SAID THAT WE REPRESENT THE CANCER COMMUNITY OR  
5 THE HIV. WE REPRESENT THE CITIZENS OF CALIFORNIA.  
6 AND I THINK EVERY ONE US OF RECOGNIZES THAT A  
7 BREAKTHROUGH IN ALZHEIMER'S CAN LEAD TO A  
8 BREAKTHROUGH IN CANCER, CAN LEAD TO A BREAKTHROUGH  
9 IN ANY OTHER DISEASE. THAT'S WHY I ASKED THE  
10 QUESTION EARLIER ON BECAUSE WHEN I FIRST READ THE  
11 REPORT, I SORT OF GOT THE SAME FEELING THAT YOU DO.

12 WHAT I THINK THE REPORT IS SUGGESTING IS  
13 NOT THAT THE PATIENT ADVOCATES NOT CONTINUE TO SIT  
14 ON THE BOARD AND NOT EVEN THAT THEY NOT PARTICIPATE,  
15 BUT THAT WE GET INDEPENDENT PATIENT ADVOCATES TO SIT  
16 IN ON THE COMMITTEES.

17 DR. SHAPIRO: DIFFERENT PEOPLE; THAT IS,  
18 PATIENT ADVOCATES ON THE BOARD AS CURRENTLY IS THE  
19 CASE. THERE'D BE ANOTHER SET OF PATIENT ADVOCATES  
20 WORKING WITH THE WORKING GROUPS. I DON'T REALLY  
21 WANT TO STAND HERE AND DEBATE THIS, BUT I JUST WANT  
22 TO SAY THAT IF WE MADE A MISTAKE, WE MADE A MISTAKE.  
23 BUT IT WAS CERTAINLY NOT OUR INTENTION TO DECREASE  
24 THE ROLE OF THE PATIENT ADVOCATES. NOT OUR  
25 INTENTION AT ALL. I UNDERSTAND EVERYTHING YOU'RE

**BARRISTERS' REPORTING SERVICE**

1 SAYING.

2 MS. LANSING: I'M NOT SURE WE CAN DO THIS,  
3 BY THE WAY, BUT I THINK THE SUGGESTION, IN ALL  
4 FAIRNESS, WAS WE WOULD STILL BE ON THE BOARD, BUT  
5 THE WORKING GROUPS WOULD BE COMPRISED OF INDEPENDENT  
6 PATIENT ADVOCATES FROM EACH OF THE DISEASE GROUPS.  
7 NOW, WHETHER WE THINK THAT'S A GOOD SUGGESTION OR  
8 NOT IS WHAT WE'RE GOING TO TALK ABOUT IN THE  
9 WORKSHOP.

10 THE THING THAT I THINK SOME OF US ARE  
11 STRUGGLING WITH, AND, AGAIN, I THINK YOU'VE DONE AN  
12 EXCELLENT JOB WITH THIS REPORT, IT IS NOT YOUR  
13 PROBLEM AS TO WHAT WE CAN AND CAN'T DO. YOU'RE  
14 SUPPOSED TO BE OBJECTIVE AND JUST LOOK AT IT. AND I  
15 THINK THAT ALL YOU'RE HEARING FROM PROBABLY EVERYONE  
16 IS GREAT RESPECT FOR WHAT YOU'VE DONE. I REALLY  
17 WANT TO SAY THAT, AND I THINK IT'S A VERY GOOD  
18 REPORT, AND I THINK YOU KIND OF DID IT IN A WAY THAT  
19 WAS VERY UNDERSTANDABLE FOR THOSE OF US WHO ARE  
20 PATIENT ADVOCATES OR FOR THOSE OF US WHO ARE  
21 CONFLICTED AND RUN A HOSPITAL, WHATEVER, OR  
22 INSTITUTION.

23 THE CONFLICT THAT YOU'RE FACING IS DO YOU  
24 COMPROMISE THIS ORGANIZATION BY NOT HAVING THE BEST  
25 PATIENT ADVOCATES AND THE BEST RUNNERS OF THE

**BARRISTERS' REPORTING SERVICE**

1 HOSPITALS AND ASSUME THAT THEY CAN BE OBJECTIVE.

2 AND THAT'S THE ETERNAL QUESTION.

3 DR. SHAPIRO: THE CONFLICT OF INTEREST, I  
4 WANT TO REPEAT SOMETHING I SAID BEFORE BECAUSE I  
5 THINK IT'S A VERY IMPORTANT ISSUE. CONFLICT OF  
6 INTEREST IS NOT SOMETHING THAT SHOULD SOMEHOW BAR  
7 YOU FROM PARTICIPATING IN THIS ORGANIZATION IN ANY  
8 WAY AS LONG AS THE CONFLICTS ARE OPEN AND MANAGED IN  
9 SOME EFFECTIVE WAY.

10 AND THE ISSUE YOU RAISED, WHICH IS A VERY  
11 IMPORTANT ISSUE, I'M VERY GLAD YOU RAISED IT, WAS  
12 YOU HAVE A MEDICAL RECORD, YOUR FAMILY HAS A MEDICAL  
13 RECORD. WHAT HAS TO BE REVEALED ABOUT THAT? THAT'S  
14 A VERY DIFFICULT ISSUE BECAUSE YOU HAVE PRIVACY  
15 ISSUES AND YOU HAVE CONFLICT OF INTEREST ISSUES. I  
16 THINK THERE ARE WAYS TO HANDLE THAT. AND I THINK  
17 IT'S NOT NECESSARY THAT ALL THESE BE REVEALED IN  
18 PUBLIC. THEY CAN BE REVEALED THROUGH THE GENERAL  
19 COUNSEL AND SO ON AND SO FORTH. THERE ARE LOTS OF  
20 WAYS OF HANDLING THAT. I THINK THAT'S A VERY  
21 IMPORTANT ISSUE, AND I'M GLAD YOU RAISED IT. BUT  
22 NONE OF THESE ISSUES BAR PEOPLE FROM PARTICIPATING.  
23 THAT'S MY POINT.

24 MS. LANSING: AND THE FACT THAT YOU HAVE  
25 THAT CONFLICT OF INTEREST, AND THIS IS WHAT I WAS

**BARRISTERS' REPORTING SERVICE**

1 TRYING TO CONCLUDE WITH, THE FACT THAT YOU ARE A  
2 PATIENT ADVOCATE, YOU ARE A PATIENT ADVOCATE BECAUSE  
3 YOU HAVE SPENT IN ALL CASES A LIFETIME OF COMMITMENT  
4 TO TRYING TO FIND A CURE OR MAKE IT A CHRONIC  
5 DISEASE. SO YOU BRING A BREADTH OF KNOWLEDGE, YOU  
6 BRING A BREADTH OF PASSION, AND A BREADTH OF  
7 COMMITMENT. AND THAT YOU DON'T WANT TO DILUTE, AND  
8 HOW YOU BALANCE THAT IS THE CHALLENGE THAT WE HAVE  
9 TO FACE.

10 DR. SHAPIRO: I AGREE WITH WHAT YOU SAY.

11 CHAIRMAN THOMAS: MR. SHEEHY AND DR.  
12 PRIETO, DEAN POMEROY, AND I SAW ANOTHER HAND OVER  
13 THERE, DR. PRICE.

14 MR. SHEEHY: FIRST OF ALL, I HAVE A  
15 PROBLEM WITH THE IDEA THAT THERE'S AN INHERENT  
16 CONFLICT OF INTEREST IN DISEASE ADVOCATES. THE  
17 WHOLE REASON THAT WE'RE VALUABLE TO HAVE IN THE ROOM  
18 IS THAT WE BRING A SPECIALIZED EXPERIENCE WITH THE  
19 DISEASES UNDER DISCUSSION. WE REALLY BRING THE  
20 VOICE OF THE CONSUMER. AND SO TO SAY THAT YOU MIGHT  
21 SAY THAT I WOULDN'T BE ABLE TO PARTICIPATE OR THAT I  
22 HAVE A CONFLICT OF INTEREST IN AN HIV GRANT, WHICH  
23 THAT IS THE WHOLE REASON THAT I BRING VALUE TO THE  
24 DISCUSSION, IS TROUBLING TO ME. AND I DON'T THINK  
25 YOU FIND THAT REFLECTED IN OTHER AREAS.

**BARRISTERS' REPORTING SERVICE**

1 THE FDA, FOR INSTANCE, DOESN'T ASK FOR  
2 NONDISEASE-SPECIFIC PATIENT ADVOCATES. THEY DON'T  
3 ASK A CANCER PATIENT ADVOCATE TO SIT IN ON THE  
4 APPROVAL OF AN HIV THERAPEUTIC. IT HAS TO BE  
5 SOMEONE WHO'S LIVING WITH HIV.

6 SO I DON'T SEE ANY EVIDENCE BASIS. YOU'VE  
7 HAD NINE YEARS OF THIS BOARD AND THE WORKING GROUP.  
8 I SEE NO EVIDENCE. WE'VE BEEN AUDITED BY THE  
9 CONTROLLER'S OFFICE AND THE BUREAU OF AUDITS AT THE  
10 STATE, AND THEY SAID WE HAD BETTER CONFLICT OF  
11 INTEREST RULES THAN THE NIH. THERE'S NO EVIDENCE  
12 BASIS FOR ALLEGING CONFLICT OF INTEREST AGAINST  
13 PATIENT ADVOCATES, MYSELF SPECIFICALLY.

14 NO. 2, WHERE THE WORKING GROUP IS  
15 CONCERNED, I THINK YOU VERY FUNDAMENTALLY  
16 MISUNDERSTAND WHAT IS SO UNIQUE ABOUT PROP 71 ABOUT  
17 OUR ENTERPRISE. IT'S ONE THING TO BE A PATIENT  
18 ADVOCATE, AND I ACTUALLY GAVE YOU -- THIS HAS BEEN  
19 PUBLISHED IN *NATURE MEDICINE*. IT'S NOT JUST A SEAT  
20 AT THE TABLE. IT'S A REAL SEAT AT THE TABLE.

21 I GUESS *NATURE MEDICINE* FELT IT WAS  
22 COMPELLING ENOUGH TO PUBLISH IT. I GUESS IT DIDN'T  
23 MAKE IT INTO YOUR EVIDENCE BASIS FOR MAKING THESE  
24 KINDS OF -- SUGGESTING THESE KINDS OF CHANGES. BUT  
25 THE FACT THAT WE CAN HEAR THE DISCUSSION AND THEN

## BARRISTERS' REPORTING SERVICE

1 COME HERE TO THE BOARD AND VOTE ON THOSE  
2 RECOMMENDATIONS IS THE KEY ELEMENT IN THE INFLUENCE  
3 AND POWER THAT PATIENT ADVOCATES CAN HAVE. WE'RE  
4 NOT ALL POWERFUL. WE'RE A MINORITY ON THE BOARD.  
5 WE CAN'T MOVE ANYTHING OUT OF THE GRANTS WORKING  
6 GROUP WITHOUT SUPPORT FROM SCIENTIFIC MEMBERS OF THE  
7 GRANTS WORKING GROUP. WE'VE NEVER MOVED ANYTHING  
8 THAT DID NOT HAVE AND, IN FACT, WE GAVE YOU  
9 DOCUMENTATION THAT SHOWED WE'VE NEVER MOVED ANYTHING  
10 INDIVIDUALLY HERE AT THE BOARD. ALL THE THINGS THAT  
11 WE HAVE GOTTEN -- THAT PATIENT ADVOCATES HAVE  
12 ADVOCATED FOR, THE GRANTS HAVE HAD SUBSTANTIAL  
13 SUPPORT FROM SCIENTIFIC MEMBERS OF THE BOARD.

14 SO I REALLY WAS HOPING FOR AN  
15 EVIDENCE-BASED ANALYSIS OF WHAT WE DO. AND I'M  
16 REALLY HAVING TROUBLE FINDING ANY EVIDENCE. AND THE  
17 EVIDENCE THAT EXISTS IN OTHER SPHERES SUGGESTS THAT  
18 PATIENT ADVOCATES PLAY AN IMPORTANT ROLE, ESPECIALLY  
19 IN ADVOCATING WITHIN THE CONTEXT OF THE VERY DISEASE  
20 FROM WHICH THEY HAVE BEEN DRAWN TO THE SEAT AT THE  
21 TABLE, AND HERE YOU SEEM TO SAY THAT'S NOT A GOOD  
22 IDEA. AND I JUST -- IF YOU HAD SOME EVIDENCE HERE,  
23 I WOULD BE MORE COMFORTABLE, BUT THE ABSENCE OF  
24 EVIDENCE AND JUST RHETORIC AND, FRANKLY, ALLEGATIONS  
25 I FIND VERY TROUBLING.

**BARRISTERS' REPORTING SERVICE**

1 DR. PRIETO: THANK YOU. I WAS GOING TO  
2 SAVE FOR THE END, BUT NOW THAT WE'VE ENGAGED IN  
3 DISCUSSION, I'LL GO AHEAD. I'M TRYING TO MAINTAIN  
4 AN OPEN MIND ABOUT THIS PARTICULAR RECOMMENDATION  
5 AND THE GENERAL IDEA THAT IT WOULD BENEFIT US TO  
6 SEPARATE OVERSIGHT FROM MANAGEMENT, AND I UNDERSTAND  
7 THAT CONCEPT. AND MY BASIC INTEREST IS THAT CIRM BE  
8 THE MOST EFFECTIVE ORGANIZATION IT CAN POSSIBLY BE.  
9 I'VE INVESTED A LOT OF TIME AND ENERGY HERE NOW.

10 ON THIS PARTICULAR ISSUE, I THINK I HAVE  
11 AN INTEREST THAT CUTS BOTH WAYS. ON ONE HAND,  
12 SEPARATING THE PATIENT ADVOCATES ON THE BOARD FROM  
13 THOSE ON THE WORKING GROUP WOULD CUT MY WORKLOAD  
14 TREMENDOUSLY. BUT ON THE OTHER, I THINK IT TOOK A  
15 GREAT DEAL OF TIME FOR THOSE OF US WHO SIT AS  
16 ADVOCATES ON THE GRANTS WORKING GROUP TO GAIN SOME  
17 CREDIBILITY WITH THE SCIENTIST MEMBERS OF THAT GROUP  
18 AND SHOW THEM THAT, IN FACT, WE WERE INTERESTED IN  
19 BRINGING THE BEST SCIENCE AND BEST OPPORTUNITIES FOR  
20 SUCCESS BACK TO THE BOARD.

21 I THINK WE HAVE THAT NOW, BUT I THINK IT  
22 WOULD BE DIFFICULT OR ANOTHER HILL TO CLIMB FOR  
23 ADVOCATES TO DO THAT. AS JEFF SAID, I THINK AS  
24 BOARD MEMBERS WE DO SERVE A ROLE AS LIAISONS WITHOUT  
25 THE CONFLICT, IF YOU WILL, THAT PERHAPS MEMBERS WHO



**BARRISTERS' REPORTING SERVICE**

1 REPRESENT ORGANIZATIONS THAT RECEIVE GRANTS, SINCE  
2 WE DON'T DO THAT, WE CAN COME WITHOUT THAT POTENTIAL  
3 CONFLICT AND SAY WE TOOK PART IN THIS DISCUSSION,  
4 THIS WAS THE FLAVOR OF THE DISCUSSION, THESE WERE  
5 THE SPECIFIC POINTS OR THE GENERAL FEELING OF WHY  
6 THIS WAS OR WAS NOT A STRONG ENOUGH GRANT TO  
7 RECOMMEND. AND I'M AFRAID IF PATIENT ADVOCATES ON  
8 THAT GROUP DID NOT HAVE THE VOICE THAT WE HAVE HERE,  
9 THAT THAT WOULD BE LOST.

10 DR. POMEROY: SO I'M GOING TO ADD MY  
11 THANKS TO EVERYONE ELSE FOR ALL YOUR HARD WORK ON  
12 THIS. AND I THINK YOU CAN FEEL THE PASSION AND  
13 DEDICATION OF THE PEOPLE ON THE BOARD AS WE RESPOND  
14 TO THESE RECOMMENDATIONS.

15 MY QUESTION IS ON A LITTLE DIFFERENT  
16 ASPECT OF THIS. I'M INTRIGUED BY THE RECOMMENDATION  
17 THAT THERE SHOULD BE MORE INDEPENDENT MEMBERS. MY  
18 QUESTION IS HOW WOULD YOU GET INDEPENDENT SCIENTIFIC  
19 EXPERTISE, SO I'M SWITCHING TO THAT CONSTITUENCY ON  
20 THE BOARD, WITHIN THE IDEA THAT THERE MIGHT BE SOME  
21 CONFLICT OF INTEREST FOR ANYONE AT AN INSTITUTION  
22 THAT'S GETTING MONEY? MY SPECIFIC QUESTION IS,  
23 PUTTING THE CONSTITUTIONALITY ASIDE, WOULD YOU  
24 EXPAND THIS BEYOND PEOPLE WHO LIVE IN CALIFORNIA?

25 DR. SHAPIRO: WELL, I HADN'T THOUGHT. I

**BARRISTERS' REPORTING SERVICE**

1 MYSELF HAVE NO OBJECTION TO THAT, BUT I DON'T THINK  
2 THAT'S ABSOLUTELY NECESSARY. CALIFORNIA HAS A GIANT  
3 POOL OF EXPERTISE IN THESE AREAS, AND I THINK THAT  
4 WOULD NOT BE A PROBLEM. AGAIN, IT'S A MATTER OF  
5 BALANCE.

6 IF ONE THOUGHT THAT PARTICULAR  
7 RECOMMENDATION WAS USEFUL, ONE DOESN'T HAVE TO GO  
8 ALL THE WAY IN THE FIRST DAY. TAKE A STEP, LEARN  
9 WHAT TO DO, DOES IT HELP YOU, DOES IT NOT HELP YOU,  
10 DOES IT WORK, DOESN'T WORK. I THINK THIS  
11 ORGANIZATION IS SMART ENOUGH TO SAY, ALL RIGHT, THIS  
12 RECOMMENDATION SEEMS SENSIBLE. LET'S JUST TRY IT.  
13 LET'S SEE A LITTLE BIT. LET'S TRY IT IN A SMALL  
14 WAY. IF IT WORKS, TAKE ANOTHER STEP. IF IT DOESN'T  
15 WORK, TAKE A STEP BACK. AND I JUST THINK THAT THIS  
16 IS VERY WELL WORTH CONSIDERING, AND THERE'S  
17 DIFFERENT WAYS TO GET VOICES.

18 I UNDERSTAND THAT, FOR EXAMPLE, IF YOU  
19 WOULD ACCEPT THE RECOMMENDATION IN PART, THAT THE  
20 MEMBERS OF THE ICOC NOT SIT ON THE WORKING GROUPS,  
21 YOU CAN SEE HOW THAT WORKS. TRY IT OUT IN ONE OF  
22 THE WORKING GROUPS, SEE IF IT WORKS, SEE IF IT HELPS  
23 YOU. NOTHING I HAVE SAID, WE HAVE SAID ABOUT  
24 CONFLICT OF INTEREST REALLY DEBARS SOMEONE FROM  
25 PLAYING A ROLE AT CIRM. ALL WE'RE SAYING IS THESE

**BARRISTERS' REPORTING SERVICE**

1 THINGS HAVE TO BE RECOGNIZED AND MANAGED IN SOME  
2 APPROPRIATE WAY. THAT'S ALL WE'RE SAYING. YOU CAN  
3 ALL HAVE ALL KINDS OF CONFLICTS YOU WANT AS LONG AS  
4 THEY ARE REVEALED AND DISCUSSED IN SOME SENSIBLE  
5 WAY.

6 CHAIRMAN THOMAS: DR. PRICE.

7 DR. PRICE: I'M GLAD YOU ACTUALLY ENDED ON  
8 THAT NOTE BECAUSE I THINK WE'D BE REMISS IF WE DO  
9 NOT CHALLENGE THE NOTION, THE IMPLICATION THAT WE DO  
10 NOT HAVE OR WE DO NOT MANAGE THE INSTITUTIONAL  
11 CONFLICTS OF INTEREST. OUR ENTIRE VOTING SYSTEM,  
12 DISCUSSION SYSTEM WITH REGARD TO GRANTS APPLICATIONS  
13 IS DESIGNED PRECISELY FOR THAT REASON. THE  
14 ANONYMITY WHICH WE APPLY TO ALL THE GRANT  
15 APPLICATIONS WHEN THEY COME TO OUR BOARD IS DESIGNED  
16 PRECISELY TO MANAGE THOSE CONFLICTS OF INTEREST.

17 AND IN SOME INSTANCES PEOPLE HAVE TO LEAVE  
18 THE ROOM FOR THE DISCUSSION. SO WE'VE GONE TO GREAT  
19 LENGTHS TO MANAGE THOSE CONFLICTS OF INTEREST, WHICH  
20 WE RECOGNIZE. I JUST WANT TO LEAVE THAT FOR THE  
21 RECORD.

22 CHAIRMAN THOMAS: JAMES, PERHAPS YOU COULD  
23 JUST SAY A FEW WORDS ON OUR POLICY SINCE WE ARE ON  
24 THE SUBJECT HERE JUST FOR THE RECORD.

25 MR. HARRISON: SO DR. PRICE IS CORRECT.

## BARRISTERS' REPORTING SERVICE

1 WE DO GO TO GREAT PAINS TO MANAGE AND PREVENT  
2 CONFLICTS OF INTEREST FROM OCCURRING. AND PART OF  
3 THAT ARISES OUT OF OUR BLIND REVIEW OF APPLICATIONS;  
4 THAT IS, APPLICATIONS ARE PRESENTED TO YOU BY  
5 APPLICATION NUMBER ONLY WITHOUT REFERENCE TO THE  
6 INSTITUTION OR THE PRINCIPAL INVESTIGATOR. AND WE  
7 PROVIDE EACH OF YOU WITH A LIST OF THE APPLICATIONS  
8 IN WHICH YOU HAVE A CONFLICT BY NUMBER. AND IF ANY  
9 OF YOU SHOULD DEIGN TO RAISE YOUR HAND TO SUGGEST  
10 YOU WANT TO SPEAK ON SOMETHING FOR WHICH YOU HAVE A  
11 CONFLICT, WE PROMPTLY CUT YOU OFF, MEANING NO  
12 DISRESPECT.

13 BUT WE DO TAKE GREAT PAINS TO PREVENT  
14 CONFLICTS OF INTEREST. AND THERE HAS NOT BEEN ANY  
15 FINDING THAT WE'VE ACTUALLY HAD A CONFLICT OF  
16 INTEREST ARISE IN CONNECTION WITH THE APPROVAL OF AN  
17 AWARD AT THE BOARD ITSELF.

18 MS. LANSING: JUST TO FURTHER ADD TO THIS,  
19 WE HAVE AND ACTUALLY I PERSONALLY LEAVE THE ROOM  
20 BECAUSE I DON'T WANT THERE TO BE ANYTHING. AND  
21 WE'VE ACTUALLY BEEN TALKING ABOUT EVEN FURTHER  
22 EXTENDING IT TO EVERYONE LEAVE THE ROOM. LEAVING  
23 THE ROOM IDENTIFIES WHAT INSTITUTION YOU'RE WITH  
24 BECAUSE YOU LEAVE THE ROOM. THIS IS SOMETHING THAT,  
25 AGAIN, THIS IS SOMETHING THAT WE HAVE TAKEN VERY

**BARRISTERS' REPORTING SERVICE**

1 SERIOUSLY. AGAIN, I DON'T WANT THIS TO BE ABOUT  
2 ANYTHING BUT GRATITUDE FOR WHAT YOU'VE DONE AND HOW  
3 SERIOUSLY YOU'VE TAKEN THIS.

4 DR. SHAPIRO: I THINK IT'S QUITE CLEAR  
5 THAT YOU HAVE TAKEN IT VERY SERIOUSLY.

6 MS. LANSING: I'M VERY GRATEFUL FOR THE  
7 REPORT. I WANT TO BE CLEAR ABOUT THAT.

8 CHAIRMAN THOMAS: DR. JUELSGAARD.

9 DR. JUELSGAARD: DR. SHAPIRO, FIRST OF  
10 ALL, I WANT TO THANK YOU AND THE INSTITUTE OF  
11 MEDICINE FOR ALL THE WORK THAT YOU'VE DONE ON THIS  
12 PARTICULAR SUBJECT AREA. IT WAS NOT EASY, AND I  
13 REALLY APPRECIATE YOUR PATIENCE IN STANDING UP THERE  
14 AND ENGAGING WITH US.

15 DR. SHAPIRO: UNIVERSITY PRESIDENT FOR 25  
16 YEARS.

17 DR. JUELSGAARD: I'M SURE YOU'D RATHER BE  
18 AT YOUR DESK RIGHT NOW. HAVING SAID THAT, THIS IS  
19 MORE THAN JUST A CLARIFICATION, AND IT RELATES TO  
20 THE DISCUSSION WE'RE HAVING BECAUSE THE SUGGESTION  
21 THAT YOU'RE MAKING ABOUT CONFLICT OF INTEREST IN  
22 THIS AREA IS A SOMEWHAT NOVEL ONE, AT LEAST IN MY  
23 EXPERIENCE, BECAUSE MOST CONFLICT OF INTEREST  
24 CENTERS AROUND ECONOMIC INTEREST OR FINANCIAL  
25 INTEREST.

**BARRISTERS' REPORTING SERVICE**

1 SO THE REFERENCE POINT FOR HIGHLIGHTING  
2 THIS AREA AS A POTENTIAL CONFLICT OF INTEREST, I  
3 READ YOUR REPORT AND UNDERSTAND IT, IS MORE BASED ON  
4 PSYCHOLOGY AND BEHAVIORAL ECONOMIC STUDIES. AND  
5 THERE WAS NO CITING IN THE REPORT, AT LEAST THAT I  
6 SAW, TO OTHER INSTITUTIONS THAT HAVE ADOPTED  
7 POLICIES THAT LOOK AT THESE SORTS OF CONFLICTS OF  
8 INTEREST. NOW, THERE MAY WELL HAVE BEEN SUCH  
9 INSTITUTIONS THAT HAVE DONE SO THAT WEREN'T  
10 REFERENCED HERE. BUT I'M CURIOUS. ARE YOU AWARE OF  
11 OTHER INSTITUTIONS?

12 DR. SHAPIRO: I CAN'T NAME THEM RIGHT NOW,  
13 BUT THE SAME COMMENT CAME UP BEFORE. WE WILL  
14 PROVIDE YOU WITH THOSE REFERENCES.

15 MR. JUELSGAARD: THAT WOULD BE VERY  
16 HELPFUL.

17 DR. SHAPIRO: I AGREE.

18 MR. TORRES: THANK YOU. I'VE JUST BEEN  
19 PROVIDED WITH ONE DOCUMENT BY YOUR STAFF. I'LL GET  
20 IT TO MR. JUELSGAARD AS WELL AS THE OTHER MEMBERS OF  
21 THE BOARD.

22 DR. SHAPIRO: UNLESS THERE'S SOME OTHER  
23 QUESTIONS RIGHT NOW, I'D LIKE TO --

24 MR. SHESTACK: SORRY. I DIDN'T REALIZE  
25 THE DISCUSSION OF THIS WOULD START RIGHT OUT THE

**BARRISTERS' REPORTING SERVICE**

1 GATE. THAT WAS A LOT OF WORK, THIS REPORT, AND I'M  
2 SURE WE APPRECIATE IT.

3 I HAVE TO SAY THAT I DON'T THINK -- I  
4 DON'T BELIEVE THAT THE CONCLUSIONS ON CONFLICT OF  
5 INTEREST ADVICE COULD BE POSSIBLY MORE INCORRECT  
6 THAN THEY ARE. INSULTING IS TOO STRONG A WORD, BUT  
7 ACTUALLY DOESN'T TAKE INTO CONSIDERATION THE DESIGN  
8 OF THE PROPOSITION. THE DESIGN OF THE PROPOSITION  
9 WAS TO KEEP THE WORKING GROUPS INCREDIBLY CLOSE TO  
10 THE PEOPLE IN CALIFORNIA, WHICH IS WHY THE ADVOCATES  
11 AND MANY OF THE OTHER MEMBERS ARE ACTUALLY APPOINTED  
12 BY ELECTED OFFICIALS IN CALIFORNIA WHO THEY HAVE A  
13 RELATIONSHIP WITH IN AREAS. THERE'S CONSTANT  
14 QUESTION OVER WHETHER OR NOT THERE'S DUE DILIGENCE  
15 AND FAIRNESS. IT'S NOT AS IF THE SELECT FEW OF THE  
16 FACULTIES OF CALIFORNIA ARE REPRESENTED. ALL OF THE  
17 FACULTIES OF ANY NOTE ARE REPRESENTED.

18 I HAVE NEVER BEEN ON A BOARD THAT WAS  
19 ACTUALLY CONDUCTED MORE TRANSPARENTLY THAN THIS  
20 BOARD AND IT'S REALLY IMPRESSIVE.

21 AND AS FOR THE ADVOCATES, I JUST WANT TO  
22 SAY FROM A PERSONAL POINT OF VIEW WHAT THE ADVOCATES  
23 ARE HERE TO DO IS TO ADVOCATE. THEY'RE HERE TO  
24 ADVOCATE FOR THE SCIENCE IN THE PUBLIC INTEREST.  
25 THEY MAY BE HERE TO ADVOCATE FOR A DISEASE THEY HAVE

**BARRISTERS' REPORTING SERVICE**

1 A SPECIAL KNOWLEDGE OF. MOST OF THEM THAT I KNOW  
2 MAY HAVE HAD LEADERSHIP POSTS AT A SPECIFIC DISEASE  
3 ORGANIZATION, BUT DO NOT CURRENTLY HOLD ONE, DO NOT  
4 HAVE A FINANCIAL INTEREST.

5 I WANT TO JUST SPEAK FOR MY OWN EXAMPLE,  
6 WHICH IS I HAVE COME TO MEETINGS AT CIRM FOR SEVEN  
7 YEARS WAITING FOR AN AUTISM GRANT TO COME UP. AND  
8 ONLY NOW AFTER SEVEN YEARS IS ANYTHING WITH  
9 POTENTIAL IN THE FIELD COMING UP.

10 I THINK ALL OF US, ALL OF THE ADVOCATES  
11 WHO HAVE COME UP THROUGH ADVOCACY ARE EXQUISITELY  
12 TRAINED IN THE IDEA THAT A RISING TIDE FLOATS ALL  
13 BOATS. WE KNOW HOW TO TAKE OUR TURN. WE KNOW HOW  
14 TO LOOK OUT FOR THE BEST INTERESTS OF THE PATIENT  
15 CONSTITUENCY WE REPRESENT AND ARE DEEPLY  
16 COMPASSIONATE FOR ALL THE OTHERS. AND I THINK THERE  
17 ISN'T A WHIFF OF BIAS ACTUALLY. AND OUR, IN FACT,  
18 CHARGE IS TO ADVOCATE.

19 SO I THINK THAT I JUST SPEAK FOR THE  
20 FELLOW ADVOCATES, THAT THEY HAVE DONE A MAGNIFICENT  
21 JOB IN ADVOCATING, AND THAT THIS BOARD HAS DONE A  
22 MAGNIFICENT JOB IN TRANSPARENCY. I ONLY WISH THAT  
23 THE MEMBERS OF THE IOM HAD SPOKEN TO MORE OF THE  
24 BOARD MEMBERS DIRECTLY ABOUT THEIR EXPERIENCE AND  
25 WHAT THEY DO SO THAT POINT OF VIEW WOULD BE MORE



**BARRISTERS' REPORTING SERVICE**

1 FULLY RECOGNIZED. AND I KNOW THAT THIS IS ONLY A  
2 SMALL PART OF YOUR REPORT; HOWEVER, THIS IS THE PART  
3 THAT UNFORTUNATELY PEOPLE WHO MAYBE, I WISH, KNEW  
4 MORE WILL SEIZE ON, AND THEY'LL TALK ABOUT THIS  
5 BECAUSE IT'S THE EASIEST PART TO TALK ABOUT BECAUSE  
6 SOME OF THE OTHER PARTS ARE VERY COMPLEX AND INSIDE  
7 BASEBALL.

8 I JUST WANT TO THANK YOU FOR YOUR HARD  
9 WORK AND SAY THAT REALLY I THINK THIS BOARD IS  
10 TRANSPARENT, IT IS NOT BIASED, AND THE ADVOCATES  
11 HAVE DONE A TREMENDOUS JOB OF TRYING TO REMIND  
12 PEOPLE ALL THE TIME THAT WE'RE NOT ONLY DISCUSSING A  
13 DISEASE IN A DISH. WE'RE DISCUSSING DISEASES THAT  
14 RUIN LIVES, AND THEY NEED TO BE REMINDED OF IT.

15 DR. SHAPIRO: YOUR BOARD WILL HAVE A  
16 CHANCE TO THINK ABOUT THIS CAREFULLY OVER TIME. I  
17 JUST WANT TO SAY ONCE AGAIN, I WON'T SAY IT ANOTHER  
18 TIME, WE ARE NOT AGAINST PATIENT ADVOCATES. WE  
19 SUPPORT THE ROLE OF PATIENT ADVOCATES AND FOR  
20 VARIOUS REASONS. NOW, YOU MAY THINK THAT WE'VE DONE  
21 IT THE WRONG WAY AND THAT'S FINE. IT'S UP TO YOUR  
22 DECISION, BUT WE ACTUALLY SUPPORT THAT ROLE. AND  
23 THE WAY WE THINK ABOUT IT, THE ROLE WOULD NOT  
24 DECREASE GOING FORWARD. AND THAT'S JUST OUR VIEW.  
25 I DON'T WANT TO ARGUE IT, AND I'M NOT HERE TO ARGUE

**BARRISTERS' REPORTING SERVICE**

1 THAT.

2 MR. SHESTACK: I WOULD JUST SAY THAT THE  
3 ROLE WOULD DECREASE, FOR INSTANCE, BY WHAT IS OF  
4 INCREDIBLE VALUE. I THINK HAVING CONTINUITY BETWEEN  
5 PEOPLE WHO HAVE BEEN AT A GRANTS WORKING GROUP OR A  
6 STANDARDS WORKING GROUPS AND REPORT BACK AGAIN TO  
7 THE BOARD BECAUSE THAT DIRECT LINE, THIS NOTION THAT  
8 WE HAVE DIRECT LINE --

9 DR. SHAPIRO: THERE IS THAT TENSION  
10 BETWEEN THAT BENEFIT AND THE BENEFIT OF INDEPENDENT  
11 OVERSIGHT. I UNDERSTAND THAT. YOU'LL HAVE TO IN  
12 YOUR OWN GOOD TIME THINK ABOUT HOW THESE THINGS  
13 BALANCE ONE AGAINST THE OTHER AND MAKE YOUR DECISION  
14 WHICH YOU THINK ARE IN THE BEST INTEREST OF CIRM  
15 OVER TIME.

16 MR. SHESTACK: THANK YOU VERY MUCH.

17 DR. SHAPIRO: LET ME JUST, IF IT'S ALL  
18 RIGHT BECAUSE I KNOW I'M WAY OVER TIME HERE.

19 CHAIRMAN THOMAS: NO. NO. THIS IS VERY  
20 IMPORTANT. TAKE AS MUCH TIME AS YOU NEED.

21 DR. SHAPIRO: I JUST WANT TO MOVE ON FROM  
22 THAT TO DISCUSS SOME RECOMMENDATIONS THAT ARE ON THE  
23 SLIDE UP HERE WITH RESPECT TO THE SCIENTIFIC  
24 PROGRAM. AND YOU CAN READ THEM FOR YOURSELVES. I  
25 DON'T WANT TO, AGAIN, GO OVER ALL THE DETAILS

## BARRISTERS' REPORTING SERVICE

1 BECAUSE YOU HAVE A LOT OF OTHER THINGS TO DO TODAY.  
2 PROBABLY THE MOST IMPORTANT OF THESE  
3 RECOMMENDATIONS IS THE SUGGESTION THAT A SINGLE  
4 EXTERNAL ADVISORY COMMITTEE BE APPOINTED TO BOTH  
5 PROVIDE ADVICE TO THE BOARD AND TO MANAGEMENT  
6 REGARDING LONG-TERM STRATEGIC AND PROGRAMMATIC  
7 ISSUES. WE THINK IT'S IMPORTANT. IT'S DIFFERENT  
8 FROM A BOARD WHICH YOU'VE GOT OF A LOT OF EXTERNAL  
9 ADVICE HERE AT CIRM. YOU TEND TO GO -- YOU HAVE THE  
10 EXTERNAL ADVISORY COMMITTEE, THEY REPORT ON  
11 SOMETHING AND OTHER GROUPS REPORT ON OTHER THINGS.  
12 WE THINK IT'S IMPORTANT FOR THAT GROUP, WHOEVER THEY  
13 MAY BE AND WHOEVER MIGHT BE APPOINTED TO THAT GROUP,  
14 BE IN PLACE OVER TIME SO THEY CAN LEARN AND YOU CAN  
15 LEARN FROM THEM REGARDING THE SETTING OF YOUR BASIC  
16 SCIENTIFIC AND PROGRAMMATIC, NOT ONLY SCIENTIFIC,  
17 BUT PROGRAMMATIC RESPONSIBILITIES. WE THINK THAT'S  
18 REALLY QUITE IMPORTANT.

19 THE LAST THING THAT I'LL MENTION NOW  
20 BECAUSE I'M DOING BADLY AND TAKEN UP SO MUCH OF YOUR  
21 TIME, THAT THERE ARE SOME IMPORTANT ASPECTS HERE  
22 WHICH HAVEN'T FOUND THEIR WAY INTO CIRM'S PORTFOLIO.  
23 AND PARTICULARLY WE THINK THERE ARE UNIQUE ETHICAL  
24 ISSUES THAT COME UP WHEN THESE KINDS -- WHEN  
25 REGENERATIVE MEDICINE GETS INTO THE CLINIC OR GETS

**BARRISTERS' REPORTING SERVICE**

1 INTO CLINICAL TRIALS, WHICH WE THINK THAT CIRM CAN  
2 PLAY A LEADERSHIP ROLE IN TRYING TO SPONSOR SOME NEW  
3 THINKING ON THIS ISSUE TO TRY TO SORT OF ANTICIPATE  
4 THE KINDS OF THINGS THAT WILL COME UP WHEN YOU  
5 ACTUALLY MOVE INTO CLINICAL TRIALS.

6 THIS DOESN'T COST A LOT OF MONEY. IT'S A  
7 VERY MODEST AMOUNT OF MONEY TO HAVE AT LEAST SOME  
8 STUDIES IN THIS AREA, BUT WE THINK THAT'S REALLY  
9 QUITE IMPORTANT.

10 LET ME FINALLY SAY A WORD ABOUT  
11 INTELLECTUAL PROPERTY. WE ACTUALLY DON'T HAVE WHAT  
12 IS A REAL RECOMMENDATION IN INTELLECTUAL PROPERTY.  
13 WE THINK THAT CIRM HAS DONE AN EXCELLENT JOB OF  
14 DISCUSSING INTELLECTUAL PROPERTY POLICIES WITH ALL  
15 THE INTERESTED CONSTITUENCIES OVER A PERIOD OF TIME  
16 AND HAVE COME TO A VERY UNDERSTANDABLE POLICY, AND  
17 IT MAY BE INDEED EXACTLY THE RIGHT POLICY. WE THINK  
18 THAT DESERVES CONTINUED CONSIDERATION BECAUSE WHEN  
19 WE WENT OUT AND SPOKE TO PEOPLE IN INDUSTRY AND WE  
20 WENT OUT AND SPOKE TO TECHNOLOGY TRANSFER OFFICES  
21 AROUND, THEY ALL EXPRESSED CONCERN ABOUT HOW CIRM  
22 WOULD DEAL WITH INTELLECTUAL PROPERTY.

23 NOW, YOUR ACTUAL POLICIES LEAVE A LOT OF  
24 FLEXIBILITY. SO YOU DEAL WITH THIS AS THEY COME UP,  
25 AND THAT'S VERY ADMIRABLE. YOU JUST TRY TO SEE,

## BARRISTERS' REPORTING SERVICE

1 LOOK, THERE ARE VARIOUS INTERESTS TO BE BALANCED  
2 HERE, AND THE CASES WILL BALANCE THEM IN THE RIGHT  
3 WAY. THAT VERY FLEXIBILITY, WHICH IS VERY  
4 ADMIRABLE, I HAVE TO SAY, ALSO PRODUCES UNCERTAINTY  
5 BY ITS VERY NATURE. PEOPLE ARE UNCERTAIN ABOUT JUST  
6 WHAT THIS -- HOW THIS POLICY IS GOING TO PLAY OUT  
7 AND YOU DON'T YET HAVE A LONG TRACK RECORD BECAUSE  
8 YOU'RE SUCH A YOUNG ORGANIZATION.

9 SO I JUST THINK YOU SHOULD BE AWARE THAT  
10 THERE IS A LOT OF UNCERTAINTY OUT THERE. THE FACT  
11 THAT THIS POLICY DIFFERS IN IMPORTANT WAYS FROM THE  
12 BAYH-DOLE POLICY IS ONE OF THE CAUSES -- CONCERN IS  
13 TOO STRONG A WORD. PEOPLE UNDERSTAND WHY IT IS YOU  
14 HAVE THE POLICIES YOU DO HAVE. IT IS PERFECTLY  
15 UNDERSTANDABLE. IT MAY IN THE END BE THE BEST  
16 POLICIES. WE'RE NOT COMPLETELY SURE OF THAT. WE  
17 THINK IT DESERVES -- ONE THING WHICH WE THINK IT  
18 DOES DESERVE SOME CONSIDERATION IS ONE OF THE  
19 BENEFITS TO THE CITIZENS OF CALIFORNIA AND  
20 REGENERATIVE MEDICINE OVERALL ABOUT HAVING POLICIES  
21 THAT WERE MORE CONSISTENT WITH THE BAYH-DOLE  
22 POLICIES.

23 NOW, I DON'T KNOW WHAT THE ANSWER TO THAT  
24 IS. I JUST THINK IT'S SOMETHING WORTH CONSIDERING  
25 AND THINKING CAREFULLY BECAUSE YOU THINK AHEAD WITH

**BARRISTERS' REPORTING SERVICE**

1 DIFFERENT STATES HAVING DIFFERENT POLICIES AND  
2 DIFFERENT INTELLECTUAL PROPERTY POLICIES, THAT DOES  
3 CREATE A PROBLEM BECAUSE THE WORLD OF REGENERATIVE  
4 MEDICINE IS NOT ONLY NATIONAL, BUT INTERNATIONAL.  
5 AND PEOPLE WHO ARE GOING TO TRY TO COMMERCIALIZE  
6 PRODUCTS IN THIS AREA AND SO ON WANT TO BE ABLE TO  
7 DO SO IN A VERY LARGE LANDSCAPE. SO WE'RE NOT SURE  
8 WHAT THE RIGHT ANSWER IS. AND HERE OUR  
9 RECOMMENDATION IS BASICALLY SIMPLY YOU CONSIDER  
10 THIS, CONTINUE TO CONSIDER IT AGAIN.

11 AND AS I SAID JUST A MOMENT AGO, IT'S BEEN  
12 VERY ADMIRABLE IN THIS AREA JUST HOW OPEN CIRM HAS  
13 BEEN IN THAT REGARD. AND I THINK THE CURRENT  
14 POLICIES ARE A VERY REASONABLE BALANCE BETWEEN THE  
15 VARIOUS CONSTITUENCIES WHO HAVE DIFFERENT INTERESTS  
16 HERE. AND SO THAT IT'S A VERY MODEST  
17 RECOMMENDATION; NAMELY, THAT WE CAME ACROSS IN  
18 DISCUSSING, PARTICULARLY WITH PEOPLE IN INDUSTRY,  
19 THAT SOME CONCERN IN THIS REGARD, THAT'S SOMETHING  
20 FOR YOU TO CONSIDER AND TALK OVER AMONGST YOURSELVES  
21 AND WITH OTHER PEOPLE IN INDUSTRY AS YOU GO AHEAD.

22 SO THERE ARE OTHER RECOMMENDATIONS IN  
23 HERE. I DON'T WANT TO TAKE THE TIME TO GO OVER THEM  
24 ALL. BUT I JUST WANT TO THANK YOU ALL FOR YOUR  
25 ATTENTION AND TO SAY IT'S BEEN A VERY INTERESTING

**BARRISTERS' REPORTING SERVICE**

1 EXPERIENCE, AND I LOOK FORWARD TO SEEING CIRM GO  
2 FROM STRENGTH TO STRENGTH.

3 MR. TORRES: DR. SHAPIRO, ON PAGE 418 OF  
4 THE REPORT IN RESPECT TO THE RECOMMENDATIONS ON  
5 GRANT REVIEW AND FUNDING PROCESS, THE NOTION TO  
6 ELIMINATE THE USE OF EXTRAORDINARY PETITIONS. AND  
7 IT'S A CONVERSATION I'VE HAD WITH OUR PRESIDENT, AND  
8 I BELIEVE AND I KNOW THAT HE'S THINKING ABOUT AND  
9 STAFF IS THINKING ABOUT HOW TO DEVELOP A NEW PROCESS  
10 THAT IS TRANSPARENT AND FAIR, BUT NOT THE PROCESS WE  
11 HAVE NOW.

12 THE QUESTION I HAVE IS WHAT BROUGHT THE  
13 CONCLUSION THAT THE BOARD SHOULD ONLY VOTE YES OR NO  
14 ON APPLICATIONS?

15 DR. SHAPIRO: WE HAD A LOT OF CONVERSATION  
16 ABOUT THAT PARTICULAR ISSUE. WE DO THINK IT'S  
17 IMPORTANT TO ELIMINATE WHAT IS, I THINK,  
18 EXTRAORDINARY PETITIONS SIMPLY BECAUSE IN OUR VIEW  
19 IT UNDERMINES THE INTEGRITY OF THE REVIEW PROCESS,  
20 WHICH IS A VERY CAREFUL AND OPEN ONE. SO WE THINK  
21 THAT THAT PUTS THE BOARD IN A VERY DIFFICULT  
22 POSITION, UNNECESSARY POSITION, AND WE THINK IT WILL  
23 BE BETTER OFF IN OUR VIEW WITHOUT THAT.

24 ON THE ISSUE OF WHETHER THE BOARD SHOULD  
25 VOTE ON A WHOLE SLATE OF GRANTS OR INDIVIDUAL

**BARRISTERS' REPORTING SERVICE**

1 GRANTS, I HAVE TO SAY IN OUR DISCUSSION WE HAD LOTS  
2 OF BACK AND FORTH ON THAT ISSUE. AND IN PART IN OUR  
3 MIND IT WAS RELATED TO THE NUMBER OF INDEPENDENT  
4 BOARD MEMBERS YOU HAD. THAT IS, THE MORE  
5 INDEPENDENT BOARD MEMBERS YOU HAVE, LESS IMPORTANT  
6 THAT WOULD BE. AND SO WE PROBABLY DIDN'T MAKE THAT  
7 AS CLEAR AS WE SHOULD HAVE IN THE REPORT, BUT THAT  
8 JUST REFLECTS OUR THINKING AS WE WENT THROUGH.

9 MR. TORRES: THANK YOU VERY MUCH.

10 DR. PRIETO: I JUST WANT TO COMMENT  
11 BRIEFLY ON THE INTELLECTUAL PROPERTY ISSUE THAT YOU  
12 MENTIONED BECAUSE I THINK THAT WE DID -- I WAS PART  
13 OF THE ORIGINAL INTELLECTUAL PROPERTY TASK FORCE  
14 THAT WORKED FOR ABOUT TWO YEARS ON OUR POLICIES.  
15 AND I THINK AT THE TIME THERE WAS A CONSCIOUS  
16 DECISION MADE THAT WE WOULD MOVE AWAY FROM THE  
17 BAYH-DOLE MODEL OR THE SCHEMA THAT PRECEDED  
18 BAYH-DOLE. WE SORT OF CONSIDER THOSE AS AN ALL OR  
19 NOTHING AND THAT WE WOULD TRY TO FIND A MIDDLE  
20 GROUND. I THINK PART OF THAT CAME OUT OF THE  
21 PROMISE IN THE INITIATIVE THAT IF THERE WERE SOME  
22 RETURN FROM OUR EFFORTS, ASIDE FROM OBVIOUSLY THE  
23 TREATMENT OF DISEASES, BUT IF THERE WERE THE  
24 POTENTIAL FOR SOME FINANCIAL RETURN, THAT SOME OF  
25 THAT WOULD COME DIRECTLY BACK TO THE PEOPLE OF



**BARRISTERS' REPORTING SERVICE**

1 CALIFORNIA. SO WE TRIED TO TAKE A MIDDLE GROUND IN  
2 ORDER TO BE FAITHFUL TO THAT PROMISE.

3 DR. SHAPIRO: AS I SAID A MOMENT AGO, I  
4 THINK YOU AND OTHERS WHO WORKED ON THAT CAME TO A  
5 VERY REASONABLE POSITION. WE'RE JUST POINTING OUT  
6 THAT THIS IS WORTH CONTINUED THINKING AS YOUR  
7 EXPERIENCE KIND OF INDICATES. IT'S POSSIBLE,  
8 ALTHOUGH I DON'T WANT TO -- IT'S POSSIBLE THAT YOU  
9 WOULD ACTUALLY GENERATE MORE MONEY BY USING THE  
10 BAYH-DOLE PROCEDURE IN SOME WAY THAN THE OTHER WAY  
11 AROUND. THAT'S AN OPEN ISSUE. WE DON'T HAVE A  
12 STRONG VIEW ON THAT. WE JUST THINK THAT YOU SHOULD  
13 CONTINUE TO MONITOR THE SITUATION AND DECIDE IN YOUR  
14 OWN MIND WHAT'S BEST FOR THE CITIZENS OF CALIFORNIA.  
15 AND IT MAY BE THE EXISTING POLICY.

16 DR. PRIETO: MR. JUELSGAARD AND THIS  
17 COMMITTEE ARE STILL LOOKING AT THAT. WE CERTAINLY  
18 HAVE MAINTAINED AN OPEN MIND AND ARE CONSIDERING  
19 THAT. I JUST WANTED TO ILLUMINATE A LITTLE BIT OF  
20 WHAT OUR THINKING WAS.

21 DR. SHAPIRO: I UNDERSTAND. WE WERE  
22 ACTUALLY VERY IMPRESSED WITH THE PROCESS ON THE  
23 INTELLECTUAL PROPERTY. AS WE SAW THROUGH THE  
24 MATERIALS HOW CAREFULLY VARIOUS INTERESTS WERE  
25 BALANCED AND LISTENED TO, EVERYBODY HAD A CHANCE FOR

**BARRISTERS' REPORTING SERVICE**

1 INPUT, AND YOU RECEIVED A LOT OF INPUT, SO WE WERE  
2 VERY IMPRESSED BY THAT PROCESS.

3 MR. SHESTACK: I JUST WONDERED IF -- I  
4 THINK ONE OF THE THINGS THAT WENT ON IN THE  
5 DISCUSSION OF INTELLECTUAL PROPERTY WAS THE HOPE  
6 THAT PERHAPS THAT BY VIRTUE OF THE SIZE OF THE  
7 BUDGET OF CIRM AND HOW EARLY AND AGGRESSIVELY IN THE  
8 GAME WE WERE FUNDING, THAT WE WOULD ACTUALLY BE A  
9 MARKET MAKER IN STANDARDS OF INTELLECTUAL PROPERTY.  
10 AND IF THEY WERE SLIGHTLY MORE PROGRESSIVE THAN  
11 PERHAPS IN WISCONSIN, MAYBE BY VIRTUE OF OUR SUCCESS  
12 OR PRODUCTIVITY, THAT MIGHT --

13 DR. SHAPIRO: I UNDERSTAND THAT. AS I  
14 SAID, AS I'VE TRIED TO SAY, I THINK YOU HAVE A VERY  
15 DECENT AND OPEN AND TRANSPARENT POLICY, WHICH IS  
16 UNDERSTANDABLE IN TERMS OF THE VARIOUS INTERESTS  
17 THAT NEED TO BE LISTENED TO HERE. ALL WE'RE SAYING  
18 IS THIS SHOULD CONTINUE TO BE MONITORED IN VIEW OF  
19 YOUR EXPERIENCE AND SEE IF ANY CHANGES ARE DESIRED.  
20 THAT'S REALLY ALL WE'RE SAYING. WE UNDERSTAND THE  
21 PROCESS, THINK IT'S A GOOD ONE, AND JUST THINK THAT  
22 IT SHOULD BE CONTINUED. THAT'S ALL.

23 MR. SHESTACK: DON'T PEOPLE RECUSE  
24 THEMSELVES, MOVING FROM THE BLOCK VOTES AND MOVING  
25 SOMETHING UP AND OUT OF THE TIER AT THE BOARD LEVEL;

**BARRISTERS' REPORTING SERVICE**

1 IS THAT CORRECT? SO THAT IS SOMETHING, JUST FOR THE  
2 RECORD, EVEN IN THAT VERSION OF THE PROCESS, WE'RE  
3 TRYING TO ADDRESS IT.

4 DR. STEWARD: LET ME ADD MY THANKS TO ALL  
5 OF YOU FOR THE HARD WORK THAT YOU PUT IN. I HAD  
6 ACTUALLY THREE QUESTIONS. I HOPE I WON'T SEEM TO  
7 DOMINATE.

8 DR. SHAPIRO: ARE ANY OF THEM COMPOUND  
9 QUESTIONS?

10 DR. STEWARD: SO THE FIRST IS AT LEAST ONE  
11 AND MAYBE SOME OF OUR CRITICS HAVE EMPHASIZED WHAT  
12 THEY FEEL IS AN IMPORTANT THING, THAT IT WOULD BE  
13 ADVANTAGEOUS TO HAVE THE GRANTS WORKING GROUP REVIEW  
14 OPEN TO THE PUBLIC OR A PUBLIC DOCUMENT. I DID FIND  
15 COMMENTS IN THERE REGARDING THAT, AND IT REAFFIRMED  
16 OUR POSITION OVER THE YEARS THAT THAT SHOULD BE A  
17 CONFIDENTIAL MEETING. I JUST WONDERED IF YOU COULD  
18 EXPAND ON THAT A LITTLE BIT.

19 DR. SHAPIRO: WE AGREE WITH THAT. WE  
20 DON'T HAVE ANY CONCERN. WE THINK THE WORK OF THESE  
21 WORKING GROUPS REALLY CAN'T GO ON EFFECTIVELY IN  
22 SOME KIND OF OPEN MEETING. YOU MIGHT WANT TO DECIDE  
23 TO REPORT IN A GENERAL NATURE WHAT GOES ON AND SO  
24 ON, BUT THE WORKING GROUP ITSELF, THAT'S THE  
25 INDIVIDUAL GRANTS, IN OUR VIEW NEEDS TO BE A CLOSED

**BARRISTERS' REPORTING SERVICE**

1 MEETING.

2 DR. STEWARD: THANK YOU VERY MUCH.

3 THE SECOND QUESTION IS WITH REGARD TO THE  
4 ROLE OF THE PATIENT ADVOCATES ON THE WORKING GROUPS  
5 AND, IN FACT, ON THE BOARD AS WELL. IN A COUPLE OF  
6 WAYS YOUR RECOMMENDATIONS DIFFER FROM WHAT I WOULD  
7 CONSIDER TO BE AT LEAST ONE TYPE OF MODEL FOR WHAT  
8 WE ARE. AND I TALKED HERE ABOUT NIH COUNCIL WHERE  
9 MEMBERS OF THE PUBLIC SERVE AND VOTE AND MOVE THINGS  
10 FORWARD. AND SO THE TWO KEY DIFFERENCES ARE, IN  
11 FACT, THAT ASPECT, THE ROLE. AND THE SECOND IS THAT  
12 COUNCIL CERTAINLY DOESN'T VOTE EN BLOC EITHER AND  
13 HAS THE ABILITY TO MOVE THINGS UP OR DOWN.

14 I WONDER IF YOU HAD THOUGHT, DISCUSSED  
15 THAT IN YOUR MEETINGS AND HOW THAT RELATES TO THE  
16 RECOMMENDATION.

17 DR. SHAPIRO: FIRST OF ALL, NIH COUNCIL,  
18 PROBABLY MANY PEOPLE HERE HAVE SAT ON THOSE COUNCILS  
19 OVER TIME, HAS A RATHER, IN MY VIEW, MUCH MORE  
20 LIMITED ROLE FOR PATIENT ADVOCACY THAN DOES CIRM.  
21 SO IN THAT CASE CIRM IS AHEAD OF THE NIH COUNCIL.  
22 AND IT IS TRUE THAT THE NIH COUNCILS CAN DO THIS  
23 GRANT BY GRANT, SO TO SPEAK, AND MOVE IT AROUND,  
24 ALTHOUGH THAT IS NOT VERY GENERAL. IT'S ALSO TRUE  
25 THAT THE NIH COUNCILS, AT LEAST THAT I'VE SERVED ON,

**BARRISTERS' REPORTING SERVICE**

1 HAVE MORE INDEPENDENT MEMBERS. AS I SAID A FEW  
2 MOMENTS AGO, THE MORE INDEPENDENT MEMBERS YOU HAVE,  
3 THIS CHANGES THE BALANCE HERE QUITE A BIT. MAYBE IN  
4 THAT CASE YOU WOULD WANT TO MARRY THESE TWO  
5 DIFFERENT THINGS IN A SLIGHTLY DIFFERENT WAY.

6 DR. STEWARD: MY THIRD QUESTION ACTUALLY  
7 GOES BACK TO ONE OF THE EARLIER QUESTIONS. SO THE  
8 CONCEPT OF A MORE OR LESS PERMANENT SCIENCE ADVISORY  
9 COMMITTEE IS VERY INTERESTING. AND THE QUESTION  
10 ARISES SHOULD THESE PEOPLE BE OUT OF CALIFORNIA?  
11 AND THEN, OF COURSE, YOU RAISED THE OTHER ISSUE OF  
12 CALIFORNIANS GENERALLY LIKE TO MAKE DECISIONS ON TAX  
13 MONEY MADE BY CALIFORNIANS. DID YOU TALK ABOUT  
14 THAT?

15 DR. SHAPIRO: YES, WE DID. IT'S AN  
16 ADVISORY COUNCIL, OF COURSE. IT'S NOT DECISIONS,  
17 JUST ADVISING YOU. AND WE THINK THAT THEY SHOULD  
18 HAVE A VERY LARGE REPRESENTATION OF PEOPLE OUTSIDE  
19 OF CALIFORNIA, PROBABLY THE MAJORITY.

20 AGAIN, I DON'T WANT -- I'M HOPING WHEN YOU  
21 THINK ABOUT IT, ANY OF US THINK ABOUT IT AND DISCUSS  
22 IT, WE DON'T GET HUNG UP ON WHAT I CONSIDER SMALLER  
23 ISSUES. SHOULD IT BE 40 PERCENT? SHOULD IT BE 55  
24 PERCENT? SHOULD IT BE 30 PERCENT, 70 PERCENT? I  
25 THINK THOSE ARE OPEN ISSUES WHICH YOU CAN LEARN BY

## BARRISTERS' REPORTING SERVICE

1 EXPERIENCE. BUT WE DO THINK THAT HAVING THAT  
2 COUNCIL IS REALLY VERY IMPORTANT. THIS IS NOT ONLY  
3 OUR IDEA. THIS CAME UP BEFORE IN OTHER STUDIES OF  
4 CIRM. THIS IS NOT AN IDEA THAT'S ORIGINAL WITH US.  
5 THE EXTERNAL PANEL HAD MADE A VERY SIMILAR  
6 RECOMMENDATION. WE THINK THAT'S JUST TO YOUR  
7 BENEFIT, AND I THINK YOU SHOULD TAKE ADVANTAGE OF  
8 THE FACT THAT THERE'S SO MANY TALENTED PEOPLE AROUND  
9 THE COUNTRY WHO WANT TO HELP YOU. YOU'VE GOT ALL  
10 THESE SCIENTISTS WHO WORK ON THESE WORKING GROUPS  
11 OUTSIDE OF CALIFORNIA THAT PUT AN ENORMOUS AMOUNT OF  
12 TIME AND EFFORT ONLY BECAUSE THEY'RE INTERESTED IN  
13 WHAT YOU ARE DOING AND THEY THINK WHAT YOU'RE DOING  
14 HAS TREMENDOUS SOCIAL BENEFIT, WHICH I AGREE WITH.

15 I THINK YOU CAN HARNESS SOME OF THAT INTO  
16 SOME TYPE OF EXTERNAL ADVISORY PANEL AND NOT BE ON A  
17 PROJECT-BY-PROJECT BASIS, BUT WOULD BE A PERMANENT  
18 PART OF THE ORGANIZATION WITH SOME KIND OF ROTATING  
19 MEMBERSHIP.

20 DR. POMEROY: SINCE OS TOOK THREE  
21 QUESTIONS, I'M ACTUALLY GOING TO ASK ZERO AND JUST  
22 MAKE ONE QUICK COMMENT. I WANTED TO HIGHLIGHT AND  
23 THANK YOU FOR ONE OF YOUR RECOMMENDATIONS BECAUSE I  
24 DON'T WANT IT TO GET LOST. THAT'S RECOMMENDATION  
25 4-3 ABOUT PUTTING SOME MONEY INTO THE ETHICAL

**BARRISTERS' REPORTING SERVICE**

1 ASPECTS OF STEM CELL RESEARCH.

2 EARLY ON IN THIS BOARD WE HAD SOME  
3 CONVERSATIONS ABOUT SETTING ASIDE SOME MONEY FOR  
4 ELSI-RELATED THINGS, ETHICAL, LEGAL, AND SOCIAL  
5 IMPLICATIONS OF STEM CELL RESEARCH. AND I THINK  
6 THAT WE LOST A LITTLE BIT OF FOCUS ON THAT, AND I  
7 THINK THIS IS AN OPPORTUNITY TO COME BACK TO THAT.  
8 SO I WANTED TO HIGHLIGHT THIS PARTICULAR  
9 RECOMMENDATION AND THANK YOU FOR IT.

10 DR. SHAPIRO: THANK YOU VERY MUCH. THAT'S  
11 THE BOTTOM ONE ON THIS SLIDE HERE, ESSENTIALLY A  
12 SUMMARY OF THAT AT THE BOTTOM ON THE SLIDE. I'M  
13 SORRY I DIDN'T HAVE TIME TO GO THROUGH ALL THE  
14 DETAIL ON THE SLIDE. THANK YOU VERY MUCH FOR THAT  
15 COMMENT.

16 CHAIRMAN THOMAS: ADDITIONAL QUESTIONS FOR  
17 DR. SHAPIRO? BEFORE YOU SIT DOWN, DR. SHAPIRO,  
18 AGAIN, VERY MUCH LIKE TO THANK YOU AND THE COMMITTEE  
19 FOR YOUR VERY LENGTHY, REASONED, AND THOUGHTFUL  
20 PROCESS THAT WENT INTO THIS. WE PRIOR TO THE  
21 ISSUANCE OF THE REPORT HAD ALREADY SET FORTH A  
22 PROCESS THAT THE BOARD WAS GOING TO UNDERTAKE TO  
23 EVALUATE THE REPORT, WHICH WILL INVOLVE GOING FIRST  
24 TO A JANUARY WORKSHOP AT WHICH THE VARIOUS  
25 RECOMMENDATIONS MADE BY THE REPORT WILL BE TAKEN UP

**BARRISTERS' REPORTING SERVICE**

1 IN CONSIDERABLE DETAIL TOWARDS DEVELOPING A GAME  
2 PLAN GOING FORWARD TO CONSIDER AND IMPLEMENT CHANGES  
3 THAT ARISE AS A RESULT OF THESE RECOMMENDATIONS.  
4 THAT WILL BE FOLLOWED BY A LENGTHY DISCUSSION  
5 THEREAFTER TO ACTUALLY PROCEED WITH IMPLEMENTATION  
6 STEPS.

7 THE SUBJECT MATTER OF THE VARIOUS  
8 RECOMMENDATIONS SQUARELY FIT WITHIN THE TASKS OF  
9 VARIOUS SUBCOMMITTEES ON OUR BOARD. SO WE'LL BE  
10 LOOKING TO THOSE SUBCOMMITTEES TO SORT OF LEAD THE  
11 ANALYSIS IN EACH OF THE RECOMMENDATIONS THAT FIT  
12 THEIR SUBJECT MATTER.

13 ALSO LIKE TO SAY, FOR THE BOARD'S  
14 PURPOSES, THAT GOING FORWARD I'VE ASKED DR. SHAPIRO  
15 AND DR. MAGNUSON IF I CAN CONTINUE TO DIALOGUE WITH  
16 THEM WITH RESPECT TO THE RECOMMENDATIONS AS WE GO  
17 THROUGH THE PROCESS BECAUSE I THINK IT WOULD BE VERY  
18 VALUABLE TO HAVE THEIR ONGOING INPUT. AND THEY HAVE  
19 AGREED THAT THAT WOULD BE SOMETHING THEY'D BE HAPPY  
20 TO DO. I THINK IT'S IMPORTANT FOR CONTINUITY SAKE  
21 IN THE PROCESS THAT WE DO JUST THAT.

22 SO I WANT MEMBERS OF THE PUBLIC WHO ARE  
23 LISTENING TO UNDERSTAND THAT WE WILL BE VERY SERIOUS  
24 IN ANALYZING AND IMPLEMENTING RECOMMENDATIONS AND  
25 ARE FIXED TO DO JUST THAT ONCE WE COME BACK. I'D



**BARRISTERS' REPORTING SERVICE**

1 LIKE TO SEE IF THERE ARE MEMBERS OF THE PUBLIC ON  
2 THE PHONE.

3 DR. SHAPIRO: I JUST WANT TO MAKE SURE, IF  
4 YOU DON'T MIND, EVERYONE HAS HAD A CHANCE TO MEET  
5 DR. MAGNUSON, WHO'S SITTING OVER HERE. HE'S BEEN  
6 VICE CHAIR OF THE COMMITTEE AND, IN PARTICULAR,  
7 WORKED VERY HARD ON THE SCIENTIFIC PROGRAM  
8 RECOMMENDATIONS THAT WE MADE.

9 CHAIRMAN THOMAS: THANK YOU. DO WE HAVE  
10 COMMENTS BY MEMBERS OF THE PUBLIC? LET'S START HERE  
11 AND THEN WE'LL GO TO OUR SITES ON THE PHONE.  
12 COMMENTS BY MEMBERS OF THE PUBLIC? SEEING NONE, DO  
13 WE HAVE COMMENTS BY MEMBERS OF THE PUBLIC ON THE  
14 PHONE? ANYBODY ON MUTE? OKAY. WELL, I BELIEVE  
15 THEN THAT CONCLUDES OUR DISCUSSION. ONCE AGAIN,  
16 PLEASE CONVEY OUR THANKS TO THE COMMITTEE.

17 (APPLAUSE.)

18 CHAIRMAN THOMAS: I THINK LET'S TAKE A  
19 FIVE-MINUTE BREAK HERE. AND WE HAVE A NUMBER OF  
20 ITEMS ON THE AGENDA THAT REQUIRE WE ATTEND TO  
21 IMMEDIATELY WITH VOTES. SO WE'RE ACTUALLY GOING TO  
22 FURTHER PUT OFF THE CHAIR AND PRESIDENT'S REPORT TO  
23 A BIT LATER. SO, PLEASE, LET'S TAKE A FIVE-MINUTE  
24 BREAK AND COME BACK.

25 (A RECESS WAS TAKEN.)

**BARRISTERS' REPORTING SERVICE**

1 CHAIRMAN THOMAS: MEMBERS OF THE BOARD,  
2 COULD YOU PLEASE TAKE YOUR SEATS? THANK YOU.

3 WE'RE GOING TO NOW TAKE UP ITEM 8, WHICH  
4 IS THE CONSIDERATION OF THE APPLICATIONS FOR RFA  
5 12-01, THE NEW FACULTY PHYSICIAN SCIENTIST  
6 TRANSLATIONAL RESEARCH AWARDS.

7 DR. OLSON: WHAT I'D LIKE TO DO MAYBE  
8 BEFORE THE BOARD GOES INTO ESSENTIALLY THE NEW  
9 FACULTY PHYSICIAN SCIENTIST AND THE BASIC BIOLOGY  
10 CONCEPT, SO THINGS WHERE YOU'RE GOING TO TALK ABOUT  
11 DISBURSING MONEY AND ALLOCATING FUNDING, I'D LIKE TO  
12 JUST GIVE YOU AN UPDATE ON THE FUNDING ALLOCATION.

13 YOU MAY RECALL THAT OVER THE PAST SIX  
14 MONTHS WE'VE AGREED THAT WHENEVER WE HAVE CONCEPT  
15 APPROVALS, WE'LL UPDATE THE BOARD ON WHERE WE ARE  
16 WITH RESPECT TO THAT. SO THIS IS AN UPDATE FROM THE  
17 OCTOBER MEETING. AND I HAVE CHANGED THE FORMAT A  
18 LITTLE BIT. I HOPE IT'S CLEARER FOR YOU. AND I  
19 ALSO WANT TO ACKNOWLEDGE THAT CHILA AND LYNN BOTH  
20 HELPED ME WITH THIS, SO THEY BOTH CONTRIBUTE TO  
21 THIS.

22 IN THE FIRST SLIDE, THIS IS BASICALLY THE  
23 BIG-PICTURE SLIDE. THIS BASICALLY SAYS, OKAY,  
24 HERE'S WHERE YOU ARE IN YOUR FUNDING AND HOW MUCH  
25 YOU'VE ACTUALLY AWARDED AS OF OCTOBER AND AS OF

**BARRISTERS' REPORTING SERVICE**

1 DECEMBER, HOW MUCH YOU'VE APPROVED IN CONCEPT AS OF  
2 OCTOBER AND OF DECEMBER, AND HOW MUCH IS IN FUTURE  
3 EITHER ALLOCATED, AS DISCUSSED IN THE STRATEGIC PLAN  
4 THAT YOU APPROVED IN MARCH, OR THAT IS FUTURE, BUT  
5 IS UNALLOCATED DUE TO VARIOUS THINGS THAT WE'VE  
6 TALKED ABOUT IN THE SUBSEQUENT THINGS IN WHICH I'LL  
7 UPDATE YOU ON HERE.

8 SO I WOULD NOW LIKE TO HIGHLIGHT KEY  
9 CHANGES IN EACH OF THESE CATEGORIES STARTING WITH  
10 THE AWARDED CATEGORY. AND, AGAIN, I BELIEVE YOU ALL  
11 HAVE THIS IN YOUR BINDER OR IN YOUR ELECTRONIC FILE,  
12 ONE OR THE OTHER. SO IF YOU LOOK IN THE AWARDED  
13 CATEGORY, AGAIN, I WOULD NOTE THAT WHAT WE DO IN  
14 THIS IS I UPDATE IT FOR THIS MEETING SUCH THAT  
15 AWARDS THAT WERE RECOMMENDED BY THE GRANTS WORKING  
16 GROUP ARE INCLUDED IN THIS CATEGORY.

17 SO WHAT HAS HAPPENED IS THERE'S BEEN A NET  
18 CHANGE OF ABOUT 37.8 MILLION FROM OCTOBER TO NOW.  
19 AND WHAT THAT INCLUDES IS RECOMMENDED AWARDS WHICH  
20 ARE COMING TO YOU TODAY WHICH ARE ROUGHLY 36 MILLION  
21 RECOMMENDED BY THE GRANTS WORKING GROUP FOR THE NEW  
22 FACULTY III PHYSICIAN SCIENTIST. SO IF YOU APPROVE  
23 WHAT HAS BEEN RECOMMENDED BY THE GRANTS WORKING  
24 GROUP, THERE WILL BE AN ADDITIONAL 36 MILLION HERE.  
25 AND THAT FALLS IN THE CATEGORY OF TRAINING CAREER

## BARRISTERS' REPORTING SERVICE

1 DEVELOPMENT. SO WE LOOK AT THIS AS A CAREER  
2 DEVELOPMENT AWARD.

3 THERE'S ALSO GOING TO BE A THREE MILLION  
4 MAJOR SUPPLEMENT COMING TO YOU LATER TODAY, AND THAT  
5 WOULD BE IN THE DEVELOPMENT. THE PATENT ASSISTANCE  
6 FUND, WHICH WE TALKED ABOUT AT VARIOUS BOARD  
7 MEETINGS, HAS NOW BEEN IMPLEMENTED AND IS IN THE  
8 BASIC RESEARCH CATEGORY BECAUSE A LOT OF THE  
9 PATENT -- A LOT OF PATENTS ARE ACTUALLY FILED IN A  
10 BASIC RESEARCH PROGRAM. I WOULD ALSO NOTE THAT  
11 THERE'S BEEN A DECREASE IN ROUGHLY 6.4 MILLION  
12 BECAUSE A VISITING FACULTY SUPPLEMENT PROGRAM WHICH  
13 THIS BOARD APPROVED ROUGHLY TWO YEARS AGO, A LITTLE  
14 OVER TWO YEARS AGO, IT'S REACHED THE END OF ITS  
15 TENURE AND VERY LITTLE -- THAT PROGRAM JUST HAS NOT  
16 HAD A LOT OF PICKUP, AND SO WE ARE MOVING THAT MONEY  
17 BACK. SO THAT ACCOUNTS FOR THE CHANGES IN THAT  
18 CATEGORY.

19 IN THE CONCEPT APPROVED CATEGORY, WE HAVE  
20 A NET CHANGE OF 48 MILLION FROM OCTOBER TO NOW. AND  
21 WHAT THAT INCLUDES IS, AND LISA WILL GO INTO A  
22 LITTLE BIT MORE, IS A DECREASE IN 80 MILLION FROM  
23 THE NEW FACULTY WHICH WAS CONCEPT APPROVED AND NOW  
24 IS EITHER AWARDED OR GOING TO UNALLOCATED.

25 SIMILARLY, WE'RE GOING TO ASK YOU, WE'RE

**BARRISTERS' REPORTING SERVICE**

1 GOING TO BE COMING TO YOU WITH A CONCEPT FOR BASIC  
2 BIOLOGY, SO THAT IS 40 MILLION ADDED TO THAT, AND  
3 THOSE ARE THE MAIN CHANGES TO THAT.

4 AND THEN, FINALLY, IN THE FUTURE, I JUST  
5 WANT TO NOTE THAT THERE IS 732.5 MILLION IN BOTH  
6 ALLOCATED, ACCORDING TO THE STRATEGIC PLAN THAT YOU  
7 APPROVED EARLIER THIS YEAR, BUT ACTUALLY THERE'S A  
8 SIGNIFICANT POT, AS YOU CAN SEE. I THINK IT'S,  
9 WHAT, 141 MILLION IN UNALLOCATED. SO THESE ARE  
10 MONIES THAT CAN BE USED TO -- WE TALKED ABOUT A  
11 RESEARCH AND ETHICS, WE HAVE TALKED IN THE PAST  
12 ABOUT, AGAIN, DOING ANOTHER EXTENSION OR DOING  
13 ANOTHER TRAININGS PROGRAM OR A BRIDGES PROGRAM OR  
14 EVEN CONTINUING BASIC BIOLOGY. SO THERE IS MONEY  
15 AVAILABLE, BUT 732 MILLION AT THE MOMENT IS WHAT IS  
16 LEFT FROM WHAT YOU'VE ALREADY CONCEPT APPROVED  
17 AND/OR AWARDED.

18 SO I JUST WANTED TO REMIND YOU OF THAT.  
19 SO THE CHANGES THERE ARE THE FACT THAT THE BASIC BIO  
20 V PROGRAM THAT WILL BE BROUGHT TO YOU FOR CONCEPT  
21 APPROVAL, THAT WAS 35 MILLION THAT ACTUALLY WAS IN  
22 THE ALLOCATED CATEGORY. WE'RE GOING TO ASK THAT YOU  
23 TAKE FIVE MILLION FROM THE UNALLOCATED CATEGORY.  
24 WE'VE ALREADY STATED THAT YOU ARE GOING TO, IF YOU  
25 GO AS RECOMMENDED FOR THE NEW FACULTY PHYSICIAN

**BARRISTERS' REPORTING SERVICE**

1 SCIENTIST, THERE WILL BE A CONSIDERABLE 43 MILLION  
2 THAT WILL GO INTO THE UNALLOCATED POOL.

3 SO BASICALLY WE ARE EXECUTING ON OUR  
4 FUNDING STRATEGY. WE'RE DOING WHAT WE HAD SAID  
5 WE'RE GOING TO DO, AND THAT'S JUST THE UPDATE. SO  
6 WITH THAT, I WILL NOW TURN IT OVER TO LISA KADYK,  
7 DR. LISA KADYK, WHO WILL REMIND YOU ABOUT THE NEW  
8 FACULTY PHYSICIAN SCIENTIST FOR TRANSLATIONAL  
9 MEDICINE PROGRAM.

10 CHAIRMAN THOMAS: THANK YOU, DR. OLSON.

11 DR. KADYK: SO, MR. CHAIRMAN AND MEMBERS  
12 OF THE BOARD, I'M HERE TO PRESENT TO YOU FOR YOUR  
13 CONSIDERATION RECOMMENDATIONS FROM THE GRANTS  
14 WORKING GROUP FOR APPLICATIONS FOR THE NEW FACULTY  
15 PHYSICIAN SCIENTIST TRANSLATIONAL RESEARCH AWARDS.  
16 JUST TO REMIND YOU, THE CONCEPT FOR THIS PARTICULAR  
17 RFA WAS APPROVED BACK IN SUMMER OF 2011.

18 AND THE THOUGHT BEHIND THAT AROSE OUT OF  
19 DISCUSSIONS THAT APPARENTLY TOOK PLACE BOTH WITHIN  
20 GRANTS WORKING GROUP MEETINGS AS WELL AS BOARD  
21 MEETINGS IN WHICH IT WAS NOTED THAT PHYSICIANS DOING  
22 TRANSLATIONAL RESEARCH ARE BECOMING SOMEWHAT OF A  
23 RARE BREED, SO PEOPLE WHO ARE M.D.'S AND WORKING IN  
24 THE CLINIC AND ALSO TRYING TO RUN RESEARCH LABS.

25 AND IT WAS FELT THAT THE REASONS FOR THAT

## BARRISTERS' REPORTING SERVICE

1 ARE TWOFOLD. FIRST OF ALL, THERE'S A LOT OF  
2 PRESSURES FOR DOING CLINICAL DUTIES ALREADY WHICH  
3 MAKES IT HARD TO ALSO MAINTAIN A RESEARCH LAB AND,  
4 FURTHERMORE, THAT FUNDING FOR SUCH TYPES OF RESEARCH  
5 IS BECOMING MORE AND MORE DIFFICULT TO OBTAIN AND  
6 UNPREDICTABLE. SO IT'S BEEN VERY CHALLENGING FOR  
7 PHYSICIAN SCIENTISTS TO CARRY OUT RESEARCH.

8 AND SO THE GOAL BEHIND THIS AWARD, A  
9 CAREER DEVELOPMENT AWARD, IS TO REALLY ENCOURAGE  
10 CAREER DEVELOPMENT OF THIS CATEGORY OF RESEARCHER  
11 AND PARTICULARLY THOSE WORKING IN TRANSLATIONAL STEM  
12 CELL RESEARCH. SO THIS AWARD WAS DESIGNED TO ACCEPT  
13 PROPOSALS ADDRESSING TRANSLATIONAL RESEARCH,  
14 INCLUDING CANDIDATE DISCOVERY, PRECLINICAL RESEARCH,  
15 AND PRECLINICAL DEVELOPMENT, AS WELL AS PROPOSALS  
16 THAT MIGHT ADDRESS A TRANSLATIONAL HURDLE.

17 AND THE PROJECTS ARE INTENDED TO BE FUNDED  
18 FOR UP TO FIVE YEARS FOR A TOTAL OF UP TO \$2 MILLION  
19 OVER THE TERM OF THE AWARD. AND LAST YEAR \$80  
20 MILLION WAS APPROVED BY THE BOARD TO BE SET ASIDE  
21 FOR THESE AWARDS, AND IT WAS ANTICIPATED  
22 APPROXIMATELY 20 AWARDS WOULD BE RECOMMENDED.

23 I SHOULD POINT OUT THAT OF THIS \$80  
24 MILLION, SOME OF IT WAS ALSO TO BE SET ASIDE FOR THE  
25 CIRM MEDICAL SCHOOL LOAN REPAYMENT PROGRAM FOR THOSE

## BARRISTERS' REPORTING SERVICE

1 CANDIDATES WHO MIGHT STILL HAVE MEDICAL SCHOOL LOANS  
2 TO REPAY.

3 AND SO THE REVIEW PROCESS WAS, FIRST OF  
4 ALL, THAT THE APPLICANTS FILE A LETTER OF INTENT TO  
5 ESTABLISH THEIR ELIGIBILITY. AS YOU CAN TELL BY THE  
6 LENGTHY NAME OF THIS AWARD, IT'S A VERY ACTUALLY  
7 NARROW GROUP OF PEOPLE OR NARROW DEFINITION OF  
8 ELIGIBILITY HERE. SO THE APPLICANT MUST HAVE AN  
9 M.D. OR EQUIVALENT DEGREE. THEY MUST BE LICENSED TO  
10 PRACTICE MEDICINE IN CALIFORNIA, ALSO BE WITHIN THE  
11 FIRST SIX YEARS OF STARTING THEIR FIRST INDEPENDENT  
12 FACULTY POSITION, AND BE WILLING TO COMMIT AT LEAST  
13 33 PERCENT EFFORT TO THIS AWARD, AND, FINALLY, THEY  
14 NEEDED TO BE NOMINATED BY THEIR INSTITUTION IN ORDER  
15 TO APPLY FOR THIS AWARD.

16 AND THE RULES THERE WERE THAT INSTITUTIONS  
17 THAT HAVE A MEDICAL SCHOOL WERE ALLOWED TO NOMINATE  
18 UP TO FOUR CANDIDATES, AND THOSE THAT DO NOT HAVE A  
19 MEDICAL SCHOOL COULD NOMINATE TWO.

20 SO APPLICATIONS WERE DUE IN THE SUMMER,  
21 AND THEY WERE REVIEWED ON OCTOBER 11TH AND 12TH.  
22 AND THE REVIEW CRITERIA WERE FOURFOLD. OF COURSE,  
23 THE RESEARCH PLAN WAS VERY IMPORTANT, AND REVIEWERS  
24 LOOKED AT THE RATIONALE, SIGNIFICANCE, POTENTIAL  
25 IMPACT ON DISEASE, AS WELL AS THE DESIGN AND



**BARRISTERS' REPORTING SERVICE**

1 FEASIBILITY OF THE PROPOSAL.

2 THIS IS A CAREER DEVELOPMENT AWARD, SO IT  
3 WAS ALSO VERY IMPORTANT TO EVALUATE THE PRINCIPAL  
4 INVESTIGATOR IN TERMS OF HIS OR HER QUALIFICATIONS  
5 AND POTENTIAL, AS WELL AS HIS OR HER CAREER  
6 DEVELOPMENT AND MENTORING PLANS. AND THERE WAS A  
7 SPECIFIC REQUIREMENT THAT THEY HAVE NAMED MENTORS  
8 FOR THIS AWARD.

9 ALSO, THE REVIEWERS LOOKED AT  
10 INSTITUTIONAL COMMITMENT TO THE PI IN TERMS OF  
11 PROVIDING DEDICATED TIME FOR THIS AWARD AS WELL AS  
12 LABORATORY SPACE AND FACILITIES, AND ALSO THE  
13 INSTITUTIONAL TRACK RECORD FOR WORKING IN THIS TYPE  
14 OF TRANSLATIONAL AND STEM CELL RESEARCH AS WELL AS  
15 THE FUTURE PLANS FOR THAT INSTITUTION. AND THEN,  
16 FINALLY, RESPONSIVENESS TO THE RFA. AND SOME OF THE  
17 KEY REQUIREMENTS THERE WERE THAT THE APPLICANT BE  
18 PROPOSING WORK USING HUMAN CELLS AND THAT IT BE  
19 TRANSLATIONAL RESEARCH OR ELSE ADDRESSING A  
20 TRANSLATIONAL HURDLE AND ALSO UNLIKELY OR UNABLE TO  
21 RECEIVE FEDERAL FUNDING.

22 AND SO AT THE END OF THE GRANTS WORKING  
23 GROUP SCIENTIFIC REVIEW, A GRAPH WAS MADE OF THE  
24 SCORE DISTRIBUTION. AND THE GRANTS WORKING GROUP  
25 DIVIDED, AS IS NORMALLY THE CASE, THE SCORES INTO

**BARRISTERS' REPORTING SERVICE**

1 THREE CATEGORIES, TIER I, II, AND III WITH TIER I  
2 BEING THE HIGHEST AND MOST LIKELY TO BE RECOMMENDED  
3 AND TIER III IN THE LOWER CATEGORY. AND THEN DURING  
4 THE PROGRAMMATIC REVIEW, THOSE TIERS WERE RESOLVED  
5 INTO EITHER TIER I, RECOMMENDED FOR FUNDING, OR TIER  
6 III, NOT RECOMMENDED FOR FUNDING. SO THAT'S JUST AN  
7 IDEA OF WHAT THE DISTRIBUTION LOOKED LIKE.

8 SO AT THE END OF THAT PROGRAMMATIC REVIEW,  
9 A VOTE WAS TAKEN. AND IN THE END TWELVE OF THE  
10 APPLICATIONS WERE RECOMMENDED FOR FUNDING. AS PAT  
11 SAID, THAT COMES TO JUST OVER \$36 MILLION. AND YOU  
12 WILL NOTE THAT IS SIGNIFICANTLY UNDER THE BUDGET  
13 THAT WAS APPROVED BY THE ICOC, AND I'D LIKE TO JUST  
14 COMMENT ON THAT.

15 I THINK THIS IS ACTUALLY NOT DUE TO AN  
16 EXTRAORDINARY SEVERITY OF THE SCIENTIFIC REVIEW IN  
17 THIS CASE, BUT RATHER REFLECTS THE BASIC PREMISE  
18 BEHIND THESE AWARDS, WHICH IS THAT THESE PHYSICIAN  
19 SCIENTISTS ARE RELATIVELY RARE. WE ONLY GOT 27  
20 APPLICATIONS. SO, IN FACT, THE GRANTS WORKING GROUP  
21 RECOMMENDED TO FUND 45 PERCENT OF THEM, WHICH IS  
22 ACTUALLY A FAIRLY HIGH PERCENTAGE.

23 SO WITH THAT, I BELIEVE THAT'S MY LAST  
24 SLIDE. ARE THERE ANY QUESTIONS?

25 CHAIRMAN THOMAS: MR. HARRISON, CAN YOU

**BARRISTERS' REPORTING SERVICE**

1 JUST REMIND US OF THE PROCEDURE HERE, PLEASE?

2 MR. HARRISON: YES. THE NEXT STEP IN OUR  
3 PROCESS IS FOR BOARD MEMBERS TO IDENTIFY ANY  
4 PARTICULAR APPLICATION ABOUT WHICH THEY WOULD LIKE  
5 TO HEAR ADDITIONAL INFORMATION. STAFF WOULD THEN  
6 MAKE A PRESENTATION REGARDING THAT APPLICATION, AND  
7 BOARD MEMBERS COULD ASK ANY QUESTIONS THEY HAVE.  
8 ONCE WE'VE HAD A DISCUSSION ABOUT APPLICATIONS IN  
9 WHICH MEMBERS HAVE AN INTEREST, WE CAN ENTERTAIN  
10 MOTIONS AND PUBLIC COMMENT.

11 CHAIRMAN THOMAS: DEAN PULIAFITO.

12 DR. PULIAFITO: THE FACT THAT WE -- I'D  
13 LIKE TO SAY GREAT JOB, GREAT PROGRAM. I WOULD SAY,  
14 JUST BEING FROM THE MEDICAL SCHOOL ENVIRONMENT, IT  
15 TAKES TIME FOR PEOPLE TO LEARN ABOUT THESE KIND OF  
16 PROGRAMS. AND IT MAY BE POSSIBLE THAT WE CAN DO  
17 THIS AGAIN WITH THE LEFTOVER MONEY. SO I SAY  
18 THAT -- AND I SEE THE OTHER DEAN NODDING HER HEAD.  
19 I SAY THAT BECAUSE I THINK WE SHOULD DO MERITOCRACY  
20 HERE, AND WE SHOULDN'T -- JUST THE AVAILABILITY OF  
21 THE EXTRA MONEY SHOULD NOT DRIVE US TO APPROVE  
22 THINGS THAT WERE NOT IN TIER I. THANK YOU.

23 MR. TORRES: I'D LIKE TO HEAR STAFF  
24 RECOMMENDATIONS ON THE EXTRAORDINARY PETITION FOR  
25 APPLICATION RM 3-06502.

**BARRISTERS' REPORTING SERVICE**

1 DR. SAMBRANO: MR. CHAIRMAN, MEMBERS OF  
2 THE BOARD, SO THIS APPLICATION 6502 RELATES TO AN  
3 ATTEMPT TO DEVELOP A BIOLOGICAL PACEMAKER. AND THE  
4 GOAL HERE IS TO BASICALLY BRIDGE WHAT WOULD BE  
5 ELECTRONIC PACEMAKERS IN CASES WHERE AN INFECTION  
6 HAS NECESSITATED THE REMOVAL OF THE ELECTRONIC  
7 DEVICE AND YOU THEN REQUIRE ANTIBIOTIC TREATMENT  
8 SYSTEMICALLY FOR ABOUT TWO OR MORE WEEKS BEFORE  
9 REPLACING IT WITH ANOTHER. SO THE IDEA IS THAT THAT  
10 GAP IN TIME COULD POTENTIALLY BE ACCOMMODATED BY A  
11 BIOLOGICAL PACEMAKER.

12 THE IDEA BEHIND THIS IS THIS IS AN INITIAL  
13 SET OF STUDIES THAT WOULD EVENTUALLY PERHAPS LEAD TO  
14 THE DEVELOPMENT OF A BIOLOGICAL PACEMAKER IN THE  
15 FUTURE THAT WOULD JUST REPLACE ELECTRONIC DEVICES.

16 THE REVIEWERS CERTAINLY APPRECIATED THE  
17 APPROACH AND THE GOAL OF DEVELOPING A BIOLOGICAL  
18 PACEMAKER. I THINK WHAT WAS REALLY A QUESTION WAS  
19 THE OVERALL DESIGN OF THIS PROPOSAL AND THE  
20 RATIONALE BEHIND DOING THIS IN PATIENTS THAT ARE IN  
21 NEED OF BEING BRIDGED FROM ONE DEVICE TO THE NEXT.

22 SO THE PROPOSAL BRINGS FORTH A COMPARISON  
23 BETWEEN A GENE THERAPY APPROACH AS WELL AS A CELL  
24 THERAPY APPROACH WHICH REVIEWERS VIEWED AS HAVING  
25 TWO DIFFERENT REQUIREMENTS OF EXPERTISE THAT WERE

**BARRISTERS' REPORTING SERVICE**

1 NOT NECESSARILY BEING BROUGHT FORTH BY THE APPLICANT  
2 AND THE TEAM.

3 SO IN THEIR VIEW, THEY CERTAINLY THOUGHT  
4 THAT THIS WAS SOMETHING THAT WOULD REQUIRE THE  
5 SELECTION OF ONE APPROPRIATE SINGLE THERAPEUTIC TO  
6 BRING FORWARD RATHER THAN EXPLORING TWO POTENTIAL  
7 ONES.

8 I THINK THEY WERE ALSO DIVIDED ABOUT THE  
9 RATIONALE BEHIND DOING THIS. CERTAINLY PATIENTS  
10 THAT ARE IN NEED OF THIS BIOLOGICAL PACEMAKER AND IN  
11 NEED OF THIS BRIDGING ARE ALREADY UNDERGOING  
12 ANTIBIOTIC THERAPY AND ARE IN A CONDITION WHERE THE  
13 INTRODUCTION OF NEW CELLS MAY BRING ABOUT  
14 COMPLICATIONS THAT WERE NOT NECESSARILY DISCUSSED OR  
15 CONSIDERED.

16 THE RISKS OF THIS THERAPY WERE ALSO NOT  
17 VERY WELL DISCUSSED IN THE APPLICATION, SUCH AS THE  
18 POSSIBILITY OF TERATOMA FORMATION, IMMUNE REJECTION,  
19 AND OTHER ITEMS AS WELL.

20 IN TERMS OF THE PI, THE PI IS A  
21 WELL-TRAINED CARDIOLOGIST, HAS A STRONG BACKGROUND  
22 IN ELECTROPHYSIOLOGY, HAS RELEVANT PUBLICATIONS IN  
23 THE AREA, BUT REVIEWERS FELT THAT THE APPLICANT DOES  
24 LACK EXPERTISE WITH HUMAN EMBRYONIC STEM CELLS THAT  
25 WOULD BE REQUIRED TO SUPPORT THE PROPOSED STUDIES.

**BARRISTERS' REPORTING SERVICE**

1 THIS DID LEAD REVIEWERS TO QUESTION WHETHER THE  
2 APPLICANT WOULD BE ABLE TO ACHIEVE THE OVERALL GOALS  
3 OF THE APPLICATION.

4 IN ADDITION, ALTHOUGH THEY CERTAINLY  
5 RECOGNIZE THE PRIMARY MENTOR AS HAVING BOTH A VERY  
6 STRONG LETTER OF SUPPORT AND BEING A VERY QUALIFIED  
7 MENTOR, THEY THOUGHT THE OVERALL DEVELOPMENT PLAN  
8 WAS WEAK. AND THEY SAW AS EVIDENCE OF THE LACK OF  
9 MENTORING THE POORLY WRITTEN APPLICATION.

10 THE INSTITUTIONAL COMMITMENT, I THINK  
11 REVIEWERS, AGAIN, FELT WAS LACKING, CERTAINLY NOT  
12 COMPARABLE TO OTHER APPLICATIONS THEY SAW. THEY  
13 THOUGHT THAT THE INSTITUTION ITSELF AND THE  
14 PROTECTED RESEARCH TIME WAS APPROPRIATE; HOWEVER,  
15 THE COMMITMENT FROM THE INSTITUTION, SPECIFICALLY IN  
16 TERMS OF LABORATORY SPACE THAT WOULD BE PROVIDED,  
17 WAS RATHER MINIMAL, AND THE AMOUNT OF START-UP FUNDS  
18 THAT THE APPLICANT WOULD BE RECEIVING WAS NOT VERY  
19 CLEAR.

20 I THINK THERE WAS ALSO A QUESTION IN  
21 GENERAL ABOUT RESPONSIVENESS TO THE RFA. SOME  
22 QUESTIONED THE RESPONSIVENESS OF A GENE THERAPY  
23 APPROACH AND CERTAINLY FELT THAT THE HUMAN EMBRYONIC  
24 STEM CELL COMPONENT MAY HAVE BEEN INCLUDED IN TERMS  
25 OF JUST BEING RESPONSIVE TO THIS RFA.

**BARRISTERS' REPORTING SERVICE**

1 SO, IN GENERAL, THAT'S THE VIEW FROM THE  
2 GRANTS WORKING GROUP ON THIS PROPOSAL.

3 CHAIRMAN THOMAS: QUESTIONS?

4 MR. TORRES: ANY REBUTTALS FROM THE FOLKS  
5 THAT ARE HERE?

6 DR. MARBAN: THANK YOU, SENATOR TORRES.  
7 SO I'M THE MENTOR IN QUESTION. THE APPLICANT IS  
8 HERE WITH ME AS IS A PATIENT ADVOCATE. THE FACT --  
9 THE IDEA THAT HUMAN EMBRYONIC STEM CELLS ARE THROWN  
10 IN HERE AS AN AFTERTHOUGHT FLIES IN THE FACE OF THE  
11 FACT THAT WE HAVE PUBLISHED WORK ON HUMAN EMBRYONIC  
12 STEM CELLS AS BIOLOGICAL PACEMAKERS AND DID SO THREE  
13 YEARS AGO, AND THE PAPER GOT AN AWARD OF THE BEST  
14 PAPER PUBLISHED IN THE JOURNAL CIRCULATION, WHICH IS  
15 THE HIGHEST IMPACT CARDIOLOGY JOURNAL IN THE WORLD.

16 THE OTHER APPROACH THAT'S COMPETING HERE  
17 IS IN PRESS AND WILL APPEAR NEXT WEEK IN *NATURE*  
18 *BIOTECHNOLOGY*. AND WE'VE ALREADY GOTTEN MEDIA  
19 INQUIRIES FROM SEVERAL COUNTRIES AROUND THE WORLD,  
20 AND IT'S JUST STARTING TO PUBLICIZE THIS WORK. IT'S  
21 DIRECT REPROGRAMMING OF PREEXISTING REGULAR HEART  
22 CELLS INTO PACEMAKER CELLS. AND THE IDEA OF  
23 COMPARING TWO LEAD CANDIDATES, BOTH OF WHICH HAVE  
24 BEEN IN RODENT MODELS IN A LARGE ANIMAL SETTING, I  
25 THINK, IS A VERY COMPELLING ONE AND SHOULDN'T

**BARRISTERS' REPORTING SERVICE**

1 DETRACT.

2           THERE WAS OBVIOUSLY SOME DIFFERENCE OF  
3 OPINION IN THE WORKING GROUP ON THESE ISSUES. IT  
4 WASN'T VIEWED WITH UNANIMITY, AND THEY WERE VOICED  
5 AND VERBALLY SO. BUT I'M NOT HERE TO QUESTION THE  
6 REVIEW SO MUCH AS TO ARGUE FOR THE FACT THAT THIS  
7 APPLICATION, WHICH CAME IN AT 58.75, WHICH IS JUST A  
8 HAIR BELOW THE CUTOFF OF 61 HERE IN A GROUP OF  
9 APPLICATIONS OF RARE INDIVIDUALS, RARIFIED  
10 INDIVIDUALS THAT WE MUST RECRUIT INTO THE STEM CELL  
11 COMMUNITY, THAT IT WOULD BE A DISSERVICE TO THE  
12 CITIZENS OF CALIFORNIA NOT TO EXTEND THAT PAYLINE  
13 DOWN SOME TO INCLUDE THIS APPLICATION.

14           THIS WOULD ALSO BALANCE THE CIRM  
15 TRANSLATIONAL PORTFOLIO IN A VERY IMPORTANT WAY.  
16 THERE IS NO FOCUS AT CIRM ON APPLICATIONS HAVING TO  
17 DO WITH CARDIAC RHYTHM DISORDERS. THESE ARE THE  
18 MAJOR CAUSE OF SUDDEN DEATH WORLDWIDE. OVER 250,000  
19 PEOPLE A YEAR IN THE UNITED STATES DIE OF SUDDEN  
20 CARDIAC DEATH DUE TO CARDIAC ARRHYTHMIAS. AND THERE  
21 IS NOT A SINGLE GRANT IN THE CIRM TRANSLATIONAL  
22 PORTFOLIO ON THIS MATTER.

23           I THINK IT IS A COMPELLING ISSUE. IT  
24 ADDRESSES HUMAN EMBRYONIC STEM CELLS, IT USES  
25 STATE-OF-THE-ART REPROGRAMMING. THE APPLICANT IS



**BARRISTERS' REPORTING SERVICE**

1 SUPERB. AND I HOPE THAT YOU WILL NUDGE DOWN THE  
2 PAYLINE TO ACCOMMODATE THIS WORTHY APPLICATION.

3 I'D ALSO LIKE TO INTRODUCE OUR PATIENT  
4 ADVOCATE AT THIS POINT.

5 MS. FEVERSTEIN: I HAVE HAD A PACEMAKER  
6 SINCE 2004. I HAVE HAD MANY, MANY, MANY, MANY  
7 ISSUES WITH THIS PACEMAKER. I WASN'T AWARE I WAS  
8 GOING TO GET ONE, AND I WOKE UP WITH ONE. I HAVE  
9 HAD PAIN. IT HAS SHOCKED ME. I CAN'T GO INTO  
10 AIRPORTS. I CAN'T GO INTO COURTHOUSES. I CANNOT GO  
11 VARIOUS AND SUNDRY PLACES BECAUSE IF I WALK INTO ANY  
12 OF THOSE MACHINES, I WILL DIE.

13 THE THOUGHT OF AN ELECTRONIC OR A STEM  
14 CELL PACEMAKER BEING IMPLANTED IN ME WHICH WOULD  
15 CHANGE THE WAY THAT I LIVE IS UNBELIEVABLY  
16 UPLIFTING. IF I HAVE TO CONTINUE TO LIVE WITH THIS  
17 AND I WILL BECAUSE THAT'S THE ONLY WAY I CAN LIVE.  
18 I PACE TO LIVE. I DON'T HAVE A DEFIBRILLATOR. IT'S  
19 A FULL ON, IT GOES ALL THE TIME. AND I CONTINUE TO  
20 HAVE ISSUES. I HAD AN EMERGENCY OPERATION TO  
21 REPLACE THE ENTIRE PACEMAKER BECAUSE IT FAILED. AND  
22 I WOULDN'T HAVE KNOWN IT FAILED AND I WOULDN'T HAVE  
23 DROPPED DEAD IF I HADN'T BEEN AT A NORMAL CHECKUP.

24 SO IF YOU APPROVE THIS APPLICATION, IT  
25 WOULD ENHANCE MY LIFE DOWN THE ROAD. THANK YOU.

**BARRISTERS' REPORTING SERVICE**

1           CHAIRMAN THOMAS: ANY OTHER PUBLIC COMMENT  
2 ON THIS ITEM? DR. TROUNSON, COULD YOU JUST GIVE US  
3 YOUR THOUGHTS, PLEASE?

4           DR. TROUNSON: SO I'M CLEARLY VERY  
5 SYMPATHETIC TO ALL OF THESE APPLICANTS, ALL OF THESE  
6 M.D. PH.D.'S. BUT IN DISCUSSION WITH DR. FEIGAL,  
7 SHE AND I DON'T THINK THAT THERE WAS REALLY ANYTHING  
8 THAT WOULD HAVE ALTERED THE REVIEWERS' MARK THAT WAS  
9 BROUGHT FORWARD IN THE EXTERNAL PETITIONS IN ANY OF  
10 THEM IN THIS CASE.

11           I THINK IT WAS WELL DEBATED AT THE REVIEW.  
12 I THINK THE MARK IS APPROPRIATE. AND I THINK IF YOU  
13 WANT TO MOVE THIS, IT HAS TO BE REALLY FOR STRICTLY  
14 PROGRAMMATIC REASONS. WE CAN'T REALLY HELP YOU ON  
15 THE SCIENTIFIC SIDE BECAUSE I DON'T THINK THERE'S  
16 REALLY ANYTHING THAT REALLY WASN'T DISCUSSED BY THE  
17 REVIEWERS THERE THAT WOULD REALLY CHANGE OUR  
18 RECOMMENDATION.

19           SO DR. FEIGAL AND I ARE IN CONCERT ON  
20 THIS, AND WE BELIEVE THAT THE REVIEWERS' SCORES ARE  
21 REASONABLE.

22           CHAIRMAN THOMAS: SENATOR TORRES.

23           MR. TORRES: WHAT WAS THE SCORE ON THIS  
24 GRANT?

25           DR. SAMBRANO: THIS WAS A 59.

**BARRISTERS' REPORTING SERVICE**

1 MR. TORRES: 59. AND THE FUNDING LEVEL  
2 WAS AT 65?

3 DR. SAMBRANO: SO THE ORIGINAL LINES WERE  
4 DRAWN AT 66 OR ABOVE AND THEN 61 OR BELOW. SO THAT  
5 ESTABLISHED THE INITIAL TIERS I AND TIERS II. THERE  
6 WAS AN APPLICATION 6525 THAT WAS MOVED UP, AND  
7 THAT'S WHY THAT'S IN TIER I. BUT THE ORIGINAL LINE,  
8 IF YOU WILL, WAS AT 66.

9 MR. TORRES: WHAT OTHER OPTIONS ARE  
10 AVAILABLE IF THIS PROPOSAL IS NOT MOVED TOWARD  
11 FUNDING FOR THIS TYPE OF RESEARCH?

12 DR. SAMBRANO: WELL, THERE'S EARLY  
13 TRANSLATIONAL. DEPENDING ON THE PROPOSAL, IT COULD  
14 BE TOOLS AND TECHNOLOGIES, BUT THERE ARE OTHER  
15 OPTIONS.

16 MR. TORRES: AND THE TIMELINESS OF THOSE  
17 OTHER OPTIONS?

18 DR. SAMBRANO: WELL, WE'RE CURRENTLY UNDER  
19 THE EARLY TRANSLATIONAL REVIEW RIGHT NOW. SO IT  
20 WOULD NOT BE UNTIL CERTAINLY LATE NEXT YEAR.

21 DR. PRIETO: I GUESS I'M JUST A LITTLE  
22 CONCERNED REGARDING OUR PROCESS IN THAT THE  
23 EXTRAORDINARY PETITION HERE, IT SEEMS TO ME IS  
24 MAKING AN ARGUMENT PURELY ON PROGRAMMATIC GROUNDS.  
25 THERE'S NO CONTESTING FACTUAL ISSUES OR

**BARRISTERS' REPORTING SERVICE**

1 MISINTERPRETATION OF THE SCIENTIFIC DATA THAT LED TO  
2 THE SCORE. JUST AN OBSERVATION. I'M NOT SURE THAT  
3 GIL NEEDS TO RESPOND TO IT.

4 CHAIRMAN THOMAS: ANY OTHER COMMENTS ON  
5 THIS APPLICATION?

6 MR. TORRES: I KNOW HOW TO READ VOTES, SO  
7 I WILL MOVE ON.

8 CHAIRMAN THOMAS: THANK YOU. ARE THERE  
9 ANY OTHER APPLICATIONS THAT MEMBERS OF THE BOARD  
10 WOULD LIKE TO HEAR A REPORT ON? MR. JUELSGAARD.

11 DR. JUELSGAARD: I'D LIKE TO HEAR A REPORT  
12 ON 06525. THIS IS THE ONE THAT IS IN TIER I  
13 RECOMMENDED FOR APPROVAL. SO I BEGIN BY NOTING THAT  
14 THERE'S A FAIRLY LARGE STANDARD DEVIATION OF 12  
15 THAT'S REPORTED ON WHAT WE RECEIVED.

16 AND THE SECOND THING I WOULD NOTE IN  
17 LOOKING AT THE MATERIALS ASSOCIATED WITH THIS,  
18 THERE'S AN INDICATION THAT THE INDIVIDUAL WHO'S  
19 INVOLVED HAS RECEIVED IN THE PAST SEVERAL OF THESE  
20 AWARDS. AND I'M CURIOUS IN PARTICULAR AS TO HOW  
21 MUCH FUNDING THIS PARTICULAR INVESTIGATOR HAS  
22 RECEIVED FROM CIRM FOR VARIOUS PAST PROJECTS, IF  
23 THAT FIGURE IS AVAILABLE.

24 DR. OLSON: I WOULD HAVE TO TAKE A FEW  
25 MINUTES PROBABLY TO TELL YOU EXACTLY HOW MUCH

## BARRISTERS' REPORTING SERVICE

1 FUNDING HE HAS. I DO NOT HAVE OFF THE TOP OF MY  
2 HEAD THE EXACT AMOUNT OF FUNDING THE APPLICANT HAS  
3 RECEIVED FROM CIRM. I DO KNOW THAT THE APPLICANT  
4 HAS RECEIVED PREVIOUS FUNDING FROM CIRM. SO I CAN  
5 GET THAT INFORMATION FOR YOU.

6 DR. JUELSGAARD: SO THE CONCERN IS  
7 SEVERAL. IT DOESN'T SAY HAS RECEIVED MONEY. SO THE  
8 QUESTION IS IS THERE AN ISSUE ABOUT HOW MANY TIMES  
9 ANY ONE INDIVIDUAL CAN KEEP COMING TO THIS  
10 ORGANIZATION FOR YET ANOTHER AWARD IN THIS AREA?  
11 AND PERHAPS THERE ISN'T. PERHAPS IT SHOULD BE  
12 OPEN-ENDED. I JUST DON'T KNOW. BUT AT LEAST TO  
13 HAVE SOME GROUNDING IN THE AMOUNT OF MONEY WOULD BE  
14 HELPFUL, AT LEAST FOR ME TO THINK ABOUT IT.

15 DR. OLSON: CIRM HAS LIMITS ON THE NUMBER  
16 OF ACTIVE AWARDS THAT AN APPLICANT MAY HOLD AT ANY  
17 ONE TIME. SO IT HAS LIMITS ON THAT AS A PI OR AS A  
18 CO-PI. THAT'S WRITTEN INTO VIRTUALLY EVERY RFA.

19 SO, NOW, AS FAR AS LOOKING AT PAST  
20 FUNDING, THAT'S NOT USUALLY A CONSIDERATION AS TO  
21 WHETHER AN APPLICANT CAN COME OR NOT. I THINK YOU  
22 ARE HIGHLIGHTING AN ISSUE THAT WAS NOTED BY THE  
23 GRANTS WORKING GROUP AND WAS DEBATED, NOT ONLY  
24 DURING THE ACTUAL SCIENTIFIC REVIEW, BUT ALSO DURING  
25 THE PROGRAMMATIC REVIEW, THAT THIS APPLICANT

## BARRISTERS' REPORTING SERVICE

1 BASICALLY IS A VERY SUCCESSFUL PERSON IN HIS OR HER  
2 FIELD, BUT IS MOVING -- BUT THE POINT WAS MADE BY  
3 SOME AND OBVIOUSLY CONVINCINGLY ENOUGH THAT AT LEAST  
4 THE ENTIRE GRANTS WORKING GROUP CHOSE TO VOTE TO  
5 RECOMMEND FOR FUNDING.

6 THE POINT WAS MADE THAT THE APPLICANT IS  
7 MOVING INTO ANOTHER AREA OF RESEARCH THAT IS  
8 CONSIDERED, WHAT DO I WANT TO SAY, A LITTLE BIT MORE  
9 SPECULATIVE, AND THAT, THEREFORE, WOULD BE LESS  
10 LIKELY TO BE FUNDED BY OTHER SOURCES. AND SO IN  
11 THAT SENSE, IT WAS A NEW CAREER DIRECTION. BUT AS I  
12 SAY, THIS WAS A POINT OF DEBATE AMONG THE GRANTS  
13 WORKING GROUP.

14 SO YOU CAN SEE WHERE THEY FELL. IT ENDED  
15 UP BEING RECOMMENDED FOR FUNDING. I'D BE HAPPY TO  
16 GO THROUGH THE ENTIRE REVIEW SUMMARY, IF YOU'D LIKE,  
17 BUT I'M RESPONDING IN PARTICULAR TO YOUR QUESTION.

18 DR. JUELSGAARD: I'M JUST INTERESTED IN  
19 THIS ONE PARTICULAR ASPECT. SO UNDER THE  
20 RESPONSIVENESS, I'LL READ JUST FROM THE FIRST OF THE  
21 TWO PARAGRAPHS ON RESPONSIVENESS, THE LAST SENTENCE,  
22 WHICH SAYS, "IT IS NOT CLEAR THAT THIS AWARD IS  
23 NECESSARY TO THE SUCCESS OF THIS CANDIDATE AS A  
24 PHYSICIAN SCIENTIST. AND IN THAT REGARD THE  
25 APPLICATION IS MINIMALLY RESPONSIVE TO THE OBJECTIVE

**BARRISTERS' REPORTING SERVICE**

1 OF THE RFA."

2 I GUESS THAT'S WHAT I'M FOCUSED ON. SO  
3 WHAT'S THE PURPOSE OF THESE AWARDS IN PARTICULAR AS  
4 WERE OUTLINED BEFORE? THESE ARE PEOPLE WHO ARE SORT  
5 OF COMING UP IN THE WORLD. THAT'S WHAT I  
6 UNDERSTOOD. AND THE QUESTION IS, GREAT, IT'S A  
7 BRAND-NEW AREA OF ENDEAVOR. I GOT THAT. I  
8 UNDERSTAND THAT. BUT FOR ME THE CRITICAL NATURE IS  
9 WHEN IS ENOUGH ENOUGH IN SORT OF BRINGING SOMEBODY  
10 NEW FORWARD ENOUGH INTO THE PHYSICIAN SCIENTIST AREA  
11 THAT WE SHOULD SAY, OKAY, FINE, WE'VE DONE OUR JOB  
12 BY YOU. NOW IT'S UP TO YOU TO FIGURE OUT OTHER  
13 FUNDING SOURCES? I'LL STOP THERE.

14 CHAIRMAN THOMAS: DR. Krontiris.

15 DR. Krontiris: I GUESS I JUST WANTED SOME  
16 CLARIFICATION FROM YOU ON THIS. IT'S INTERESTING  
17 THAT IT'S KIND OF A TWIST ON OUR USUAL DISCUSSION.  
18 BUT WAS IT ULTIMATELY DECIDED THAT THIS CANDIDATE  
19 FIT THE CRITERIA FOR THE AWARD?

20 DR. OLSON: THE CANDIDATE MET THE  
21 ELIGIBILITY CRITERIA. THE CANDIDATE MET THE  
22 ELIGIBILITY CRITERIA.

23 DR. Krontiris: THEN I THINK THAT'S WHERE  
24 WE ARE.

25 DR. OLSON: MR. JUELsgaard IS ASKING A

**BARRISTERS' REPORTING SERVICE**

1 DIFFERENT QUESTION. HE'S ASKING DID THE CANDIDATE  
2 MEET THE RESPONSIVENESS CRITERIA, WHAT THE GOAL OF  
3 THE RFA WAS. I THINK IT DEPENDS ON HOW YOU CHOOSE  
4 TO INTERPRET THAT.

5 CHAIRMAN THOMAS: ANY OTHER COMMENTS?  
6 QUESTIONS? YES, DR. CHISARI.

7 DR. CHISARI: SO THERE ARE TWO COMMENTS IN  
8 THIS REVIEW THAT WE'VE BEEN PROVIDED WITH THAT ARE  
9 OF SIGNIFICANT CONCERN TO ME, AND PERHAPS YOU CAN  
10 PROVIDE SOME INSIGHT. THE FIRST ONE IS THAT, I'LL  
11 READ NOW, "THE REVIEWERS GENERALLY FOUND THE  
12 EXPERIMENTAL PLAN TO BE NOVEL, BUT THERE WERE  
13 CONSIDERABLE QUESTIONS REGARDING THE RATIONALE OF  
14 USING EMBRYONIC STEM CELLS AS OPPOSED TO IPS CELLS  
15 GIVEN ALLOGENEIC BARRIER." AND SOME OF THE  
16 REVIEWERS SUGGESTED THAT IPS CELLS BE USED FROM THE  
17 BEGINNING OF THE PROJECT.

18 SO MY FIRST QUESTION IS CAN YOU DESCRIBE  
19 WHAT THE DISCUSSION WAS AROUND THAT PARTICULAR  
20 ISSUE?

21 DR. OLSON: I THINK OBVIOUSLY IF YOU'RE  
22 TALKING ABOUT AN AUTOIMMUNE DISEASE, I THINK THERE  
23 WERE SOME CONCERNS -- AND THIS WAS -- DO RECALL THAT  
24 THESE ARE IN ORDER OF WHAT THE REVIEWERS CONSIDERED  
25 IMPORTANT OR RELEVANT TO THAT. BUT THEY DID THINK



## BARRISTERS' REPORTING SERVICE

1 THAT YOU DO HAVE TO ASK THE QUESTION OF AN  
2 ALLOGENEIC THERAPY IN THAT CONTEXT. SO I THINK THAT  
3 WAS THE QUESTION, BUT I THINK WE ALL RECOGNIZE THAT  
4 THERE ARE CONSIDERATIONS WITH A PERSONALIZED IPSC  
5 THERAPY. AND SO I THINK AS ADVANCES ARE BEING MADE  
6 IN SORT OF A, WHAT SHALL I SAY, IMPROVING ACCEPTANCE  
7 OF ALLOGENEIC THERAPIES OR IN SOME CONTEXT, WOULD  
8 THIS BE VIABLE. SO I LEAVE IT AT THAT.

9 DR. CHISARI: HOW DID THE GROUP COME DOWN  
10 ON THAT ISSUE?

11 DR. OLSON: THEY CAME DOWN THAT IT WAS A  
12 CONCERN ALBEIT NOT AS IMPORTANT AS OTHER CONCERNS AS  
13 FAR AS THE DESIGN AND FEASIBILITY AND THE RATIONALE.

14 DR. CHISARI: THE OTHER QUESTION IS AT THE  
15 END OF THE RESEARCH PLAN CRITIQUE, IT'S IN THE  
16 CATEGORY OF MINOR CONCERNS, IT SAYS HERE SOME  
17 REVIEWERS RAISED MINOR CONCERNS REGARDING THE  
18 RELEVANCE, RELEVANCE, OF STUDYING INFLAMMATORY BOWEL  
19 DISEASE IN AN ANIMAL MODEL THAT IS NOT  
20 IMMUNOCOMPETENT.

21 GIVEN THAT THE PATHOGENESIS OF  
22 INFLAMMATORY BOWEL DISEASE IS IMMUNE MEDIATED, AND  
23 APPARENTLY IN AIM 3 OF THIS APPLICATION, THEY'RE  
24 GOING TO BE USING IMMUNO-INCOMPETENT MICE, A MOUSE  
25 MODEL, WILL THE RELEVANCE OF THE EXPERIMENTS IN AIM

**BARRISTERS' REPORTING SERVICE**

1 3 BE APPLICABLE TO THE HUMAN DISEASE?

2 DR. OLSON: I THINK YOU HIGHLIGHT AN ISSUE  
3 THAT BASICALLY PLAGUES ALL HUMAN-DERIVED THERAPIES  
4 IN THE CONTEXT OF A PRECLINICAL MODEL AND  
5 PARTICULARLY THOSE THAT INVOLVE AN AUTOIMMUNE  
6 COMPONENT. SO THAT'S THE KIND OF SITUATION WHERE  
7 YOU EITHER DO A HOMOLOGOUS SPECIES MODEL. BUT IF  
8 YOU ARE ACTUALLY TRYING TO TEST, YOU CAN TEST THE  
9 NOTION OF CAN IT ENGRAFT IN THAT KIND OF MODEL, CAN  
10 IT FUNCTION. WHAT YOU CANNOT TEST IS THE IMPACT OF  
11 AUTOIMMUNITY ON IT.

12 SO IT'S IN THAT CONTEXT THAT YOU CAN SAY  
13 IS WHAT YOU HAVE DEVELOPED FUNCTIONAL, BUT YOU  
14 CANNOT ADDRESS THE IMPACT OF THE AUTOIMMUNITY  
15 WITHOUT GOING TO OTHER KINDS OF MODELS.

16 DR. CHISARI: THE FUNDAMENTAL --

17 DR. OLSON: AND THAT COULD BE -- I'M  
18 SORRY. GO AHEAD.

19 DR. CHISARI: THE FUNDAMENTAL PATHOGENESIS  
20 OF INFLAMMATORY BOWEL DISEASE IS THAT IT'S AN  
21 AUTOIMMUNE INFLAMMATORY DISEASE.

22 DR. OLSON: YES, IT IS AN AUTOIMMUNE  
23 DISEASE. THAT IS CORRECT.

24 DR. CHISARI: IF THE ANIMAL MODEL, WHICH  
25 IS ONLY ONE OF THREE AIMS, BUT IF THAT MODEL IS ONE

**BARRISTERS' REPORTING SERVICE**

1 THAT DOES NOT REPRODUCE THE UNDERLYING FUNDAMENTAL  
2 PATHOGENESIS OF THE HUMAN DISEASE, COULD YOU EXPLAIN  
3 WHY --

4 DR. OLSON: WHAT YOU DO NOT HAVE IS YOU DO  
5 NOT HAVE A PROOF OF DISEASE ACTIVITY, BUT YOU MAY  
6 WELL GET A PROOF OF BIOLOGICAL ACTIVITY. THAT IS,  
7 CAN THIS DO -- CAN THIS INTEGRATE, CAN IT INTEGRATE  
8 AND CAN IT BE FUNCTIONAL IN THAT KIND OF MODEL. I  
9 AGREE WITH YOU. YOU WILL NOT GET DISEASE MODIFYING  
10 ACTIVITY IN THAT KIND OF MODEL, BUT YOU WILL GET  
11 BIOLOGICAL ACTIVITY. SO THAT IS A STEP. IT'S SORT  
12 OF PROOF OF BIOLOGICAL CONCEPT, BUT NOT PROOF OF  
13 DISEASE MODIFYING CONCEPT.

14 DR. CHISARI: THANK YOU.

15 DR. PULIAFITO: TO ME THE RED FLAG IS THIS  
16 SEEMS LIKE A WELL-FUNDED INVESTIGATOR THAT'S GOT  
17 LOTS OF YOUNG INVESTIGATOR AWARDS. DOESN'T TO ME  
18 REALLY MEET THE INTENT OF THIS RFA.

19 DR. OLSON: AND THAT IS YOUR DECISION AS A  
20 BOARD TO MAKE.

21 DR. JUELGAARD: SO BASED ON THE ONE, THE  
22 LACK OF KNOWLEDGE ABOUT THE AMOUNT OF MONEY THAT  
23 THIS INVESTIGATOR HAS RECEIVED BEFORE --

24 DR. OLSON: I CAN SPEAK TO THAT NOW. THE  
25 APPLICANT HAS PREVIOUSLY RECEIVED \$3.2 MILLION FROM

**BARRISTERS' REPORTING SERVICE**

1 CIRM. I WOULD POINT OUT THAT'S CONSIDERABLY LESS  
2 THAN MANY INVESTIGATORS.

3 DR. JUELSGAARD: SO THIS INDICATED IT HAD  
4 SEVERAL AWARDS, AND THAT SEEMS LIKE ONLY ONE; IS  
5 THAT RIGHT?

6 DR. OLSON: OTHER AWARDS, NOT NECESSARILY  
7 FROM CIRM.

8 DR. KRONIRIS: COULD I JUST MAKE A  
9 COMMENT? THIS IS KIND OF AN EXAMPLE OF MAKING SOME  
10 FAIRLY DETAILED INQUIRIES INTO THE NATURE OF THIS  
11 REVIEW AND THE CANDIDATE BLINDED TO REALLY IMPORTANT  
12 ASPECTS OF THE REVIEW THAT I THINK WE SIMPLY HAVE TO  
13 TRUST, AND IT SOUNDS LIKE FROM THE DISCUSSION THE  
14 GRANTS WORKING GROUP WENT THROUGH. WE DON'T KNOW  
15 WHO THE CANDIDATE IS, WHAT THEIR STATE OF CAREER IS,  
16 HOW PRODUCTIVE THEY HAVE BEEN, WHAT'S HAPPENED IN  
17 TERMS OF THE TOTALITY OF THEIR GRANT REVIEW. ALL OF  
18 THESE THINGS GRANTS WORKING GROUP COMMITTEE WOULD  
19 HAVE GONE THROUGH AND COME ULTIMATELY TO SOME  
20 DECISION ABOUT AND THEY HAVE. AND TO QUESTION THESE  
21 CLEARLY LEGITIMATE ISSUES THAT ARE BOTHERING PEOPLE  
22 WITHOUT HAVING KNOWLEDGE OF THE FACTS SEEMS TO ME  
23 NOT PRODUCTIVE.

24 CHAIRMAN THOMAS: MR. HARRISON, AT THIS  
25 POINT, DO WE ENTERTAIN A MOTION TO FUND TIER I, OR

**BARRISTERS' REPORTING SERVICE**

1 SHOULD WE GO TO PUBLIC COMMENT ON ANY OTHER  
2 PROPOSALS IN ADVANCE?

3 MR. HARRISON: I WOULD RECOMMEND THAT YOU  
4 TAKE ANY OTHER PUBLIC COMMENT, AND THEN YOU CAN ASK  
5 WHETHER ANY MEMBER WOULD LIKE TO MAKE A MOTION WITH  
6 RESPECT TO A PARTICULAR APPLICATION. IF THERE ARE  
7 NONE, THEN YOU CAN MOVE TO A BLOC VOTE ENCOMPASSING  
8 THOSE IN TIER I AND IN TIER III.

9 CHAIRMAN THOMAS: THANK YOU, MR. HARRISON.  
10 DO WE HAVE MEMBERS OF THE PUBLIC WHO'D LIKE TO  
11 COMMENT AT THIS POINT? IN SO DOING, PLEASE GIVE  
12 YOUR NAME TO START.

13 DR. MEMARZADEH: SO GOOD MORNING,  
14 EVERYONE. I AM SANAZ MEMARZADEH. I AM A  
15 GYNECOLOGIST BY TRAINING AND A GYNECOLOGIC SURGEON.  
16 I'M ALSO A PH.D.-TRAINED MOLECULAR BIOLOGIST. I  
17 HAVE SUBMITTED AN APPLICATION TO CIRM FOCUSING ON  
18 IDENTIFYING REAL TREATMENTS FOR A DISEASE CALLED  
19 ENDOMETRIOSIS. ENDOMETRIOSIS IS CHRONIC,  
20 DEBILITATING, PAINFUL, INCURABLE, AND VERY  
21 PREVALENT. IT AFFECTS 10 PERCENT OF WOMEN DURING  
22 THEIR REPRODUCTIVE LIVES. THIS IS THE PRIME OF A  
23 WOMAN'S LIFE.

24 AS GYNECOLOGISTS WE DON'T KNOW HOW TO  
25 TREAT ENDOMETRIOSIS. AND THE REASON FOR THAT IS WE

**BARRISTERS' REPORTING SERVICE**

1 DON'T UNDERSTAND WHAT CAUSES IT. AS A RESULT, A  
2 WOMAN WHO IS AFFECTED BY ENDOMETRIOSIS ENDS UP  
3 UNDERGOING MULTIPLE SURGERIES, ULTIMATELY RESULTING  
4 IN REMOVAL OF REPRODUCTIVE ORGANS AND, IN ESSENCE,  
5 FEMALE CASTRATION.

6 TO MY KNOWLEDGE CIRM HAS NOT FUNDED WORK  
7 RELATED TO GYNECOLOGIC DISEASES. I AM HERE TODAY TO  
8 PETITION FOR FUNDING OF MY APPLICATION PRIMARILY  
9 BECAUSE I DO BELIEVE SOME KEY POINTS WERE MISSED  
10 DURING THE REVIEW PROCESS.

11 FIRST, IT WAS QUESTIONED IF THE CIRM GRANT  
12 WOULD HELP MY CAREER DEVELOPMENT. FIVE-YEAR STABLE  
13 FUNDING THROUGH CIRM WOULD ALLOW ME TO BECOME A  
14 LEADER IN THE FIELD OF GYNECOLOGIC RESEARCH.  
15 GYNECOLOGIC DISEASES ARE SO POORLY STUDIED AND WE  
16 DESPERATELY NEED LEADERS IN THIS FIELD.

17 SECOND, MY CHOICE OF MENTORS WAS  
18 QUESTIONED. I HAVE PICKED MY TWO MENTORS SPECIFIED  
19 IN THE APPLICATION FOR A VERY SPECIFIC REASON. BOTH  
20 HAVE BEEN SUCCESSFUL IN TAKING A TREATMENT FROM THE  
21 LABORATORY INTO THE CLINIC. DR. OWEN WITTE WAS  
22 INSTRUMENTAL IN DEVELOPMENT AND CLINICAL TESTING OF  
23 GLEEVEK, THE FIRST TARGETED THERAPY FOR LEUKEMIAS.  
24 MY SECOND MENTOR, DR. JOHN GLASBY WORKED ALONGSIDE  
25 DR. DENNY SLAMON IN TAKING HERCEPTIN FROM THE LAB

**BARRISTERS' REPORTING SERVICE**

1 INTO CLINIC FOR TREATMENT OF PATIENTS FOR BREAST  
2 CANCER.

3 I PLAN TO TAKE FULL ADVANTAGE OF THESE  
4 WONDERFUL MENTORS AND ALSO THE GREATER COMMUNITY AT  
5 UCLA AND OTHER MENTORS IN REPRODUCTIVE BIOLOGY SUCH  
6 AS DR. DANIEL DEMESICK (PHONETIC).

7 THIRD AND LAST, THE ABILITY OF A SPECIFIC  
8 HORMONAL DEFECT IN ENDOMETRIOSIS WAS QUESTIONED.  
9 MANY INVESTIGATORS AND EXPERTS IN THE FIELD HAVE  
10 ALREADY DEMONSTRATED THAT THIS SPECIFIC HORMONAL  
11 DEFECT DOES EXIST. WHAT IS NOT KNOWN IS EXACTLY  
12 WHAT CELLS ARE AFFECTED BY THAT DEFECT AND WHAT IS  
13 THE MECHANISM OF THIS HORMONAL PROBLEM.

14 OUR PRELIMINARY DATA SUGGESTS THAT  
15 ENDOMETRIOSIS MAY VERY WELL BE A STEM CELL DISEASE.  
16 SIMPLY PUT, IT COULD HAPPEN BECAUSE THERE'S A  
17 MISCOMMUNICATION BETWEEN THE ENDOMETRIAL STEM CELL  
18 AND ITS NEIGHBORS. IN MY PROPOSAL I PLAN TO FOCUS  
19 ON THIS SPECIFIC MECHANISM OF DISEASE, LOOKING  
20 PARTICULARLY AT THE ENDOMETRIAL STEM CELLS AND ITS  
21 NEIGHBORS. I THEN PLAN TO TEST DRUGS THAT CAN  
22 TARGET THOSE SPECIFIC DEFECTS IN AN IN VIVO MODEL  
23 FOR THE TREATMENT OF ENDOMETRIOSIS.

24 THE OUTCOME WILL BE EVIDENCE-BASED,  
25 EFFECTIVE TREATMENTS WITHOUT THE NEED FOR SURGERY.

**BARRISTERS' REPORTING SERVICE**

1 I KNOW THAT I CAN DO THIS AT UCLA, AND I'M ASKING  
2 FOR YOUR HELP IN FUNDING THIS GRANT THAT WILL  
3 SIGNIFICANTLY ACCELERATE THIS WORK. THANK YOU SO  
4 MUCH.

5 CHAIRMAN THOMAS: THANK YOU, DOCTOR. NEXT  
6 PUBLIC COMMENT, PLEASE.

7 DR. DAMOISEAUX: MY NAME IS DR.  
8 DAMOISEAUX. I'M THE SCIENTIFIC DIRECTOR OF THE  
9 MOLECULAR SCREENING SHARED RESOURCE AT UCLA. I  
10 WOULD LIKE TO PETITION YOU TO FUND DR. SANAZ'  
11 RESEARCH.

12 I'M VERY FAMILIAR WITH HER RESEARCH, AND I  
13 CAN SPEAK A LOT TO HER SCIENTIFIC EXCELLENCE. BUT  
14 HERE TODAY I AM AS A HUSBAND OF A WONDERFUL WIFE WHO  
15 IS AFFECTED WITH ENDOMETRIOSIS. AND THAT DIAGNOSIS  
16 CAME DOWN ABOUT FOUR YEARS AGO. AFTER A JOURNEY OF  
17 ABOUT TWO YEARS AND GOING THROUGH SIX OB-GYNS, WE  
18 FINALLY ENDED UP GETTING THIS DIAGNOSIS AND WERE  
19 ABLE TO DO SOMETHING ABOUT THIS. AT THE SAME TIME,  
20 I STARTED TO REVIEW THE SCIENTIFIC LITERATURE AND  
21 FOUND PRETTY MUCH NOTHING. I DIDN'T FIND ANYTHING  
22 THAT WAS FUNDED BY THE NIH IN ANY MAJOR SCALE. I  
23 DIDN'T FIND ANY FUNDING SOURCES OUTSIDE OF THE NIH.  
24 SO I THINK THIS IS YOUR FIRST OPPORTUNITY TO TEAR  
25 INTO THIS DISEASE AND BE LEADING IN THE NATION.



**BARRISTERS' REPORTING SERVICE**

1 SO AFTER REVIEWING ALL OF THIS AND LOOKING  
2 AT THE OPTIONS, MY WIFE DECIDED TO HAVE LUPRON,  
3 WHICH IS BASICALLY, AS DR. SANAZ POINTED OUT, A  
4 CHEMICAL CASTRATION OF THE FEMALE ORGANS. SHE WENT  
5 INTO PREMATURE MENOPAUSE. A WONDERFUL WIFE OF 30  
6 YEARS FELT ALL OF A SUDDEN 50 YEARS OLD. SO I'M NOT  
7 SURE IF ANY OF YOUR WIVES OR IF ANY OF YOU HAVE  
8 EXPERIENCED THIS, BUT I CAN TELL YOU IT'S PRETTY  
9 HORRIBLE.

10 SO RIGHT NOW THIS IS THE ONLY OPTION,  
11 HORMONAL ABLATION THERAPY. AND WHAT'S REALLY,  
12 REALLY NEEDED IS TO DISSECT THE BIOLOGY BEHIND IT.  
13 I THINK THERE'S A LOT OF BIOLOGY TO BE HAD BECAUSE  
14 ENDOMETRIOSIS IS BASICALLY, IF YOU WANT, A  
15 NONCANCEROUS GROWTH OF ENDOMETRIAL TISSUE IN ALL  
16 SORTS OF ORGANS OF THE BODY. SO, FOR EXAMPLE,  
17 ENDOMETRIAL LESIONS HAVE BEEN FOUND IN THE BOWEL, IN  
18 THE LUNGS, EVEN IN THE BRAIN, BUT THEY DON'T TURN  
19 INTO A FULL-BLOWN CANCER TYPICALLY. ACTUALLY IT WAS  
20 FAIRLY RARELY.

21 REALLY GREAT QUESTION HERE IS WHY. IN  
22 ORDER TO BE ABLE TO GO AFTER THESE QUESTIONS THAT  
23 WILL TELL US A LOT ABOUT CANCER STEM CELLS AND A LOT  
24 OF OTHER THINGS THAT ARE REALLY IMPORTANT AND AREN'T  
25 ANSWERED, I REALLY WOULD LIKE YOU TO FUND HER

**BARRISTERS' REPORTING SERVICE**

1 PROPOSAL. THANK YOU.

2 CHAIRMAN THOMAS: THANK YOU. NEXT  
3 SPEAKER, PLEASE. AND DO REMEMBER PLEASE KEEP YOUR  
4 COMMENTS TO THREE MINUTES.

5 DR. CINGOLANI: GOOD MORNING. MY NAME IS  
6 EUGENIO CINGOLANI. I AM APPLYING FOR THE  
7 APPLICATION FOR DEVELOPMENT OF A BIOLOGICAL  
8 PACEMAKER. AS A LITTLE BIT OF BACKGROUND, I AM A  
9 CARDIOLOGIST, CLINICAL ELECTROPHYSIOLOGIST, TAKING  
10 CARE OF PATIENTS WITH THESE CONDITIONS. PRIOR TO  
11 THIS, I SPENT THREE YEARS AT HOPKINS STUDYING CELL  
12 BIOLOGY TO TRY TO DEVELOP NEW THERAPIES TO HELP MY  
13 PATIENTS.

14 I BELIEVE THAT THIS IS A REALLY  
15 UNDERSERVED POPULATION WHERE SOME CONDITIONS CAN  
16 HAPPEN TO ELECTRONIC DEVICES AND SOME ALTERNATIVES  
17 NEEDS TO TREAT OUR PATIENTS. I'M LUCKY ENOUGH TO  
18 HAVE A TERRIFIC MENTOR AND COMMENTERS WITH DIFFERENT  
19 EXPERTISE TO HELP ME DEVELOP MY PROJECT. AND I  
20 THINK THIS IS VERY IMPORTANT FOR OUR PATIENTS.

21 I DO THINK THAT WITH A DEVELOPMENT AND THE  
22 HELP OF CIRM, WE CAN DEVELOP NOW THAT WE HAVE JUST  
23 DEVELOPED A NEW TECHNIQUE THAT IS CLINICALLY  
24 FEASIBLE TO DELIVER THESE BIOLOGICAL PACEMAKERS AND  
25 ALSO DEVELOP NEW WAYS TO REPROGRAM OUR OWN CELLS TO

**BARRISTERS' REPORTING SERVICE**

1 DEVELOP PACEMAKERS TO HELP THIS PARTICULAR SUBSET OF  
2 PATIENTS. I DO THINK THAT THE RISKS ARE QUITE  
3 COMMON AND MILLIONS OF CALIFORNIANS AND AMERICANS  
4 SUFFER FROM THIS, AND THEY CAN BE HELPED WITH THE  
5 PRESENT PROPOSAL.

6 AND THE SCORE OF THE PROPOSAL WAS JUST  
7 ABOVE THE LINE OF 59, AND I THINK IT'S VERY CLOSE TO  
8 THE PAYLINE. AND I WILL BE REALLY SUPPORTIVE IF YOU  
9 COULD HELP ME WITH THIS MY APPLICATION. THANK YOU.

10 MS. FORMAN: MY NAME IS ARIELLE FORMAN.  
11 I'M ACTUALLY GOING TO GO BACK TO THE ENDOMETRIOSIS  
12 GRANT PROPOSAL. I'M JUST A PATIENT. AND LIKE HIS  
13 WIFE, I'VE GONE THROUGH IT ALL FOR ABOUT THE PAST  
14 FIVE YEARS. I'VE GONE THROUGH MULTIPLE SURGERIES  
15 TRYING TO SAVE MY UTERUS SO THAT I CAN EVENTUALLY  
16 HAVE CHILDREN BECAUSE I AM A YOUNG ADULT.

17 NOW, THIS PROBLEM NOT ONLY AFFECTS ME, IT  
18 AFFECTS MY WORK, MY BOYFRIEND, VERY SUPPORTIVE OF  
19 THAT. BUT I HAVE TO MAKE A PRIVATE ISSUE PUBLIC IN  
20 THAT IF I'M SITTING AT MY DESK AND ALL OF A SUDDEN I  
21 START BASICALLY HEMORRHAGING, I HAVE TO HIGHTAIL IT  
22 OUT OF THERE SO I DON'T MAKE A MESS. I'M IN PAIN.  
23 HAVE TO DO IT.

24 AND ALL MY OPTIONS SO FAR HAVE BEEN  
25 LAPAROSCOPIC SURGERY TO TRY AND GET THE

**BARRISTERS' REPORTING SERVICE**

1 ENDOMETRIOSIS AND I GUESS THEY CALL IT, LIKE, BACK  
2 BLEEDING OUT OF THERE. AND THEN ALSO UP TO AN  
3 ABLATION TO BURN OFF THE INSIDE OF THE UTERUS SO THE  
4 BLOOD DOESN'T COME OUT. NONE OF THOSE HAVE WORKED.  
5 I'VE TRIED LUPRON, WHICH CAUSED EARLY MENOPAUSE.  
6 AND ALL OF A SUDDEN MY FINGERNAILS BROKE OFF, MY  
7 HAIR FELL OUT, I'M GETTING HOT FLASHES EVEN WITH THE  
8 HORMONE REPLACEMENT THERAPY. I'M 35 YEARS OLD. IT  
9 WAS JUST A HORRIBLE PREVIEW OF WHAT'S GOING TO  
10 HAPPEN IF IT CONTINUES AND THERE'S NO EASY CURE FOR  
11 THIS WHERE ALL OF A SUDDEN I'M GOING TO HAVE TO GET  
12 MY WHOLE UTERUS AND OVARIES TAKEN OUT AND GO THROUGH  
13 MENOPAUSE AT THE YOUNG AGE AND HORMONE REPLACEMENT.

14 SO I REALLY HOPE YOU GUYS TAKE THAT INTO  
15 CONSIDERATION TO WORK FOR FUNDING TO DO SOME  
16 RESEARCH FOR THE ENDOMETRIOSIS.

17 CHAIRMAN THOMAS: THANK YOU. NEXT,  
18 PLEASE.

19 DR. DENG: MY NAME IS SOPHIE DENG. I'M A  
20 CORNEA SPECIALIST AT THE JULES STEIN EYE INSTITUTE.  
21 MY APPLICATION IS TO REGENERATE FUNCTIONAL LIMBAL  
22 STEM CELLS FROM HUMAN SKIN STEM CELLS. AND THIS IS  
23 COMPLEMENTARY TO MY PREVIOUS TRANSLATIONAL AWARD,  
24 WHICH IS EXPANSION OF AUTOLOGOUS LIMBAL STEM CELLS  
25 FOR TRANSPLANTATION.

**BARRISTERS' REPORTING SERVICE**

1           BECAUSE THE AWARD, WE HAVE ABLE TO DEVELOP  
2           A NOVEL THREE-DIMENSIONAL CULTURE SYSTEM TO EXPAND  
3           THE HUMAN LIMBAL STEM CELLS IN CULTURE. AND I ALSO  
4           APPLIED FOR A PROVISIONAL PATENT AS WELL. BECAUSE  
5           THIS AWARD BE ABLE TO DEVELOP TWO SYMBIOTIC FREE  
6           CULTURE SYSTEM FOR TRANSPLANTATION PURPOSE, AND  
7           WE'RE ON OUR WAY MOVE THIS ONE INTO CLINIC. SO FROM  
8           OUR TRACK RECORD BECAUSE OF THE FUNDING FOR MY  
9           PREVIOUS GRANT SO THAT WE ARE MOVING TOWARDS THE  
10          CLINIC IS THE GOAL OF THE PROJECT.

11           AS FOR THIS KIND OF PROPOSAL IS TO  
12          GENERATE THE LIMBAL STEM CELLS WHEN THE PATIENT HAVE  
13          A BILATERAL DISEASE THAT THEY DON'T HAVE ANY MORE  
14          LIMBAL STEM CELL LEFT TO BE EXPAND AND TO BE  
15          TRANSPLANTED. AND WE SPECIFICALLY LOOK INTO THE  
16          HUMAN SKIN STEM CELLS BECAUSE THEY COME FROM THE  
17          SAME DEVELOPMENTAL LINEAGE. AND ONE CRITICISM FROM  
18          THE REVIEWER WAS THAT THE DESIGN OF THE PROJECT WAS  
19          OVERSIMPLIFIED AND NOT EXCEPTIONALLY NOVEL.

20           IT SHOULD BE NOTED IT'S A COMPLICATED,  
21          COMPLEX SYSTEM BECAUSE WE DON'T KNOW MUCH ABOUT THIS  
22          TRANSDIFFERENTIATION. WE ACTUALLY USE A FUNCTIONAL  
23          ASSAY AS OUTCOME TO STUDY THIS PROCESS. WE PLAN TO  
24          COME BACK TO THE BASIC SCIENCE LATER TO LOOK INTO  
25          THIS COMPLEX BIOLOGY. WE DID NOT OVERLOOK THIS

**BARRISTERS' REPORTING SERVICE**

1 UNDERLYING BIOLOGY PROBLEM.

2 ALSO TAKE INTO CONSIDERATION THIS  
3 TRANSLATIONAL RESEARCH, THE GOAL IS NOT ABOUT  
4 NOVELTY OF THE APPROACH. IT'S ABOUT HOW SAFE, HOW  
5 PRACTICAL, HOW EASY TRANSLATING INTO THE CLINIC. I  
6 THINK THAT WAS SOMETHING THAT WAS ALSO OVERLOOKED.

7 SO AS MENTIONED AS CLEARLY STATED IN THE  
8 FINAL COMMENTS THAT YOU SUCCESSFUL, THIS PROPOSAL  
9 CAN INDEED LEAD TO A NEW THERAPY AND IS EXACTLY THE  
10 GOAL OF THIS PROPOSAL. SO TO ME AS A CLINICIAN, AS  
11 SURGEON, I THINK THAT THE OUTCOME IS HOW TO  
12 TRANSLATE THE FINDING IN THE LABORATORY TO RESEARCH.  
13 IF THIS IS SUCCESSFUL, I THINK IT'S GROUNDBREAKING.  
14 IT'S NOT A SIMPLE OVERSIMPLIFIED PROPOSAL. I THINK  
15 THE OUTCOME, IT SHOULD BE IMPORTANT IN TREATING THIS  
16 POPULATION OF PATIENTS.

17 AND FINALLY IS ONE REVIEWER MENTIONED THAT  
18 IMPACT OF THIS BILATERAL DISEASE IS NOT VERY  
19 PREVALENT. HOWEVER, THIS PATIENT, BOTH EYES ARE  
20 INFECTED. THEY CANNOT SEE, THEY CANNOT FUNCTION.  
21 NOT ONLY THAT THEY ARE FEASIBLE, BUT ALSO THEY COST  
22 THE SOCIETY THE MOST BECAUSE THEY NEED CARETAKERS.  
23 SO ACTUALLY ECONOMICALLY THESE PATIENT IS MOST  
24 COSTLY TO THE SOCIETY. I THINK THIS UNDERESTIMATE.

25 IN JULES STEIN ALONE WE HAVE ESTIMATE

**BARRISTERS' REPORTING SERVICE**

1 ABOUT 300 TO 500 PATIENT ALONE IN OUR INSTITUTE. SO  
2 THIS IS NOT A LOW PREVALENT DISEASE. ACTUALLY  
3 PEOPLE OVERLOOK THE IMPACT OF THE DISEASE TO THE  
4 SOCIETY. THANK YOU VERY MUCH FOR CONSIDERATION.

5 CHAIRMAN THOMAS: THANK YOU. ANY OTHER  
6 COMMENTS FROM MEMBERS OF THE PUBLIC?

7 MR. SHEEHY: COULD I JUST ASK DR. DENG?  
8 THIS IS A BIT OF A SIDEBAR. I HATE TO DISTRACT, BUT  
9 SINCE THIS HAS BEEN A SUBJECT EARLIER THIS MORNING.

10 SO THE GRANT, THE EARLY TRANSLATIONAL  
11 GRANT THAT WE MOVED UP THROUGH EXTRAORDINARY  
12 PETITION HAS LED TO A NEW PRODUCT THAT YOU PATENTED.

13 DR. DENG: THAT'S CORRECT.

14 MR. SHEEHY: I ALSO NOTE THAT THE  
15 CALIFORNIA STEM CELL REPORT ALSO TALKS ABOUT AN  
16 EXTRAORDINARY PETITION THAT'S RESULTED IN MAJOR  
17 SCIENTIFIC PUBLICATION. WHEN SOME OF THESE THINGS  
18 WORK OUT, I DON'T THINK THAT WE REALLY -- WE HEARD  
19 ABOUT PATIENT ADVOCATES AND WHAT A PROBLEM WE ARE  
20 AND HOW CONFLICTED WE ARE. AND I CAN REMEMBER I  
21 SPECIFICALLY ADVOCATED FOR DR. DENG'S PROJECT A  
22 COUPLE YEARS AGO, AND NOW THERE'S A PATENT. AND I  
23 JUST THINK THERE'S A LITTLE LACK OF EVIDENCE BASIS  
24 AND A LITTLE NAIVETY ON SOME FOLKS' PART. BUT THANK  
25 YOU.

**BARRISTERS' REPORTING SERVICE**

1 DR. DENG: THANK YOU.

2 CHAIRMAN THOMAS: ANY FURTHER PUBLIC  
3 COMMENT? SEEING AND HEARING NONE, ARE THERE ANY  
4 PROPOSALS THAT MEMBERS OF THE BOARD WOULD LIKE TO  
5 MAKE A MOTION TO ELEVATE FROM TIER III TO TIER I?  
6 HEARING NONE, IS THERE A MOTION FROM MEMBERS OF THE  
7 BOARD TO APPROVE TIER I AS CURRENTLY CONSTITUTED FOR  
8 FUNDING? DR. PRICE.

9 DR. PRICE: SHOULD WE ASK THE QUESTION THE  
10 OTHER WAY AROUND?

11 CHAIRMAN THOMAS: MR. HARRISON, WHAT IS  
12 PROPER PHRASING OF THE QUESTION HERE?

13 MR. HARRISON: WHETHER ANY MEMBER WOULD  
14 LIKE TO MAKE A MOTION TO MOVE AN APPLICATION FROM  
15 TIER I TO TIER III.

16 CHAIRMAN THOMAS: THANK YOU. WELL NOTED,  
17 DR. PRICE. ANY SUCH MOTION BY ANY MEMBERS OF THE  
18 BOARD?

19 MR. HARRISON: THEN IF I COULD SUGGEST IF  
20 WE COULD ASK A MEMBER WHO DOES NOT HAVE AN INTEREST  
21 IN AN APPLICATION EITHER IN TIER I OR TIER III TO  
22 MAKE A MOTION TO APPROVE THE FUNDING OF APPLICATIONS  
23 IN TIER I AND TO CLOSE FUNDING ON THOSE IN TIER III.

24 DR. PRICE: I SO MOVE.

25 CHAIRMAN THOMAS: MOVED BY DR. PRICE.



**BARRISTERS' REPORTING SERVICE**

1       SECONDED BY --

2               MR. JUELSGAARD:   SECOND THE MOTION.

3               CHAIRMAN THOMAS:  -- MR. JUELSGAARD.  IS  
4       THERE DISCUSSIONS BY MEMBERS OF THE BOARD ON THIS  
5       MOTION?  HEARING NONE, IS THIS A ROLL CALL, MR.  
6       HARRISON?  MARIA, PLEASE TAKE THE ROLL.

7               MS. BONNEVILLE:  AND IF YOU COULD ANSWER  
8       THE ONES WITH WHICH I AM NOT IN CONFLICT.

9               MS. BONNEVILLE:  ROBERT PRICE.

10              DR. PRICE:  YES, EXCEPT FOR THOSE WITH  
11      WHICH I HAVE A CONFLICT.

12              MS. BONNEVILLE:  DAVID BRENNER.  SUE  
13      BRYANT.

14              DR. BRYANT:  YES, EXCEPT FOR THOSE WITH  
15      WHICH I HAVE A CONFLICT.

16              MS. BONNEVILLE:  FRANK CHISARI.

17              DR. CHISARI:  AYE, EXCEPT FOR THOSE WITH  
18      WHICH I HAVE A CONFLICT.

19              MS. BONNEVILLE:  ANNE-MARIE DULIEGE.  
20      JAMES ECONOMOU.  MARCY FEIT.

21              MS. FEIT:  YES, EXCEPT FOR THOSE WITH  
22      WHICH I HAVE A CONFLICT.

23              MS. BONNEVILLE:  LEEZA GIBBONS.

24              MS. GIBBONS:  YES.

25              MS. BONNEVILLE:  MICHAEL GOLDBERG.  SAM

**BARRISTERS' REPORTING SERVICE**

1 HAWGOOD.

2 DR. HAWGOOD: YES, EXCEPT FOR THOSE WITH  
3 WHICH I HAVE A CONFLICT.

4 MS. BONNEVILLE: STEPHEN JUELSGAARD.

5 MR. JUELSGAARD: YES.

6 CHAIRMAN THOMAS: MARIA, DR. ECONOMOU  
7 RE-ENTERED THE ROOM HERE. DR. ECONOMOU, WE HAVE A  
8 THE MOTION APPROVAL IF TIER I.

9 DR. ECONOMOU: YES, EXCEPT FOR THOSE WITH  
10 WHICH I HAVE A CONFLICT.

11 MS. BONNEVILLE: TED Krontiris.

12 DR. Krontiris: YES, EXCEPT FOR THOSE WITH  
13 WHICH I HAVE A CONFLICT.

14 MS. BONNEVILLE: SHERRY LANSING.

15 MS. LANSING: YES, EXCEPT FOR THOSE WITH  
16 WHICH I HAVE A CONFLICT.

17 MS. BONNEVILLE: BERT LUBIN. SHLOMO  
18 MELMED. CLAIRE POMEROY.

19 DR. POMEROY: YES, EXCEPT FOR THOSE WITH  
20 WHICH I HAVE A CONFLICT.

21 MS. BONNEVILLE: ROBERT PRICE.

22 DR. PRICE: YES.

23 MS. BONNEVILLE: FRANCISCO PRIETO.

24 DR. PRIETO: YES, EXCEPT FOR THOSE WITH  
25 WHICH I HAVE A CONFLICT.

**BARRISTERS' REPORTING SERVICE**

1 MS. BONNEVILLE: CARMEN PULIAFITO.

2 DR. PULIAFITO: YES, EXCEPT FOR THOSE WITH  
3 WHICH I HAVE A CONFLICT.

4 MS. BONNEVILLE: ROBERT QUINT.

5 DR. QUINT: YES.

6 MS. BONNEVILLE: DUANE ROTH. JOAN  
7 SAMUELSON.

8 MS. SAMUELSON: YES.

9 MS. BONNEVILLE: JEFF SHEEHY.

10 MR. SHEEHY: YES, EXCEPT FOR THOSE WITH  
11 WHICH I HAVE A CONFLICT.

12 MS. BONNEVILLE: JONATHAN SHESTACK.

13 MR. SHESTACK: YES.

14 MS. BONNEVILLE: OSWALD STEWARD.

15 DR. STEWARD: YES, EXCEPT FOR THOSE WITH  
16 WHICH I HAVE A CONFLICT.

17 MS. BONNEVILLE: JONATHAN THOMAS.

18 CHAIRMAN THOMAS: YES.

19 MS. BONNEVILLE: ART TORRES.

20 MR. TORRES: AYE.

21 MS. BONNEVILLE: CARL WARE.

22 DR. WARE: YES, EXCEPT FOR THOSE WITH  
23 WHICH I HAVE A CONFLICT.

24 CHAIRMAN THOMAS: MR. HARRISON.

25 MR. HARRISON: WE NEED TO LOOK AT EACH

## BARRISTERS' REPORTING SERVICE

1 APPLICATION AND THE QUORUM REQUIREMENTS BECAUSE THEY  
2 VARY. SO IF YOU'D LIKE, YOU CAN PROCEED ONTO  
3 ANOTHER, AND THEN WE'LL MAKE CLEAR THAT THE MOTION  
4 CARRIED.

5 CHAIRMAN THOMAS: FAIR ENOUGH. WE'RE  
6 GOING TO MOVE NOW TO ITEM 13.

7 MR. SHEEHY: I JUST WANTED TO ECHO DR.  
8 PULIAFITO'S EARLIER COMMENTS. AND I THINK IF DR.  
9 PIZZO WAS STILL WITH US, HE WOULD ALSO SUGGEST THAT  
10 I THINK WE WEREN'T THINKING ABOUT THIS BEING  
11 ONE-OFF, BUT I HOPE STAFF WILL CONSIDER REPEATING  
12 THIS RFA AT SOME POINT IN THE NOT TOO DISTANT  
13 FUTURE. I THINK WE HEARD WHEN WE PROPOSED THIS ONE,  
14 THAT THIS IS A VERY GOOD WAY TO POPULATE A  
15 DIMINISHING FIELD OF CLINICIAN SCIENTISTS. AND I  
16 CERTAINLY WAS IMPRESSED WITH THE APPLICATIONS WE  
17 GOT.

18 I THINK THE HIGH SUCCESS RATE IS PARTIALLY  
19 DUE TO THE FACT THAT WE HAD INSTITUTIONAL LIMITS,  
20 AND THE INSTITUTIONS VERY DILIGENTLY, I THINK,  
21 COMPETED THESE OUT AND SENT US SOME PHENOMENAL  
22 APPLICANTS. I JUST HOPE THAT SOME CONSIDERATION  
23 STRATEGICALLY WOULD BE MADE TOWARDS CONSIDERING  
24 KEEPING THIS RFA IN OUR PORTFOLIO.

25 CHAIRMAN THOMAS: THANK YOU, MR. SHEEHY.

**BARRISTERS' REPORTING SERVICE**

1 MR. HARRISON: THE MOTION DID PASS.

2 CHAIRMAN THOMAS: THANK YOU. ON TO ITEM  
3 13, WHICH IS CONSIDERATION OF THE AWARD OF  
4 SUPPLEMENTAL FUNDS TO AN EXISTING GRANTEE, VIACYTE.  
5 I BELIEVE DR. OLSON IS GOING TO PRESENT.

6 MR. HARRISON: THE MEMBERS IN CONFLICT ON  
7 THIS APPLICATION ARE FEIT, HAWGOOD, LANSING,  
8 PULIAFITO, AND SHEEHY.

9 DR. OLSON: I CAN START NOW. OKAY. IN  
10 2010 VIACYTE RECEIVED A DISEASE TEAM I AWARD IN THE  
11 AMOUNT OF \$20 MILLION TO DEVELOP A COMBINATION CELL  
12 THERAPEUTIC DERIVED FROM HUMAN EMBRYONIC STEM CELLS  
13 FOR THE TREATMENT OF PATIENTS WITH TYPE 1 DIABETES  
14 AND ALSO POTENTIALLY TYPE 2 DIABETES. AT ITS  
15 PERIODIC ASSESSMENT BY CIRM'S CLINICAL DEVELOPMENT  
16 ADVISORY PANEL, THE PROGRAM HAS RECEIVED STRONG  
17 ENDORSEMENT FOR THE OUTSTANDING CALIBER OF ITS  
18 PROGRESS.

19 AND YOU MAY RECALL EARLIER THIS YEAR WHEN  
20 DR. FEIGAL GAVE AN UPDATE FOLLOWING THE FIRST  
21 CLINICAL DEVELOPMENT REVIEW, AND AT THAT POINT CIRM  
22 NOTED THAT THERE WOULD BE A NEED FOR SUPPLEMENTAL  
23 FUNDING TO THE VIACYTE DISEASE TEAM I AWARD TO  
24 ENABLE THEM TO CONTINUE THEIR PROGRESS TOWARDS  
25 FILING AN IND TO ENTER FIRST-IN-HUMAN CLINICAL

**BARRISTERS' REPORTING SERVICE**

1 TRIALS.

2 AT THE OCTOBER 25TH BOARD MEETING, THE  
3 BOARD AWARDED 10 MILLION TO VIACYTE UNDER THE  
4 STRATEGIC PARTNERSHIP AWARD PROGRAM FOR A  
5 CONTINUATION OF ITS PROGRAM TO FILE AN IND, ENTER  
6 THE CLINIC, AND COMPLETE AN EARLY PHASE CLINICAL  
7 STUDY THAT IN THAT CASE INCLUDES STRONG POTENTIAL  
8 FOR THE ACHIEVEMENT OF A CLINICAL PROOF OF CONCEPT.  
9 THIS ACTION WAS TAKEN BY THE BOARD FOLLOWING A  
10 STRONG FUNDING RECOMMENDATION BY THE GRANTS WORKING  
11 GROUP AND A HIGH SCIENTIFIC SCORE IN RECOGNITION OF  
12 A PROJECT THAT HAD MADE STRONG PROGRESS TOWARDS WHAT  
13 WAS CITED BY THE GRANTS WORKING GROUP AS THE HOLY  
14 GRAIL OF DIABETES TREATMENT.

15 AS YOU KNOW, AT THAT MEETING A  
16 REPRESENTATIVE FROM VIACYTE'S POTENTIAL PARTNER,  
17 GSK, WAS PRESENT AND ACKNOWLEDGED VIACYTE'S  
18 TREMENDOUS PROGRESS IN THE FIELD AND INFORMED THE  
19 BOARD THAT GSK HAD ALREADY CONDUCTED AN INTENSE  
20 TECHNICAL AND FINANCIAL DUE DILIGENCE OF THE PROGRAM  
21 WHICH HAD BEEN REVIEWED BY MULTIPLE COMMITTEES  
22 WITHIN GSK. AND THAT PENDING FINAL APPROVAL, GSK  
23 WAS INTERESTED IN AN ALLIANCE TO ENABLE GSK,  
24 VIACYTE, AND CIRM TO PROGRESS THE PROGRAM WITH THE  
25 NOTION THAT UPON SUCCESS AT THE INITIAL

**BARRISTERS' REPORTING SERVICE**

1 CIRM-VIACYTE-GSK PROGRAM, THAT GSK WOULD  
2 SUBSEQUENTLY CARRY THE PROGRAM FORWARD.

3 WE HAVE RECENTLY BEEN INFORMED AND HAVE  
4 INFORMED THE BOARD THAT GSK DID NOT OBTAIN THAT  
5 FINAL APPROVAL REQUIRED DUE TO BUSINESS REASONS AND  
6 IN THE CONTEXT OF GSK'S OVERALL RESEARCH AND  
7 DEVELOPMENT PORTFOLIO AND INVESTMENT NEED, AND NOT  
8 AS A RESULT OF ANY SCIENTIFIC OR TECHNICAL  
9 ASSESSMENT OF VIACYTE'S PROGRAM.

10 AT YOUR LAST BOARD MEETING AND AT OUR LAST  
11 BOARD MEETING, YOU APPROVED THE CONCEPT PROPOSAL FOR  
12 EXTRAORDINARY SUPPLEMENTS TO EXISTING AWARD. THAT  
13 CONCEPT PROVIDES FOR LEVEL ONE MINOR SUPPLEMENTS AS  
14 WELL AS LEVEL TWO MAJOR SUPPLEMENTS. THE LEVEL TWO  
15 MAJOR SUPPLEMENTS WAS INTENDED TO SUPPORT GRANTEES  
16 TO ENHANCE PROBABILITY OF CONVERSION OF FUNDED  
17 PROGRAMS THAT COULD GIVE UNEXPECTED AND  
18 TRANSFORMATIONAL BENEFITS AND RAISE PROJECTS TO A  
19 HIGH PROBABILITY OF CLINICAL BENEFIT.

20 THE AWARD PROVIDED FOR UP TO 3 MILLION,  
21 AND, IN THE CONTEXT OF FDA-MANDATED REQUIREMENTS,  
22 ALSO ALLOWED FOR A CDAP REVIEW TO PROVIDE A  
23 RECOMMENDATION TO THIS BOARD.

24 SO CIRM IS PROPOSING THAT A LEVEL TWO  
25 MAJOR SUPPLEMENT AWARD IN THE AMOUNT OF \$3 MILLION

**BARRISTERS' REPORTING SERVICE**

1 BE PROVIDED TO VIACYTE. AT ITS NOVEMBER 29TH CDAP  
2 MEETING, SO A MEETING OF THE CLINICAL DEVELOPMENT  
3 ADVISORY PANEL, WHICH WAS HELD JUST A COUPLE OF  
4 WEEKS AGO, VIACYTE WAS ASSESSED BY THE PANEL.  
5 AGAIN, THE ADVISORS WERE VERY POSITIVE, STATING THAT  
6 THE PROGRAM IS VIEWED AS ONE OF CIRM'S TOP PROGRAMS  
7 WITH AN ABILITY TO ESTABLISH EARLY IN CLINICAL  
8 DEVELOPMENT A CLINICAL PROOF OF CONCEPT AND A STRONG  
9 POTENTIAL TO PROCEED TO COMMERCIAL THERAPEUTIC.

10 VIACYTE, IN ADDITION, PRIOR TO THE CDAP  
11 MEETING AND WAS DISCUSSED AT CDAP, HAS HELD A  
12 PRE-IND MEETING WITH THE FDA PRIOR TO CONDUCTING THE  
13 CRITICAL ACTIVITIES NECESSARY FOR ACTUALLY FILING  
14 THE IND IN APPROXIMATELY 12 MONTHS.

15 THE FDA DID HAVE SOME SPECIFIC  
16 RECOMMENDATIONS OR MODIFICATIONS TO VIACYTE'S  
17 PROPOSED ACTIVITIES TO BE UNDERTAKEN OR COMPLETED  
18 PRIOR TO IND FILING. THESE ACTIVITIES WERE  
19 DISCUSSED AT THE CDAP MEETING WITH VIACYTE AND  
20 ENDORSED BY CDAP, AND IT IS THESE ACTIVITIES THAT  
21 WOULD BE THE SUBJECT OF THE REQUESTED SUPPLEMENT FOR  
22 THE FUNDING OVER A SIX-MONTH PERIOD.

23 SO, IN SUMMARY, THE CDAP RECOMMENDED  
24 PROVIDING -- STRONGLY RECOMMENDED PROVIDING  
25 SUPPLEMENTAL FUNDING IN ORDER TO ENSURE THAT THE



**BARRISTERS' REPORTING SERVICE**

1 PROJECT STAYS ON CRITICAL PATH WHILE ADDITIONAL  
2 FUNDING SOURCES ARE SECURED BY VIACYTE.

3 SO THE RECOMMENDATION IS, FOLLOWING  
4 ENDORSEMENT OF THE CLINICAL DEVELOPMENT ADVISORS,  
5 CIRM RECOMMENDS THAT A LEVEL TWO MAJOR SUPPLEMENT IN  
6 THE AMOUNT OF \$3 MILLION BE AWARDED TO VIACYTE SO  
7 THAT IT MAY CONTINUE TO CONDUCT RESEARCH THAT IS ON  
8 THE CRITICAL PATH FOR AN IND FILING AS RECOMMENDED  
9 BY THE FDA IN ITS RECENT PRE-IND MEETING.

10 MR. TORRES: SO MOVED.

11 CHAIRMAN THOMAS: MOVED BY SENATOR TORRES.  
12 IS THERE A SECOND?

13 DR. PRIETO: SECOND.

14 CHAIRMAN THOMAS: SECONDED BY DR. PRIETO.  
15 ANY DISCUSSION BY MEMBERS OF THE BOARD?

16 DR. JUELSGAARD: DR. OLSON, COULD YOU  
17 ADVISE ME OF WHAT CDAP TOOK INTO ACCOUNT WITH  
18 RESPECT TO THE FINANCIAL SITUATION OF VIACYTE AT  
19 THIS POINT?

20 DR. OLSON: CDAP WAS INTERESTED IN KNOWING  
21 WHAT PATHS VIACYTE WAS PURSUING, AND THEY DID TAKE  
22 THAT INTO CONSIDERATION.

23 DR. JUELSGAARD: COULD YOU BE PERHAPS A  
24 BIT MORE DESCRIPTIVE OF THAT?

25 DR. OLSON: I THINK THAT'S PROBABLY MORE

**BARRISTERS' REPORTING SERVICE**

1 APPROPRIATELY DISCUSSED IN A CLOSED SESSION. DR.  
2 TROUNSON PERHAPS CAN RESPOND MORE.

3 DR. TROUNSON: SO WE'VE BEEN KEPT WELL  
4 INFORMED OF THE SITUATION ALL ALONG. YOU WOULD BE  
5 PROBABLY AWARE, ALTHOUGH MAY NOT REMEMBER, BUT THIS  
6 PROJECT IS BEING CO-FUNDED BY THE JDRF. I THINK  
7 IT'S VERY LIKELY THAT THEY'RE GOING TO PROVIDE A  
8 SIMILAR AMOUNT OF MONEY. I CAN JUST SAY THAT THAT  
9 SEEMS LIKELY. THAT'S ALL I'VE HEARD, THAT IT SEEMS  
10 LIKELY. AND THAT THEY'RE ON TRACK WITH DISCUSSIONS  
11 WITH OTHER INSTITUTIONS, WHICH WE REALLY CAN'T GIVE  
12 YOU ANY MORE INFORMATION ON AT THIS POINT IN TIME,  
13 BUT THEY'RE VERY MUCH ON TRACK.

14 ALL I WOULD SAY, I THINK, STEVE, IS IF IT  
15 DOES WORK ITSELF OUT, I THINK WE MIGHT END UP WITH A  
16 BETTER SITUATION BECAUSE IT'S BEEN A LITTLE  
17 COMPLICATED. AND I HOPE THAT WE'LL BE IN A BETTER  
18 SITUATION THAN THE ONE THAT WE THOUGHT WE WERE IN.

19 DR. JUELSGAARD: DR. TROUNSON, SO CAN I  
20 SEEK YOUR ASSURANCE THAT FROM A FINANCIAL POINT OF  
21 VIEW VIACYTE HAS A VIABLE PATH FORWARD IN ORDER TO  
22 RAISE ENOUGH MONEY TO CONTINUE THIS PROJECT INTO THE  
23 FORESEEABLE FUTURE?

24 DR. TROUNSON: ALL I CAN SAY IS THAT I'M  
25 CONFIDENT THAT THE TEAM IS MOVING FORWARD IN A VERY

**BARRISTERS' REPORTING SERVICE**

1 APPROPRIATE WAY. I DON'T THINK I CAN GIVE YOU ANY  
2 GUARANTEES OF THAT BECAUSE I'M NOT INVOLVED IN THOSE  
3 DISCUSSIONS, NOR WOULD IT BE APPROPRIATE FOR ME TO  
4 GIVE A GUARANTEE. BUT I BELIEVE THAT THEY'RE DOING  
5 EVERYTHING VERY APPROPRIATELY AT THE PRESENT TIME,  
6 AND I HAVE A HIGH DEGREE OF CONFIDENCE IN THE CEO IN  
7 THE WAY HE'S APPROACHING THAT. AND I THINK WE WILL  
8 PROBABLY HAVE AN OUTCOME BY THE MIDDLE OF NEXT YEAR  
9 THAT WILL BE SATISFYING. THAT'S ALL I CAN SAY TO  
10 YOU AT THIS POINT.

11 DR. KRONIRIS: LET ME KIND OF ASK THE  
12 SAME QUESTION ANOTHER WAY AROUND, AND YOU CAN DECIDE  
13 WHETHER THAT CAN BE ANSWERED IN THIS SESSION OR NOT.

14 THERE ARE TWO PRECONDITIONS HERE FOR THE  
15 AWARD THAT ARE LISTED IN THE REPORT, ONE BEING  
16 HAVING RAISED A CERTAIN AMOUNT OF MONEY AND AMOUNT  
17 OF CASH AND TWO BEING A LETTER OF INTENT FROM A  
18 PHARMACEUTICAL PARTNER. SO DO ONE OR BOTH OF THESE  
19 CONDITIONS STILL OBTAIN?

20 DR. TROUNSON: CAN I JUST ANSWER THAT THIS  
21 IS REALLY A SUPPLEMENT TO THE DISEASE TEAM GRANT,  
22 WHICH IS A PREVIOUS GRANT. THEY HAVE SIX MONTHS  
23 FROM THE TIME OF THE SP AWARD TO MAKE ONE OF THOSE  
24 CONDITIONS. SO WE'LL HAVE TO WAIT AND SEE WHETHER  
25 THEY DO. WE'RE HOPING CLEARLY THAT THEY WILL DO

**BARRISTERS' REPORTING SERVICE**

1 THAT AND THEN BE BACK ON TRACK. BUT THIS IS A  
2 SUPPLEMENTARY AWARD TO THEIR ORIGINAL DISEASE TEAM.

3 DR. POMEROY: SO I REMAIN UNCLEAR ON  
4 EXACTLY WHAT THE \$3 MILLION WILL BE SPENT ON IN THE  
5 NEXT SIX MONTHS AND WHAT THE DELIVERABLE WOULD BE  
6 FOR THAT \$3 MILLION.

7 DR. TROUNSON: I THINK WE WOULD HAVE TO GO  
8 INTO EXECUTIVE.

9 DR. POMEROY: THAT'S FINE, BUT I DON'T  
10 FEEL PERSONALLY COMFORTABLE AUTHORIZING \$3 MILLION  
11 WITH NO IDEA OF HOW IT'S TO BE USED.

12 DR. TROUNSON: WE'RE PREPARED TO PROVIDE  
13 YOU THAT. IT'S JUST THAT WE COULDN'T -- I THINK IT  
14 WOULDN'T BE APPROPRIATE TO DO IT PUBLICLY.

15 CHAIRMAN THOMAS: I'M ADVISED BY THE  
16 POWERS THAT BE IN THE CORNER OVER THERE THAT CLOSED  
17 SESSION WOULD HAVE TO BE AT 2:30. SO IF THAT'S THE  
18 WISH OF THE BOARD, WE'LL TABLE THE TOPIC.

19 MR. HARRISON: IT'S A PUBLIC NOTICE  
20 REQUIREMENT. WE WERE NOT ABLE TO AGENDIZE THIS ITEM  
21 FOR A CLOSED SESSION UNTIL EARLIER THIS WEEK. AS A  
22 RESULT, WE HAVE TO WAIT UNTIL 2:30 IN ORDER TO  
23 CONSIDER IT IN ORDER TO COMPLY WITH THE LAW.

24 MR. SHESTACK: IS IT AN ISSUE OF JUST  
25 AGENDIZING CLOSED SESSION IN GENERAL OR THIS

**BARRISTERS' REPORTING SERVICE**

1 PARTICULAR ISSUE?

2 MR. HARRISON: IT'S FOR THIS PARTICULAR  
3 ITEM.

4 CHAIRMAN THOMAS: OKAY.

5 MS. BAUM: I WOULD URGE THAT BOARD MEMBERS  
6 MAKE ALL DUE EFFORT TO STAY HERE UNTIL AFTER THAT  
7 CLOSED SESSION SO WE CAN MAINTAIN A QUORUM. THANK  
8 YOU.

9 CHAIRMAN THOMAS: ANY OTHER QUESTIONS OF  
10 DR. OLSON FOR THE MOMENT? THANK YOU. WE'LL TAKE  
11 THIS UP IN CLOSED SESSION.

12 WE HAVE THE SPOTLIGHT COMING UP IN FIVE  
13 MINUTES HERE. IS THERE ANYTHING, MARIA, THAT YOU  
14 WOULD RECOMMEND WE HIT IN THE FIVE MINUTES?

15 DR. SAMBRANO, WE'RE GOING TO NOW ITEM NO.  
16 12, CONSIDERATION OF APPOINTMENTS OF NEW SCIENTIFIC  
17 MEMBERS OF THE GRANTS WORKING GROUP.

18 DR. SAMBRANO: SO WE'RE BRINGING FOR YOUR  
19 CONSIDERATION EIGHT NOMINEES FOR GRANTS WORKING  
20 GROUP MEMBERS. THESE, MORE SPECIFICALLY, BRING  
21 EXPERTISE IN THE AREAS OF SYSTEMS BIOLOGY AND  
22 GENOMICS. THEY ARE LISTED ALONG WITH THEIR BIOS IN  
23 YOUR BOOKS.

24 THESE ARE DRs. STEPHEN FRIEND, CHRISTIE  
25 GUNTER, LEROY HOOD, JOHN MADDICK, ALEXANDER

**BARRISTERS' REPORTING SERVICE**

1 MEISSNER, MAYNARD OLSON, JARED ROACH, AND ZAIM  
2 SERANI. SO WE'RE REQUESTING YOUR APPROVAL ON  
3 APPOINTMENT OF THESE NOMINEES AS MEMBERS OF THE  
4 GRANTS WORKING GROUP.

5 MR. TORRES: SO MOVED.

6 DR. POMEROY: SECOND.

7 CHAIRMAN THOMAS: MOVED BY SENATOR TORRES,  
8 SECONDED BY DEAN POMEROY. ANY DISCUSSION BY MEMBERS  
9 OF THE BOARD ON THIS SUBJECT? ALL THOSE IN FAVOR --  
10 IS THERE ANY PUBLIC COMMENT ON THIS SUBJECT?  
11 HEARING NONE, ALL THOSE IN FAVOR PLEASE SAY AYE.  
12 OPPOSED? MEMBERS ON TELEPHONE.

13 MS. FEIT: AYE.

14 MS. SAMUELSON: AYE.

15 DR. WARE: AYE.

16 CHAIRMAN THOMAS: THANK YOU. ANY NOES ON  
17 THIS ITEM? ABSTENTIONS? MOTION PASSES. THANK YOU.

18 OKAY, MARIA, WE SHOULD NOW GRAB LUNCH IN  
19 THE ADJOURNING ROOM, AND PLEASE RETURN FOR WHAT I AM  
20 TOLD IS A MOST EXCITING SPOTLIGHT PRESENTATION.

21 (A RECESS WAS TAKEN.)

22 CHAIRMAN THOMAS: WE'RE NOW GOING TO GO  
23 BACK TO OUR AGENDA. WE'RE GOING TO TAKE UP ITEM NO.  
24 10, CONSIDERATION OF BASIC BIOLOGY V CONCEPT PLAN.  
25 DR. SHEPARD. LET'S TAKE A THREE- OR FOUR-MINUTE

**BARRISTERS' REPORTING SERVICE**

1 BREAK AND LET EVERYBODY MOBILIZE.

2 (A RECESS WAS TAKEN.)

3 CHAIRMAN THOMAS: COULD EVERYBODY PLEASE  
4 TAKE THEIR SEATS. WE'RE NOW GOING TO PROCEED WITH  
5 ITEM NO. 10, CONCEPT PROPOSAL FOR BASIC BIOLOGY  
6 AWARDS NO. 5. KELLY, PLEASE PROCEED.

7 DR. SHEPARD: THANK YOU, MR. CHAIRMAN,  
8 MEMBERS OF THE BOARD, AUDIENCE, AND ALL THOSE  
9 LISTENING. IT'S MY PLEASURE TO PRESENT FOR YOUR  
10 CONSIDERATION TODAY THE CONCEPT APPROVAL BASIC  
11 BIOLOGY AWARDS V. THIS IS AGENDA ITEM NO. 10 IN  
12 YOUR MATERIALS.

13 I'D LIKE TO BEGIN BY JUST GIVING A BRIEF  
14 GENERAL OVERVIEW OF THE GOALS OF THE BASIC BIOLOGY  
15 AWARDS. THESE ARE, OF COURSE, ONE OF CIRM'S CORE  
16 RECURRING RFA PROGRAMS, THE GOAL OF WHICH IS TO  
17 FOSTER CUTTING-EDGE RESEARCH INTO FUNDAMENTAL  
18 MECHANISMS OF HUMAN STEM CELL BEHAVIORS. THESE  
19 AWARDS SUPPORT STUDIES TACKLING SIGNIFICANT BUT  
20 UNRESOLVED ISSUES THAT ARE PERTINENT TO THE  
21 UNDERSTANDING OF THE CONTROL OF STEM CELL FATE.

22 FOCUS AREAS OF THESE AWARDS INCLUDE BASIC  
23 MECHANISMS OF HUMAN PLURIPOTENT AND ADULT STEM  
24 CELLS; ELUCIDATION OF THE MOLECULAR DETERMINANTS OF  
25 CELL FATE DECISIONS, FOR EXAMPLE, SELF-RENEWAL AND

## BARRISTERS' REPORTING SERVICE

1 DIFFERENTIATION; THE MECHANISMS, IN OTHER WORDS, THE  
2 MOLECULAR AND CELLULAR PATHWAYS BY WHICH LINEAGES  
3 ARE SPECIFIED. IN OTHER WORDS, DERIVING MATURE,  
4 FUNCTIONAL ADULT TISSUES OF VARIOUS TYPES FROM STEM  
5 CELLS. AND IN MORE RECENT ROUNDS OF THESE AWARDS,  
6 WE'VE ALSO FUNDED BASIC RESEARCH INTO THE MOLECULAR  
7 MECHANISMS OF DISEASE INSOFAR AS HUMAN STEM CELLS  
8 ARE USED AS IN VITRO TOOLS TO ENABLE STUDIES.

9 TO DATE WE'VE ISSUED FOUR RFA'S UNDER THE  
10 BASIC BIOLOGY INITIATIVE, AND WE'VE IMPLEMENTED 83  
11 THREE-YEAR GRANTS UNDER THIS PROGRAM.

12 NOW, BEFORE I MOVE INTO BASIC BIOLOGY V, I  
13 WANT TO PAUSE FOR JUST A MOMENT TO REMIND EVERYONE  
14 THAT JUST RECENTLY, THIS YEAR IN FACT, WE UNDERWENT  
15 SOME MAJOR UPDATES TO CIRM'S STRATEGIC PLAN WHICH  
16 GUIDES OUR THINKING AND OUR FUTURE INITIATIVES.  
17 THIS PROCESS TOOK INTO ACCOUNT PAST SUCCESSES AND  
18 WHAT STILL REMAINS TO BE DONE IN ORDER FOR US TO  
19 MOST EFFECTIVELY AND SUCCESSFULLY REALIZE CIRM'S  
20 MISSION.

21 NOW, A DIRECTIVE IN THE 2012 STRATEGIC  
22 PLAN WITH RESPECT TO OUR BASIC BIOLOGY PROGRAM, AND  
23 I'VE QUOTED IT HERE, IS TO FOSTER AN ENGINE OF  
24 DISCOVERY AND TRANSFORMATIVE RESEARCH. IN OTHER  
25 WORDS, THE CHALLENGE TO OUR TEAM AT CIRM WAS TO TRY



**BARRISTERS' REPORTING SERVICE**

1 TO DEVISE STRATEGIES AND IMPLEMENT THEM IN OUR  
2 ONGOING AND FUTURE PROGRAMS THAT WOULD EVEN FURTHER  
3 ALLOW US TO ACHIEVE HIGH-IMPACT TRANSFORMATIVE  
4 DISCOVERY.

5           WHEN YOU THINK ABOUT BASIC RESEARCH AND  
6 ENABLING TRANSFORMATIVE DISCOVERY, THERE ARE A  
7 COUPLE OF STRATEGIES BY WHICH THIS MIGHT BE  
8 ACHIEVED. ONE STRATEGY IS GOING DIRECTLY AFTER KEY  
9 QUESTIONS THAT COULD BE ANSWERED BY THE BASIC STEM  
10 CELL BIOLOGY. AND THAT'S THE TACTIC THAT WE HAVE  
11 BEEN UTILIZING IN OUR BASIC BIOLOGY AWARDS  
12 MECHANISM. HOWEVER, SOMETIMES THERE ARE  
13 TRANSFORMATIVE DISCOVERIES THAT OCCUR FROM  
14 UNEXPECTED SOURCES. SOMETIMES THEY CAN STEM FROM  
15 TESTING FROM AN ENTIRELY NEW IDEA OR NEW A WAY OF  
16 THINKING, ASKING PROVOCATIVE QUESTIONS OR BRINGING  
17 CLEVER INSIGHTS TO BEAR, OR TECHNOLOGIES ON A  
18 QUESTION THAT IT MIGHT NOT HAVE BEEN PREVIOUSLY  
19 ASKED IN THE PAST. IT MIGHT NOT HAVE BEEN  
20 TECHNICALLY FEASIBLE.

21           SO WITH THESE IDEAS IN MIND, WE ARE  
22 PROPOSING TO INCORPORATE A NEW ELEMENT INTO BASIC  
23 BIOLOGY V. WE'D LIKE TO BUILD ON OUR SUCCESSFUL  
24 TEMPLATE THAT WE'VE UTILIZED FOR THE PAST FOUR  
25 ROUNDS AND INCORPORATE SOME NEW ELEMENTS THAT I

**BARRISTERS' REPORTING SERVICE**

1 WOULD JUST LIKE TO GO BRIEFLY OVER WITH YOU IN THE  
2 FOLLOWING TWO SLIDES.

3 SO WE'RE PROPOSING THAT THE BASIC BIOLOGY  
4 AWARD V INITIATIVE WOULD FUND TWO TYPES OF BASIC  
5 RESEARCH INTO STEM CELL BIOLOGY. THESE WOULD BE  
6 SUBMITTED THROUGH ONE OF TWO TRACKS. SO THE FIRST  
7 TRACK WE'RE CALLING THE FUNDAMENTAL MECHANISMS  
8 TRACK. THE TYPE OF RESEARCH SUBMITTED THROUGH THIS  
9 TRACK IS ESSENTIALLY THE SAME AS WHAT WE'VE TARGETED  
10 SUCCESSFULLY IN PREVIOUS ROUNDS OF BASIC BIOLOGY.  
11 SO IN OTHER WORDS, THE PROJECTS WILL BE SIMILAR TO  
12 THOSE. IN OTHER WORDS, THEY ARE RIGOROUS STUDIES  
13 UTILIZING HUMAN STEM CELLS THAT WILL SIGNIFICANTLY  
14 ADVANCE THE FIELD. THE FOCUS OF THESE  
15 INVESTIGATIONS, AGAIN, ARE ON CELLULAR AND MOLECULAR  
16 MECHANISMS THAT ARE PARTICULAR TO STEM CELL  
17 FUNCTION, CELLULAR DIFFERENTIATION, OR DISEASE  
18 MECHANISM.

19 THESE STUDIES MUST BE BASED ON COMPELLING  
20 PRELIMINARY DATA AND STRONG SCIENTIFIC RATIONALE TO  
21 SUPPORT THEIR FEASIBILITY. THESE ARE THREE-YEAR  
22 AWARDS, AND WE'RE PROPOSING JUSTIFIABLE DIRECT  
23 PROJECT COSTS OF UP TO \$250,000 PER YEAR PER AWARD.

24 THE SECOND TRACK WE'RE CALLING THE  
25 EXPLORATORY CONCEPTS TRACK. AGAIN, THIS IS A

## BARRISTERS' REPORTING SERVICE

1 COMPLEMENTARY APPROACH TO ENABLE POTENTIALLY  
2 TRANSFORMATIVE DISCOVERIES. FOR THIS TYPE OF AWARD,  
3 THE RESEARCH PROPOSED WOULD BE TO TEST A HIGHLY  
4 NOVEL HYPOTHESIS THAT, IF PROVEN, WOULD CHALLENGE  
5 DOGMA AND RESULT IN A TRANSFORMATIVE DISCOVERY FOR  
6 THE STEM CELL FIELD. IN OTHER WORDS, THIS IS HIGH  
7 RISK, BUT POTENTIALLY VERY HIGH GAIN  
8 EXPLORATORY-TYPE PURSUITS. AS SUCH, WE PROPOSE THAT  
9 A TWO-YEAR DURATION WITH JUSTIFIABLE DIRECT PROJECT  
10 COSTS OF UP TO \$200,000 WOULD BE APPROPRIATE.

11 SO THE TOTAL ALLOCATION WE WOULD REQUEST  
12 FOR THE BASIC BIOLOGY V AWARDS IS \$40 MILLION TO  
13 SUPPORT UP TO 30 BASIC BIOLOGY V AWARDS. WE  
14 ENVISION THAT THE MAJORITY OF THESE WOULD BE  
15 SUPPORTED THROUGH THE FUNDAMENTAL MECHANISM TRACK  
16 SIMILAR TO WHAT WE'VE CAPTURED WITH PREVIOUS ROUNDS.  
17 HOWEVER, WE WOULD ALSO LIKE TO ATTRACT A NUMBER OF  
18 EXPLORATORY CONCEPT-TYPE RESEARCH PROJECTS. WE  
19 WOULDN'T DICTATE THE SPECIFIC NUMBERS OF EACH. WE  
20 WOULD LEAVE THAT UP TO THE WISDOM AND JUDGMENT OF  
21 OUR GRANTS WORKING GROUP, INCLUDING BOTH THE  
22 SCIENTIFIC MERIT DISCUSSION AND THE PROGRAMMATIC  
23 REVIEW.

24 THE ELIGIBILITY FOR THE BASIC BIOLOGY  
25 AWARDS ARE STANDARD AND SIMILAR TO THE ONES WE'VE

## BARRISTERS' REPORTING SERVICE

1 USED IN THE PAST. PI'S MUST HOLD A -- THE PRINCIPAL  
2 INVESTIGATORS MUST HOLD A PH.D., M.D., OR EQUIVALENT  
3 DEGREE AND BE WILLING TO COMMIT A MINIMUM OF 20  
4 PERCENT EFFORT. AN ELIGIBLE PI MAY SUBMIT THROUGH  
5 ONE TRACK, EITHER THE FUNDAMENTAL MECHANISM TRACK OR  
6 THE OTHER, THE EXPLORATORY CONCEPT TRACK, BUT NOT  
7 BOTH. AND WHERE THEY APPLY WOULD BE WHAT IS THE  
8 BEST FIT FOR THE TYPE OF RESEARCH PROJECT THEY ARE  
9 INTERESTED IN PURSUING.

10 IN TERMS OF INSTITUTIONAL ELIGIBILITY,  
11 THIS RFA WOULD BE OPEN TO ALL ACADEMIC, NONPROFIT,  
12 AND FOR-PROFIT INSTITUTIONS IN CALIFORNIA. WE'RE  
13 NOT PROPOSING ANY INSTITUTIONAL LIMITS. RATHER,  
14 WE'RE PROPOSING TO USE THE PRELIMINARY APPLICATION  
15 REVIEW PROCESS TO SELECT MOST COMPETITIVE,  
16 COMPELLING, AND RESPONSIVE PROPOSALS TO MOVE FORWARD  
17 WITH FULL APPLICATIONS TO BE EVALUATED BY THE GWG.

18 TO BE ELIGIBLE FOR THESE AWARDS, PROJECTS  
19 SUBMITTED THROUGH FUNDAMENTAL MECHANISMS STUDIES  
20 MUST UTILIZE HUMAN STEM CELLS OR THEIR DERIVATIVES.  
21 THOSE SUBMITTED THROUGH THE EXPLORATORY CONCEPT  
22 STUDIES MAY UTILIZE HUMAN AND OR, WITH COMPELLING  
23 JUSTIFICATION, VERTEBRATE ANIMAL MODEL SYSTEMS  
24 STUDIES WOULD BE CONSIDERED.

25 TRANSLATIONAL RESEARCH PROJECTS ARE OUT OF

**BARRISTERS' REPORTING SERVICE**

1 SCOPE AS HAS ALWAYS BEEN TRUE FOR BASIC BIOLOGY, AND  
2 CIRM HAS SEVERAL RECURRING AND OTHER RFA PROGRAMS  
3 THAT CAPTURE THIS TYPE OF RESEARCH. AND THE  
4 EXPLORATORY CONCEPT STUDIES MUST BE DIRECTLY RELATED  
5 TO STEM CELL BIOLOGY, DIRECT REPROGRAMMING, OR  
6 DETERMINATION OF CELL FATE AND IDENTITY.

7 THE PROVISIONAL TIMELINE FOR THE BASIC  
8 BIOLOGY AWARDS ARE AS FOLLOWS: FOLLOWING CONCEPT  
9 APPROVAL, WE WOULD RELEASE THE RFA IN JANUARY,  
10 TOWARDS THE END OF JANUARY 2013. THE PRELIMINARY  
11 APPLICATION WOULD BE DUE THE FOLLOWING MARCH. AND  
12 FOLLOWING THE PREAPPLICATION REVIEW, AN INVITATION  
13 FOR FULL APPLICATIONS WOULD BE EXPECTED AROUND JUNE  
14 OF 2013. THOSE WOULD BE REVIEWED BY THE FULL  
15 WORKING GROUP IN SEPTEMBER OF 2013, AND THE EARLIEST  
16 BOARD APPROVAL OF FUNDING, WE WOULD HOPE TO BE ABLE  
17 TO BRING THESE TO YOU NEXT DECEMBER, ABOUT A YEAR  
18 FROM NOW.

19 IN SUMMARY, WE'RE REQUESTING APPROVAL FOR  
20 A BUDGET OF UP TO \$40 MILLION TO SUPPORT UP TO 30  
21 BASIC BIOLOGY V AWARDS IN TOTAL. THE AWARDS WOULD  
22 CONSIST OF TWO TYPES, THOSE ADDRESSING FUNDAMENTAL  
23 MECHANISMS OF HUMAN STEM CELLS AND THOSE TESTING  
24 EXPLORATORY NEW CONCEPTS.

25 THANK YOU VERY MUCH. I'LL BE HAPPY TO

**BARRISTERS' REPORTING SERVICE**

1 TAKE ANY QUESTIONS.

2 MR. SHESTACK: I JUST HAVE A COUPLE QUICK  
3 QUESTIONS. I THOUGHT IN THE WRITE-UP IT SAID THAT  
4 STUDIES ON DIFFERENTIATION WERE OUTSIDE THE SCOPE OF  
5 THIS.

6 DR. SHEPARD: DIFFERENTIATION FROM  
7 PLURIPOTENT STEM CELLS IN PARTICULAR IS A KEY  
8 PRIORITY OF THESE AWARDS. IT HAS BEEN AND IT  
9 CONTINUES TO BE ONE OF OUR MAJOR PRIORITIES.

10 MR. SHESTACK: I MISREAD IT.

11 AND THEN DO YOU ENVISION WHEN YOU SAY THE  
12 EXPLORATORY TRACK IS SORT OF HIGH RISK, HIGH REWARD,  
13 IS THAT SIGNIFICANTLY DIFFERENT FROM THE WAY IT'S  
14 BEEN IN THE BASIC BIOLOGY TRACK BEFORE?

15 DR. SHEPARD: WELL, THE FUNDAMENTAL  
16 MECHANISMS TRACK IS SIMILAR TO WHAT WE'VE DONE  
17 BEFORE. I WOULDN'T CALL THESE EXTREMELY HIGH RISK  
18 THE USUAL WAY WE'VE DONE IT. THEY HAVE TO BE BASED  
19 ON COMPELLING PRELIMINARY DATA FOR ONE AND OTHER  
20 STRONG SCIENTIFIC RATIONALE. THOSE ARE ELEMENTS  
21 THAT SPEAK TO THEIR FEASIBILITY.

22 NOW, FOR THE EXPLORATORY CONCEPTS, WE  
23 STILL WANT THEM TO PROPOSE PROJECTS THAT ARE  
24 TECHNICALLY FEASIBLE; HOWEVER, THE BURDEN OF HAVING  
25 COMPELLING PRELIMINARY DATA IS NOT THERE. IT COULD

## BARRISTERS' REPORTING SERVICE

1 BE HELPFUL TO THEM, BUT REALLY IT'S MORE ABOUT THE  
2 IDEA. WE WILL BE LOOKING FOR HIGHLY NOVEL IDEAS  
3 THAT COULD BE REALLY GROUNDBREAKING, A NEW  
4 HYPOTHESIS THAT REALLY CHALLENGES WHAT WE ALREADY  
5 KNOW, BECAUSE IF THESE ARE THE TYPES OF HYPOTHESES,  
6 THAT IF YOU FIND SOMETHING NEW, HAVE THE POTENTIAL  
7 TO REALLY ADVANCE THE FIELD IN A GREAT LEAP RATHER  
8 THAN IN AN INCREMENTAL STEP. OF COURSE, THAT'S ALSO  
9 TRUE THROUGH THE FUNDAMENTAL MECHANISM TRACK IF  
10 WE'RE ABLE TO OVERCOME A LONG-STANDING QUESTION OF  
11 STEM CELL BIOLOGY BY TACKLING IT HEAD-ON.

12 MR. SHESTACK: DO YOU FEEL AND DOES THE  
13 SCIENTIFIC STAFF FEEL THAT, EVEN THOUGH THIS WOULD  
14 BE THE FIFTH TRACK, THAT WE SHOULD STILL BE SPENDING  
15 THIS AMOUNT OF MONEY IN AWARDING UP TO 20 AWARDS IN  
16 THIS TRACK?

17 DR. SHEPARD: UP TO 30. WE DO FEEL THAT  
18 THERE'S STILL A LOT OF BASIC BIOLOGY THAT NEEDS TO  
19 BE DONE. THE \$40 MILLION THAT WE'RE REQUESTING IS A  
20 SLIGHT BIT MORE. IT'S FIVE MILLION MORE THAN WE  
21 REQUESTED LAST YEAR FOR BASIC BIO IV. WE REQUESTED  
22 35 MILLION, BUT WE ENDED UP AWARDING \$38 MILLION IN  
23 AWARDS AFTER BOARD APPROVAL. AND THAT IS CONSISTENT  
24 WITH WHAT'S BEEN AWARDED EVERY ROUND. IT'S ALWAYS  
25 BEEN 25 AND 30 PROJECTS AT APPROXIMATELY 35 TO \$40

## BARRISTERS' REPORTING SERVICE

1 MILLION. AND WE DON'T ANTICIPATE THAT THIS TOTAL  
2 ALLOCATION WILL INCREASE AS THE YEARS GO BY;  
3 HOWEVER, THE INTEREST IN BASIC BIOLOGY AND THE NEED  
4 FOR IT IS VERY REAL.

5 WE RECEIVED 357 PRELIMINARY APPLICATIONS  
6 FOR BASIC BIOLOGY V. THIS HAS SURPASSED. THE BASIC  
7 BIOLOGY PROGRAM RECEIVES MORE APPLICATIONS AND  
8 GENERAL INTEREST THAN MANY OF OUR OTHER PROGRAMS.  
9 AND SO WE FEEL THAT THE NUMBERS WE'RE ASKING FOR IS  
10 REASONABLE GIVEN WHAT WE CAN DO. ALTHOUGH I THINK  
11 THERE'S A LOT MORE INTEREST AND COMPETITION FOR  
12 THOSE AWARDS THAN WE ARE IN THEORY ABLE TO SUPPORT.

13 MR. SHESTACK: THANK YOU. THANK YOU VERY  
14 MUCH.

15 DR. JUELSGAARD: SO JUST A LITTLE  
16 EXPLANATION. I DID SOME MATH ON WHAT YOU'RE  
17 PROPOSING, THE 20 FUNDAMENTAL MECHANISM AWARDS AND  
18 THE 10 EXPLORATORY CONCEPT AWARDS BASED ON THE  
19 MAXIMUM AMOUNT OF 250,000 A YEAR WITH THE FIRST,  
20 200,000 WITH RESPECT TO THE SECOND, ASSUMING  
21 EVERYBODY GOT THE MAXIMUM AMOUNT OF MONEY THAT WE'RE  
22 RECOMMENDING. WHEN YOU ADD THEM TOGETHER, YOU COME  
23 UP WITH A TOTAL 20 MILLION OUT OF THE 40 MILLION  
24 THAT YOU'RE RECOMMENDING BE THE POOL. SO AM I TO  
25 ASSUME -- SO THOSE ARE THE DIRECT COSTS.



## BARRISTERS' REPORTING SERVICE

1 SO AM I TO ASSUME THAT THE OTHER 20  
2 MILLION, THEN, ARE GOING TO BE ALLOCATED TOWARDS THE  
3 INDIRECT COST? IS IT TYPICALLY ONE-FOR-ONE?

4 MR. SHESTACK: THESE ARE MULTIYEAR AWARDS.

5 DR. JUELSGAARD: THIS IS CONSIDERING THE  
6 MULTIPLE YEARS. FIFTEEN MILLION FOR THE FIRST AND  
7 FIVE FOR THE SECOND.

8 DR. SHEPARD: THE INDIRECTS AREN'T IN THE  
9 DIRECT PROJECT COSTS AND IT VARIES FROM INSTITUTION  
10 TO INSTITUTION. WE BASED THE NUMBERS -- FIRST OF  
11 ALL, WHEN WE HAVE -- BASED ON OUR OWN EXPERIENCE  
12 WITH JUST THE FUNDAMENTAL MECHANISM TRACK TYPE OF  
13 AWARDS, WE GENERALLY GET ANYWHERE BETWEEN 25 AND 30  
14 THAT WE ARE ABLE TO AWARD WITHIN THAT BUDGET. NOW,  
15 WE'VE REDUCED THE DIRECT PROJECTS COST FROM 300,000  
16 A YEAR TO 250,000 A YEAR FOR THOSE AWARDS. SO  
17 THAT'S A SLIGHT REDUCTION.

18 AND ALSO FOR THE EXPLORATORY CONCEPT  
19 AWARDS, WE WENT AND LOOKED AT OTHER SIMILAR FUNDING  
20 MODELS, AND BASED ON OUR OWN EXPERIENCE, WHAT WE  
21 THOUGHT WOULD MAKE SENSE FOR THAT.

22 WE DON'T KNOW HOW MANY OF EACH AWARD WILL  
23 BE GRANTED, BUT WHAT WE WOULD LIKE TO DO IS WE WOULD  
24 LIKE TO HAVE A SIMILAR AND NOT SIGNIFICANTLY REDUCED  
25 NUMBER OF THE TRADITIONAL THREE-YEAR AWARDS THAT WE

**BARRISTERS' REPORTING SERVICE**

1 SUPPORT, BUT WE WANT TO BE ABLE TO ACCOMMODATE AS  
2 MANY OF THE EXPLORATORY CONCEPT AWARDS AS THE REVIEW  
3 DETERMINES ARE HIGHLY MERITORIOUS. SO THE NUMBERS,  
4 THERE'S A LITTLE WIGGLE ROOM IN THERE, BUT WE FEEL  
5 THAT IT'S APPROPRIATE TO GET APPROXIMATELY THE RIGHT  
6 NUMBER OF AWARDS THAT WE'RE ABLE TO ADMINISTER.

7 DR. JUELSGAARD: ACTUALLY MY QUESTION GOES  
8 TO A SOMEWHAT DIFFERENT ISSUE, AND THAT'S THE AMOUNT  
9 OF MONEY THAT'S GOING TO THE INSTITUTION FOR  
10 INDIRECT COST, NOT THE AMOUNT OF MONEY THAT'S GOING  
11 FOR DIRECT COSTS.

12 WHAT I'M SEEING IS, IF I DO THE MATH  
13 CORRECTLY, AN EQUAL ALLOCATION BETWEEN DIRECT COST  
14 AND INDIRECT COST. AND MY QUESTION IS IS THAT  
15 TYPICAL? IS THAT THE WAY IT WORKS? WE DO DRAW A  
16 LINE ON THE MAXIMUM AMOUNT OF INDIRECT COSTS AS A  
17 PERCENTAGE OF THE DIRECT COST THAT WE'RE WILLING TO  
18 BEAR? I JUST DON'T KNOW QUITE HOW THAT WORKS.

19 DR. SHEPARD: IT DOES VARY, BUT WE DO HAVE  
20 A LIMIT. MAYBE DR. OLSON WOULD SPEAK TO THAT.

21 DR. OLSON: I JUST WANT TO REMIND YOU THAT  
22 IT'S A DIRECT FACILITIES COST AS WELL AS AN INDIRECT  
23 COST THAT IS NOT CAPTURED IN THE DIRECT PROJECT  
24 COSTS. THAT FIGURE CAN VARY FROM ABOUT 1.45 UP TO,  
25 AS YOU NOTE, DOUBLE, A HUNDRED PERCENT. SO IT TENDS

## BARRISTERS' REPORTING SERVICE

1 TO AVERAGE AT ABOUT 65 PERCENT OF, AT LEAST THE LAST  
2 TIME I CHECKED, THE COMBINATION OF THE DIRECT  
3 FACILITIES COST, WHICH IS A NEGOTIATED NUMBER, AND  
4 WE BASE THAT ON WHAT THE INSTITUTE HAS NEGOTIATED  
5 WITH THE NIH. SO WE ACCEPT THAT AS THE COST. AND  
6 THEN THE INDIRECT RATE IS SET BY THE RFA. IT'S  
7 TYPICALLY 20 PERCENT.

8 DR. STEWARD: I KNOW I SOUND LIKE A BROKEN  
9 RECORD, BUT AT LEAST I'M CONSISTENT. MY ISSUE WAS  
10 ALWAYS BEING OVERLY RESTRICTIVE IN THESE AND  
11 LIMITING THE SCOPE BECAUSE, IN GENERAL, THE PI'S OUT  
12 THERE ARE THE ONES WITH INCREDIBLY CREATIVE IDEAS  
13 AND ARE REALLY DRIVING THE SCIENCE. SO THAT'S A  
14 STATEMENT.

15 THE QUESTION IS ON WHAT BASIS DID YOU  
16 CHOOSE THE RESTRICTIONS THAT YOU'RE APPLYING TO THIS  
17 ROUND? FOR EXAMPLE, THAT NEW APPROACHES FOR  
18 GENERATING IPS CELLS WOULD BE OUT OF SCOPE AND  
19 TRANSLATIONAL RESEARCH IN PARTICULAR, THE KINDS OF  
20 TESTING OF CELL POPULATIONS AND DISEASE MODELS.  
21 REALLY, EXACTLY THE SAME THING WE JUST SAW IN THE  
22 SPOTLIGHT PRESENTATION, THOSE SEEM TO BE THINGS THAT  
23 WE WOULD WANT TO KEEP IN SCOPE.

24 DR. SHEPARD: TRANSLATIONAL RESEARCH HAS  
25 NEVER BEEN IN SCOPE WITH THE BASIC BIOLOGY AWARDS

**BARRISTERS' REPORTING SERVICE**

1 UNLESS YOU COUNT DIEASE IN A DISH STUDIES TO  
2 UNDERSTAND THE MECHANISM IN DISEASE, AND WE'RE NOT  
3 DISQUALIFYING THOSE FROM THE BASIC BIOLOGY AWARDS.  
4 THOSE ARE STILL ALLOWED.

5 IF YOU ARE REFERRING TO THE NEW APPROACHES  
6 FOR REPROGRAMMING TO IPSC'S AND MAKING THEM MORE  
7 EFFICIENTLY, ONE OF THE REASONS WE EXCLUDED THAT  
8 THIS TIME IS BECAUSE WE TYPICALLY RECEIVE MANY  
9 APPLICATIONS IN THAT AREA. AND OUR REVIEWERS HAVE  
10 INDICATED THAT THAT IS JUST NOT CONSIDERED TO BE ONE  
11 OF THE MOST PRESSING PRIORITIES, MAKING IPSC'S MORE  
12 EFFICIENTLY. NOW, IF YOU'RE MAKING IPSC'S AS A TOOL  
13 TO INVESTIGATE FUNDAMENTAL MECHANISMS OF HUMAN STEM  
14 CELL BIOLOGY PLURIPOTENCY, THEN THAT WOULD BE IN  
15 SCOPE.

16 DR. STEWARD: OKAY. AND I GUESS MAYBE  
17 IT'S SORT OF A DEFINITION OF TRANSLATIONAL RESEARCH  
18 HERE. TO ME AT LEAST, STUDYING ANIMAL MODELS AND  
19 TESTING THERAPEUTIC EFFICACY ISN'T QUITE  
20 TRANSLATIONAL. IT'S REALLY STILL BASIC BIOLOGY, BUT  
21 THAT'S JUST A STATEMENT AGAIN RATHER THAN -- NIH  
22 WOULD FUND THAT AS AN R01 MECHANISM, FOR EXAMPLE.

23 DR. SHEPARD: I'M JUST -- MY POINT IS THAT  
24 OUR DEFINITION OF WHAT IS IN SCOPE WITH BASIC  
25 BIOLOGY V HAS NOT CHANGED FROM PREVIOUS ROUNDS. AND

**BARRISTERS' REPORTING SERVICE**

1 WE DO HAVE OTHER RFA PROGRAMS THAT DO FUND THE TYPE  
2 OF RESEARCH THAT YOU'RE SPEAKING OF.

3 DR. BRYANT: I'D JUST LIKE TO SAY THAT I'M  
4 COMPLETELY DELIGHTED TO SEE THE SECOND NEW  
5 INITIATIVE HERE. I THINK IT'S LONG OVERDUE.  
6 THERE'S NOWHERE THAT YOU CAN GET FUNDING FOR THAT  
7 KIND OF THING, AND I THINK IT COULD BE  
8 TRANSFORMATIONAL. THANK YOU.

9 CHAIRMAN THOMAS: DR. CHISARI.

10 DR. CHISARI: I ECHO THAT. I'M EXTREMELY  
11 EXCITED AND GRATIFIED THAT CIRM IS UNDERTAKING THIS  
12 INITIATIVE. I HOPE IT'S NOT THE LAST UNTIL WE HAVE  
13 A STEM CELL CURE FOR ALL THE DISEASES THAT STEM  
14 CELLS CAN ADDRESS.

15 UNDER THE DEFINITION OR SCOPE OF THE  
16 FUNDAMENTAL MECHANISMS TRACK, THE THIRD BULLET POINT  
17 ENDS WITH DISEASE MECHANISM. AND SO WHEN SCIENTISTS  
18 TRY TO ADDRESS A DISEASE MECHANISM THAT AFFECTS  
19 HUMANS WITHOUT IT BEING INVASIVE, IT PRETTY MUCH  
20 REQUIRES DOING EXPERIMENTS ON HUMAN CELLS IN A DISH  
21 OR IN VERTEBRATE ANIMALS. AND I THINK SOMEWHERE IN  
22 HERE YOU EMPHASIZE OR YOU STATE THAT WITH COMPELLING  
23 REASONS, VERTEBRATE ANIMALS MAY BE USED. WHAT WOULD  
24 YOU DEFINE AS COMPELLING?

25 DR. SHEPARD: WELL, THAT'S A GOOD

**BARRISTERS' REPORTING SERVICE**

1 QUESTION. SO IN PAST ROUNDS OF BASIC BIOLOGY, WHEN  
2 WE JUST HAD THE ONE TRACK, IT WAS ALWAYS PRIORITIZED  
3 ON THE HUMAN STEM CELL STUDIES, BUT THERE WAS THIS  
4 CLAUSE IN THE RFA THAT SAID IF YOU FEEL THAT YOUR  
5 WORK IS PARTICULARLY GROUNDBREAKING AND AN ANIMAL  
6 MODEL SYSTEM IS NECESSARY, YOU CAN PROPOSE THAT.  
7 WHAT WE ENDED UP HAVING WAS REVIEW CRITERIA THAT  
8 WERE CENTERED ON HOW MECHANISTIC THE RESEARCH IS AND  
9 THE PRIORITY WAS HUMAN STEM CELLS.

10 WE THOUGHT BY HAVING ANOTHER TRACK, IF  
11 PEOPLE ARE GOING TO CLAIM THAT THEIR STUDIES ARE  
12 TRULY GROUNDBREAKING AND THOSE STUDIES ARE  
13 JUSTIFIED, THEN THAT WOULD BE A REVIEW CRITERIA IN  
14 AND OF ITSELF. AND THOSE TYPES OF AWARDS WOULD BE  
15 EVALUATED AGAINST OTHERS MAKING THAT CLAIM RATHER  
16 THAN AGAINST 300 PLUS TYPES OF RESEARCH THAT ARE  
17 MORE FOCUSED ON THE HUMAN STEM CELL BIOLOGY.

18 SO THAT WAS ONE WAY WE TRIED TO BETTER  
19 DEAL WITH THOSE TYPES OF APPLICATIONS AND BETTER  
20 INCREASE THE POTENTIAL OF CAPTURING THE TRULY  
21 GROUNDBREAKING TYPE STUDIES UNDER THIS PROGRAM.

22 WITH RESPECT TO DISEASE MECHANISM, THE  
23 SLIDES I PRESENTED ARE JUST A VERY BRIEF OVERVIEW OF  
24 THE PROGRAM. IN THE RFA THERE'S MORE DETAILS. AND  
25 THE BASIC BIOLOGY RFA STARTED IN ITS FIRST ITERATION

**BARRISTERS' REPORTING SERVICE**

1 AS PURELY BEING ABOUT STEM CELL BIOLOGY. BUT AROUND  
2 THAT TIME IS WHEN PEOPLE REALLY BEGAN TO APPRECIATE  
3 THE VALUE OF IPSC CELLS FOR DISEASE MODELING. AND  
4 DISEASES, OF COURSE, ARE WELL WITHIN CIRM'S MISSION,  
5 AND WE THOUGHT THAT AS LONG AS THE STUDIES ARE  
6 RESPONSIVE TO THE RFA, WHICH IS THEY ARE PURSUING  
7 MOLECULAR AND CELLULAR MECHANISMS, IT WOULD BE  
8 APPROPRIATE TO STUDY DISEASES UNDER THIS INITIATIVE  
9 INSOFAR AS THE HUMAN STEM CELLS ARE WHAT MAKE THAT  
10 POSSIBLE. AND WHAT SETS THE DISEASE IN A DISH  
11 STUDIES IN BASIC APART FROM THE DISEASE IN A DISH  
12 STUDIES THAT ARE SUPPORTED THROUGH OUR TOOLS AND  
13 TECHNOLOGY PROGRAM AND OUR EARLY TRANSLATION PROGRAM  
14 IS THE FOCUS IS ON UNDERSTANDING WHAT IS GOING WRONG  
15 IN THE DISEASE AT THE CELLULAR AND MOLECULAR LEVEL.

16 WE HAD PATIENT ADVOCATES TODAY TALKING  
17 ABOUT ENDOMETRIOSIS AND HOW NOBODY KNOWS ABOUT THE  
18 BASIC BIOLOGY OF THAT. THIS IS WHERE YOU COULD  
19 STUDY THE BASIC BIOLOGY OF THAT; WHEREAS, OUR OTHER  
20 PROGRAMS, EARLY TRANSLATION, IS WHERE YOU TAKE A  
21 DISCOVERY THAT'S BEEN MADE AND TRANSLATE IT INTO A  
22 THERAPY. SO WE'RE TRYING TO CAPTURE  
23 DISEASE-IN-A-DISH-TYPE STUDIES AT EVERY LEVEL AT THE  
24 BEGINNING WHERE YOU NEED TO UNDERSTAND THE MECHANISM  
25 TO THE POINT WHERE YOU ARE SCREENING FOR DRUGS THAT

**BARRISTERS' REPORTING SERVICE**

1 COULD MODIFY A PHENOTYPE.

2 SO THIS IS WHERE WE'RE CAPTURING THE MORE  
3 EARLY STAGE STUDIES UNDER THIS INITIATIVE.

4 DR. CHISARI: WELL, YOU'VE JUST EXPLAINED  
5 IT VERY, VERY CLEARLY. I HOPE THAT IT'S EXPLAINED  
6 THAT CLEARLY IN THE RFA SO THAT YOU DON'T ENCOURAGE  
7 HUNDREDS OF SCIENTISTS TO WRITE APPLICATIONS THAT  
8 WILL WIND UP NOT BEING COMPELLING ENOUGH TO BE  
9 COMPETITIVE.

10 DR. SHEPARD: WE GET VERY MANY  
11 APPLICATIONS, SO WE'RE TRYING TO BE AS CLEAR AS  
12 POSSIBLE SO THAT WHEN PEOPLE SUBMIT APPLICATIONS,  
13 THEY ARE WHAT WE'RE LOOKING FOR. AND IF THEY DON'T  
14 UNDERSTAND WHAT WE'RE LOOKING FOR, WE WANT TO MAKE  
15 IT CLEAR SO THAT THEY CRAFT THEIR PROPOSALS SO THAT  
16 IT DOES ANSWER THE TYPE OF QUESTIONS THAT WE FEEL  
17 HAVE THE BEST POTENTIAL OF ADVANCING THE FIELD.

18 DR. CHISARI: THANK YOU.

19 CHAIRMAN THOMAS: THANK YOU. DO WE HEAR A  
20 MOTION TO APPROVE?

21 DR. CHISARI: SO MOVE.

22 MS. GIBBONS: SECOND.

23 CHAIRMAN THOMAS: MOVED BY DR. CHISARI,  
24 SECONDED BY LEEZA. IS THERE ANY FURTHER DISCUSSION  
25 BY MEMBERS OF THE BOARD? ANY DISCUSSION BY MEMBERS



**BARRISTERS' REPORTING SERVICE**

1 OF THE PUBLIC? CAN THIS BE A VOICE VOTE, MR.  
2 HARRISON?

3 MR. HARRISON: YES, EXCEPT FOR THE MEMBERS  
4 ON THE PHONE.

5 CHAIRMAN THOMAS: ALL THOSE IN FAVOR  
6 PLEASE SAY AYE. OPPOSED? MEMBERS ON THE PHONE  
7 PLEASE CAST YOUR VOTES.

8 MS. SAMUELSON: YES.

9 DR. HAWGOOD: AYE.

10 DR. WARE: AYE.

11 MS. FEIT: YES.

12 CHAIRMAN THOMAS: THANK YOU VERY MUCH.  
13 THE MOTION PASSES. THANK YOU, DR. SHEPARD.

14 DR. SHEPARD: THANK YOU.

15 CHAIRMAN THOMAS: NOW PROCEEDING TO ITEM  
16 11, CONSIDERATION OF FINAL ADOPTION OF THE CIRM  
17 CONFLICT OF INTEREST CODE AMENDMENTS. MR. TOCHER.

18 MR. TOCHER: GOOD AFTERNOON. THIS ITEM  
19 COMES BACK TO YOU FROM EARLIER THIS YEAR CONCERNING  
20 AMENDMENTS TO CIRM'S CONFLICT OF INTEREST CODE.  
21 THIS IS THE CODE THAT DESCRIBES THE LEVELS OF  
22 DISCLOSURE FOR MEMBERS OF THIS BOARD AS WELL AS  
23 STAFF AT CIRM.

24 THE POLITICAL REFORM ACT REQUIRES AGENCIES  
25 TO CONDUCT A BIENNIAL REVIEW OF ITS CODE AND TO

**BARRISTERS' REPORTING SERVICE**

1 EXAMINE WHETHER NEW POSITIONS AND EXISTING POSITIONS  
2 ARE ASSIGNED THE CORRECT LEVEL OF DISCLOSURE ON  
3 THEIR STATEMENTS OF ECONOMIC INTERESTS.

4 EARLIER THIS YEAR CIRM STAFF MET WITH THE  
5 FAIR POLITICAL PRACTICES COMMISSION, WHICH OVERSEES  
6 THIS AGENCY'S CODE ADOPTION, AND IDENTIFIED  
7 POSITIONS THAT THE AGENCY THOUGHT SHOULD BE REVIEWED  
8 FOR POSSIBLE NARROWING OF THE DISCLOSURE CATEGORIES  
9 FOR THESE DUTIES. THIS INCLUDES MEMBERS OF CIRM'S  
10 EXECUTIVE STAFF AS WELL AS MEMBERS OF THIS BOARD.  
11 HOWEVER, THE GOVERNANCE SUBCOMMITTEE TO THE BOARD,  
12 CHAIRED MY MEMBER LANSING, RECOMMENDED THAT CIRM AND  
13 THE ICOC NEVERTHELESS MAINTAIN THE BROADEST  
14 DISCLOSURE LEVEL POSSIBLE FOR MEMBERS OF THE BOARD  
15 AND CIRM'S EXECUTIVE STAFF, BUT DO FOLLOW THROUGH  
16 FOR CIRM NONEXECUTIVE STAFF AND REVIEW THOSE  
17 POSITIONS FOR THE APPROPRIATE LEVEL OF DISCLOSURE.

18 THAT RECOMMENDATION WAS FOLLOWED BY THE  
19 BOARD, AND STAFF THEN OVER THE PAST SEVERAL MONTHS  
20 HAS WORKED TO IMPLEMENT THAT RECOMMENDATION BY  
21 REVIEWING CIRM'S CODE FOR NONEXECUTIVE STAFF. THAT  
22 PROCESS HAS CONCLUDED. WE HAVE WORKED CLOSELY WITH  
23 FPPC STAFF TO REVIEW JOB DESCRIPTIONS AND WHAT THE  
24 APPROPRIATE LEVELS OF DISCLOSURE WOULD BE. THOSE  
25 CHANGES AND PROPOSED AMENDMENTS HAVE BEEN CIRCULATED

## BARRISTERS' REPORTING SERVICE

1 FOR PUBLIC COMMENT. NONE HAS BEEN RECEIVED BY BOTH  
2 THE FPPC AND CIRM. AND SO THE PROCESS IS AT ITS  
3 CONCLUSION, AND WE AWAIT THE BOARD'S FINAL ADOPTION  
4 OF THESE AMENDMENTS, WHICH, AGAIN, MAINTAIN THE  
5 BROADEST DISCLOSURE FOR ICOC MEMBERS AND FOR CIRM  
6 EXECUTIVE STAFF.

7 CHAIRMAN THOMAS: YOU NEED A MOTION?

8 MR. TOCHER: CORRECT.

9 CHAIRMAN THOMAS: DO I HEAR A MOTION?

10 DR. PULIAFITO: SO MOVED.

11 MS. LANSING: SECOND.

12 CHAIRMAN THOMAS: MOVED BY DEAN PULIAFITO,  
13 SECOND BY SHERRY. ANY DISCUSSION BY MEMBERS OF THE  
14 BOARD? DISCUSSION BY MEMBERS OF THE PUBLIC?  
15 HEARING NONE, WE'LL PROCEED TO A VOICE VOTE. ALL  
16 THOSE IN FAVOR PLEASE SAY AYE. OPPOSED? VOTES ON  
17 THE PHONE, PLEASE.

18 MS. SAMUELSON: AYE.

19 MS. FEIT: AYE.

20 DR. HAWGOOD: YES.

21 CHAIRMAN THOMAS: THANK YOU VERY MUCH.

22 MOTION CARRIES. THANK YOU, MR. TOCHER.

23 WE'RE GOING TO GO ITEM 14, WHICH I'M  
24 INFORMED IS ACTUALLY NOT AN ACTION ITEM, BUT A  
25 DISCUSSION ITEM. SO THAT IS DISCUSSION OF UPDATE TO

**BARRISTERS' REPORTING SERVICE**

1 CIRM'S RESPONSE TO THE PERFORMANCE AUDIT  
2 RECOMMENDATIONS. I BELIEVE, ALEX, YOU ARE GOING TO  
3 GIVE US THIS DISCUSSION.

4 MS. CAMPE: CHAIRMAN AND MEMBERS OF THE  
5 BOARD, THANK YOU FOR YOUR TIME TODAY. I'M HERE  
6 ACTUALLY TO UPDATE YOU ON THE PERFORMANCE AUDIT  
7 REPORT THAT WE RECEIVED IN MAY OF 2012 AND TO SHARE  
8 WITH YOU WHAT THE PROGRESS HAS BEEN WITH THAT  
9 REPORT.

10 FIRST OF ALL, WE WERE INFORMED THAT WE  
11 WERE IN FULL COMPLIANCE WITH THAT PERFORMANCE AUDIT.  
12 THEY HAD RECOMMENCED 24 RECOMMENDATIONS FOR IMPROVED  
13 PERFORMANCE FOR CIRM. WE HAVE TAKEN THOSE SERIOUSLY  
14 AND HAVE LOOKED AT ALL OF THEM. AND ALL OF YOU  
15 ACTUALLY HAD RECEIVED A COPY OF THAT REPORT MANY  
16 MONTHS AGO. I'VE ALSO SHARED A LINK WITH YOU WHERE  
17 IT IS NOW ON THE WEB SITE.

18 SO OF THE 24 RECOMMENDATIONS, TO DATE  
19 SEVEN ARE COMPLETED. THE NEWLY COMPLETED ONES THAT  
20 YOU CAN NOW BE AWARE OF IS THAT THE BOND FORECASTING  
21 PROCEDURES HAVE BEEN COMPLETED. WE HAD AN IP MODULE  
22 THAT WAS UPDATED TO INCLUDE SPECIFIC QUESTIONS ABOUT  
23 COMMERCIALIZATION ACTIVITY. WE HAD A FORMAL  
24 ONBOARDING PROGRAM THAT WAS COMPLETED. AND WE ALSO  
25 HAD A GRANTS MANAGEMENT SYSTEM MODULE RELEASE TO

**BARRISTERS' REPORTING SERVICE**

1 OBTAIN REQUIRED INVENTION DISCLOSURE FORMS AND  
2 INVENTION UTILIZATION FORMS.

3 CURRENTLY WE ALSO HAVE 14 ONGOING FOCUS  
4 ASPECTS TO THE 24 RECOMMENDATIONS. AND THEN,  
5 FINALLY, WE HAVE 13 STILL IN PROGRESS. AND WE'RE  
6 ALL WORKING VERY HARD TO COMPLETE THOSE BY JUNE OF  
7 2013.

8 SO THAT REALLY WRAPS UP MY UPDATE TO WHERE  
9 WE'RE AT WITH REGARDS TO THE PERFORMANCE AUDIT. I'M  
10 HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE.

11 CHAIRMAN THOMAS: THANKS, ALEX. I THINK  
12 THE PROCESS IS COMING ALONG VERY WELL. WE'RE BEING  
13 VERY RESPONSIVE TO THE AUDIT, AND WE'LL CONTINUE TO  
14 BE SO UNTIL WE HAVE ALL ITEMS TAKEN CARE OF. SO  
15 THANK YOU VERY MUCH.

16 GOING TO GO NOW TO -- ASK A QUESTION.  
17 ALAN, HOW LONG DO YOU EXPECT THE PRESIDENT'S REPORT  
18 TO BE? TRYING TO BUDGET TIME HERE.

19 DR. TROUNSON: THREE AND A HALF MINUTES.  
20 JUST A LITTLE LONGER THAN FIVE MINUTES.

21 CHAIRMAN THOMAS: LET'S GO THEN TO ITEM  
22 15, DISCUSSION OF COMMERCIALIZATION OF THE INDUSTRY  
23 ENGAGEMENT PLAN. ELONA.

24 MS. BAUM: THANK YOU VERY MUCH. THIS IS A  
25 DISCUSSION ITEM AS WELL, AND IN MANY WAYS IT FOLLOWS

**BARRISTERS' REPORTING SERVICE**

1 THE PERFORMANCE AUDIT BECAUSE IT HAS ITS GENESIS  
2 FROM THAT AUDIT. I WANT TO GIVE YOU A LITTLE  
3 CONTEXT. AS I MENTIONED, THE MOSS ADAMS REPORT, THE  
4 PERFORMANCE AUDIT, HAD SUGGESTED THAT ALTHOUGH WE  
5 HAD COMMERCIALIZATION AND INDUSTRY ENGAGEMENT  
6 ACTIVITIES ONGOING FOR PROBABLY A YEAR AND A HALF OR  
7 EVEN MORE, THERE WAS NEVER A FORMAL REPORT THAT HAD  
8 BEEN PREPARED THAT OUTLINED WHAT OUR CORE STRATEGIC  
9 OBJECTIVES WERE AND DEFINED ANY OF OUR INITIATIVES.

10 SO WHAT THIS REPORT IS, WHICH YOU HAVE IN  
11 YOUR BINDER, IS ESSENTIALLY A COMPENDIUM OF WHAT WE  
12 HAVE BEEN DOING. AND THEN I'VE ALSO LISTED SOME  
13 OTHER POTENTIAL INITIATIVES THAT WILL BE CONSIDERED  
14 IN THE FUTURE POSSIBLY AND SOME THAT WE COULD BRING  
15 TO YOU THAT AREN'T EVEN LISTED THERE. BUT I WANTED  
16 TO GIVE YOU A SENSE THAT THIS IS CONSIDERED A LIVING  
17 DOCUMENT, THAT CERTAINLY THE STRATEGIC PRIORITIES  
18 THAT I'M OUTLINING WITHIN THE DOCUMENT ARE LIKELY TO  
19 BE CONSISTENT AND NOT CHANGED, BUT, AGAIN, THE  
20 INITIATIVES ARE EXPECTED TO VARY.

21 I WANTED TO ALSO GIVE YOU SOME BACKGROUND  
22 AS TO WHY WE'RE EMPHASIZING INDUSTRY ENGAGEMENT AND  
23 COMMERCIALIZATION ACTIVITIES. AS YOU ALL KNOW, THE  
24 FOCAL POINT OF PROPOSITION 71 HAS BEEN TO INVEST IN  
25 RESEARCH THAT WILL HELP ACCELERATE THE DEVELOPMENT

**BARRISTERS' REPORTING SERVICE**

1 OF TRANSFORMATIVE NEW THERAPIES FOR PATIENTS. I  
2 THINK WE HAVE HEARD TIME AND TIME AGAIN WITHIN THE  
3 IOM REPORT, WITHIN THE BLUE RIBBON PANEL THAT'S  
4 REVIEWED CIRM, AND OTHER TIMES AS WELL THAT INDUSTRY  
5 ENGAGEMENT IS ABSOLUTELY FRONT, CENTER, AND CRITICAL  
6 TO ACHIEVE THIS END.

7 SO YOU WILL SEE STRATEGIC PRIORITIES AND  
8 OBJECTIVES THAT ARE GEARED TOWARDS ACHIEVING THAT  
9 OBJECTIVE. BUT IN ADDITION, IF YOU EVEN GO TO THE  
10 VERY FIRST PAGE OF PROP 71, YOU WILL SEE THAT THERE  
11 ARE ECONOMIC DEVELOPMENT COMPONENTS TO PROPOSITION  
12 71. AND I QUOTED A COUPLE OF STATEMENTS THAT APPEAR  
13 IN PROP 71, SUCH AS "TO ADVANCE THE BIOTECH INDUSTRY  
14 IN CALIFORNIA TO WORLD LEADERSHIP AS AN ECONOMIC  
15 ENGINE FOR CALIFORNIA." THAT'S ONE QUOTE THAT  
16 APPEARS IN PROP 71. ANOTHER QUOTE BEING "TO BENEFIT  
17 THE CALIFORNIA ECONOMY BY CREATING PROJECTS, JOBS,  
18 AND THERAPIES THAT WILL GENERATE MILLIONS OF DOLLARS  
19 IN TAX REVENUES."

20 I'M HAPPY TO SAY WE'VE BEEN VERY  
21 SUCCESSFUL IN THAT FRONT. WITH THAT SAID, LET ME  
22 JUST GO OVER SOME OF THE STRATEGIC OBJECTIVES AND  
23 INITIATIVES THAT ARE GEARED TO SUPPORT THE PROP 71  
24 GOALS AND OBJECTIVES.

25 SO THERE'S ESSENTIALLY FOUR STRATEGIC

## BARRISTERS' REPORTING SERVICE

1 GOALS OR OBJECTIVES THAT ARE BEING PROPOSED. I'LL  
2 LIST THEM, AND THEN IN THE NEXT COUPLE SLIDES I'LL  
3 OUTLINE THE RATIONALE BEHIND THEM.

4 SO THE FIRST ONE IS TO ATTRACT FOLLOW-ON  
5 FINANCING AND CO-FUNDING FOR CIRM-FUNDED RESEARCH.  
6 AND I'LL EXPLAIN A LITTLE BIT WHAT I MEAN BY  
7 FOLLOW-ON IN A MINUTE.

8 THE NEXT IS OBVIOUSLY TO SUPPORT COMPANY  
9 CREATION. THAT'S FUNDAMENTAL TO PROP 71. AND  
10 SUPPORT THEIR GROWTH AND POSSIBLY EVEN RELOCATION OF  
11 COMPANIES INTO CALIFORNIA. CERTAINLY THE HIGH  
12 IMPACT COMPANIES WILL BE CONSIDERED.

13 AGAIN, WE'RE ALSO SEEKING, AS YOU'VE SEEN  
14 IN OTHER INITIATIVES, TO OBTAIN EARLY ENGAGEMENT OF  
15 TOP TIER BIOPHARMACEUTICAL COMPANIES IN ORDER TO  
16 ACCESS THEIR EXPERTISE AND FUNDING. AND ALSO TO  
17 ASSUME A LEADERSHIP ROLE IN THE FIELD SO THAT WE CAN  
18 SUPPORT AREAS THAT ARE NOT NECESSARILY REQUIRED  
19 FUNDING, BUT REALLY REQUIRE SOME LEADERSHIP FOR THE  
20 INDUSTRY TO PROGRESS. AND I'LL EXPLAIN A LITTLE BIT  
21 WHAT I MEAN ABOUT THAT IN A SECOND.

22 FOLLOW-ON FINANCING, WHAT DOES THAT MEAN?  
23 WHAT THAT MEANS IS LINKING OUR PROGRAMS TO POTENTIAL  
24 FUTURE SOURCES OF FUNDING. HOPEFULLY EVERYONE  
25 UNDERSTANDS WHEN I USE THAT TERM, "FOLLOW-ON



**BARRISTERS' REPORTING SERVICE**

1 FUNDING," WHAT I MEAN BY THAT. OF COURSE, WE WANT  
2 TO LEVERAGE OUR FUNDING. SO IF WE'RE ABLE TO OBTAIN  
3 CO-FUNDING TODAY FOR PROJECTS AND HAVE A PARTNER  
4 THAT'S HELPING US ALONG, THAT ALLOWS OUR FUNDING TO  
5 LAST LONGER. SO THAT'S ANOTHER OBJECTIVE. AND  
6 THAT'S WHAT IS MEANT BY THAT FIRST STRATEGIC  
7 OBJECTIVE THAT I JUST LISTED.

8 I'VE ALREADY EXPLAINED THAT ENGAGING  
9 PHARMA, BIOPHARMA EARLY IS BENEFICIAL BECAUSE WE GET  
10 TO ACCESS THEIR VERY KEY AND CORE EXPERTISE IN MANY  
11 AREAS. AND ALSO THEY ARE, FRANKLY, A SOURCE OF  
12 CO-FUNDING AND FOLLOW-ON FINANCING. AND THAT'S WHY  
13 YOU SEE THE STRATEGIC PARTNERSHIP FUND DESIGNED AS  
14 IT IS.

15 THIRDLY, AS MENTIONED, WE WANT TO SUPPORT  
16 THE GROWTH OF COMPANIES. WE DO HAVE SOME SPINOUT  
17 COMPANIES ARISING FROM CIRM FUNDING, AND WE WILL  
18 CONTINUE TO MONITOR THOSE. IN ADDITION, WE WANT TO  
19 SUPPORT THOSE YOUNG COMPANIES AS BEST AS ABLE. BUT  
20 WE NEED TO DO THAT IN AREAS WHERE THEY ARE FOCUSED  
21 ON CIRM'S MANDATE. THERE'S A NUMBER OF COMPANIES IN  
22 CALIFORNIA THAT IDENTIFY THEMSELVES AS BEING IN THE  
23 STEM CELL INDUSTRY. BUT YOU WILL NOTE THAT IN A  
24 NUMBER OF INSTANCES, THEY'RE NOT DOING RESEARCH THAT  
25 IS THE FOCAL POINT OF PROP 71.

**BARRISTERS' REPORTING SERVICE**

1           AND THEN WE'LL HAVE INDUSTRY INITIATIVES  
2           THAT WILL ENABLE US TO ACCOMPLISH THIS. IT DOESN'T  
3           ALL HAVE TO BE IN THE FORM OF FUNDING, BUT WE CAN  
4           HELP WITH ORGANIZING WORKSHOPS, ETC., TO ACHIEVE  
5           THAT GOAL. THAT GETS TO THE INITIATIVES.

6           WE, FINALLY, WANT TO MAINTAIN A LEADERSHIP  
7           ROLE, AS I JUST STATED, IN THE BUSINESS AREA SO THAT  
8           WE CAN FOCUS ON REIMBURSEMENT ISSUES, ACCESS TO  
9           CAPITAL, DEFINING BUSINESS MODELS. THESE, AGAIN,  
10          DON'T TAKE A LOT OF FUNDING. WHAT THEY REQUIRE IS  
11          THAT WE TAKE A LEADERSHIP ROLE. WE'RE OUT IN THE  
12          PUBLIC, WE'RE ORGANIZING THE KEY THOUGHT LEADERS,  
13          WE'RE PERFORMING WORKSHOPS IN ORDER TO ENGAGE IN  
14          THOSE ISSUES. WE DO THIS ALONGSIDE OTHER  
15          INDUSTRY-ORIENTED GROUPS LIKE THE ALLIANCE FOR  
16          REGENERATIVE MEDICINE. SO THAT'S OUR FOURTH KEY  
17          OBJECTIVE.

18          AND THEN IN TERMS OF EXISTING AND  
19          POTENTIAL INITIATIVES, THE TBD'S THAT YOU SEE ON THE  
20          SLIDE BEFORE YOU MEANS THOSE HAVE NOT BEEN PROVIDED  
21          TO THE BOARD YET. AND WE ARE NOT ASKING FOR YOUR  
22          PERMISSION. THEY MIGHT COME AT A LATER DATE. THE  
23          FIRST THREE WE'VE TALKED ABOUT A LOT. THEY'RE THE  
24          SUPPORTING A PARTNERING FORUM AT THE STEM CELL  
25          MEETING ON THE MESA. I THINK WE'VE ALL FELT THAT

## BARRISTERS' REPORTING SERVICE

1 THAT'S BEEN VERY SUCCESSFUL AND A VERY WORTHWHILE  
2 ACTIVITY TO DO.

3 WE'VE ALREADY ESTABLISHED A BUSINESS  
4 DEVELOPMENT FUNCTION. YOU WILL HEAR THAT WE'VE  
5 HIRED -- I DON'T WANT TO BLOW ALAN'S COVER, BUT HE  
6 WILL BE INTRODUCING ONE OR OUR NEW MEMBERS OF OUR  
7 STAFF AND WE'LL HAVE A NICE PICTURE, I HOPE, OF NEIL  
8 LITTMAN. I DIDN'T PUT IT ON HERE BECAUSE I THOUGHT  
9 HE WOULD PRECEDE ME. SO WE'RE EXTREMELY LUCKY TO  
10 HAVE ADDED THAT NEW EXPERTISE, AND WE WILL USE AND  
11 TAKE ADVANTAGE OF THAT.

12 WE ARE MOVING AHEAD WITH SOME OTHER  
13 POTENTIAL IDEAS. AND, AGAIN, WE WILL COME TO YOU  
14 WITH THE SPECIFICS AS NEEDED AND ASK FOR FUNDING IF  
15 NEEDED. SOME OF THESE COULD INCLUDE A  
16 PRECOMPETITIVE CONSORTIA THAT WE'RE THINKING ABOUT.  
17 WE MIGHT, BUT NOT NECESSARILY WILL, ASK FOR PROGRAMS  
18 THAT WILL ENHANCE RELOCATION SUPPORT FOR COMPANIES  
19 THAT PERFORM HIGH IMPACT ACTIVITIES THAT WILL  
20 BENEFIT CALIFORNIA. AND AN INTERESTING IDEA COULD  
21 BE THAT, EVEN IF WE DON'T GET DIRECT FUNDING FROM  
22 THEM, IDENTIFY THE BIG BIOPHARMAS THAT WANT TO  
23 COLLABORATE IN ONE WAY OR ANOTHER WITH US EITHER BY  
24 PROVIDING IN-KIND SERVICES OR JUST ALLOWING OUR  
25 RESEARCHERS TO KNOW WHO'S EVEN IN THE FIELD, WHO

## BARRISTERS' REPORTING SERVICE

1 WANTS TO START INVESTING AND INVESTIGATING  
2 REGENERATIVE MEDICINE. SO WE MIGHT JUST ON OUR WEB  
3 SITE IDENTIFY WHAT WE CONSIDER TO BE INDUSTRY  
4 COLLABORATORS OR POTENTIAL INDUSTRY COLLABORATORS.  
5 THESE ARE JUST A COUPLE IDEAS. WE'LL HAVE MORE THAT  
6 WE'LL PROVIDE FOR YOU AS WE CONTINUE.

7 I THINK A LOT OF WHAT WE HAD NEED TO DO IS  
8 JUST OLD-FASHIONED BUSINESS DEVELOPMENT. IT'S ABOUT  
9 CREATING RELATIONSHIPS. IT'S ABOUT IDENTIFYING WHAT  
10 THE VC'S WANT AND WHAT THE BIOPHARMAS ARE INTERESTED  
11 IN AND LINKING UP WHEN WE SEE THE OPPORTUNITY. SO  
12 THAT'S A LOT OF THE WORK THAT GOES ON BEHIND THE  
13 SCENES. YOU DON'T ALWAYS HAVE TO HAVE A GLITZY  
14 INITIATIVE TO ACCOMPLISH THIS. IT'S A LOT OF HARD  
15 WORK AND IT'S THE OLD-FASHIONED WAY. WE WILL BE  
16 CREATIVE, THOUGH, IN TRYING TO ORGANIZE OTHER TYPES  
17 OF INITIATIVES.

18 FINALLY, I DON'T HAVE A SLIDE ON THIS,  
19 BUT, OF COURSE, METRICS ARE VERY IMPORTANT. AND ON  
20 THE LAST PAGE OF THE REPORT THAT I PROVIDED YOU, I  
21 GIVE AN INDICATION OF HOW I THINK WE CAN MEASURE OUR  
22 SUCCESS. THE OBVIOUS WAY IS TO LOOK AT HOW MUCH  
23 CO-FUNDING. THAT'S A VERY OBJECTIVE WAY TO MEASURE  
24 HOW SUCCESSFUL WE'VE BEEN. OTHER WAYS ARE TO LOOK  
25 AT NEW STEM CELL COMPANIES THAT WE HAVE, QUOTE, SPUN

**BARRISTERS' REPORTING SERVICE**

1 OUT OR HELPED SPIN OUT OF ACADEMIA AND/OR RECRUIT TO  
2 CALIFORNIA. SO WE'LL BE TRYING TO FIND WAYS TO  
3 TRACK THAT TYPE OF INFORMATION. ALSO TRYING TO FIND  
4 WAYS OF CREATING AND TRACKING INDUSTRY RELATIONSHIPS  
5 THAT WE HELP FOSTER.

6 SO WE WILL AT SOME POINT IN TIME PROVIDE  
7 THAT INFORMATION TO YOU. AND THE POINT OF THIS  
8 EXERCISE RIGHT NOW IS TO ASK IF YOU HAVE ANY OTHER  
9 INPUT AND TO LET YOU KNOW THAT WE ARE FOCUSED ON  
10 THIS, AND WE DO BELIEVE IT WAS A GOOD SUGGESTION BY  
11 ADAMS AND MOSS TO PUT THIS IN A FORMAL WRITTEN  
12 DOCUMENT, BUT WANTED TO REMIND EVERYBODY THAT THE  
13 ACTIVITY HAS BEEN ONGOING.

14 SO THANK YOU VERY MUCH FOR YOUR  
15 CONSIDERATION. AND IF YOU HAVE ANY INPUT, IT'S MUCH  
16 APPRECIATED.

17 CHAIRMAN THOMAS: THANK YOU, ELONA. ANY  
18 COMMENTS ON THIS? THIS IS A TOPIC WE DISCUSS AT  
19 EXECUTIVE COMMITTEE IN GREAT DETAIL IN MANY  
20 DIFFERENT SESSIONS. OBVIOUSLY ONE THAT'S VERY KEY  
21 TO MOVING FORWARD HERE, AS HAS BEEN NOTED BY VARIOUS  
22 PARTIES, MOST RECENTLY THIS MORNING. SO ANYBODY HAS  
23 THOUGHTS ALONG THE WAY HOW TO INCREASE INDUSTRY  
24 ENGAGEMENT, PLEASE DO CONTACT ELONA AND CONTINUE THE  
25 DIALOGUE.

**BARRISTERS' REPORTING SERVICE**

1 DR. TROUNSON: NOTHING MUCH MORE EXCEPT TO  
2 SAY THAT THIS IS A LIVING DOCUMENT. AND WE WANT TO  
3 MOVE FORWARD ON WHAT MIGHT BE SOME RELATIVELY BIG  
4 INITIATIVES, AND WE'LL KEEP YOU INFORMED ABOUT THAT.  
5 I DID SAY AT MY REVIEW THAT WE WERE GOING TO PRODUCE  
6 A WHITE PAPER ON PUBLIC/PRIVATE FUNDING THAT MIGHT  
7 BE OF INTEREST. SO WE'LL BE LOOKING TO KEEP THIS A  
8 LIVING DOCUMENT. AND I'LL CERTAINLY ASK ELONA TO  
9 PERIODICALLY UPDATE YOU AND PROVIDE YOU WITH AN  
10 UPDATED FORM OF THIS STRATEGIC DOCUMENT.

11 AND FEEL FREE TO LOOK IT OVER AND LET US  
12 KNOW IF YOU FEEL THAT THERE'S SOME OTHER THINGS THAT  
13 WE COULD DO OR SOME THINGS THAT WE COULD DO  
14 DIFFERENTLY. I THINK WE'RE LOOKING FOR WAYS OF  
15 MAXIMIZING OUR INTEGRATION WITH BUSINESS FOR THE  
16 INSTITUTE.

17 CHAIRMAN THOMAS: THANK YOU. ALAN, AS  
18 LONG AS YOU'RE SPEAKING, WHY DON'T WE SEGUE NEATLY  
19 INTO THE PRESIDENT'S REPORT.

20 DR. TROUNSON: THANK YOU VERY MUCH, CHAIR.  
21 SO AS USUAL, I WANTED TO JUST POINT OUT A COUPLE OF  
22 THE REALLY MAJOR DEVELOPMENTS THAT I THINK HAVE BEEN  
23 HAPPENING IN THE AREA. AND THIS FIRST ONE IS ABOUT  
24 SOMATIC COPY NUMBER IN SKIN CELLS. SO THIS RESEARCH  
25 GROUP, MOSTLY FROM YALE UNIVERSITY, PUBLISHED IN

**BARRISTERS' REPORTING SERVICE**

1 NATURE IN NOVEMBER, MADE 20 IPS CELL LINES FROM  
2 SEVEN INDIVIDUALS. AND THEY WERE USING WHOLE GENOME  
3 SEQUENCING AS A WAY OF LOOKING AT THE GENOME IN  
4 THESE IPS CELLS AND IN THE PARENTAL FIBROBLASTS THAT  
5 WENT UP TO MAKE THIS.

6 THEY HAD ON AVERAGE TWO COPY NUMBER  
7 VARIANTS. THAT'S WHAT THEY CALL IF THERE'S A  
8 VARIANT IN THE GENE NUMBERS IF THAT'S A VARIATION.  
9 AND THESE ARE EITHER DELETIONS OR REPLICATIONS OF  
10 DNA THAT WERE NOT APPARENT IN FIBROBLASTS. AND OVER  
11 50 PERCENT OF THIS IS DUE TO LOW FREQUENCY SOMATIC  
12 MOSAIC MUTATION IN THE FIBROBLASTS THEMSELVES.

13 NOW, THEY WENT ON TO ESTIMATE THAT AROUND  
14 A THIRD, 30 PERCENT, OF SKIN FIBROBLASTS THAT WE  
15 HAVE HAVE THIS COPY NUMBER VARIATION, SUGGESTING A  
16 VERY WIDESPREAD MOSAICISM IN BODY TISSUES, AND MUCH  
17 LARGER THAN HAS BEEN APPRECIATED BEFORE. SO THIS IS  
18 SKIN. WE DON'T KNOW WHAT IT IS IN BRAIN OR LIVER OR  
19 OTHER TISSUES. SO THESE HAVE MAJOR IMPLICATIONS FOR  
20 GENOME ANALYSIS, FOR EXAMPLE, BASED ON BLOOD  
21 SAMPLING. THEY MAY NOT INDICATE AT ALL WHAT WE'RE  
22 AT RISK OF BECAUSE THOSE COPY NUMBER VARIATIONS MAY  
23 PREDISPOSE YOU TO SOMETHING THAT'S TOTALLY  
24 UNEXPECTED FROM A BLOOD SAMPLING. WE DON'T REALLY  
25 KNOW WHAT THE VARIATIONS ARE IN BRAIN AND OTHER

**BARRISTERS' REPORTING SERVICE**

1 TISSUES.

2 SO THESE COPY NUMBER VARIATIONS HAVE BEEN  
3 IMPLICATED IN CANCER, BUT THESE STUDIES SUGGEST THAT  
4 MANY NORMAL TISSUES HAVE THESE, NOT ONLY CANCER  
5 TISSUES, BUT NORMAL TISSUES. SO, AGAIN, IT SORT OF  
6 THROWS A QUESTION INTO WHETHER COPY NUMBER VARIATION  
7 IS SUCH A CRITICAL ELEMENT BY ITSELF IN CANCER.

8 WHEN YOU'RE MAKING IPS CELLS DERIVED FROM  
9 A SINGLE OR FEW CELLS, AS THEY ARE, IS THIS A  
10 GENUINE READOUT OF THE INDIVIDUAL? IT'S A GOOD  
11 QUESTION. WHAT ARE YOU READING OUT? YOU'RE READING  
12 A BIT OF YOU, BUT NOT THE ENTIRETY OF YOU. AND IT  
13 MAY NOT INCLUDE RELEVANT MUTATIONS.

14 SO IT'S A VERY INTERESTING ASPECT OF  
15 SCIENCE THAT'S BROUGHT OUR ATTENTION. THIS WOULDN'T  
16 HAVE HAPPENED UNLESS WE'D BEEN ABLE TO UTILIZE THESE  
17 CELLS IN THIS WAY. AND IT DOES BRING TO ATTENTION  
18 WHAT WE'RE REALLY TALKING ABOUT IN TERMS OF THE  
19 GENOME HEALTH AND NORMALITY OF CELLS IN THE BODY.

20 A SECOND PAPER BY LEE, ET AL. FROM JOHN  
21 COOKE'S LABORATORY IN STANFORD IS ALSO VERY  
22 INTERESTING. IT WAS ACTIVATION OF INNATE IMMUNITY  
23 IS REQUIRED FOR EFFICIENT NUCLEAR REPROGRAMMING. SO  
24 IPS CELLS ARE NORMALLY MADE FOR RETROVIRAL  
25 TRANSDUCTION OF THESE KEY TRANSCRIPTION FACTORS.



## BARRISTERS' REPORTING SERVICE

1 BUT YOU CAN MAKE IPS CELLS FROM PROTEINS, THESE CELL  
2 PERMANENT PROTEINS THAT ARE THE TRANSCRIPTION  
3 FACTORS, BUT THESE PROTEINS ARE VERY MUCH LESS  
4 EFFICIENT THAN THE VIRAL TRANSDUCTION.

5 SO THE TEAM LOOKED AT THIS, AND THE  
6 QUESTION WAS DOES THE RETROVIRAL APPROACH ACTUALLY  
7 ACTIVATE THE SIGNALING PATHWAYS NECESSARY FOR  
8 REPROGRAMMING? DOES THE ACTUAL VIRUS, IS THAT  
9 IMPORTANT IN REPROGRAMMING THESE CELLS?

10 AND WHAT HAPPENS IS A VIRUS TRIGGERS THE  
11 CELL'S INNATE IMMUNE RESPONSE VIA A TOLL-LIKE  
12 RECEPTOR, TOLL-LIKE RECEPTOR 3, WHICH ACTUALLY  
13 UNWINDS THE CHROMATIN, EXPOSING SILENCED GENES TO  
14 ACTIVATION. SO THAT'S HOW IT WORKS. AND THAT'S  
15 WHAT HAPPENS WHEN YOU GET A VIRAL INFECTION. YOU  
16 WANT THE BODY TO RESPOND. SO THEY RESPOND THROUGH  
17 THIS INNATE IMMUNITY PATHWAY.

18 SO IF YOU BLOCK TOLL-LIKE RECEPTOR, YOU  
19 BLOCK REPROGRAMMING. AND ADDING IT REALLY DOES  
20 INCREASE THE EFFICIENCY OF REPROGRAMMING. SO  
21 THERE'S A PLASTIC CELL STATE WHEN CHALLENGED BY A  
22 PATHOGEN IN YOUR BODY. YOU BECOME MUCH MORE PLASTIC  
23 BECAUSE YOU WANT TO RESPOND IN A WAY IN WHICH YOU  
24 WANT TO DEFEAT THAT PATHOGEN OR VIRUS.

25 AND THAT'S TERMED TRANSFLAMMATION. SO A

**BARRISTERS' REPORTING SERVICE**

1 NEW WORD, "TRANSFLAMMATION." DON'T FORGET IT.  
2 TRANSFLAMMATION. ALLOWING REPROGRAMMING, IN FACT,  
3 HAS BETTER ACCESS TO GENES REQUIRED FOR PLURIPOTENCY  
4 AND DIRECT TRANSDIFFERENTIATION. A VERY IMPORTANT  
5 ELEMENT. AND THIS WAS WORK FROM STANFORD  
6 UNIVERSITY, AND IT'S OPENED OUR EYES AGAIN, YET  
7 AGAIN, ABOUT REPROGRAMMING.

8 THE NEXT ONE WAS REALLY ABOUT MAKING --  
9 YOU KNOW WE'VE BEEN HAVING TROUBLE MAKING  
10 HEMATOPOIETIC STEM CELLS THAT ARE ABLE TO ENGRAFT IN  
11 THE BODY. WE CAN MAKE THEM FROM EMBRYONIC STEM  
12 CELLS, BUT THEY WON'T ENGRAFT. SO THIS TEAM HAVE  
13 SHOWN THAT THEY CAN MAKE LONG-TERM ENGRAFTING  
14 HEMATOPOIETIC STEM CELLS. IN THIS CASE THEY DID IT  
15 FROM MOUSE EMBRYONIC STEM CELLS IN SERUM AND STROMAL  
16 FREE CONDITION. AND THEY USE THE HOXB4  
17 TRANSCRIPTION FACTOR TO OVEREXPRESS IN THESE  
18 EMBRYONIC STEM CELLS. AND THEY'RE ABLE TO MAKE  
19 HEMATOPOIETIC STEM CELLS AND PROGENITOR CELLS THAT  
20 WERE ACTUALLY VERY SIMILAR TO WHAT'S IN THE MOUSE  
21 BODY, VERY, VERY SIMILAR.

22 SO WHAT DOES THIS MEAN FOR THE HUMAN  
23 BECAUSE THIS IS IN THE MOUSE? AND HOXB4 IS  
24 SOMETHING THAT PEOPLE ARE CONCERNED ABOUT BECAUSE  
25 HOXB4 CAN RELATE TO CANCER. SO WHAT THIS PAPER

## BARRISTERS' REPORTING SERVICE

1 POINTS OUT IS THE NEED TO WORK ON THE SMALL  
2 MOLECULES THAT WILL MIMIC THE HOXB4 AND TO UTILIZE  
3 THIS SYSTEM IN HUMAN STUDIES INVOLVING  
4 PLURIPOTENTIAL STEM CELLS. I THINK IT'S JUST A NEAT  
5 PIECE OF WORK.

6 ANOTHER PAPER FROM THE LITERATURE CAME OUT  
7 IN *NATURE COMMUNICATIONS*, AND THIS IS ABOUT THE GENE  
8 CALLED RB, WHICH IS A CELL CYCLE INHIBITOR OR A  
9 TUMOR SUPPRESSOR. AND THAT'S PRESENT IN HUMAN  
10 EMBRYONIC STEM CELLS, AND IT RESTRICTS THE CELL  
11 CYCLE. SO IT INDUCES CELL CYCLE ARREST AND INDUCES  
12 DIFFERENTIATION BY HAVING EFFECT ON MULTIPLE  
13 TRANSCRIPTION FACTORS AND CELL DEATH.

14 AND IF YOU INACTIVATE THIS FAMILY OF GENES  
15 IN EMBRYONIC STEM CELLS, YOU WILL GET A G2M ARREST.  
16 SO THE CELL CYCLE WILL ARREST AND YOU WILL GET DEATH  
17 THROUGH ACTIVATION OF THE P53 PATHWAY, WHICH IS AN  
18 ONCOGENE PATHWAY. AND LOSS OF RB FAMILY FUNCTION  
19 PROMOTES GENOMIC INSTABILITY. SO HENCE THIS  
20 ACTIVITY OF THIS FAMILY OF GENES IS ESSENTIAL FOR  
21 SELF-RENEWAL AND SURVIVAL OF EMBRYONIC STEM CELLS.  
22 AND WE HAVE TO TAKE CARE OF THIS GENE WHEN WE'RE  
23 WORKING WITH THESE CELLS.

24 NOW, FINALLY, I THOUGHT THIS WAS AN  
25 INTERESTING PAPER FROM A CHINESE GROUP WHO USED

## BARRISTERS' REPORTING SERVICE

1 EMBRYONIC STEM CELLS TO VACCINATE AGAINST CANCER.  
2 AND SO YOU WOULD THINK WHAT? AND WHEN I READ IT, I  
3 THOUGHT WHAT? AND THESE MICE AND RATS HAVE BEEN  
4 IMMUNIZED WITH INACTIVATED HUMAN EMBRYONIC STEM  
5 CELLS. SO THEY STOPPED THEM FROM MULTIPLYING. YOU  
6 CAN PREVENT THEM FROM MULTIPLYING. AND THEY GAVE  
7 THEM TO RATS THAT WERE THEN CHALLENGED WITH THE  
8 HUMAN OVARIAN CANCER CELLS.

9 THEY SHOWED THAT THESE VACCINATED MICE AND  
10 RATS SHOWED CONSISTENT CELLULAR AND HUMORAL IMMUNE  
11 RESPONSES AGAINST OVARIAN CANCERS WITH ANTITUMOR  
12 IMMUNE PROTECTION, WHICH IS REALLY INTERESTING.

13 AND THE REASON WHY IS THAT HUMAN EMBRYONIC  
14 STEM CELLS HAVE SEVERAL ONCOGENES AND TUMOR  
15 SUPPRESSOR GENES THAT ARE SHARED IN COMMON WITH  
16 OVARIAN CANCERS AND PROBABLY MAKES THEM A VERY  
17 SUITABLE ANTIGEN VEHICLE FOR VACCINATION AGAINST  
18 OVARIAN CANCERS. IT'S SOMETHING JUST OUT OF THE  
19 BOX, AND SOMETHING, WHEN I READ IT, I THOUGHT WHAT,  
20 BUT I THINK IT'S A VERY INTERESTING PIECE OF WORK.  
21 AND IT MAY BE USED, MIGHT BE USED PERHAPS IN THE  
22 FUTURE. I'M UNSURE ABOUT THAT, BUT I'M RELATING  
23 SOMETHING WHICH SURPRISED ME. AND IT APPEARED IN  
24 ONE OF THESE INTERNATIONAL JOURNALS OF MOLECULAR  
25 MEDICINE.

**BARRISTERS' REPORTING SERVICE**

1 MS. LANSING: ANYTHING FOLLOWING UP ON  
2 THIS?

3 DR. TROUNSON: NOT YET BECAUSE IT'S JUST  
4 PUBLISHED IN NOVEMBER, AND THEY HAD PUBLISHED A  
5 COUPLE OF OTHER PAPERS, BUT MOSTLY THE FIELD IGNORED  
6 IT, SHERRY, BECAUSE WHY WOULD YOU WOULD USE  
7 EMBRYONIC STEM CELLS FOR VACCINATION? I THINK  
8 RESPONDED IN THE SAME WAY I DID. HUMAN EMBRYONIC  
9 STEM CELLS, THEY HAVE THEIR OWN PROPENSITY TO FORM  
10 MULTICELLULAR TUMOR ITSELF. SO WHY WOULD YOU DO  
11 THAT?

12 WELL, THEY INACTIVATED THOSE CELLS. AND  
13 IT'S THE ANTIGENS THAT THEY'RE EXPRESSING THAT THE  
14 IMMUNE SYSTEM REACTS TO, MAKES ACTIVATED T-CELLS AND  
15 ANTIBODIES THAT THEN GOES AFTER THE CANCER. SO I  
16 THINK IT'S A VERY INTERESTING APPROACH.

17 MS. LANSING: WHEN YOU HEAR SOMETHING LIKE  
18 THIS AND YOU KNOW IN OVARIAN CANCER THAT THERE IS  
19 NOTHING REALLY THAT CAN DETECT IT, AND IT'S REALLY  
20 PRETTY MUCH, THERE ARE RARE EXCEPTIONS, IF YOU CATCH  
21 IT IN TIME, YOU'RE FINE, BUT VERY RARELY IS IT EVER  
22 CAUGHT IN TIME. AS THIS BODY WHAT CAN WE DO WHEN WE  
23 READ SOMETHING LIKE THIS? I'M NOT SUGGESTING THAT  
24 WE DO IT, BUT WHAT CAN WE DO TO DRAW IT TO A DRUG  
25 COMPANY'S ATTENTION? WHAT CAN WE DO TO MOVE IT

## BARRISTERS' REPORTING SERVICE

1 FORWARD IN A WAY? EVEN WITHIN THE CANCER COMMUNITY.  
2 YOU HEAR SOMETHING LIKE THAT AND NO ONE IS PAYING  
3 ATTENTION TO IT, AND IT WOULD BE A SIMPLE THING TO  
4 SEE IF THERE'S ANY VALIDITY TO IT.

5 DR. TROUNSON: WE HAVE A NUMBER OF  
6 DIFFERENT MECHANISMS THAT ALLOWS US TO WORK IN  
7 ASSOCIATION WITH COUNTRIES LIKE CHINA. WE COULD DO  
8 SOME COLLABORATIVE RESEARCH WITH THEM IF THEY COME  
9 INTO THE GRANTS WORKING GROUP, APPLY TOGETHER WITH A  
10 CALIFORNIA RESEARCHER, AND IT MIGHT BE INTERESTING  
11 IF THEY DID. SO I'M GOING TO SEE -- I WANT TO TALK  
12 MORE TO THE SCIENCE COMMUNITY AND SEE HOW THEY FEEL  
13 HERE IN CALIFORNIA. BUT IF THERE WAS SOMEBODY, IT  
14 COULD BE ENCOURAGING THAT THEY LINK UP WITH THIS  
15 GROUP AND SEE IF THIS RESEARCH REALLY HAS SOMEWHERE  
16 TO GO FOR PATIENTS.

17 MS. LANSING: WELL, COULD YOU KEEP ME  
18 POSTED?

19 DR. TROUNSON: ABSOLUTELY.

20 DR. STEWARD: IF I COULD JUST AMPLIFY ON  
21 THAT A LITTLE BIT. NINDS HAS AN INTERESTING PROGRAM  
22 THAT WAS ESTABLISHED. I ACTUALLY THINK THAT ARLENE  
23 STARTED IT A NUMBER OF YEARS AGO. AND THE PROGRAM  
24 IS TO ACTUALLY HAVE A CONTRACT TO REPLICATE  
25 INTERESTING FINDINGS BECAUSE, OF COURSE, THE FIRST

**BARRISTERS' REPORTING SERVICE**

1       THING IS JUST TO SAY WHETHER IT CAN BE REPLICATED.

2                 AND JUST TO THROW THAT OUT THERE AS A  
3       POSSIBLE CONSIDERATION FOR CIRM, JUST AN INTERESTING  
4       MECHANISM. AND SOME OF THESE THINGS ARE OUT THERE  
5       AND INTERESTING, AND SOME OF THEM JUST GO AWAY  
6       REALLY QUICKLY.

7                 DR. TROUNSON: OS IS MAKING A VERY VALID  
8       POINT. WHEN YOU SEE SOMETHING, LIKE THIS IS VERY  
9       INTERESTING, IT'S REALLY IMPORTANT TO GET THE SECOND  
10      OR THIRD STUDY FROM INDEPENDENT LABS. SO THEN YOU  
11      CAN FEEL SOME CONFIDENCE IT'S A REALISTIC APPROACH,  
12      AND IT MIGHT BE SOMETHING THAT'S WORTH FOLLOWING UP.  
13      HE'S MAKING A VERY, VERY SALIENT POINT HERE.

14                WE HAVE A NUMBER OF NEW APPOINTMENTS.  
15      CATHERINE PRIEST HAS JOINED US FROM GERON AS A PH.D.  
16      SCIENCE OFFICER. GREAT TO HAVE HER ON BOARD.

17                NEIL LITTMAN, WHO'S BEEN APPOINTED AS THE  
18      BUSINESS DEVELOPMENT OFFICER. NEIL WAS HERE. SO I  
19      THINK THAT'S GREAT. HE'S FROM MOST RECENTLY BURRILL  
20      & COMPANY. HE'S GOT A LOT OF ENERGY, AND HE'LL NEED  
21      IT BECAUSE WE'VE GOT A LOT OF PEOPLE TO SATISFY OUT  
22      THERE. AND CLEARLY THERE WAS A REQUIREMENT FOR US  
23      TO HAVE A MENTORING PROCESS TO HELP BUSINESS ACCESS  
24      US. AND SO NEIL HAS GOT THE JOB OF SORT OF LINKING  
25      US TOGETHER AND CREATING OPPORTUNITIES. SO HE'S GOT

**BARRISTERS' REPORTING SERVICE**

1 THE KIND OF PERSONALITY AND THE SKILL SPACE TO DO  
2 THAT. SO I'M VERY PLEASED NEIL IS WITH US. IT'S A  
3 GREAT ADDITION, AND CERTAINLY GOING TO HELP ELONA  
4 AND MYSELF VERY MUCH BECAUSE WE SPEND A LOT OF TIME  
5 IN THIS INTERFACE.

6 PAUL STEIN, I THINK, IS HERE IS OUR NEW  
7 DEPUTY GENERAL COUNSEL. PAUL HAS TAKEN OVER IAN'S  
8 POSITION BECAUSE HE MOVED TO TAKE OVER NANCY'S  
9 POSITION. SO EVERYBODY IS TAKING OVER -- SOMEDAY  
10 SOMEONE WILL TAKE OVER MY POSITION. THIS IS A  
11 PROCESS WHERE WE'VE GOT ANOTHER VERY GOOD PERSON ON  
12 BOARD. HE'S MOST RECENTLY AT THE CALIFORNIA  
13 ATTORNEY GENERAL'S OFFICE, AND ALREADY HE'S MAKING A  
14 GREAT IMPACT FOR US.

15 ANOTHER PERSON, MARIA MILLAN, WHO'S AN  
16 M.D. MEDICAL OFFICER, MOST RECENTLY AT STEM CELLS,  
17 INC., AND SHE'S JUST JOINED US. AND IT'S TERRIFIC  
18 TO HAVE ANOTHER MEDICAL GRADUATE TO JOIN THE TWO  
19 MEDICAL GRADUATES. I THINK WE'VE GOT JUST TWO  
20 MEDICAL GRADUATES, ELLEN AND BETTINA. AND THAT WILL  
21 BE GREAT BECAUSE YOU NEED THESE PEOPLE WHEN WE'RE IN  
22 THIS TRANSLATIONAL SPACE.

23 I'M ALSO ENCOURAGING US TO FINISH OFF THE  
24 MEDICAL TEAM BY NEGOTIATING WITH ONE OTHER PERSON  
25 WHO HAS A MEDICAL DEGREE. AND IF WE'RE ABLE TO GET



## BARRISTERS' REPORTING SERVICE

1 THAT PERSON ON BOARD, WE WOULD HAVE A COMPLETE  
2 MEDICAL TEAM, AND THAT WOULD BE TERRIFIC. SO WE'RE  
3 IN THAT PROCESS AT THE MOMENT.

4 OUR RFA PROGRAM, STRATEGIC PARTNERSHIPS  
5 POSTED NOVEMBER, WEBINAR IN DECEMBER. SO THIS IS  
6 THE SECOND ONE OF THOSE. SO THIS IS FAST  
7 APPROACHING. AND WE UNDERSTAND THAT THERE IS QUITE  
8 A LOT OF INTEREST OUT THERE. SO WE'LL BE INTERESTED  
9 TO SEE WHICH COMPANIES COME INTO THAT.

10 THE IPS CELL INITIATIVE, WE HAD A GRANTS  
11 WORKING GROUP REVIEW, AND THAT WILL -- WHEN DOES  
12 THAT COME FORWARD TO THE BOARD? MARCH. SO WE'VE  
13 HAD THAT REVIEW. IT WAS A VERY INTERESTING  
14 DIFFERENT REVIEW. JEFF WAS THERE, OTHER MEMBERS OF  
15 THE BOARD WERE THERE. I THINK IT WAS REALLY VERY  
16 STIMULATING. IT WAS RATHER DIFFERENT TO THE ONES  
17 THAT WE HAD HAD BEFORE.

18 MR. SHEEHY: I THINK YOU SHOULD REALLY  
19 GIVE A SHOUT-OUT TO YOUR STAFF ON THIS ONE, ALAN.  
20 JUST A TREMENDOUS JOB. THERE WERE THREE MOVING  
21 PARTS, AND I THINK ALL OF US HAD A LOT OF  
22 TREPIDATION ON HOW THIS WOULD ALL WORK. KUDOS TO  
23 YOU AND TO YOUR STAFF. THEY PERFORMED BRILLIANTLY.

24 DR. TROUNSON: I THINK IT WAS GREAT.

25 SO YOU KNOW THE BASIC BIOLOGY HAS BEEN

## BARRISTERS' REPORTING SERVICE

1       HERE AND THE NEW FACULTY POSITION, THAT'S DONE.  
2       DISEASE TEAM III WILL BE POSTED IN JANUARY. THE RFA  
3       WILL BE POSTED IN JANUARY. AND THE GENOMICS  
4       INITIATIVE, THE GRANTS WORKING GROUP IS GOING TO  
5       HAPPEN IN FEBRUARY. SO THEY SHANGHAIED ME OUT OF  
6       THE BEACH IN FEBRUARY. I'M BACK FOR TWO DAYS WHICH  
7       I NEED TO DO FOR THE GENOMICS INITIATIVE. IT'S  
8       SOMETHING THAT I PUSHED TO GET IT, AND SO GIL SAID  
9       YOU HAVE NO OPTION. YOU'VE GOT TO COME.

10               EARLY TRANSLATIONAL IV, THE PRE-APP REVIEW  
11       IS CURRENTLY UNDER WAY.

12               THE WORKSHOPS AND MEETINGS WE'VE HELD  
13       RECENTLY, THE STEM CELL MEETING ON THE MESA, ALPHA  
14       CLINICS WORKSHOP, A MEETING WITH THE UNITED KINGDOM  
15       HOUSE OF LORDS, SCIENCE AND TECHNOLOGY SELECT  
16       COMMITTEE, THAT HAPPENED IN DECEMBER.

17               UPCOMING MEETINGS, THE CIRM GRANTEE  
18       MEETING, WHICH IS HAPPENING IN MARCH. PARKINSON'S  
19       DISEASE WORKSHOP, THAT'S HAPPENING IN MARCH AS WELL.  
20       SO WE'RE GOING TO BE BUSY, BUSY, BUSY IN MARCH.

21               SO JUST A QUICK SUMMARY OF A COUPLE OF  
22       THESE MEETINGS. THE MEETING ON THE MESA, 10 TO 29  
23       PERCENT INCREASE IN INVESTOR AND PARTNERING FORUM  
24       FROM LAST YEAR. AND THE PARTNERING MEETING  
25       SCHEDULES AS SHOWN HERE. IT WAS A VERY BUSY AND

**BARRISTERS' REPORTING SERVICE**

1 ACTIVE MEETING. I THINK MEMBERS OF THE BOARD WHO  
2 WERE THERE, STEVE JUELSGAARD WAS THERE AND OTHERS.  
3 I THINK IT WAS A PRETTY GOOD SHOW REALLY AND REALLY  
4 HAD A CONSIDERABLE COMPONENT OF OUR TEAMS PRESENT  
5 THERE. I THINK IT'S A GREAT INITIATIVE. AND THANKS  
6 TO ELONA FOR GETTING THAT UP AND GETTING US REALLY  
7 INVOLVED.

8 SO THE ATTENDEES ARE SHOWN IN THIS, SO YOU  
9 WILL SEE THIS IN YOUR FOLDERS, SO I WON'T GO IN ANY  
10 DETAILS ON IT, BUT YOU CAN HAVE A LOOK AT THE KIND  
11 OF PARTNERING FOCUS THAT THEY HAD, THE ATTENDEES.

12 THE ALPHA CLINIC WORKSHOP, I WANT TO THANK  
13 NATALIE DEWITT, WHO PUT ON A GREAT WORKSHOP AT  
14 STANFORD FOR TWO DAYS. JEFF WAS THERE. HE'S  
15 EVERYWHERE, BUT HE DEFINITELY WAS THERE. I THOUGHT  
16 IT WAS A GREAT WORKSHOP. DIFFERENT AGAIN, RIGHT?

17 MR. SHEEHY: IT HAS THE POSSIBILITY TO  
18 REALLY BE AN HISTORIC EFFORT. AND, AGAIN, STAFF,  
19 YOUR LEADERSHIP, ALAN, WAS TREMENDOUS. IT WAS  
20 BRILLIANT.

21 DR. TROUNSON: IT WASN'T MINE. IT WAS  
22 NATALIE. I JUST PUT A BIT OF ENZYME IN THE SYSTEM,  
23 BUT IT WAS A GREAT SHOW. SHE DID A SPECTACULAR JOB.  
24 SHE'S NOW WRITING UP THE WHITE PAPER. I THINK YOU  
25 WILL GET IT HOPEFULLY IN JANUARY. LOOK AT HER

## BARRISTERS' REPORTING SERVICE

1 SMILING. SO WE'RE PUSHING STAFF HARD TO GET THAT.  
2 SO A WHITE PAPER WILL COME TO YOU AS A RESULT OF  
3 THAT WORKSHOP. AND THEN WE HOPE TO COME TO YOU IN  
4 MARCH AND TALK ABOUT THE ALPHA CLINICS WITH YOU TO  
5 SEE WHETHER YOU'D BE SUPPORTIVE OF THAT PROGRAM.

6 HOUSE OF LORDS, SELECT COMMITTEE ON  
7 SCIENCE AND TECHNOLOGY WAS A GREAT MEETING AGAIN.  
8 IT WAS PUT ON BY IAN SWEEDLER. FANTASTIC. AND  
9 CANDACE BAGLEY DID ALL THE ORGANIZING FOR THAT. AND  
10 WE HAD, I DON'T KNOW HOW MANY PEOPLE, 30  
11 PARTICIPANTS FROM CALIFORNIA CAME AT THEIR OWN COST  
12 TO MEET WITH THE HOUSE OF LORDS AT DIFFERENT TIMES.  
13 THEY WERE ORGANIZED BY IAN AND CANDACE.

14 AND THE HOUSE OF LORDS WENT AWAY SAYING  
15 THIS IS FANTASTIC. CIRM IS FANTASTIC. WE'VE BEEN  
16 VERY INFORMED ABOUT WHAT'S HAPPENING. AND THEY'RE  
17 GOING TO WRITE A REPORT TO THEIR PARLIAMENT. AND I  
18 THINK THERE'S ALSO SOME VERY NICE QUOTES. "WE  
19 LOOKED AROUND THE WORLD TO SEE WHERE THINGS WERE  
20 BEING DONE WELL, AND WE THOUGHT THAT CIRM IS THE  
21 PLACE TO GO." WELL, THEY DID AT ONE STATE SAY THEY  
22 WANTED TO CLONE ME. I WANTED TO CLONE IAN AND  
23 CANDACE RATHER THAN ME. I THINK IT WAS A VERY GOOD  
24 SESSION. WE WENT BROADLY ACROSS ALL OF THE THINGS  
25 THAT WE DO.

## BARRISTERS' REPORTING SERVICE

1 THE GRANTS MANAGEMENT SYSTEM, THERE WAS A  
2 RECENT RELEASE FEATURES ON THAT. A PATENT  
3 ASSISTANCE FUND, SCIENTIFIC OUTCOMES CODING,  
4 SCHEDULE NOTIFICATION. ALL OF THESE THINGS MEAN A  
5 LOT TO US. IN THE NEXT PIPELINE WILL BE NOTICE OF  
6 GRANT AWARDS, PAYMENTS, AND PAY MEMOS, AND REVIEWER  
7 DATABASE. THIS IS AN ELECTRONIC SYSTEM THAT'S  
8 REALLY HELPING US DO THINGS.

9 IF I CAN SEGUE NOW TO CHILA, IF I MAY, IF  
10 THAT'S OKAY, SHE'LL QUICKLY PRESENT THE FINANCES TO  
11 YOU. BUT BEFORE I GO, THIS IS CLEARLY THE LAST  
12 BOARD MEETING THIS YEAR. AND I WANTED TO THANK YOU,  
13 BUT I WANTED ALSO TO THANK ALL THE MEMBERS OF  
14 MANAGEMENT FOR A FANTASTIC YEAR. I THINK IT'S BEEN  
15 A REALLY, REALLY GREAT YEAR. AND EVERYBODY HAS  
16 WORKED SO INCREDIBLY HARD, I CAN'T BELIEVE IT.

17 I'LL BE PASSING THE BATON OVER TO ELLEN  
18 FEIGAL, WHO WILL BE ACTING PRESIDENT FROM THE 20TH  
19 OF DECEMBER. AND SHE WILL BE THE PERSON THAT CAN  
20 TAKE ALL THE ACCOLADES AND ALL THE CRITICISMS. I  
21 HAVE ABSOLUTE CONFIDENCE IN ELLEN, AND I KNOW SHE'LL  
22 WORK VERY MUCH WITH YOU AND THE BOARD, CHAIR, AND I  
23 THINK THERE WILL BE NO HICCUP AT ALL IN THE  
24 ORGANIZATION. BUT FEEL FREE, AS YOU DO, TO TALK TO  
25 ME. PLEASE TALK TO ELLEN WHILE I'M NOT HERE. I

**BARRISTERS' REPORTING SERVICE**

1 WILL BE AT THE END OF A TELEPHONE, BUT I'LL PROBABLY  
2 HAVE A BEER AND I'LL PROBABLY BE SITTING ON THE  
3 BEACH. I WON'T MAKE MUCH OF AN APOLOGY FOR DOING  
4 THAT BECAUSE IT'S TIME I NEED TO PUT INTO MY FAMILY  
5 TO GET THEM BACK ON.

6 WITH THAT, CHILA, CAN YOU DO THE FINANCES.

7 MS. SILVA-MARTIN: THANK YOU, DR.

8 TROUNSON. MR. CHAIRMAN, MEMBERS OF THE BOARD, I  
9 KNOW THAT WE'RE PRESSED FOR TIME, SO I WILL PROVIDE  
10 YOU WITH A BRIEF REPORT ON CIRM'S FINANCES.

11 FIRST OF ALL, OUR OPERATIONAL EXPENDITURES  
12 FOR THE FIRST FIVE MONTHS OF THE FISCAL YEAR ARE ON  
13 TRACK. WE HAVE HAD NO OVERAGES IN ANY OF OUR  
14 CATEGORIES. WE HAVE EXPERIENCED A LITTLE BIT OF  
15 SAVINGS, AND THAT'S IN OUR SALARIES AND BENEFITS  
16 CATEGORY. AND THAT'S BECAUSE, AS YOU KNOW, WE HAD  
17 SEVERAL VACANCIES AT THE BEGINNING OF THE FISCAL  
18 YEAR. BUT AS BOTH DR. TROUNSON AND ELONA HAVE  
19 REPORTED, WE'RE HAPPY TO REPORT THAT WE FILLED MOST  
20 OF THOSE VACANCIES. SO WE DON'T ANTICIPATE THAT  
21 TYPE OF SAVINGS FOR THE REST OF THE FISCAL YEAR.

22 ALTHOUGH THE SLIDE SAYS IN MARCH, I'M  
23 ACTUALLY WORKING WITH THE DEPARTMENT OF GENERAL  
24 SERVICES, SO I'M HOPING TO BE ABLE TO DO THIS IN  
25 JANUARY, IS TO PROVIDE YOU WITH OPERATING

**BARRISTERS' REPORTING SERVICE**

1 EXPENDITURES FOR THE FIRST HALF OF THE FISCAL YEAR,  
2 AND I WILL PROVIDE THAT REPORT IN JANUARY.

3 OUR GRANT DISBURSEMENTS FOR THROUGH  
4 NOVEMBER HAVE BEEN \$65.5 MILLION AS COMPARED TO THE  
5 PREVIOUS PERIOD OF 11/12 WHERE WE DISTRIBUTED \$88.8  
6 MILLION. WE HAVE A VERY HEALTHY CASH BALANCE. AS  
7 OF NOVEMBER 30, 2012, WE HAVE \$61.5 MILLION. THIS  
8 REPRESENTS A DECREASE OF \$14.1 MILLION, WHICH IS  
9 WHAT I REPORTED BACK IN SEPTEMBER. AND THE CASH  
10 BALANCE IS MADE UP MOSTLY OF COMMERCIAL PAPER AND  
11 NOW A LITTLE BIT OF BOND PROCEEDS.

12 AND I HAVE TO TELL YOU THAT LYNN HARWELL  
13 FROM THE OFFICE OF THE CHAIR WORKS ON A DAILY BASIS  
14 WITH THE STATE TREASURER'S OFFICE AND DEPARTMENT OF  
15 FINANCE TO ENSURE THAT WE HAVE SUFFICIENT FUNDS.  
16 AND IN NOVEMBER, AS PART OF HER EFFORT, WE WERE ABLE  
17 TO RECEIVE \$15 MILLION IN COMMERCIAL PAPER.

18 I WANTED TO REPORT TO YOU BRIEFLY ON OUR  
19 ADMINISTRATIVE EXPENDITURES. AND THIS NEXT PIE  
20 CHART CAPTURES OUR EXPENDITURES AGAINST THE  
21 6-PERCENT CAP. AS THE BLUE SLICE OF THE CHART  
22 REPRESENTS, AS OF JUNE 30, 2012, WE HAVE SPENT \$61.4  
23 MILLION OF OUR \$180 MILLION ALLOCATION FOR GRANT AND  
24 GENERAL ADMINISTRATION. THAT REPRESENTS ABOUT 34  
25 PERCENT OF THE BUDGET. THE ORANGE SLICE REPRESENTS

**BARRISTERS' REPORTING SERVICE**

1 WHAT WE HAVE BUDGETED TO SPEND FOR GENERAL AND ADMIN  
2 IN THE CURRENT FISCAL YEAR, AND THAT REPRESENTS  
3 \$14.9 MILLION OR 8 PERCENT.

4 AT THIS TIME IN THE FISCAL YEAR, I DON'T  
5 ANTICIPATE MUCH OF A SAVINGS, BUT WE MAY HAVE ABOUT  
6 5-PERCENT SAVINGS IN THIS FISCAL YEAR. AND SO THEN  
7 WHAT THAT LEAVES IS WHAT'S REPRESENTED IN THE GREEN  
8 SLICE OF THE PIE, AND THAT'S A LITTLE BIT UNDER \$104  
9 MILLION AVAILABLE FROM THE FISCAL YEAR 2013-14, AND  
10 BEYOND.

11 IN THE NEXT CHART, THE EXPENDITURE CAP IS  
12 JUST PROVIDED IN MORE DETAIL. SO THE CUMULATIVE  
13 EXPENDITURES ARE REPRESENTED BY THE TWO LINES, AND  
14 THEY CORRESPOND TO THE NUMBERS ON THE LEFT-HAND  
15 SIDE. SO FOR GENERAL ADMINISTRATION THROUGH JUNE  
16 2012, WE HAVE SPENT \$36.2 MILLION. SIMILARLY, FOR  
17 OUR GRANT EXPENDITURES THROUGH JUNE 30, 2012, WE  
18 SPENT \$25.3 MILLION. AND THEN THE BAR CHARTS  
19 REPRESENT THE YEARLY EXPENDITURES, AND THEY  
20 CORRESPOND TO THE NUMBERS ON THE RIGHT-HAND SIDE.  
21 AND SO, FOR EXAMPLE, IN THE CURRENT FISCAL YEAR, WE  
22 ARE BUDGETED TO SPEND \$3.5 MILLION IN GRANT  
23 ADMINISTRATION AND \$6.4 MILLION IN GENERAL  
24 ADMINISTRATION.

25 AND THEN, ALTHOUGH WE'RE ONLY SIX MONTHS



## BARRISTERS' REPORTING SERVICE

1 INTO THE CURRENT FISCAL YEAR, IT'S REALLY TIME TO  
2 BEGIN DEVELOPMENT OF THE 2013-14 FISCAL YEAR BUDGET.  
3 SO THIS NEXT SLIDE REPRESENTS OUR TIMELINE FOR THAT.  
4 WHAT WE PLAN TO DO, THE FINANCE STAFF WILL  
5 DISTRIBUTE THE CURRENT YEAR DATA AS WELL AS BUDGET  
6 TEMPLATES TO THE COST CENTER MANAGERS IN JANUARY.  
7 THEY'LL BE PROVIDED ABOUT THREE TO FOUR WEEKS TO  
8 TURN THOSE DOCUMENTS AROUND. AND THEN IN FEBRUARY  
9 WE'LL BEGIN AN INTERNAL REVIEW OF THOSE BUDGET  
10 DOCUMENTS AND PUT TOGETHER A PRELIMINARY BUDGET FOR  
11 PRESENTATION TO THE FINANCE SUBCOMMITTEE IN MARCH,  
12 AS WELL AS PROVIDING YOU WITH A HIGH LEVEL OVERVIEW  
13 OF THAT BUDGET AT THE MARCH MEETING. WE'LL FINALIZE  
14 THE BUDGETS AND THEN BRING THEM BACK TO YOU FOR  
15 FINAL REVIEW AND APPROVAL IN MAY.

16 AND I'M NOT GOING TO GO OVER THE NEXT  
17 SLIDE BECAUSE ACTUALLY DR. OLSON ALREADY COVERED IT  
18 IN QUITE A BIT OF DETAIL. AND THAT REALLY CONCLUDES  
19 MY PRESENTATION. ARE THERE ANY QUESTIONS?

20 CHAIRMAN THOMAS: ANY QUESTIONS FOR CHILA?

21 MS. FEIT: I JUST WANT TO MAKE A COMMENT.  
22 ON BEHALF OF MICHAEL GOLDBERG AND I, WE WANT TO  
23 THANK THE STAFF FOR FOLLOWING UP ON ALL THE  
24 REQUESTS. THE BUDGETED DEVELOPMENT TIMELINE WAS  
25 SOMETHING THAT WE HAD REQUESTED TO ENSURE THAT THE

**BARRISTERS' REPORTING SERVICE**

1 BOARD, THE ICOC BOARD, HAS TIME TO COMMENT ON THE  
2 BUDGET BEFORE IT'S FINALIZED. AGAIN, I WANT TO  
3 THANK STAFF. THEY DO KEEP US INFORMED EVERY STEP OF  
4 THE WAY OF HOW OUR EXPENSES AND ALLOCATIONS ARE  
5 PROGRESSING. SO THANK YOU TO STAFF FOR DOING A  
6 GREAT JOB.

7 CHAIRMAN THOMAS: THANK YOU, CHILA, FOR A  
8 VERY THOROUGH REPORT. WE APPRECIATE IT VERY MUCH.  
9 LET'S MOVE TO COMMUNICATIONS UPDATE. KEVIN.

10 MR. MCCORMACK: CHAIRMAN THOMAS, MEMBERS  
11 OF THE BOARD, LET ME WISH YOU HAPPY HOLIDAYS. AND I  
12 WANTED TO THANK ALAN FOR GIVING US A NEW WORD TO  
13 WORK WITH IN OUR NEXT ROUND OF COMMUNICATIONS,  
14 TRANSFLAMMATION. I LIKE THAT.

15 I THOUGHT I'D BEGIN TODAY BY LOOKING INTO  
16 THE ISSUE THAT I THINK HAS DOMINATED MOST OF OUR  
17 ATTENTION FOR THE PAST WEEK, AND THAT'S OBVIOUSLY  
18 THE IOM REPORT.

19 I HAVE TO SAY WHEN I FIRST SAW THE REPORT  
20 AND WAS READING THROUGH THE RECOMMENDATIONS AND THE  
21 FINDINGS, I HAD RATHER A SINKING FEELING BECAUSE IT  
22 WAS OBVIOUSLY QUITE A CRITICAL REPORT. BUT I HAVE  
23 TO SAY THAT WHEN I LOOKED AT THE MEDIA COVERAGE, I  
24 WAS PLEASANTLY SURPRISED. I FOUND IT, FOR THE MOST  
25 PART, QUITE BALANCED AND GENERALLY NEUTRAL. BY THAT

**BARRISTERS' REPORTING SERVICE**

1 I MEAN IT DIDN'T DEAL WITH ANY OF THE CRITICISMS OR  
2 RECOMMENDATIONS, BUT THAT IT DIDN'T GO TO SOME OF  
3 OUR MORE VOCAL CRITICS WHO WOULD ORDINARILY HAVE  
4 TAKEN THIS OPPORTUNITY TO PILE ON AND REALLY TELL  
5 EVERYONE HOW BAD WE WERE.

6 THEY BASICALLY DEALT WITH SOME OF THE  
7 PRAISE THAT THE IOM REPORT GAVE US AND THEN WENT  
8 THROUGH THE RECOMMENDATIONS IN JUST A FAIRLY BASIC  
9 AND FACTUAL MANNER. SO I THOUGHT IT WAS QUITE GOOD  
10 FROM THAT PERSPECTIVE.

11 SOME OF THEM EVEN COVERED THE LIMITS OF  
12 THE ICOC AND THEIR ABILITY TO CHANGE THINGS, AND  
13 THAT SOME OF THE MORE SERIOUS RECOMMENDATIONS WOULD  
14 REQUIRE EITHER A VOTE OR INITIATIVE OR A VOTE OF THE  
15 LEGISLATURE. SO, AGAIN, I THOUGHT THAT WAS QUITE  
16 GOOD.

17 TALKING TO FRIENDS OF MINE OUTSIDE THE  
18 BUSINESS, AS IT WERE, AND THE GOOD THING ABOUT  
19 HAVING FRIENDS LIKE THIS IS THAT THEY'RE NOT SHY  
20 ABOUT TELLING YOU WHAT THEY THINK, IS FOR THE MOST  
21 PART THEY THOUGHT THE REPORTS WERE EITHER NEUTRAL OR  
22 THEY DIDN'T CARE. THEY JUST THOUGHT GOVERNMENT  
23 RECOMMENDATIONS OR GOVERNMENT CHANGES. WHEN THEY  
24 SUPPORTED STEM CELLS AND STEM CELL RESEARCH, THEY  
25 DID SO FOR REASONS OF LOOKING FOR THERAPIES AND

**BARRISTERS' REPORTING SERVICE**

1 CURES. AND NO ONE TO THIS DAY HAS EVER COME UP TO  
2 ME AND SAY, "OH, YOU WORK FOR THE STEM CELL AGENCY.  
3 HOW'S THAT GRANTS WORKING GROUP PATIENT ADVOCATE  
4 ELEMENT WORKING?"

5 SO IT WAS VERY MUCH -- IF YOU WERE HERE, I  
6 THINK WE TAKE THEM VERY SERIOUSLY OBVIOUSLY, AND  
7 THERE ARE A LOT OF THINGS THAT WE HAVE TO DO TO  
8 CONSIDER THEM. BUT FOR THE GENERAL PUBLIC, IT  
9 DIDN'T SEEM TO ME THAT THERE WAS MUCH OF KIND OF A  
10 REACTION TO IT. LOOKING THROUGH SOME OF THE  
11 COMMENTS THAT WERE POSTED ON NEWSPAPER WEB SITES  
12 THAT PRINTED ARTICLES, AGAIN, IT WAS VERY GENERAL  
13 AND NOT TERRIBLY CRITICAL OF US. SO I THINK IN THAT  
14 SENSE IT WAS QUITE GOOD.

15 IN FACT, ONE OF THE REPORTS THAT I SAW WAS  
16 ARIN ALLDAY IN THE *SAN FRANCISCO CHRONICLE*, AND I  
17 THINK THIS WAS KIND OF TYPICAL OF MANY OF THE  
18 REPORTS. AND IT SAID, "CALIFORNIA STEM CELL FUNDING  
19 AGENCY HAS HAD PROFOUND IMPACT ON SCIENTIFIC  
20 ADVANCEMENT SINCE IT WAS CREATED IN 2004, BUT IT'S  
21 IN NEED OF SIGNIFICANT RECONSTRUCTING TO ADDRESS  
22 CONCERNS ABOUT THE POTENTIAL FOR CONFLICT OF  
23 INTEREST AND MISMANAGEMENT, ACCORDING TO AN  
24 INDEPENDENT REVIEW RELEASED THURSDAY." SO I THOUGHT  
25 THAT WAS GOOD.

**BARRISTERS' REPORTING SERVICE**

1           AND THERE WERE A COUPLE OF OTHER  
2           EDITORIALS THAT FOLLOWED UP ON THAT, REPEATING VERY  
3           MUCH THAT SAME KIND OF FEELING. SO I THINK IT'S  
4           GOING TO SUGGEST THAT THE MEDIA ARE GOING TO BE  
5           FOLLOWING UP ON THIS, AND THEY'LL HAVE INTEREST IN  
6           SEEING WE ACT AND HOW WE REACT TO THE  
7           RECOMMENDATIONS IN THE COMING MONTHS. SO THAT'S  
8           CERTAINLY SOMETHING WE NEED TO TAKE INTO  
9           CONSIDERATION.

10           MOVING TO SOMETHING ALTOGETHER MORE  
11           DELIGHTFUL, THIS IS A YOUNG LADY THAT MANY OF US MET  
12           AT THE ALPHA STEM CELL CLINIC WORKSHOP AT STANFORD.  
13           HER NAME IS KATIE SHARIFY. FOR MOST OF US, UNTIL WE  
14           MET HER IN PERSON, WE KNEW HER AS PATIENT NO. 4 IN  
15           THE GERON STEM CELL SPINAL INJURY CLINICAL TRIAL.  
16           FOR A LOT OF THE TALKS AT THE ALPHA STEM CELL CLINIC  
17           WORKSHOP, VERY TECHNICAL. IT WAS ABOUT HOW DO YOU  
18           PUT ON CLINICAL TRIALS, A LOT OF THE ISSUES THAT  
19           NEEDED TO BE RESOLVED.

20           KATIE CAME AT IT FROM A VERY DIFFERENT  
21           PERSPECTIVE, FROM THE PATIENT PERSPECTIVE, FROM  
22           SOMEONE WHO WAS BADLY INJURED IN A CAR ACCIDENT AS A  
23           TEENAGER, WOKE UP IN THE INTENSIVE CARE UNIT WITH  
24           HER PARENTS SAYING WE'VE GOT SOMETHING THAT'S GOING  
25           TO FIX YOU, IT'S GOING TO CURE YOU. AND THEN

**BARRISTERS' REPORTING SERVICE**

1 LEARNING THAT HER PARENTS, WHO HAD A VERY POOR GRASP  
2 OF ENGLISH, HAD MISUNDERSTOOD WHAT THEY'D BEEN TOLD.  
3 AND SO THE DOCTORS HAD TO EXPLAIN TO HER EXACTLY  
4 WHAT WAS INVOLVED IN THE TRIAL.

5 KATIE TALKED ABOUT THE PRESSURE FOR  
6 SOMEONE WHO HAS BEEN THROUGH SUCH A HORRENDOUS  
7 ACCIDENT TO HAVE TO MAKE A DECISION ABOUT WHETHER TO  
8 GET INVOLVED IN A CLINICAL TRIAL IN A VERY SHORT  
9 SPACE OF TIME. ALL THE EMOTIONS RUNNING THROUGH  
10 HER, AND SOMEONE IS SAYING DO YOU WANT TO DO THIS?  
11 YOU REALLY ONLY HAVE ABOUT TWO DAYS TO DECIDE.

12 AND SO I WANTED TO PLAY YOU A SHORT  
13 EXCERPT FROM A VIDEO WE SHOT OF THAT.

14 (THE VIDEO WAS THEN SHOWN, NOT  
15 REPORTED OR HEREIN TRANSCRIBED.)

16 MR. MCCORMACK: I THINK FOR ME ONE OF THE  
17 INTERESTING AND MOVING PARTS OF THAT WAS WHERE KATIE  
18 TALKED ABOUT SHE REALIZED THE THERAPY WAS UNLIKELY  
19 TO GIVE HER THE ABILITY TO WALK AGAIN. SHE SAID IT  
20 MIGHT AT THE MOST GIVE HER A SENSE OF BEING ABLE TO  
21 MOVE HER BIG TOE OR SOMETHING EQUALLY OF THAT SCOPE.  
22 BUT SHE SAID WHAT MATTERED TO HER ULTIMATELY WAS  
23 THAT SHE DIDN'T CARE ABOUT MOVING HER BIG TOE. SHE  
24 WANTED TO MOVE THE SCIENCE FORWARD. AND IT WAS SUCH  
25 A POWER SPEECH. I THINK IT HAS A WONDERFUL IMPACT

## BARRISTERS' REPORTING SERVICE

1 ON EVERYONE WHO WAS THERE. A LOT OF THE RESEARCHERS  
2 AFTERWARDS TALKED ABOUT HOW IT REALLY HELPED INFORM  
3 THEM ABOUT AN ASPECT OF THE CLINICAL TRIALS THAT  
4 THEY DON'T ALWAYS THINK ABOUT, ABOUT AN ELEMENT THAT  
5 REALLY SHOULD BE FUNDAMENTAL AND CENTRAL TO  
6 EVERYTHING WE DO, WHICH IS THE PATIENT EXPERIENCE  
7 AND HOW WE CAN HELP THEM AND HOW WE CAN BEST INFORM  
8 THEM ABOUT WHAT THEY'RE GOING THROUGH AND WHAT IT  
9 MAY DO FOR THEM.

10 SO FOR THAT I THOUGHT IT WAS A WONDERFUL  
11 THING. IT WAS ACTUALLY A REALLY GOOD INTERVIEW BY  
12 MY COLLEAGUE AMY ADAMS. IT WAS A LUNCHTIME SESSION,  
13 AND AMY DID A GREAT JOB IN KEEPING IT REALLY  
14 INFORMATIVE AND THOUGHTFUL, BUT ALSO KATIE IS  
15 WONDERFULLY ARTICULATE AND KEPT IT REALLY FUNNY AS  
16 WELL.

17 AND TODD SHOT THIS VIDEO AND EDITED IT,  
18 AND IT'S ABOUT A 28-MINUTE VIDEO, BUT I THINK IT'S A  
19 REALLY GOOD ONE. IF YOU WANT PEOPLE TO UNDERSTAND  
20 WHAT IT'S LIKE FOR A PATIENT TO GO THROUGH SOMETHING  
21 LIKE THIS, THROUGH AN ACTUAL CLINICAL TRIAL, IT'S A  
22 REALLY GOOD VIDEO TO DIRECT THEM TOWARDS. IT'S 28  
23 MINUTES LONG, AS I SAID; BUT IN THE FEW WEEKS THAT  
24 IT'S BEEN UP, IT'S ALREADY HAD MORE THAN 2,000 HITS.  
25 SO CLEARLY IT'S SOMETHING THAT PEOPLE ARE INTERESTED

## BARRISTERS' REPORTING SERVICE

1 IN, AND PEOPLE FIND IT VERY ENGAGING ONCE THEY START  
2 TO WATCH IT.

3 FOLLOWING UP ON THAT, DON GIBBONS AND I  
4 WENT TO THE WORLD STEM CELL SUMMIT IN BEAUTIFUL  
5 DOWNTOWN WEST PALM BEACH, FLORIDA, LAST WEEK. WE  
6 DIDN'T ACTUALLY GET TO SEE WEST PALM BEACH. WE SAW  
7 A NUMBER OF CONFERENCE ROOMS, BUT THEY WERE VERY  
8 LOVELY. I THINK, AGAIN, FOR ME THERE WERE A NUMBER  
9 OF VERY INTERESTING TALKS, BUT I THINK THE BEST PART  
10 IS THE OPPORTUNITY TO MEET PATIENT ADVOCATES AND  
11 PATIENT ADVOCATE GROUPS FROM AROUND THE COUNTRY  
12 BECAUSE IT GIVES YOU A DIFFERENT SENSE, ANOTHER  
13 PERSPECTIVE ON HOW FORTUNATE WE ARE HERE IN  
14 CALIFORNIA.

15 I THINK THE MESSAGE THAT WE BOTH CAME AWAY  
16 WITH, WE MET WITH A NUMBER OF DIFFERENT GROUPS BOTH  
17 AT THE DINNER AND AT THE EVENT AND THEN PRIVATE  
18 MEETINGS, IS THAT CALIFORNIA IS REALLY THE ENVY OF  
19 SO MANY OTHER STATES, AND THAT THE STEM CELL AGENCY  
20 IS WIDELY RESPECTED. WE'RE HELD UP AS THE GOLD  
21 STANDARD. PEOPLE LOOK TO US FOR LEADERSHIP. PEOPLE  
22 LOOK TO US TO KIND OF SET THE PACE.

23 MANY STATES AROUND THE COUNTRY, AND WE  
24 TALKED TO PEOPLE FROM NEBRASKA, TEXAS, MISSOURI,  
25 THEY'RE FACING CONSTANT CHALLENGES TO THE WORK THAT



**BARRISTERS' REPORTING SERVICE**

1 THEY DO, EVEN POLITICAL CHALLENGES AND NONPOLITICAL  
2 CHALLENGES. IN NEBRASKA, EVEN THOUGH THE  
3 LEGISLATURE HAS PASSED LAWS ALLOWING STEM CELL  
4 RESEARCH, AT THEIR UNIVERSITY, THEY'RE FACING A  
5 CHALLENGE FROM A NEWLY ELECTED BOARD OF REGENTS WHO  
6 HAVE THE MAJORITY OPPOSED TO EMBRYONIC STEM CELL  
7 RESEARCH. SO THEY FACE CHALLENGES ON MANY FRONTS.  
8 AND SO FOR THEM, IT CAN BE QUITE ISOLATING. FOR  
9 THEM, THEY WERE LOOKING TO US FOR LEADERSHIP AND  
10 ALSO AN OPPORTUNITY TO HELP KIND OF CONNECT THEM TO  
11 SOMETHING THAT'S WORKING AND RESOURCES.

12 AND SO DON AND I WERE MORE THAN HAPPY TO  
13 TALK WITH THEM AND BE ABLE TO KIND OF TALK ABOUT THE  
14 RESOURCES WE HAVE THAT WE CAN SHARE WITH THEM THAT  
15 THEY CAN USE FOR THEIR OWN PURPOSES SO THAT EACH  
16 GROUP, THEN, DOESN'T HAVE TO CREATE ITS OWN WORK  
17 FROM SCRATCH, THAT THEY CAN TAP INTO WHAT WE'VE  
18 ALREADY DONE, AND BUILD ON THAT. HOPEFULLY OVER THE  
19 NEXT YEAR OR SO, WE'LL BE ABLE TO CREATE A NATIONAL  
20 NETWORK OF PATIENT ADVOCACY GROUPS. SO WE'RE GOING  
21 TO WORK TOGETHER AND SUPPORT EACH OTHER AND BUILD ON  
22 THE NETWORK THAT WE ALREADY HAVE.

23 FINALLY, I JUST WANTED TO GIVE YOU A  
24 COUPLE OF UPDATES. I TOLD YOU ABOUT TODD SHOOTING  
25 THE VIDEO HERE. TODD HAS ALSO ANOTHER VIDEO GETTING

## BARRISTERS' REPORTING SERVICE

1 POSTED IN THE NEXT COUPLE OF WEEKS, FEATURING DR.  
2 XIANMIN ZENG FROM THE BUCK INSTITUTE FOR RESEARCH ON  
3 AGING. IT'S THE LATEST IN OUR SERIES ON ASK THE  
4 EXPERT. DR. ZENG TALKS ABOUT PARKINSON'S DISEASE,  
5 AND IT'S REALLY GOING TO BE FASCINATING STUFF.

6 AND THEN ALSO THE NEW WEB SITE WILL BE  
7 READY TO LAUNCH IN JANUARY. AND AT THE NEXT BOARD  
8 MEETING, AMY ADAMS WILL WALK YOU THROUGH IT TO  
9 EXPLAIN THE NEW DESIGN, WHY WE DID IT THIS WAY, AND  
10 HOW IT'S SO MUCH BETTER, NOT JUST THE PUBLIC IN  
11 TERMS OF MATERIAL THEY'RE INTERESTED IN, BUT FOR  
12 RESEARCHERS AND SCIENTISTS WHO WANT TO ACTUALLY LOOK  
13 AT GRANTS AND EVERYTHING ELSE. SO IT WILL BE A MUCH  
14 BETTER WEB SITE, MORE FUNCTIONAL FOR EVERYONE. SO  
15 WITH THAT, I'M HAPPY TO ANSWER ANY QUESTIONS.

16 CHAIRMAN THOMAS: QUESTIONS? COMMENTS?  
17 BEEN A BUSY STRETCH.

18 MR. MCCORMACK: IT WAS FUN. THAT WAS ONE  
19 OF THE THINGS AT THE WORLD STEM CELL SUMMIT, DON AND  
20 I SPENT HALF THE TIME ACTUALLY TRYING TO GET READY  
21 FOR THE IOM REPORT. SO THERE WERE A LOT OF REALLY  
22 GOOD TALKS THAT WE DIDN'T GET A CHANCE TO HEAR.  
23 OVERALL IT WORKED WELL.

24 MS. GIBBONS: JUST A BRIEF QUESTION ABOUT  
25 THE SPOTLIGHT THAT WE SAW TODAY. WHAT'S THE

**BARRISTERS' REPORTING SERVICE**

1 TIMETABLE ON WHEN THOSE ARE POSTED SO WE CAN START  
2 SHARING THAT?

3 MR. MCCORMACK: AS SOON AS TODD CAN FINISH  
4 EDITING IT, WE'LL GET IT UP. AS SOON AS THAT  
5 HAPPENS.

6 MS. GIBBONS: YOU GUYS WILL JUST LET US  
7 KNOW WHEN IT'S POSTED.

8 MR. MCCORMACK: ABSOLUTELY. WE'LL SHARE  
9 THAT WITH EVERYONE. WE'RE SHAMELESS IN SHARING.  
10 DON'T WORRY. THIS MONTH, IN TIME FOR CHRISTMAS.

11 CHAIRMAN THOMAS: ANY OTHER THOUGHTS,  
12 COMMENTS? VERY GOOD. THANK YOU, KEVIN. SO WE'VE  
13 GOT FIVE MINUTES OR SO UNTIL CLOSED SESSION. SO I  
14 THINK LET'S JUST TAKE A BREAK.

15 MR. HARRISON: WE ACTUALLY FIRST HAVE TO  
16 ENTERTAIN A MOTION BY THE BOARD TO ADD THE ITEM TO  
17 THE AGENDA BASED ON THE FACT THAT IT CAME TO THE  
18 BOARD'S ATTENTION AFTER THE AGENDA WAS POSTED, AND  
19 THERE'S A NEED TO TAKE IMMEDIATE ACTION.

20 DR. POMEROY: SO MOVED.

21 CHAIRMAN THOMAS: MOVED BY DEAN POMEROY.  
22 SECONDED BY --

23 DR. BRYANT: SECOND.

24 CHAIRMAN THOMAS: -- DR. BRYANT. THANK  
25 YOU. ALL IN FAVOR PLEASE SAY AYE. OPPOSED? THOSE

**BARRISTERS' REPORTING SERVICE**

1 ON THE PHONE.

2 MS. SAMUELSON: NOT OPPOSED.

3 MS. FEIT: AYE.

4 DR. WARE: AYE.

5 CHAIRMAN THOMAS: THANK YOU. MOTION  
6 CARRIES. SO WE WILL, AFTER MR. HARRISON READS THE  
7 APPROPRIATE CODE NUMBER -- NO. I'M GETTING THIS  
8 FROM MARIA. WHAT DOES THAT MEAN? WE WILL ADJOURN  
9 TO CLOSED SESSION WHICH WILL BE BEGIN AT 2:30. WE  
10 WILL RECONVENE THEREAFTER FOR FURTHER PUBLIC  
11 DISCUSSION ON THE MATTER, AND WE'LL CLOSE WITH THE  
12 CHAIRMAN'S REPORT. MR. HARRISON, THE CODE NUMBER  
13 PLEASE.

14 MR. HARRISON: THE BOARD WILL BE CONVENING  
15 IN CLOSED SESSION TO CONSIDER PREPUBLICATION DATA,  
16 PROPRIETARY INFORMATION, AND OTHER CONFIDENTIAL  
17 INFORMATION RELATED TO THE PROPOSAL TO AWARD VIACYTE  
18 A SUPPLEMENTAL AWARD PURSUANT TO HEALTH AND SAFETY  
19 CODE SECTION 125290.30(F)(3)(B) AND (C).

20 AND IF MEMBERS COULD REMEMBER TO PLEASE  
21 SIGN THEIR CONFLICT CERTIFICATIONS AND HAND THEM  
22 BACK TO AMY CHEUNG, WE WOULD APPRECIATE IT. THANK  
23 YOU.

24 (THE BOARD THEN WENT INTO CLOSED  
25 SESSION, NOT REPORTED NOR HEREIN TRANSCRIBED.)

**BARRISTERS' REPORTING SERVICE**

1 CHAIRMAN THOMAS: DO WE HAVE THOSE ON THE  
2 PHONE BACK ON THE PHONE? I BELIEVE, MR. HARRISON,  
3 THERE WAS A MOTION ON THE FLOOR WITH RESPECT TO ITEM  
4 13; IS THAT CORRECT?

5 MR. HARRISON: THAT'S CORRECT. THERE'S A  
6 MOTION PENDING TO APPROVE SUPPLEMENTAL FUNDING OF \$3  
7 MILLION TO VIACYTE. THE MAKER WAS TORRES AND THE  
8 SECOND WAS PRIETO.

9 CHAIRMAN THOMAS: OKAY. IS THERE ANY  
10 DISCUSSION BY MEMBERS OF THE BOARD ON THE SUBJECT?  
11 ANY DISCUSSION BY MEMBERS OF THE PUBLIC ON THE  
12 SUBJECT? HEARING NONE, MR. HARRISON, IS THIS ROLL  
13 OR VOICE?

14 MR. HARRISON: THIS IS A ROLL CALL VOTE.

15 MS. BONNEVILLE: DAVID BRENNER. SUE  
16 BRYANT.

17 DR. BRYANT: YES.

18 MS. BONNEVILLE: FRANK CHISARI.

19 DR. CHISARI: YES.

20 MS. BONNEVILLE: ANNE-MARIE DULIEGE.

21 JAMES ECONOMOU.

22 DR. ECONOMOU: YES.

23 MS. BONNEVILLE: LEEZA GIBBONS.

24 MS. GIBBONS: YES.

25 MS. BONNEVILLE: MICHAEL GOLDBERG.

**BARRISTERS' REPORTING SERVICE**

1       STEPHEN JUELSGAARD.  
2               DR. JUELSGAARD:  YES.  
3               MS. BONNEVILLE:  TED KRONIRIS.  BERT  
4       LUBIN.  CLAIRE POMEROY.  
5               DR. POMEROY:  YES.  
6               MS. BONNEVILLE:  ROBERT PRICE.  
7               DR. PRICE:  YES.  
8               MS. BONNEVILLE:  FRANCISCO PRIETO.  
9               DR. PRIETO:  YES.  
10              MS. BONNEVILLE:  ROBERT QUINT.  
11              DR. QUINT:  YES.  
12              MS. BONNEVILLE:  DUANE ROTH.  JOAN  
13       SAMUELSON.  
14              MS. SAMUELSON:  I'M GOING TO HAVE TO  
15       ABSTAIN BECAUSE I COULDN'T HEAR THE DISCUSSION.  
16              MS. BONNEVILLE:  JONATHAN SHESTACK.  
17              MR. SHESTACK:  YES.  
18              MS. BONNEVILLE:  OSWALD STEWARD.  
19              DR. STEWARD:  YES.  
20              MS. BONNEVILLE:  JONATHAN THOMAS.  
21              CHAIRMAN THOMAS:  YES.  
22              MS. BONNEVILLE:  ART TORRES.  
23              MR. TORRES:  AYE.  
24              MS. BONNEVILLE:  CARL WARE.  
25              DR. WARE:  ABSTAIN.

**BARRISTERS' REPORTING SERVICE**

1 MR. HARRISON: THE MOTION CARRIES.

2 MR. TORRES: WHAT WAS THE VOTE?

3 MR. HARRISON: THIRTEEN IN FAVOR, TWO  
4 ABSTENTIONS.

5 CHAIRMAN THOMAS: THANK YOU. THAT  
6 CONCLUDES THE AGENDA. LET ME FINISH RATHER  
7 UNORTHODOXLY WITH THE CHAIRMAN'S REPORT. WANT TO  
8 SAY, FIRST OF ALL, THIS HAS BEEN AN AMAZING YEAR OF  
9 ACTIVITY AND INTENSE WORK BY EVERYBODY CONCERNED  
10 HERE.

11 AS WE NOTED, WE'VE HAD NINE RFA'S THAT HAD  
12 GRANTS WORKING GROUP MEETINGS THIS YEAR, WHICH BY  
13 ANY ACCOUNT IS AN EXTRAORDINARY AMOUNT, WHICH, OF  
14 COURSE, COULDN'T BE MADE POSSIBLE WITHOUT AN  
15 INCREDIBLE AMOUNT OF WORK BY ALAN AND ELLEN AND PAT  
16 AND GIL AND ALL THE SCIENCE STAFF AND ALL THE  
17 SUPPORT STAFF. AND I THINK IT'S SOMETHING THAT THE  
18 AGENCY AS A GROUP SHOULD BE REALLY PROUD OF. THIS  
19 IS SOMETHING THAT CONTINUES OUR MISSION.

20 WE HAD THIS YEAR, AS WE ALWAYS DO, A  
21 COUPLE OF ITEMS THAT WERE FIRST OF THEIR KIND,  
22 CUTTING-EDGE INITIATIVES THAT KEEP TRACK REAL-TIME  
23 OF DEVELOPMENTS IN REGENERATIVE MEDICINE AND KEEP  
24 CIRM ON THE FOREFRONT NATIONALLY AND WORLDWIDE. AND  
25 IT'S SOMETHING THAT IS JUST A TESTAMENT TO

**BARRISTERS' REPORTING SERVICE**

1 EVERYBODY'S CONSIDERABLE HARD WORK AND WE SEE THE  
2 RESULTS. WE SEE THE PORTFOLIO WE HAVE, WE SEE,  
3 NOTWITHSTANDING A FEW ISSUES, THE GENERAL ACCLAIM  
4 THAT WE AROUND THE WORLD GET AND FOR ALL WE DO.

5 SO FIRST OF ALL, JUST MAKE THAT COMMENT.

6 WITH RESPECT TO THE LAST STRETCH SINCE THE  
7 LAST BOARD MEETING, IT'S BEEN A BUSY TIME FOR THE  
8 CHAIR. WE HAD THE MEETING ON THE MEETING THE MESA,  
9 A KEYNOTE AT THE WORKING TO WALK SYMPOSIUM HELD IN  
10 IRVINE, THE ALPHA CLINIC MEETING, WHICH I WANT TO  
11 ECHO WHAT MR. SHEEHY SAID TO DR. TROUNSON, WAS  
12 EXTRAORDINARY AND CONGRATULATE NATALIE AS WELL FOR  
13 THAT. ALWAYS TOUGH TO PULL OFF FIRST-TIME MEETINGS  
14 ON NEW CONCEPTS, AND IT WAS VERY, VERY EXCITING.

15 WE HAD THE STANFORD SYMPOSIUM ON  
16 REGENERATION AND SPINAL CORD INJURY. THE CDAP  
17 MEETING, THE WORLD STEM CELL SUMMIT, THE HOUSE OF  
18 LORDS MEETING THAT ALAN REFERENCED, THE IPSC CELL  
19 BANKING INITIATIVE, AND, OF COURSE, ALL THE DEALINGS  
20 THAT LED UP TO THE RELEASE OF THE IOM STUDY. VERY  
21 BUSY STRETCH. I GUESS FITTING FOR A VERY BUSY YEAR.

22 I JUST WANT TO CIRCLE BACK AND CLOSE ONE  
23 LAST WORD ABOUT THE STAFF. EVERY MONDAY MORNING  
24 THERE'S A STAFF MEETING WHICH ALAN, ELLEN, OR ELONA  
25 VARIOUSLY LEAD, DEPENDING ON WHO HAPPENS TO BE THERE



## BARRISTERS' REPORTING SERVICE

1 AT THAT TIME. AND THERE WAS A REPORT SPECIFICALLY  
2 ON THE GRANTS WORKING GROUP FOR THE IPS CELL BANKING  
3 INITIATIVE.

4 DR. GRIESHAMMER IN THE COURSE OF THAT  
5 REPORT SAID I WANT EVERYBODY TO UNDERSTAND WHAT WENT  
6 INTO THIS FIRST OF ITS KIND EVENT. AND SHE  
7 PROCEEDED TO LIST ALL THE DIFFERENT ROLES FILLED BY  
8 MEMBERS OF STAFF TO MAKE THAT CELL BANK GRANTS  
9 WORKING GROUP MEETING HAPPEN. AND IT WAS QUITE  
10 STUNNING. AND I BELIEVE SHE ESSENTIALLY MENTIONED  
11 VIRTUALLY EVERY SINGLE PERSON IN THE ENTIRE  
12 OPERATION HAVING A HAND IN SOME ASPECT OF THAT. AND  
13 AS YOU SAT THERE LISTENING TO IT, YOU WOULD ONLY BE  
14 ADDITIONALLY IMPRESSED WITH THE HIGH CALIBER OF THE  
15 STAFF AND THE HIGH CALIBER OF THE MISSION AND HOW  
16 WE'RE GOING ABOUT FULFILLING IT. AND TO ME THAT WAS  
17 ONE OF THE GREAT MOMENTS OF THE ENTIRE YEAR BECAUSE  
18 IT TIED ALL THIS HARD WORK TOGETHER.

19 SO CONGRATULATIONS, ALAN, TO YOU AND TO  
20 ELLEN, PAT, ETC., ALL THE STAFF FOR A TRULY  
21 PHENOMENAL JOB. WE LOOK FORWARD TO BIGGER AND  
22 BETTER NEXT YEAR. WE HAVE LOTS OF THINGS  
23 CALENDARED, LOTS OF VERY INTERESTING ACTIVITIES  
24 AHEAD OF US. AND AS WE CONTINUE ALONG AND MAKING  
25 PROGRESS IN OUR GOAL OF ALLEVIATING HUMAN SUFFERING,

**BARRISTERS' REPORTING SERVICE**

1 I THINK WE CAN ALL BE VERY PROUD OF WHAT WE'VE ALL  
2 BEEN ABLE TO DO.

3 SO ON THAT NOTE, HAPPY HOLIDAYS TO  
4 EVERYBODY. THANK YOU VERY MUCH FOR ALL YOUR HARD  
5 WORK. DR. PRIETO HAS A COMMENT.

6 DR. PRIETO: I WOULD JUST LIKE TO SECOND  
7 J.T.'S COMMENTS ABOUT OUR STAFF AND THANK YOU FOR  
8 EVERYTHING YOU'VE DONE. I WISH EVERY ORGANIZATION  
9 THAT I WORKED WITH HAD A STAFF THIS GOOD.

10 CHAIRMAN THOMAS: THANK YOU.

11 (APPLAUSE.)

12 CHAIRMAN THOMAS: HAPPY HOLIDAYS. WE'LL  
13 SEE EVERYBODY IN JANUARY. THANK YOU VERY MUCH.

14 (THE MEETING WAS THEN CONCLUDED AT  
15 03:01 P.M.)

16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**BARRISTERS' REPORTING SERVICE**

REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT OF THE PROCEEDINGS BEFORE THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD AT THE LOCATION INDICATED BELOW

LUXE HOTEL, SUNSET BOULEVARD  
11461 SUNSET BOULEVARD  
LOS ANGELES, CALIFORNIA  
ON  
DECEMBER 12, 2012

WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CSR 7152  
BARRISTER'S REPORTING SERVICE  
160 S. OLD SPRINGS ROAD  
SUITE 270  
ANAHEIM, CALIFORNIA  
(714) 444-4100