

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: HOTEL WHITCOMB  
1231 MARKET STREET  
SAN FRANCISCO, CALIFORNIA

DATE: WEDNESDAY, FEBRUARY 3, 2010  
4:30 P.M.

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

BRS FILE NO.: 85104

## BARRISTERS' REPORTING SERVICE

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## BARRISTERS' REPORTING SERVICE

1 SAN FRANCISCO, CALIFORNIA; WEDNESDAY, FEBRUARY 3, 2010

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10

CHAIRMAN KLEIN: FOR DR. BRODY AND SHERRY,  
THERE WAS AN OFF-LINE CONVERSATION THAT INDICATED THAT  
WE'RE TWO SHORT OF A QUORUM AT THE MOMENT, BUT WE HAVE  
THOSE INDIVIDUAL MEMBERS IN TRANSIT. THEY'RE GOING TO  
GET HERE A LITTLE LATER. SO WE'RE GOING TO PROCEED TO  
OPEN AND GO THROUGH THE ITEMS THAT DO NOT NEED A  
QUORUM, THEN WE'LL PROCEED TO THE ITEMS THAT NEED A  
QUORUM.

11

12

13

14

SO IF WE COULD HAVE MELISSA KING LEAD US IN  
THE PLEDGE OF ALLEGIANCE, I WOULD CALL THE MEETING TO  
ORDER, AND THEN SHE WILL PROCEED IMMEDIATELY TO A ROLL  
CALL.

15

(THE PLEDGE OF ALLEGIANCE.)

16

MS. KING: I WILL NOW START THE ROLL CALL.

17

RICARDO AZZIZ.

18

DR. AZZIZ: PRESENT.

19

MS. KING: ROBERT BIRGENEAU. FLOYD BLOOM.

20

DR. BLOOM: HERE.

21

MS. KING: DAVID BRENNER.

22

DR. BRENNER: HERE.

23

MS. KING: WILLIAM BRODY.

24

DR. BRODY: HERE.

25

MS. KING: SUSAN BRYANT. MARCY FEIT.

## BARRISTERS' REPORTING SERVICE

1 MS. FEIT: HERE.  
2 MS. KING: MICHAEL FRIEDMAN. LEEZA GIBBONS.  
3 MS. GIBBONS: HERE.  
4 MS. KING: MICHAEL GOLDBERG. SAM HAWGOOD.  
5 DR. HAWGOOD: HERE.  
6 MS. KING: BOB KLEIN.  
7 CHAIRMAN KLEIN: HERE.  
8 MS. KING: SHERRY LANSING.  
9 MS. LANSING: HERE.  
10 MS. KING: GERALD LEVEY. TED LOVE. ED  
11 PENHOET. PHIL PIZZO. CLAIRE POMEROY.  
12 DR. POMEROY: HERE.  
13 MS. KING: FRANCISCO PRIETO.  
14 DR. PRIETO: HERE.  
15 MS. KING: ELIZABETH FINI.  
16 DR. FINI: HERE.  
17 MS. KING: ROBERT QUINT. JEANNIE FONTANA.  
18 DR. FONTANA: HERE.  
19 MS. KING: DUANE ROTH.  
20 MR. ROTH: HERE.  
21 MS. KING: JOAN SAMUELSON. DAVID  
22 SERRANO-SEWELL. JEFF SHEEHY.  
23 MR. SHEEHY: HERE.  
24 MS. KING: JONATHAN SHESTACK. OSWALD  
25 STEWARD.

## BARRISTERS' REPORTING SERVICE

1 DR. STEWARD: HERE.

2 MS. KING: AND ART TORRES.

3 MR. TORRES: HERE.

4 CHAIRMAN KLEIN: THANK YOU VERY MUCH.

5 WELCOME ALL OF YOU TO SAN FRANCISCO. WE'RE GOING TO BE  
6 OBVIOUSLY HERE TODAY AND TOMORROW AT UC SAN FRANCISCO,  
7 MISSION BAY CONFERENCE CENTER. WE WILL HAVE A COUPLE  
8 OF ITEMS THAT ARE GOING TO BE TABLED AT STAFF'S REQUEST  
9 UNTIL A FUTURE MEETING. THAT WILL BE ITEM 7 AND ITEM  
10 NO. 12.

11 I'D LIKE TO INDICATE THAT ITEM NO. 12 IS  
12 GOING TO BE EXTREMELY EXCITING. IT'S LOOKING AT THE  
13 POTENTIAL TO HELP ADVANCE THE CLINICAL TRIALS THERAPIES  
14 THAT ARE DERIVED FROM PLURIPOTENT STEM CELLS. WE WILL  
15 FIND, WHEN THE STAFF MAKES THEIR PRESENTATION, WHAT THE  
16 REAL DEFINING LIMITS ARE IN THE NEXT MEETING, BUT TO  
17 HAVE THE OPPORTUNITY AND PRIVILEGE OF FUNDING THE  
18 THERAPIES THAT ARE AT THIS LEVEL AND FDA-APPROVED HUMAN  
19 TRIALS, WHETHER PHASE I OR PHASE II, IS REMARKABLE  
20 GIVEN THAT IT HAS ONLY BEEN TWO AND A HALF YEARS SINCE  
21 THE LITIGATION WAS FINISHED.

22 AND I WOULD EMPHASIZE THAT IN THE DISEASE  
23 TEAM ROUNDS THAT OCCURRED, THE PRESS FOCUSED ON FOUR  
24 OUT OF FOURTEEN BEING DERIVED FROM EMBRYONIC STEM  
25 CELLS, AND THEY WERE NOT OVERWHELMED WITH THAT. I

## BARRISTERS' REPORTING SERVICE

1 THOUGHT IT WAS NEXT TO A MIRACLE TO HAVE IN TWO AND A  
2 HALF YEARS A TYPE OF CELL THAT HAD BEEN EFFECTIVELY  
3 DENIED ANY MAJOR FUNDING FOR A DECADE WHILE OTHER CELL  
4 THERAPIES WERE MOVING FORWARD. AND TO THEN SEE THEM  
5 ACCELERATED TO THE POINT THAT THEY WERE AWARDED FOUR  
6 OUT OF FOURTEEN DISEASE TEAM AWARDS WITH THE GOAL OF  
7 GETTING TO AN IND IN 48 MONTHS I FIND TO BE A  
8 REMARKABLE TESTAMENT TO THE COMMITMENT OF THE  
9 SCIENTISTS AND CLINICIANS AND CLINICIAN-SCIENTISTS IN  
10 THIS STATE.

11 I WOULD LIKE TO IN CALLING THE MEETING TO  
12 ORDER TO THANK JENNIFER PRYNE AND MELISSA KING WITH THE  
13 HELP OF AMY CHUNG, WHO SOON WILL BE WORKING WITH  
14 MELISSA. AFTER A YEAR PROCESS, MELISSA I THINK IS  
15 ECSTATIC, AMY, THAT YOU ARE GOING TO BE HELPING HER.  
16 AND YOU WON'T HAVE TO STAY TILL 10 O'CLOCK AT NIGHT,  
17 ONLY TILL EIGHT. BUT WE ADMIRE AND APPRECIATE THE  
18 DEDICATION OF ALL OF THE STAFF, BUT MELISSA I JUST  
19 PERSONALLY WOULD LIKE TO SAY THAT YOU ARE THE LAST ONE  
20 TO LEAVE AT THIS WHOLE END OF THE BUILDING. SO WE  
21 THANK YOU FOR YOUR SPECIAL EFFORTS.

22 WE'RE GOING TO HAVE ANOTHER MEMBER JOINING BY  
23 PHONE TONIGHT AND TOMORROW, DR. FRIEDMAN. IT IS  
24 IMPORTANT TO UNDERSTAND THAT THE CITY OF HOPE HAD A  
25 MAJOR ANNOUNCEMENT IN THIS MOST RECENT PERIOD. THEY

## BARRISTERS' REPORTING SERVICE

1 WERE AWARDED THE ONLY, IT'S MY UNDERSTANDING, MAJOR  
2 STEM CELL PRODUCTION FACILITY GRANT IN THE UNITED  
3 STATES, AND IT IS AT THE CITY OF HOPE. IT IS A  
4 MULTIYEAR GRANT. AND AT THE NEXT MEETING HE'S --  
5 PERSONALLY I'M GOING TO ASK THAT MELISSA KING ARRANGE  
6 THAT HE PROVIDES US WITH A SPECIAL REPORT ON THE DEPTH  
7 OF THAT VERY SPECIAL DESIGNATION OF THE CENTER.

8 I WOULD ALSO SAY THAT, FOR THOSE OF YOU WHO  
9 ARE WATCHING THE PROGRESS OF THE GMP FACILITIES, DR.  
10 POMEROY INDICATED TO ME THAT ABOUT THREE WEEKS FROM NOW  
11 THEY WILL BE LIVE. AND IT'S REPORTED THE DAVIS GMP  
12 FACILITY IS REMARKABLE EVEN TO A SEASONED VETERAN LIKE  
13 DR. POMEROY. SO I ENCOURAGE YOU TO COMMUNICATE WITH  
14 HER AND TO GO GET TO WORK.

15 I WAS THERE WHEN THEY OPENED THE SHOW  
16 BUILDING AND DEDICATED THAT EFFORT, AND IT IS A  
17 TREMENDOUS ASSET TO HAVE IN PLACE. GAVE THEM A TIME  
18 HEAD START THAT HAS BEEN VERY VALUABLE.

19 I WILL HOLD THE BALANCE OF MY COMMENTS UNTIL  
20 TOMORROW MORNING. AND I WOULD LIKE TO MOVE TO THE  
21 PRESIDENT'S REPORT. DR. TROUNSON IN THE LAST WEEK SENT  
22 OUT, I THINK, TO BOARD MEMBERS SOME DETAILED DISCUSSION  
23 MATERIALS THAT HE'S ADDED TO THE PRESIDENT'S REPORT  
24 THAT ARE GOING TO DESCRIBE THE DIFFERENCES AND THE  
25 UNIQUE FEATURES OF OUR GRANT PROCESS AS COMPARED TO THE

## BARRISTERS' REPORTING SERVICE

1 NIH PROCESS, WHICH I THINK IS GOING TO BE VERY VALUABLE  
2 TO ALL OF US.

3 BUT I'D LIKE TO SAY THAT THE SCIENTIFIC STAFF  
4 IS REALLY GOING AT ABSOLUTE FULL SPEED WITH GREAT  
5 DEDICATION, AND IT IS REMARKABLE THAT THE PRESIDENT CAN  
6 FIND TIME TO PULL THESE PRESIDENT'S REPORTS TOGETHER  
7 FOR EACH OF THESE BOARD MEETINGS. SO DR. TROUNSON.

8 DR. TROUNSON: THANK YOU VERY MUCH.

9 CHAIRMAN KLEIN: ACTUALLY, DR. TROUNSON, ONE  
10 OTHER ANNOUNCEMENT CAME TO MIND, WHICH IS LIZ LABROS  
11 (PHONETIC) IS HERE. SHE'S SEATED TO THE RIGHT OF DON  
12 REED. LIZ IS WITH ACT CURE, AND ACT CURE IS FROM  
13 MISSOURI. THEY WERE ONE OF THE KEY DRIVING FORCES  
14 BEHIND AMENDMENT 2 IN MISSOURI THAT PROTECTED THE  
15 FREEDOM TO DO RESEARCH ON EMBRYONIC STEM CELLS IN  
16 MISSOURI.

17 (APPLAUSE.)

18 CHAIRMAN KLEIN: AND I'D LIKE TO EMPHASIZE  
19 THAT WHILE THE VISION OF CALIFORNIA VOTERS IS  
20 EXTRAORDINARY AND WE'RE DEEPLY APPRECIATIVE OF IT, WE  
21 CANNOT STAND ALONE. AND IT IS CRITICAL THAT THERE BE  
22 FREEDOM TO HAVE RESEARCH IN THIS AREA THROUGHOUT THE  
23 UNITED STATES. CERTAINLY THE EFFORT IN MISSOURI  
24 COMMUNICATED A VERY IMPORTANT MESSAGE THAT THE  
25 HEARTLAND OF THIS COUNTRY AS WELL AS CALIFORNIA ARE

## BARRISTERS' REPORTING SERVICE

1 DEDICATED TO SCIENTIFIC FREEDOM AND MAKING SURE WE HAD  
2 ACCESS TO EVERY TYPE OF CELL POSSIBLE TO APPROPRIATELY  
3 MATCH THE CELLULAR THERAPIES TO THE DISEASE AND MAKING  
4 SURE THAT WE HAD THE BEST OPPORTUNITY TO REACH PATIENTS  
5 WITH THE APPROPRIATE TREATMENT. SO THANK YOU. PLEASE  
6 THANK YOUR ORGANIZATION.

7 MS. KING: BEFORE PRESIDENT TROUNSON BEGINS  
8 HIS REPORT, I JUST WANTED TO LET THE MEMBERS ON THE  
9 PHONE KNOW THAT THERE ARE TWO SLIDE DECKS THAT WE'RE  
10 TRYING TO GET TO YOU. ONE IS ALAN'S SLIDE DECK THAT  
11 INVOLVES A NUMBER OF OTHER PEOPLE'S SLIDES AS WELL THAT  
12 YOU WILL HEAR SPEAKING. AND THEN THERE'S A  
13 SUPPLEMENTARY SLIDE DECK FROM DR. GIL SAMBRANO. WE ARE  
14 ATTEMPTING TO E-MAIL THOSE TO YOU RIGHT NOW AS THEY  
15 WERE FINALIZED TODAY, VERY IMPORTANT LAST MINUTE  
16 INFORMATION. SO YOU WON'T HAVE THEM AT THE BEGINNING,  
17 BUT WE HOPE YOU HAVE THEM WITHIN THE NEXT TEN MINUTES  
18 OR SO AS WE ATTEMPT TO E-MAIL YOU THESE LARGE FILES.

19 MS. LANSING: THANK YOU.

20 DR. TROUNSON: I THINK IT'S A VERY  
21 INTERESTING TIME IN THE SENSE THAT I'VE ALWAYS BEEN  
22 INTERESTED IN CREATIVITY MYSELF BECAUSE I THINK THIS IS  
23 A SPACE THAT WE ACTUALLY WORK IN AS SCIENTISTS, THE  
24 CREATIVE SPACE, AND THE ISSUE OF HOW YOU MAKE SORT OF  
25 MAJOR BREAKTHROUGHS AND HOW YOU LEAD IN AN AREA WHEN

## BARRISTERS' REPORTING SERVICE

1 MOST THINGS WANT TO GO IN A STRAIGHT LINE. AND IT  
2 REALLY DOES DESERVE YOU MOVE THINGS IN THREE  
3 DIMENSIONS. AND I'D HAVE TO SAY CIRM IS A  
4 THREE-DIMENSIONAL SPACE BECAUSE MR. KLEIN CAME NOT OUT  
5 OF SCIENCE, BUT OUT OF LAW AND HOUSING AND CARING FOR  
6 PEOPLE TO CREATE CIRM.

7 AND I THINK WHAT WE'RE SEEING THAT'S GOING ON  
8 CURRENTLY IS STILL PART OF THIS INCREDIBLE CREATIVITY  
9 THAT'S HAPPENING. WE'RE ACTUALLY PUSHING THIS BY  
10 FUNDING IT, BUT ALSO FOR ENCOURAGING SCIENTISTS AND  
11 BIOTECH COMPANIES TO REALLY GO OUT IN A THIRD  
12 DIMENSIONAL SPACE.

13 WHAT I WANT TO TALK TO YOU ABOUT WAS SOME OF  
14 THAT. IF I CAN HAVE THE FIRST SLIDE, THE FIRST SLIDE  
15 IS, FIRST OF ALL, A REPORT THAT I THINK WE SHOULD DRAW  
16 YOUR ATTENTION TO BECAUSE IT WAS A REPORT THAT THOSE  
17 TWO INDIVIDUAL AUTHORS SPENT A LOT OF TIME PUTTING  
18 TOGETHER ABOUT CIRM. THERE WAS A NUMBER OF YEARS  
19 INVOLVED, AND THIS STARTED BEFORE I WAS PRESIDENT AND  
20 WENT DURING THE TIME. I THINK IF YOU READ THEIR WORDS,  
21 AND I CAN ACTUALLY READ THEM TO YOU IF YOU LIKE, BUT IF  
22 YOU READ THEM, I THINK IT'S AN INCREDIBLY STRONG  
23 ENCOURAGEMENT, GENERALLY SPEAKING, FOR WHAT WE'RE DOING  
24 PRACTICALLY IN THE SPACE.

25 WE HAVE A CADRE OF REALLY TOP CLASS PEOPLE.

## BARRISTERS' REPORTING SERVICE

1 AND THAT'S REALLY EXPANDING AT AN INCREDIBLE RATE, AND  
2 THEY'RE DOING SOME ABSOLUTELY MARVELOUS THINGS, WHICH  
3 IS TAKING US A HUGE EFFORT TO KEEP UP WITH. IF WE FUND  
4 SOMETHING TODAY, IT COULD WELL BE OUT OF SCIENTIFIC  
5 RELEVANCE WITHIN SIX MONTHS. AND THIS IS HAPPENING  
6 TIME AND TIME AGAIN WHEN YOU PUSH THE SPACE SO FAST AS  
7 WHAT'S HAPPENING NOW.

8 BUT THAT'S A REALLY INTERESTING REPORT, AND  
9 IF YOU ARE ABLE TO GET THIS, AND I'M SURE YOU CAN, IT'S  
10 WELL WORTH READING THAT PARTICULAR REPORT. SO YOU  
11 RECEIVED IT FROM MELISSA, BUT PERHAPS NOT EVERYTHING  
12 THAT MELISSA SENDS YOU READ AVIDLY. I RECOMMEND YOU  
13 READ THIS BECAUSE IT'S A KIND OF NICE SUMMARY FROM  
14 PEOPLE WHO GOT THEMSELVES WELL AND TRULY EMBEDDED IN  
15 THE SPACE.

16 I WANT TO TALK TO YOU ABOUT HOW THIS FIELD IS  
17 CHANGING. AND THERE ARE PEOPLE WHO SAY, WELL, THE WAY  
18 CIRM WAS CREATED MAYBE IS NOT RELEVANT ANYMORE. I  
19 ACTUALLY DON'T THINK THAT'S TRUE AT ALL. BUT WHAT IS  
20 HAPPENING IN THE SPACE IS REALLY ASTONISHING. HERE'S A  
21 REPORT JUST OUT IN *NATURE*, IT WAS ON JANUARY 27TH, AND  
22 IT IS A DIRECT CONVERSION OF THE FIBROBLASTS. THESE  
23 ARE THE CELLS THAT ARE EASILY OBTAINED, SKIN  
24 FIBROBLASTS. HE CONVERTED THEM USING A SET OF  
25 TRANSCRIPTION FACTORS TO NEURONS. SO THEY

## BARRISTERS' REPORTING SERVICE

1 HYPOTHESIZE -- AND YOU WILL NOTICE IT IS A STANFORD  
2 UNIVERSITY GROUP. IT'S A GROUP FOR WHICH WE'VE BEEN  
3 SUPPORTING. THEY HYPOTHESIZE THAT A PANEL OF  
4 TRANSCRIPTION FACTORS COULD CONVERT SKIN CELLS, NOT TO  
5 IPS CELLS, BUT TO SOMETHING ELSE, TO NERVE CELLS.

6 SO THEY TOOK A POOL OF LENTIVIRUSES CONTAINED  
7 IN THESE GENES AND USED THEM TO INFECT SKIN FIBROBLASTS  
8 FROM A MOUSE. IT'S GOT GREEN WHERE THE NERVES ARE IN  
9 THE MOUSE SHOWN IN THE CARTOON. AND THOSE, WHEN THE  
10 NERVES COME ON, WHEN IT'S A NERVE THAT TURNS GREEN, BUT  
11 THEY TOOK THE SKIN CELLS FROM THOSE MICE AND THEN THEY  
12 ADDED THESE TRANSCRIPTION FACTORS, AND THEY CONVERTED  
13 THOSE SKIN CELLS INTO NEURONS.

14 SO THE GENE IS SOME OF US CALL IT MASH1, BUT  
15 OTHERS CALL IT ASD1, AND THEY CAN INDUCE THESE TUJ1  
16 CELLS TO COME ON GREEN. SO ONCE THAT PARTICULAR MARKER  
17 APPEARS, IT'S A NERVE. IT'S CHARACTERISTIC OF NERVE  
18 CELLS.

19 NOW, THAT ONE GENE WAS SUFFICIENT, BUT IT WAS  
20 POTENTIATED BY THREE OTHERS OR FIVE OTHERS. IN FACT,  
21 THREE OF THEM WERE SUFFICIENT TO EFFICIENTLY CONVERT  
22 FIBROBLASTS TO FUNCTIONAL NEURONS. SO THIS IS REALLY  
23 QUITE EXTRAORDINARY. IT HAS HAPPENED IN THE PAST, BUT  
24 NOBODY REALLY SORT OF FOLLOWED IT UP. IT WAS DONE WITH  
25 MUSCLES AS I RECALL, FIBROBLAST MUSCLE. AND THERE WAS

## BARRISTERS' REPORTING SERVICE

1 A REPORT ON EXOCRINE CELLS FROM THE HARVARD LABORATORY  
2 CONVERTING EXOCRINE CELLS INTO PANCREATIC BETA ISLET  
3 CELLS, INSULIN PRODUCING CELLS, WITH THREE  
4 TRANSCRIPTION FACTORS.

5 SO THE MARKERS THAT ARE SHOWN IN THE PANEL  
6 WOULD INDICATE THAT WE'VE GOT NERVES THERE. AND  
7 ALTHOUGH THE READOUTS, SO THEY PUT PATCH CLAMPS ON  
8 THESE CELLS, WHICH ARE NERVES, AND THEY READ OUT  
9 TYPICAL POTENTIALS THAT YOU WOULD SEE IN A NERVE CELL.  
10 AND PARTICULARLY WHEN YOU STIMULATE IT, YOU GET EXACTLY  
11 WHAT YOU EXPECT. AND THE BOTTOM PANEL ARE THE  
12 NEUROTRANSMITTERS THAT HAVE BEEN TRANSFERRED ACROSS THE  
13 CELLS. SO THEY APPEAR IN THESE TESTS TO BE VIABLE  
14 NEURONS, NEURONS WHICH ARE FUNCTIONAL.

15 AND SO NEXT SLIDE. SO THE EFFICIENCY OF  
16 CONVERSION TO NEURONS WAS 2 PERCENT FROM MOUSE  
17 EMBRYONIC FIBROBLASTS AND UP TO 9 PERCENT WITH THE  
18 TAUGFP FIBROBLAST. SO IT WAS BASICALLY VERY EFFICIENT  
19 CONVERSION. YOU KNOW, THOSE SORT OF FIGURES ARE REALLY  
20 EFFICIENCY STARTING TO TAKE PLACE. AND AGAIN, WHEN  
21 THEY'RE DONE, AGAIN, THEY SHOWED THAT THESE NEURONS  
22 CHANGED WITH THESE TRANSCRIPTION FACTORS AND APPEAR TO  
23 BE FUNCTIONAL. THEY SHOWED THE RIGHT SORT OF OUTPUTS,  
24 AND THEY SHOWED THE RIGHT SORT OF MARKERS. AND THEY  
25 WERE CONNECTED WHEN THEY WERE ACTUALLY PLACED INTO

## BARRISTERS' REPORTING SERVICE

1 MICE. SO THESE NEURONS WERE ACTUALLY TRANSMITTING  
2 MESSAGES.

3 SO NEXT. SO WHAT'S THIS REALLY MEAN? IT'S  
4 POSSIBLE THAT ONLY ONE GENE IS REALLY NECESSARY TO  
5 ACTIVATE CONVERSION OF A FIBROBLAST, AND THAT ALSO TO A  
6 NEURON. WHY ISN'T THIS MECHANISM USED FOR  
7 REGENERATION? WHY DOESN'T THE BODY USE THIS? BECAUSE  
8 IT'S KIND OF THOUGHT EVOLUTION WOULD HAVE PICKED UP ON  
9 THIS. IF YOU NEEDED TO SORT FIX THINGS, YOU ONLY NEED  
10 ONE GENE, WHY DIDN'T YOU GET IT GOING IN EVOLUTION?  
11 WHY ISN'T IT THERE? WHY ISN'T IT OPERATIVE? AND  
12 THAT'S STILL A GOOD QUESTION BECAUSE I DON'T ACTUALLY  
13 KNOW WHY THESE TRANSCRIPTION FACTORS AREN'T UTILIZED  
14 FOR REGENERATIVE PURPOSES IN VIVO. PERHAPS THEY ARE,  
15 BUT THE EVOLUTIONARY PRESSURE HAS BEEN ONLY AT A VERY  
16 MODERATE REPAIR LEVEL RATHER THAN THE MASSIVE REPAIR  
17 THAT WE'RE GENERALLY TALKING ABOUT.

18 SO CAN THAT CONVERSION BE USED CLINICALLY?  
19 IT'S A QUESTION OF NUMBERS REALLY. CAN YOU CREATE  
20 NUMBERS FROM THIS? YOU'RE UNABLE TO EXPAND THOSE CELLS  
21 AT THE PRESENT TIME, BUT THERE WAS A REPORT JUST  
22 RECENTLY IN THE JOURNALS THAT YOU CAN NOW EXPAND FETAL  
23 CORD BLOOD CELLS. SO IT IS POSSIBLE IF SOMEONE WOULD  
24 WORK OUT HOW TO EXPAND THEM, BUT CURRENTLY, BECAUSE YOU  
25 CAN'T EXPAND THEM, YOU'RE PROBABLY LIMITED BY THE

## BARRISTERS' REPORTING SERVICE

1 NUMBER THAT YOU CAN ACTUALLY MAKE FROM THESE SKIN  
2 CELLS. SO IT'S PROBABLY INADEQUATE FOR CLINICAL  
3 UTILIZATION AT THIS POINT IN TIME.

4 CAN OTHER TISSUES BE FORMED AS A DIRECT  
5 CONVERSION USING TRANSCRIPTION PANELS? YOU WILL NOTE  
6 THAT DOUG MELTON'S INDUCTION OF INSULIN PRODUCTION  
7 USING THREE TRANSCRIPTION FACTORS WAS ONE OF THE MAJOR  
8 REPORTS IN THE SCIENTIFIC MEDICAL LITERATURE IN 2008.  
9 I ASKED WHY THAT HADN'T BEEN FOLLOWED UP, BUT IT IS  
10 BEING FOLLOWED UP, AND THERE IS SOME FOLLOW-UP PAPERS.  
11 I DON'T KNOW THE DETAILS OF WHAT'S HAPPENING, BUT WHAT  
12 I THINK YOU ARE GOING TO SEE IS A LOT OF WORK HERE IN  
13 THIS AREA OF TRANSCRIPTION FACTORS BECAUSE IF YOU CAN  
14 MANIPULATE, TRANSDIFFERENTIATE, IF YOU LIKE, CELLS IN  
15 THIS KIND OF SPACE, SUDDENLY YOU TURN ON MANY NEW  
16 OPPORTUNITIES. THESE ARE OPPORTUNITIES FOR USE IN  
17 PATIENTS. THIS IS A VERY, VERY RADICAL CHANGE. IT'S A  
18 MASSIVE CHANGE FROM WHERE BOB KLEIN AND YOU STARTED  
19 WITH WITH CIRM. AND THIS IS PART OF THE CREATIVE  
20 EVENTS THAT ARE HAPPENING AROUND US.

21 THIS IS NOT THE ONLY THING THAT'S  
22 EXTRAORDINARY, I THINK, AT THE MOMENT. GO TO THE NEXT  
23 SLIDE. I THOUGHT THERE WAS REALLY MAJOR DIFFERENCES  
24 BETWEEN GENDERS, AND I'VE SORT OF GROWN UP IN AN  
25 AUSTRALIAN SOCIETY WHICH IS REALLY WELL PARTITIONED IN

## BARRISTERS' REPORTING SERVICE

1 A GENDER WAY. BUT IF YOU COME DOWN TO THE MOLECULAR  
2 BIOLOGY, ONE WOULD ARGUE REALLY, ONE WOULD WONDER  
3 WHETHER THAT'S, IN FACT, TRUE BECAUSE THERE'S A PAPER  
4 PUBLISHED IN THE JOURNAL *CELL*, WHICH IS A VERY  
5 HIGH-IMPACT JOURNAL, IT'S NOT SPECIFICALLY ABOUT STEM  
6 CELLS, BUT IT'S ABOUT TRANSCRIPTION FACTORS.

7 IN THE MOUSE THE FORKHEAD TRANSCRIPTION  
8 FACTOR, CALLED FOXL2, IS REQUIRED TO PREVENT  
9 TRANSDIFFERENTIATION OF ADULT OVARY TO TESTES. SO IF  
10 YOU ARE AN ADULT WOMAN, YOU DEFINITELY NEED FOXL2  
11 FUNCTIONING. IF YOU WANT TO STAY IN YOUR GENDER, YOU  
12 ABSOLUTELY REALLY DO. IF YOU INDUCE OR DELETE FOXL2 IN  
13 ADULT OVARIAN FOLLICLES, THIS LEADS IMMEDIATELY TO  
14 UPREGULATION OF TESTIS-SPECIFIC GENES.

15 THIS ONE GENE COULD -- ONE INFLUENCE COULD  
16 TURN A FUNCTIONAL OVARY TOWARDS A TESTIS. I THINK  
17 THAT'S A SHOCK. IT WAS A SHOCK TO ME. I'M SURE IT'S  
18 PROBABLY ILLUMINATING TO YOU, BUT I'M TALKING ABOUT THE  
19 POWER OF THESE TRANSCRIPTION FACTORS. THEY'RE ALSO  
20 REPROGRAMMING THE FOLLICLE GRANULOSA AND THECA CELLS.  
21 THESE ARE THE CELLS THE REPRODUCTION PEOPLE DEAL WITH  
22 ALL THE TIME. THESE ARE THE CELLS OF THE FOLLICLE  
23 WALL.

24 THEY TURN INTO SERTOLI-LIKE CELLS AND  
25 LEYDIG-LIKE CELLS. WHEN YOU HEAR SERTOLI AND LEYDIG,

## BARRISTERS' REPORTING SERVICE

1 THEY'RE THE PRIMARY CELLS OF THE TESTES. AND THESE  
2 FOLLICLE CELLS WILL CHANGE INTO THAT WITH TESTOSTERONE  
3 LEVELS COMPARABLE TO NORMAL XY MALES, COMPARABLE TO XY  
4 MALES, WITH THIS ONE TRANSCRIPTION FACTOR AFFECTED.

5           HERE'S SOME PICTURES. ON THE TOP LINE IS THE  
6 NORMAL SITUATION, BUT AT THE BOTTOM PANELS, THESE ARE  
7 FOLLICLE CELLS BEING TURNED INTO TESTICULAR CELLS. ON  
8 THE LEFT-HAND SIDE WHERE THE ARROW IS, THESE ARE  
9 FEATURES OF SERTOLI CELLS. AND IT'S TYPICAL WHEN YOU  
10 LOOK AT A TUBULE IN A TESTIS, YOU SEE THIS KIND OF  
11 STRUCTURE. THIS IS EXACTLY WHAT YOU SEE. AND SO THIS  
12 IS AN INCREDIBLY EFFECTIVE WAY OF CONVERTING ONE GENDER  
13 TO ANOTHER WITH JUST ONE TRANSCRIPTION FACTOR.

14           SO THE WAY IT WORKS, OF COURSE, IS QUITE  
15 COMPLEX; BUT NEVERTHELESS, IT IS FUNCTIONALLY ONE GENE,  
16 THE FOXL2 THERE. BECAUSE TRANSCRIPTION FACTORS AFFECT  
17 OTHER GENES, VERY IMPORTANT IN CONTROLLING THE GENE  
18 CALLED SOX9. AND THEY ACTUALLY OPPOSE ONE ANOTHER IN  
19 KEEPING THE GENDERS AS THEY ARE. SO THIS IS -- IN  
20 SCIENCE I NEVER THOUGHT IT WOULD GET DOWN TO ONE GENE.

21           DR. AZZIZ: I'M A LITTLE WORRIED ABOUT THE  
22 FUTURE OF HUMANITY ON ONE GENE, SO I DON'T KNOW.

23           DR. TROUNSON: THAT'S RIGHT. IT'S SORT OF  
24 ASTONISHING REALLY. SO, AGAIN, THIS IS NOT -- THIS IS  
25 HAPPENING BECAUSE WE'RE ACTUALLY BRINGING DIFFERENT

## BARRISTERS' REPORTING SERVICE

1 PARTS OF SCIENCE TOGETHER, CELL BIOLOGISTS COMING  
2 TOGETHER WITH THE MOLECULAR AND GENOMICS. AND WITHOUT  
3 THE STEM CELL SCIENTISTS, WE WOULDN'T SORT OF BE INTO  
4 THIS SPACE BECAUSE WE WOULDN'T UNDERSTAND IT. WE  
5 WOULDN'T BE ABLE TO TEST IT.

6 SO NOW, TINKERING WITH THOSE ARE ALSO THESE  
7 INCREDIBLY IMPORTANT FAMILIES OF MICRO-RNA'S. THESE  
8 ARE THE MESSENGERS THAT COME OFF THE GENOMIC DNA. AND  
9 THESE LITTLE BITS OF MICRO-RNA WERE ALWAYS THOUGHT TO  
10 BE RUBBISH AND WRONG. THAT'S REALLY WRONG. THAT'S NOW  
11 SORT OF CHANGED. AND ROBERT BLELLOCH AND HIS  
12 COLLEAGUES PUBLISHED A BEAUTIFUL PAPER IN *NATURE* ON  
13 JANUARY THE 6TH, AND THEY SHOWED THAT IN THE ABSENCE OF  
14 A PROTEIN REQUIRED FOR ONE OF THESE MICRO-RNA'S, MOUSE  
15 ES CELLS ARE UNABLE TO SILENCE SELF-RENEWAL. THEY JUST  
16 CAN'T SILENT THAT.

17 SO IF YOU LET THE MICRO-RNA'S SUPPRESS  
18 SELF-RENEWAL IN THE ABSENCE OF THAT PROTEIN, SO  
19 ESSENTIALLY THESE MICRO-RNA'S CAN CONTROL WHAT'S GOING  
20 ON WITH THE ACTION OF REALLY CRITICAL GENES. SO THEY  
21 FOUND OUT THAT THERE ARE DIFFERENT TYPES OF  
22 MICRO-RNA'S. THERE'S A FAMILY CALLED THE ESCC'S, WHICH  
23 ARE THE ES CELLS, EMBRYONIC STEM CELL CYCLE REGULATING  
24 MICRO-RNA'S. AND THESE TWO SETS OF MICRO-RNA'S  
25 INDIVIDUALLY ACTIVATE NUMEROUS SELF-RENEWAL GENES. SO

## BARRISTERS' REPORTING SERVICE

1 THEY ACT AS SORT OF A TOGGLE SWITCH IN EITHER ENABLING  
2 SELF-RENEWAL OR ENABLING DIFFERENTIATION.

3 SO WHETHER YOU COULD STAY AS AN  
4 UNDIFFERENTIATED OR WHETHER YOU CAN DIFFERENTIATE IS  
5 NOW IN THIS SORT OF TOGGLE SWITCH WITH THESE FAMILIES  
6 OF MICRO-RNA'S WHICH WERE THOUGHT TO BE NONSENSE  
7 MATERIAL, BUT THEY'RE VERY, VERY IMPORTANT.

8 SO IF YOU INHIBIT THIS LET-7 FAMILY THAT  
9 PROMOTES DEDIFFERENTIATION OF FULLY FORMED CELLS BACK  
10 TOWARDS IPS OR TO THE UNDIFFERENTIATED STATE. SO IT'S  
11 A VERY POWER -- THEY'RE POWERFUL SETS OF FACTORS AS  
12 WELL. NONE OF THESE WERE RECOGNIZED WHEN THEY STARTED  
13 TO WORK THROUGH THE GENOME BECAUSE THEY THOUGHT THESE  
14 MICRO-RNA'S WERE NOT REALLY RELEVANT.

15 SO HERE'S THE TOGGLE SWITCHING, AND IT SHOWS  
16 IF YOU WANT SELF-RENEWAL, WE REALLY NEED TO HAVE THE  
17 LET-7 FAMILY OFF. WHEN YOU WANT DIFFERENTIATION, YOU  
18 WANT THE LET-7 FAMILY ON. SO THIS TOGGLE SWITCHING  
19 ABOUT WHETHER THE CELLS ARE GOING TO BE  
20 UNDIFFERENTIATED OR FULLY DIFFERENTIATED IS REALLY  
21 QUITE CRITICAL. AND I THINK IT'S A VERY POWERFUL  
22 INFLUENCE OF FAMILIES OF THESE VERY SMALL RNA'S.

23 THERE WAS JUST A FOLLOW-UP ON SOME OTHER WORK  
24 THAT I TALKED TO YOU ABOUT A FEW MONTHS AGO. THE  
25 GENERATION AND PURIFICATION OF PHOTORECEPTOR-DERIVED

## BARRISTERS' REPORTING SERVICE

1 CELLS FROM HUMAN EMBRYONIC STEM CELLS IS PROGRESSING  
2 VERY RAPIDLY. THAT MADE IPS CELLS FROM HUMAN  
3 FIBROBLASTS. THEY'VE BEEN ABLE TO DIFFERENTIATE THEM  
4 USING THE EMBRYONIC STEM CELL DIFFERENTIATION PATHWAYS  
5 TO RETINAL PROGENITORS. THESE ARE COMPETENT TO  
6 GENERATE PHOTORECEPTORS. AND THAT'S BEEN DIFFICULT TO  
7 DO, TO ACTUALLY GENERATE THE PHOTORECEPTORS.

8 THEY PURIFIED THESE PHOTORECEPTOR FRACTIONS  
9 USING FAC SORTING WITH THE GREEN FLUORESCENT PROTEIN.  
10 AND ON TRANSPLANTATION, THESE CELLS INTEGRATED, THESE  
11 TUMOR CELLS INTEGRATED IN THE RETINAS EXPRESSED BY THE  
12 RECEPTOR MARKERS.

13 SO WHAT YOU GET IS PRETTY PICTURES WHERE IT'S  
14 SHOWN ON THE GRAPHICS WHAT THEY CALL EYE FIELD  
15 TRANSCRIPTION FACTORS. THE OLD TRANSCRIPTION FACTOR IS  
16 COMING BACK. THEY'RE THE ONES THAT ARE DRIVING THE  
17 CELLS INTO THE RETINAL CELL PHENOTYPE. AND THE  
18 PHOTORECEPTOR MARKERS ARE THE ONES WHICH YOU REALLY  
19 NEED TO PICK UP BASICALLY COLOR, BLACK AND WHITE, TO  
20 ENABLE THE STRUCTURE OF SIGHT TO BE INTEGRATED IN A WAY  
21 WHICH YOU CAN SEE. IT'S NO USE JUST HAVING LIGHT AS A  
22 RECEPTOR. YOU'VE GOT TO HAVE THE WHOLE PHOTORECEPTOR  
23 POPULATION. IT'S CLEAR THAT THESE ARE THERE.

24 SO, YOU KNOW, WE ARE NOW PUSHING ON WITH OUR  
25 WORK WITH SUPPORTING MACULAR DEGENERATION. AND I'M

## BARRISTERS' REPORTING SERVICE

1 FEELING MORE AND MORE CONFIDENT THAT THOSE STUDIES WILL  
2 RESULT IN TREATMENTS WHICH, I THINK, WILL BE EFFECTIVE.  
3 WHETHER IT'S FROM EMBRYONIC STEM CELLS OR THE IPS  
4 CELLS, I AM A LITTLE UNSURE. THE EMBRYONIC STEM CELLS  
5 ARE CLEARLY IN FRONT AT THE MOMENT, BUT THE IPS CELLS  
6 AT THE RATE MAY BE CATCHING UP. SO IT'S REALLY, REALLY  
7 INTERESTING.

8 SO I WANTED TO SORT OF EMPHASIZE THAT WHAT  
9 THESE SCIENTISTS ARE DOING ARE REALLY CHANGING THE  
10 SCOPE OF WHERE WE ARE IN THE SCIENCE. AND IT'S REALLY  
11 GOING TO CHANGE OUR OPPORTUNITIES, FOR SURE. BUT THE  
12 OLD SORT OF -- THE OLD ATTITUDES OF HOW THE GENOME  
13 WORKS, HOW THE CELLS FUNCTION, THAT'S BEEN SORT OF  
14 CHANGED OVERNIGHT. AND UNDERNEATH OUR FEET ARE THESE  
15 SHIFTING SANDS OF CHANGE ALL THE TIME. EVERY TIME I  
16 LOOK AT THESE JOURNALS, I'M ACTUALLY ASTONISHED AT  
17 WHAT'S HAPPENING. I DON'T KNOW ABOUT YOU, BUT I FEEL  
18 INVIGORATED, BUT I FEEL SURPRISE FREQUENTLY AT WHAT CAN  
19 HAPPEN.

20 WELL, WE'VE ALL BEEN BUSY ON A LOT OF  
21 DIFFERENT ISSUES, AND WE'VE DRIVEN THE STAFF TOTALLY TO  
22 DISTRACTION. IN AUSTRALIA THIS IS MEANT TO BE A QUIET  
23 HOLIDAY TIME DOWN THE BEACH WITH FRIENDS. IT'S JUST  
24 BEEN CHAOTIC WITH US. WE'VE JUST BEEN PUSHING SO HARD  
25 BECAUSE THERE'S A VERY BRIEF RESPITE, CHRISTMAS TO NEW

## BARRISTERS' REPORTING SERVICE

1 YEAR. I DON'T THINK PEOPLE HAD MUCH TIME OFF AT ALL,  
2 MR. CHAIRMAN, AND THEY'VE BEEN WORKING EXTRAORDINARY  
3 HOURS.

4 BUT WE'VE BEEN BUSY ON A NUMBER OF VERY  
5 IMPORTANT THINGS. AND THE VICE PRESIDENT R & D SEARCH,  
6 I'LL MENTION THAT IN A LITTLE MORE DETAIL IN THE  
7 FOLLOWING SLIDE. WE'RE GETTING THERE WITH THAT.

8 WE'VE HAD GRANT ISSUES THAT WE'VE BEEN  
9 FOLLOWING THROUGH. SOME OF THESE THINGS ARE GENERATED  
10 INTERNALLY; SOME OF THEM ARE GENERATED BY INTERESTS OF  
11 THE ICOC MEMBERS. SO WE LOOKED AT THE CALIFORNIA  
12 SCIENTIFIC LEADERSHIP PREAPPLICATION PROCESSES. WE'RE  
13 DATA GATHERING FOR REVIEW OF EXTRAORDINARY PETITIONS.  
14 SO WE'RE GATHERING INFORMATION HERE TO TRY AND FIND OUT  
15 WHAT OTHER PEOPLE DO, HOW WILL OUR SCIENTISTS RESPOND,  
16 WHAT DO THEY NEED, WHAT CAN WE DO THAT DOESN'T ELONGATE  
17 THE PROCESS TOO MUCH SO THAT WE COME BACK WITH SOME  
18 SUGGESTIONS OR RECOMMENDATIONS THAT THEY SHOULDN'T  
19 REALLY IMPACT ON OUR ABILITY TO GET THE JOB DONE.

20 SUBMISSION OF NEW DATA PRIOR TO REVIEW, AND  
21 GIL WILL SPEAK TO YOU ON SOME OF THESE BECAUSE IT'S  
22 REALLY VERY INTERESTING. WE TRIED THIS OUT ONCE.  
23 WE'VE HAD A RESPONSE. I THINK IT'S BEEN INTERESTING.  
24 HE'LL TELL YOU HOW IT'S WORKED.

25 WE'VE BEEN LOOKING AT AGGREGATED PERCENT

## BARRISTERS' REPORTING SERVICE

1 EFFORT OF PI'S. WE THINK THESE THINGS NEED TO BE KEPT  
2 IN CHECK BECAUSE SOME PEOPLE GET JUST OVERWHELMED WITH  
3 AMBITION AND I THINK POSSIBLY GET TOO MUCH ON THEIR  
4 PLATE. AND SO WE'RE GOING TO NEED TO COME BACK AND  
5 TALK TO YOU AND OTHERS, CERTAINLY TALK TO SOME PI'S.

6 INDUSTRY PRESENCE ON THE GRANTS WORKING  
7 GROUP, WE THINK THERE'S ROOM FOR THIS. THERE'S A BIG  
8 CALL FOR IT FROM THE INDUSTRY. WE'RE MEETING WITH BOTH  
9 THE KEY SCIENTISTS AND THE INSTITUTES, ALL THE  
10 INSTITUTES. WE MEET WITH THEM REGULARLY. AND WE'RE  
11 MEETING NOW WITH THE BIOTECH INDUSTRY, TRYING TO GET A  
12 FEEL FOR WHAT THEY THINK IS IMPORTANT, WHAT WE CAN DO  
13 FOR THEM THAT WILL CARRY OUR MISSION FURTHER AND  
14 FASTER.

15 WE'VE BEEN REALLY WORKING HARD ON LOANS AND  
16 COMPANY ISSUES, SO CIRM REGULATION. AND ELONA HAS BEEN  
17 AND DUANE HAVE KIND OF HAD ALMOST A MARRIAGE OVER THIS,  
18 I THINK. THEY'RE SPEAKING NEARLY EVERY DAY ON THE  
19 MATTER. AND I'VE BEEN TRYING TO FOLLOW, AND I THINK  
20 OTHERS HAVE BEEN TRYING TO FOLLOW THE PROCESSES HERE.  
21 BUT WE'RE ALSO INTERACTING WITH INDUSTRY, TRYING TO GET  
22 A FEEDBACK FROM THEM ABOUT THE LOANS. WHAT ARE REAL  
23 DIFFICULTIES AND WHAT CAN WE DO TO MAKE IT USEFUL TO  
24 THEM? AND TURN THE FEEDBACK INTO OUR OWN PROCESSES TO  
25 MAKE THE LOANS EFFECTIVE, BUT USEFUL.

## BARRISTERS' REPORTING SERVICE

1 WE'VE GOT A LOT OF THE INTERNATIONAL  
2 AGREEMENTS AND PROJECT MONITORING. SO THE WAY WE  
3 MONITOR THESE COMBINED PROJECTS AND NOW HAVE AGREEMENTS  
4 WITH ALL OUR OVERSEAS COLLABORATING PARTNERS OF  
5 MONITORING, A SENSIBLE MONITORING PROCESS. AND NANCY  
6 KOCH HAS BEEN REALLY TERRIFIC AT HELPING WITH THAT.  
7 WE'RE GETTING THERE. WE'RE STARTING FINAL NEGOTIATIONS  
8 WITH SOME STATES NOW. WE HAVE AN AGREEMENT WITH ONE  
9 STATE, AND WE'RE LOOKING FURTHER TO COMPLETE SOME  
10 NEGOTIATIONS WITH THREE OTHER STATES. THAT WOULD GIVE  
11 THEM THE ABILITY FOR THEIR SCIENTISTS AND THEIR BIOTECH  
12 INDUSTRY TO CO-APPLY WITH OUR CALIFORNIA SCIENTISTS.  
13 AND IT LOOKS LIKE A VERY EFFECTIVE MECHANISM FOR  
14 INCREASING OUR CAPACITY AND THE ABILITY OF OUR  
15 SCIENTISTS.

16 THE SCIENTISTS REALLY SORT OF MOVE VERY  
17 QUICKLY TO EMBRACE THIS, AND IT'S BEEN VERY GOOD. AND  
18 I THINK THE OTHER STATES AND THE OTHER COUNTRIES ARE  
19 FEELING EXTREMELY POSITIVE ABOUT IT DESPITE SOME  
20 ECONOMIC GLOOM ON THE HORIZON. AND IN CASE FOR THEM,  
21 SOME STATES IN EUROPE, THEIR ECONOMIES ARE VERY  
22 SUPPRESSED, DEPRESSED AT THE MOMENT, BUT THEY'RE STILL  
23 SHOWING A STRONG DESIRE TO SORT OF WORK WITH THE  
24 SCIENTISTS HERE IN CALIFORNIA. SO IT'S GREAT. I HOPE  
25 THERE WILL BE MORE OF THOSE COLLABORATIVE GRANTS

## BARRISTERS' REPORTING SERVICE

1 BECAUSE IT'S A GLOBAL WORLD. AND IF WE CAN AFFECT THE  
2 BEST SCIENTISTS FROM AROUND THE WORLD, JOIN THEM  
3 TOGETHER, I THINK WE'LL JUST GET A MUCH BETTER PRODUCT.

4 WE HAVE PATENT ISSUES. IT'S INTERESTING.  
5 AND I THINK MEMBERS OF THE UNIVERSITY WOULD HAVE A VIEW  
6 HERE. BUT THE SCIENTISTS FEEL THAT THE UNIVERSITIES  
7 ARE STRAPPED. THEY'RE PRETTY HARD-PRESSED AT THE  
8 MOMENT. I THINK THAT'S RIGHT. AND SO ONE OF THE  
9 THINGS THAT MIGHT SUFFER IN THIS SITUATION IS REALLY  
10 BEING ABLE TO PATENT AT A TOTALLY OPTIMUM RATE. SO  
11 WE'RE THINKING INTO THIS SPACE, AND I'M WORKING WITH  
12 GENERAL COUNSEL AND WITH THE CHAIR AND WITH OTHER  
13 PEOPLE TO SORT OF SEE IF WE CAN DO SOMETHING HERE  
14 BECAUSE I WANT TO SEE IF WE CAN ENJOIN OURSELVES TO  
15 HELP IN THAT SITUATION, BUT ALSO HELP US MAKE  
16 CONNECTION WITH THE NEXT PHASE OF OUR DISEASE TEAMS,  
17 WHICH ARE THE SORT OF BIGGER BUSINESSES THAT ARE OUT  
18 THERE THAT WILL HELP TAKE SOME OF THOSE PROJECTS RIGHT  
19 THROUGH TO PHASE III AND PHASE IV.

20 SO THERE ARE SOME OPPORTUNITIES HERE, AND I'M  
21 SENSITIVE TO -- THESE ARE DISCUSSIONS I NEED WITH THE  
22 UNIVERSITIES, BUT I THINK THEY'RE IMPORTANT ISSUES.  
23 AND I'M CERTAIN THEY'RE THINGS WE WANT TO DO SOMETHING  
24 ABOUT IN THE NEAR TERM BECAUSE THIS ECONOMY, I DON'T  
25 THINK, IS GOING TO TURN AROUND AS RAPIDLY AS EVERYONE

## BARRISTERS' REPORTING SERVICE

1 WOULD HOPE. I MEAN I WISH IT WAS GOING TO DO THAT, BUT  
2 IT'S CLEAR TO ME, TO ME ANYWAY, IT'S NOT GOING TO TURN  
3 AS QUICKLY AS WE HAD HOPED. THEREFORE, WE NEED TO GET  
4 IN AND HELP THIS PARTICULAR ISSUE. THAT'S TO PROTECT  
5 THE INTERESTS OF CALIFORNIA ESSENTIALLY, BUT ALSO  
6 UNIVERSITIES AND OUR SCIENTISTS AND OUR BIOTECH  
7 COMPANIES.

8 SO WE'VE BEEN WORKING WITH NETWORKS BETWEEN  
9 THE SCIENCE AND INDUSTRY. IT'S A CONTINUAL DISCUSSION  
10 THERE. HOW CAN WE DO THIS BETTER? CAN WE ENCOURAGE  
11 SOME OF THE BIOTECH INDUSTRY TO BECOME PARTNERS WITH  
12 THE ACADEMICS? AND THAT LOOKS LIKE A FUNCTIONING  
13 RELATIONSHIP. IT'S LOOKING BETTER AND BETTER. THE  
14 COMPANIES ARE COMING ALONGSIDE THE ACADEMICS. THE  
15 ACADEMICS HAVE GOT THE INNOVATION WHICH IS NEEDED IN  
16 THIS SPACE BECAUSE FDA CAN'T REALLY TELL US EXACTLY  
17 WHAT THE PATHWAY IS. THERE'S GOT TO BE A LOT OF  
18 THINKING ABOUT IT, BUT WE WANT ATTENTION TO MILESTONES  
19 AND GO/GO-NO DECISIONS. WE NEED TO GET THERE. SO A  
20 COMBINATION OF THE TWO IS A VERY FAVORABLE SITUATION.  
21 IF YOU LOOK AT THE DISEASE TEAMS, SOME OF THOSE ARE  
22 PERFORMING EXTRAORDINARILY WELL, AND OFTEN THEY HAVE  
23 THIS PARTNERSHIP OF A COMPANY TOGETHER WITH THE  
24 ACADEMIC INSTITUTION.

25 SO YOU'RE LEARNING -- PEOPLE ARE LEARNING IN

## BARRISTERS' REPORTING SERVICE

1 THIS SPACE MOVING FORWARD. I MET WITH SOME OF THE  
2 COMPANIES THAT ARE DOING THAT, AND THEY REALLY FEEL  
3 INVIGORATED. THEY REALLY DO. THEY'RE FEELING VERY,  
4 VERY HYPED UP. THEY LIKE THE RELATIONSHIP, AND THEY  
5 DON'T FEEL THAT THEY'VE ALWAYS GOT TO ARGUE THAT THE  
6 NEXT MILESTONE IS THEIR TOP CAP; AND IF THEY DON'T GET  
7 THE NEXT MILESTONE, THE MONEY WON'T APPEAR. IT'S A  
8 BETTER RELATIONSHIP IN THAT TOUGH-GOING PROGRAM.

9 WE HAVE A DIALOGUE WITH THE INDUSTRY AND THE  
10 FDA, ENHANCING SUCCESS OF THE STEM CELL PIPELINE. I'VE  
11 HAD A VERY BRIEF DISCUSSION WITH JEFF SHEEHY AND  
12 OTHERS. I THINK IT'S TIME FOR PATIENT ADVOCATES TO  
13 BECOME INVOLVED. THERE IS, I'M SURE, A RISK AVERSENESS  
14 SOMEWHERE IN THE SYSTEM. I THINK WE'VE GOT MOSTLY OUR  
15 PLURIPOTENTIAL STEM CELL PROJECTS ARE ALL ON HOLD THAT  
16 HAVE GOT UP TO IND, THEY'RE ON HOLD FOR VARIOUS  
17 REASONS. THEY MAY BE VERY SENSIBLE REASONS, PERFECTLY  
18 REASONABLE, BUT I THINK IT'S TIME. IT'S KIND OF TOO  
19 LATE TO WAIT FOR A WHOLE LOT OF PROJECTS TO GET UP TO  
20 AN IND AND WE CAN'T GET THEM THROUGH THE SPACE BECAUSE  
21 THE PATIENT ADVOCATES REALLY HAVEN'T HAD AN INPUT.

22 AND I'VE GOT FEEDBACK FROM ALL OF THE  
23 GOVERNMENT AND THE FDA, ALL PLACES, SO IT'S THE RIGHT  
24 TIME NOW. WHAT JEFF AND COLLEAGUES DID FOR SOME OTHER  
25 CAUSES WAS REALLY CRITICAL IN GETTING IT TO HAPPEN.

## BARRISTERS' REPORTING SERVICE

1 AND SO I THINK THERE'S AN OPPORTUNITY HERE FOR PATIENT  
2 ADVOCATES TO REALLY HAVE AN IMPACT NOW. IT'S TIME.  
3 SO I'VE GOT THAT MESSAGE. WE'VE STARTED A DIALOGUE,  
4 AND HOPEFULLY WE'LL HAVE SOME -- HAVE THAT PERSPECTIVE  
5 INCLUDED.

6 WE'RE HAVING A CIRM EXTERNAL REVIEW. I'VE  
7 BEEN WORKING WITH THE CHAIR ON THIS AT THE MOMENT.  
8 WE'VE GOT A TERRIFIC POTENTIAL GROUP OF PEOPLE, VERY  
9 HIGH CALIBER PEOPLE. WE JUST WANT TO SORT OF CHECK OUT  
10 THE STRUCTURES AND HOW WE'RE GOING TO DO IT SO THAT WE  
11 CAN ASK IN A REASONABLE WAY WOULD THEY BE WILLING TO  
12 GIVE UP A WHOLE WEEK OF THEIR TIME TO DO IT. SO WE'RE  
13 GETTING CLOSER. I THINK WE'RE NOT FAR AWAY NOW BOB AND  
14 ME APPROACHING THEM TO SEE IF THEY WILL DO IT. IF WE  
15 GET THE CALIBER OF THOSE PEOPLE, I THINK WE'LL HAVE A  
16 WONDERFUL JOB DONE. IT WILL BE A BIG INTERROGATION BY  
17 REVIEW, BUT IT WILL BE DONE BY PEOPLE WHO HOLD THE  
18 HIGHEST QUALITIES IN THE COMMUNITY.

19 THERE'S CIRM ECONOMIC STIMULUS ISSUES THAT  
20 JOHN ROBSON HAS BEEN CARRYING. THAT'S VERY  
21 INTERESTING. WE HOPE TO GET A REPORT TO YOU SOON. THE  
22 ONE CLINICAL TRIAL THAT HAPPENED IN SAN DIEGO WITH THE  
23 POLYCYTHEMIA VERA HAS BEEN INTERROGATED RIGHT INTO THE  
24 DEPTHS. AND I HAVE TO SAY I'M VERY IMPRESSED WITH THE  
25 JOB THAT THAT GROUP HAVE DONE ON THAT. AND WE'RE

## BARRISTERS' REPORTING SERVICE

1 HAVING SOME EXTERNAL INDEPENDENT PEOPLE DO A CRITIQUE  
2 OF IT WITH THE GROUP THAT'S DONE IT TO MAKE SURE THAT  
3 THERE ISN'T SOMETHING MISSING THAT'S NOT OBVIOUS TO US  
4 INTERNALLY. WE'VE BEEN THROUGH IT A NUMBER OF TIMES.

5 IT LOOKS LIKE A GREAT MULTIPLIER OF  
6 INFLUENCE. AND IF WE CAN KEEP DOING THESE SORT OF  
7 THINGS, THE VALUE FOR CALIFORNIA WILL BE EXTRAORDINARY,  
8 WILL REALLY BE EXTRAORDINARY. AND I THINK WE'VE ONLY  
9 GOT TO BE ABLE TO BE SUCCESSFUL IN A CERTAIN MINIMUM  
10 NUMBER TO REALLY RETURN THE VALUE OF THE BOND MONEY  
11 BACK TO CALIFORNIA. I THINK WE'LL BE ABLE TO  
12 DEMONSTRATE THAT VERY ADEQUATELY.

13 SO WE'VE GOT ON THE FRONT NOW MODELS THAT ARE  
14 EVOLVING FROM THESE STUDIES THAT WE CAN ACTUALLY INSERT  
15 THE NEXT CONDITION INTO AND APPLY IT. WE CAN ALSO LOOK  
16 AT JOB CREATION AND THE OTHER BENEFITS TO THE COMMUNITY  
17 AS WE'RE MOVING FORWARD. SO I THINK YOU WILL BE  
18 INTERESTED IN THAT. IT'S OFTEN SAID, WELL, WHAT ARE  
19 YOU DOING? WHAT SORT OF IMPACT ARE YOU HAVING? WELL,  
20 WE'RE ONLY THREE YEARS OLD. THERE'S SOME IMPACT  
21 ALREADY, AND IT'S QUITE -- YOU WILL FIND IT QUITE  
22 INTERESTING.

23 THERE ARE DEVELOPMENT PORTFOLIO ISSUES. I'M  
24 GOING TO ASK DR. OLSON TO PRESENT THAT TO THE ICOC IN  
25 APRIL. AGAIN, IT'S SOMETHING I WANT US -- I SPOKE

## BARRISTERS' REPORTING SERVICE

1 BRIEFLY AGAIN TO JEFF SHEEHY ABOUT AND I'VE TALKED TO  
2 THE CHAIR ABOUT. THESE ARE COMPLICATED MATTERS, BUT  
3 THEY REALLY -- WE NEED SOME REFLECTION ABOUT HOW WE  
4 POSITION OUR PROGRAMS IN ORDER TO GET THE BEST OUT.  
5 HOW CAN WE FUND A PROJECT AND MAKE SURE A SUCCESSFULLY  
6 FUNDED PROJECT CAN GET THROUGH? EVERY TIME WE LOOK AT  
7 IT IN AN INDEPENDENT REVIEW, IT MAY NOT BE CHOSEN THE  
8 NEXT TIME. SO WE NEED TO HAVE THOUGHTS ABOUT THE  
9 CONTINUITY OF SOME OF THE PROJECTS SO THAT THEY GO TO  
10 THE END, THEY GO TO THE CLINIC. AND WE ALSO NEED TO BE  
11 THOUGHTFUL ABOUT HOW MANY EQUIVALENT PROJECTS WE  
12 SHOULD, ONES THAT ARE IDENTICAL OR CLOSE, VERY CLOSELY  
13 RELATED, WHETHER WE SHOULD, YOU KNOW, LOOK TOWARDS  
14 DROPPING ONE OF THEM OR NOT, NOT NECESSARILY SELECTING  
15 TWO THAT ARE EXACTLY THE SAME OR THREE OF THE SAME OR  
16 FOUR OF THE SAME.

17 SO THESE ARE PROGRAMMATIC ISSUES, AND I THINK  
18 WE'VE GOT TO DRILL INTO THAT. SO WE WANT TO GET THOSE  
19 MEMBERS OF THE BOARD. WE'RE ONLY SORT OF STARTING THIS  
20 DIALOGUE WITH MEMBERS OF THE BOARD, BUT CLEARLY WE'VE  
21 BEEN THINKING ABOUT IT IN MANAGEMENT AND HOW WE'RE  
22 GOING -- WHAT WE WOULD DO IN TERMS OF GENERATING SOME  
23 INFORMATION ON IT.

24 SO OPPORTUNITIES FOR PLURIPOTENTIAL STEM CELL  
25 TRIALS, THERE ARE CLEARLY, AS I SAID, A NUMBER OF IND'S

## BARRISTERS' REPORTING SERVICE

1 IN THIS AREA, MOST OF THEM CURRENTLY ON HOLD, BUT A  
2 NUMBER OF THEM EXPECT TO BE OFF HOLD THIS YEAR. AND I  
3 THINK IT'S TIME THAT WE TEST THE WATER WHETHER WE  
4 SHOULD BE INVOLVED OR NOT. THAT REALLY MEANS THAT WE  
5 SHOULD HAVE A CLINICAL RFA. WHETHER WE DO OR WE DON'T,  
6 I THINK, IS UP TO THE REVIEW PANEL IN DUE COURSE TO  
7 DECIDE WHETHER WE SHOULD OR SHOULDN'T. BUT I THINK THE  
8 OPPORTUNITY NOW WITH A NUMBER OF THEM AT IND, TO KNOW  
9 WHETHER WE SHOULD BE PART OF THOSE GOING THROUGH. AND  
10 THERE'S CERTAINLY MANY OF THEM REALLY SEEKING OUR HELP.  
11 SO I THINK IT'S TIME TO CONSIDER THAT. SO WE'LL BRING  
12 SOMETHING FORWARD AT THE NEXT MEETING. WE WEREN'T  
13 REALLY READY FOR THIS MEETING TO DO IT.

14 WE'RE LOOKING AT REGULATORY PATHWAY ISSUES TO  
15 STEM CELL THERAPIES. THIS IS A COMPLICATED AREA. THE  
16 FDA ARE WANTING MARKERS OF THE CELLS AND THE CULTURE  
17 FOR EFFICACY, AND WE DON'T KNOW. WE'RE ONLY INTO  
18 ANIMAL STUDIES, SO WE CAN'T TELL WHAT A MARKER COULD BE  
19 IN A HUMAN, BUT THEY'RE WANTING THAT. SO THERE'S A LOT  
20 OF STRESS AND STRAIN IN THE SPACE, BUT WE'RE ALSO  
21 LOOKING WHERE WE CAN MAYBE STIMULATE SOME OF OUR BASIC  
22 SCIENCE TO HELP IN CREATING SOME OF THESE TESTS. SO  
23 THAT STRESS AND STRAIN, I'M HOPEFUL, WILL REALLY BE  
24 CONSTRUCTIVE. AND IF WE CAN GO TO SOME OF OUR INDUSTRY  
25 AND SUGGEST WHAT THE NEEDS, WE NEED TESTS FOR THIS,

## BARRISTERS' REPORTING SERVICE

1 THAT, AND THE OTHER, AND THIS IS THE BASIS OF IT. WILL  
2 YOU BRING THIS FORWARD IN SOME OF OUR TOOLS AND  
3 TECHNOLOGY OR BASIC BIOLOGY, I THINK WE'LL BECOME MORE  
4 EFFECTIVE AND HELP THE FDA FEEL MORE EFFECTIVE.

5 SO THE UPCOMING GRANT REVIEWS, WE HAVE ONE IN  
6 BASIC BIOLOGY II. THERE ARE 56 APPLICATIONS INVITED.  
7 THE DEADLINE IS ON THE 8TH OF DECEMBER. THE GRANTS  
8 REVIEW IS HAPPENING ON THE 23D OF FEBRUARY, THIS MONTH,  
9 AND WILL COME TO THE ICOC IN APRIL.

10 THERE ARE NUMBER OF OTHERS, THE STEM CELL  
11 TRANSPLANTATION AND IMMUNOLOGY, THE REVIEW IS SLATED  
12 FOR APRIL 8TH AND 9TH AND WILL COME TO THE ICOC ON JUNE  
13 22D, 23D. THE NUMBER OF GRANTS THAT WENT FORWARD IN  
14 THAT, PAT OR GIL, HOW MANY? FORTY-FOUR GRANTS. THESE  
15 WERE GRANTS JEFF AND OTHERS OFTEN RAISED HIS INTEREST  
16 IN THIS AREA, AND I'VE ALWAYS HAD A STRONG INTEREST IN  
17 IMMUNOLOGY AND TOLERANCE AND SO FORTH. I HAVEN'T READ  
18 THE GRANTS AT THIS STAGE AT ALL, SO I DON'T REALLY  
19 KNOW, BUT I HEAR FROM STAFF THERE'S SOME VERY GOOD  
20 STUDIES BEING BROUGHT FORWARD.

21 LET'S HOPE THAT THAT HAS AN IMPACT. AND BE  
22 INTERESTED IN THAT REVIEW.

23 CHAIRMAN KLEIN: DR. TROUNSON, COULD YOU  
24 COMMENT ON THE INTERNATIONAL COLLABORATION ON  
25 IMMUNOLOGY AND, SECONDLY, ON THE RESEARCH LEADERSHIP

## BARRISTERS' REPORTING SERVICE

1 AWARDS, THE OTHER APPLICATION DATES THAT ARE  
2 APPROPRIATE AND ALREADY ANTICIPATED?

3 DR. TROUNSON: OKAY. THE COLLABORATIVE  
4 PARTNERS IN THE IMMUNOLOGY ARE VICTORIA IN AUSTRALIA  
5 WHERE THERE IS A WEALTH OF IMMUNOLOGISTS, PARTICULARLY  
6 IN MELBOURNE, WELL-KNOWN NOBEL PRIZES IN IMMUNOLOGY.  
7 IT'S A VERY GOOD PLACE. BUT ALSO IN GERMANY. GERMANY  
8 ARE THE OTHER PARTNERS IN THE IMMUNOLOGY PROGRAM. SO I  
9 THINK THERE WERE SIX, THREE AND THREE. SO SIX OF THE  
10 PROJECTS HAD THOSE INTERNAL PARTNERSHIPS.

11 THE RESEARCH LEADERSHIP AWARDS, I THINK IT'S  
12 A QUARTERLY DEADLINE. AM I RIGHT, MICHAEL?

13 DR. YAFFE: ONE IN JUNE AND ONE IN SEPTEMBER  
14 AND ONE IN DECEMBER.

15 DR. TROUNSON: ONE IN JUNE, ONE IN SEPTEMBER,  
16 AND DECEMBER. SO I KNOW THERE'S A LOT OF TALK OUT  
17 THERE. I'VE HEARD A LOT OF CRITICISM FROM INSTITUTIONS  
18 OUTSIDE OF CALIFORNIA, WHICH YOU MIGHT EXPECT. NOT TO  
19 TAKE, THEY'RE VERY GOOD PEOPLE. THERE'S A LOT OF  
20 INTEREST CLEARLY OUT THERE IN THESE AWARDS, AND WE'RE  
21 HOPING TO SEE SOME OF THEM PERCOLATE THROUGH IN A  
22 QUARTERLY FASHION.

23 SO I'M NOT SURE WHETHER WE CAN DO IT MORE  
24 FREQUENTLY THAN THAT. BOB ASKED ME A QUESTION JUST  
25 BEFORE. I KNOW WE HAVE THIS QUARTERLY PROGRAM, AND WE

## BARRISTERS' REPORTING SERVICE

1 TALKED -- I THINK WE TALKED AROUND THIS TABLE THAT IT  
2 WAS -- THAT WOULD BE EFFECTIVE ENOUGH FOR THE  
3 INSTITUTIONS. IF YOU CAN'T MAKE ONE, YOU WILL  
4 CERTAINLY BE READY FOR THE NEXT ONE. AND I THINK ON  
5 THAT BASIS, WE CAN SATISFY MOST OF THE INSTITUTIONS. I  
6 NOTE DAVID AND SAM ARE NODDING THERE, SO IT'S PROBABLY  
7 RIGHT. CAN'T SEE CLAIRE. I THINK IT PROBABLY WORKS.  
8 BUT WE'LL BE INTERESTED TO SEE WHAT HAPPENS HERE.

9 EARLY TRANSLATIONAL II, POSTING THE RFA THIS  
10 MONTH, RECEIPT OF PREAPPLICATIONS WILL BE IN MARCH,  
11 FULL APPLICATIONS IN JUNE, REVIEW IN SEPTEMBER.

12 TOOLS AND TECHNOLOGIES AND BOTTLENECKS, SO  
13 THESE, CONCEPT CLEARANCE WILL COME TO TIME AT THIS  
14 MEETING. SO WE'LL BE INTERESTED IN YOUR VIEWS ABOUT  
15 THE CONCEPT WE'RE PUTTING TO YOU.

16 THE CLINICAL PROGRAM THAT I MENTIONED BEFORE,  
17 WE'LL BRING THE CONCEPT TO YOU IN THE MARCH MEETING.

18 I JUST WANTED TO REMIND YOU. THIS IS A LIST  
19 OF WORKSHOPS THAT WE'VE GOT GOING AND IT'S FEARSOME,  
20 BUT INTERESTING. SO THERE'S A CIRM DIVERSITY WORKSHOP  
21 AT DREW UNIVERSITY THIS MONTH. SO WE'RE HOPING THAT WE  
22 GET PEOPLE FROM THE BOARD THERE. ART TORRES IS THE  
23 CHAIR, AND SO HE'S GOT THE RESPONSIBILITY OF KEEPING  
24 ORDER IN THIS GROUP. SO ANY INTEREST, HE'S VERY  
25 STIMULATING ABOUT WHAT'S GOING TO HAPPEN. SO TALK TO

## BARRISTERS' REPORTING SERVICE

1 HIM ABOUT IT.

2 WE HAVE A CIRM GRANT WRITING WEBINAR ON MARCH  
3 THE 3D. THIS IS MEANT TO HELP OUR PEOPLE WRITING  
4 GRANTS. WE DECIDED THE BEST WAY TO MAKE IT ACCESSIBLE  
5 TO INDUSTRY AND ACADEMIA IS TO DO IT BY WEBINARS.

6 WE HAVE A GRANTEE MEETING IN SAN FRANCISCO ON  
7 MARCH THE 3D TO THE 5TH, AND WE'RE HOSTING A  
8 GERMAN-CIRM COLLABORATION GROUP THE DAY AFTER THAT CIRM  
9 GRANT MEETING. WE HAVE A SCIENCE COLLABORATION WITH  
10 MARYLAND, THAT WE'RE GOING TO MARYLAND IN MARCH 11TH  
11 AND 12TH. SO WE'RE GOING OUT TAKING A GROUP OF  
12 CALIFORNIANS OVER TO MARYLAND TO MEET THEM IN THERE,  
13 AND THAT'S TO SEE IF WE CAN ENJOIN THEIR UNIVERSITIES,  
14 BUT ALSO THEIR BIOTECH INDUSTRIES THERE. THEY'VE GOT  
15 SOME VERY INTERESTING TECHNOLOGIES. I THINK THERE'S  
16 GREAT OPPORTUNITIES IN THAT SPACE.

17 THERE'S A CIRM CONSORTIUM FDA WEBINAR FOR  
18 APRIL THIS YEAR. SO IN APRIL WE'RE DOING A WEBINAR.  
19 THAT WILL BE THE FIRST WEBINAR WITH THE FDA. SO THAT  
20 WILL BE, AGAIN, AVAILABLE TO EVERYBODY TO BE INVOLVED.

21 AND WE'RE HAVING MRC-CIRM SCNT, SOMATIC CELL  
22 NUCLEAR TRANSFER, PATHOGENESIS WORKSHOP IN SAN  
23 FRANCISCO ON JUNE THE 13TH AND 14TH. AND SO WE WANT --  
24 WE'LL HOPEFULLY GET SOME OF THE PEOPLE WHO ARE  
25 INTERESTED IN SCNT THERE BECAUSE WE'RE ASKING ALL THE

## BARRISTERS' REPORTING SERVICE

1 TOP PEOPLE FROM AROUND THE WORLD TO COME TOGETHER AND  
2 REALLY DRILL INTO THIS METHOD AND TECHNOLOGY AND TELL  
3 US WHERE WE ARE, WHAT ARE THE OPPORTUNITIES, IS IT  
4 YESTERDAY'S STORY, OR WE'VE GOT GREAT OPPORTUNITIES  
5 GOING FORWARD. AND I THINK IT WILL BE ONE OF THE MORE  
6 STIMULATING ONES, AND I THINK THERE'S SOME VERY GOOD  
7 PEOPLE THAT THE STAFF HAVE ORGANIZED TO COME AND REALLY  
8 KEY PEOPLE THROUGHOUT THE WORLD. AND THE UK, OF  
9 COURSE, THEY'VE ALWAYS BEEN VERY ACTIVE IN THIS AREA,  
10 AND THE MRC IS SUPPORTING THIS WORKSHOP.

11 THEN WE HAVE THE INTERNATIONAL STEM CELL  
12 RESEARCH SOCIETY MEETING IN SAN FRANCISCO JUNE 16TH TO  
13 19TH. BUT THE DAY BEFORE THAT MEETING, WE HAVE A  
14 CLINICAL TRIALS REGULATORY HARMONIZATION WORKSHOP. AND  
15 SO THIS IS BRINGING ALL THE REGULATORY BODIES FROM  
16 AROUND THE WORLD TOGETHER, TOGETHER WITH THE PEOPLE WHO  
17 ARE DOING THE CELL THERAPIES, AND WE'RE ASKING FOR THE  
18 POSITIVES AND THE NEGATIVES. AND WHAT ARE WAYS IN  
19 WHICH WE CAN HARMONIZE THESE REGULATIONS THAT ARE NOW  
20 GROWING UP IN DIFFERENT PLACES, CHINA, EUROPE, JAPAN,  
21 ALL OVER THE WORLD, AND SEE IF WE CAN GET SOME RATIONAL  
22 HARMONIZATION AS PART OF IT.

23 IT'S BEEN A VERY GOOD RESPONSE. ELONA BAUM  
24 HAS BEEN REALLY HELPING VERY MUCH WITH THAT WORKSHOP,  
25 AND IT'S BEEN DRIVEN VERY HARD BY THE ISSCR, AND IT

## BARRISTERS' REPORTING SERVICE

1 DOES INCLUDE THE STEM CELL THERAPEUTIC ORGANIZATION,  
2 WHICH IS BIG IN TRANSPLANTATION AS WELL. SO IT SHOULD  
3 BE A QUITE INTERESTING WORKSHOP THAT PARTICULAR ONE.

4 WE'VE GOT A CHINA-CIRM SCIENCE COLLABORATION  
5 MEETING ON JUNE 20TH, SO IMMEDIATELY AFTER THAT. AND  
6 WE'RE MEETING WITH SPAIN AND THE NETHERLANDS LATER IN  
7 THE YEAR. YOU CAN SEE THAT THE WORKSHOPS ARE OCCUPYING  
8 QUITE A BIT OF SPACE, BUT I WANTED TO BRING IT TO YOUR  
9 ATTENTION BECAUSE ONE OR OTHER AND SOME PEOPLE, VARIOUS  
10 PEOPLE, WILL BE INTERESTED IN SOME OF THESE WORKSHOPS.  
11 BUT THEY'RE MEANT TO BE ENHANCING OUR MISSION, AND I  
12 THINK IT FAVORS THAT WAY.

13 CHAIRMAN KLEIN: DR. TROUNSON, ON THE CHINA  
14 WORKSHOP, IF YOU COULD RELATE FOR THE BOARD AND THE  
15 PUBLIC THE LEVEL OF INTEREST AND COMMITMENT OF THE  
16 CHINESE FINANCIALLY TO OUR PROGRAM AND DISTINGUISHING  
17 THEM FROM SOME COUNTRIES ARE FOCUSED ON ONE PROGRAM,  
18 SOME ARE BROADER. I THINK IT WOULD BE IMPORTANT TO  
19 INFORM THE BOARD ABOUT THE BREADTH OF INTEREST FROM  
20 CHINA.

21 SECONDLY, THE LEVEL OF CAPITALIZATION THAT  
22 CAME OUT OF THE NETHERLANDS AFTER THEY DID THEIR DUE  
23 DILIGENCE, BECAUSE THEY WERE HERE AND HAD A VERY  
24 PRODUCTIVE MEETING WITH US, IS INFORMATIVE AS WELL  
25 BECAUSE IT IS VERY SUPPORTIVE OF HAVING A BROAD

## BARRISTERS' REPORTING SERVICE

1 PROGRAM.

2 DR. TROUNSON: I THINK IN THE CASE OF CHINA,  
3 CHINA IS THE FASTEST GROWING COUNTRY IN STEM CELL  
4 RESEARCH BESIDES THE U.S. THEY'RE REALLY STEAMING  
5 UPWARDS, AND THEY HAVE A HUGE COMMITMENT TO THIS AREA  
6 OF MEDICINE. AND WE'VE BEEN OVERWHELMED BY THEIR  
7 RESPONSE REALLY. NORMALLY IN CHINA YOU SPEND A LOT OF  
8 TIME WITH SINGLE E-MAILS GOING TO SINGLE PEOPLE AND  
9 LONG PERIODS OF TIME. HERE WE'RE DEALING WITH ABOUT 12  
10 PEOPLE. AND CLEARLY, IT WAS SIGNED BY THE MINISTER OF  
11 SCIENCE AND TECHNOLOGY. THE MINISTER HEADS UP WHAT  
12 THEY CALL MOST. AND THEY'RE VERY KEEN FOR THE CHINESE  
13 RESEARCHERS TO BE PART OF A COLLABORATION WITH THE  
14 CALIFORNIANS. I THINK IT'S VERY IMPORTANT WE DO NOTE  
15 THAT, YOU KNOW, IN CHINA WE KNOW THAT THERE ARE LESS  
16 REGULATED AREAS, AND WE BROUGHT THAT TO THE ATTENTION  
17 OF THE MINISTER AND HE RECOGNIZES THAT AND HAS TAKEN  
18 THAT ON BOARD.

19 NOTABLY SOME OF THEIR WEB SITES HAVE CHANGED  
20 SINCE THAT DISCUSSION. SO I THINK IF YOU TALK TO THE  
21 SCIENTISTS, THERE ARE EXTRAORDINARY COLLABORATIONS  
22 ALREADY EXISTING BETWEEN CALIFORNIA AND VARIOUS CHINESE  
23 ORGANIZATIONS, VERY EFFECTIVE. DR. SHENG DING, FOR  
24 EXAMPLE, HAS MULTIPLE COLLABORATIONS, VERY EFFECTIVE  
25 ONES. I KNOW A NUMBER OF OTHER INSTITUTES THROUGHOUT

## BARRISTERS' REPORTING SERVICE

1 THE WHOLE OF CALIFORNIA HAVE GOT STRONG CONNECTIONS  
2 WITH COLLEAGUES IN CHINA. SOME PLACES THEY HAVE SHARED  
3 POSITIONS, POSITIONS IN CALIFORNIA AND POSITIONS IN  
4 CHINA.

5 THESE ARE THE SORT OF PEOPLE, I THINK, WE  
6 COULD FEEL COMFORTABLE WITH. WE WILL CERTAINLY BE  
7 CAREFUL ABOUT WHO WE'RE COLLABORATING WITH. BUT  
8 ESSENTIALLY I THINK THEY ARE A GROUP OF SCIENTISTS WHO  
9 REALLY ARE ON THE MOVE. THEY'RE VERY WELL SUPPORTED.  
10 THEY'RE WILLING TO COME INTO ALL OUR PROGRAMS BEYOND, I  
11 THINK, THE EARLY TRANSLATIONAL. IT'S JUST TOO SOON TO  
12 GET ALL THE CONTRACTUAL LEGAL ARRANGEMENTS DONE, BUT  
13 I'VE INDICATED, I THINK, THAT THEY WOULD BE PART OF ALL  
14 OF THE OTHERS COMING UP. THE CLINICAL ONE WON'T BE  
15 RELEASED FOR ANY COLLABORATIVE FUNDING PARTNERS. AT  
16 THIS POINT I CAN'T SEE THAT THAT WOULD BE RELEVANT, BUT  
17 WITH TRAINING PROGRAMS, WE DON'T HAVE ANY IN PLACE, I  
18 THINK, COMING UP, BUT THE OTHERS, I THINK THEY'RE VERY  
19 KEEN TO BE INVOLVED WITH.

20 SO HERE'S AN OPPORTUNITY FOR US TO WORK  
21 TOGETHER WITH CHINA. AND I THINK IT WILL BE DEMANDING,  
22 BUT I THINK IT WILL BE VERY WORTHWHILE. THEY'RE A  
23 COUNTRY ON THE MOVE.

24 THE NETHERLANDS HAVE MADE A LARGE ALLOCATION  
25 TO THE NETHERLANDS STEM CELL INSTITUTE, WHICH IS NOT

## BARRISTERS' REPORTING SERVICE

1 EXACTLY THE SAME AS US BECAUSE IT HAS RESEARCH IN IT.  
2 I WISH, CHAIR, YOU'D LET ME DO SOME RESEARCH. I  
3 WOULDN'T MIND LOOKING THE SAME, BUT IT'S NOT. IN THE  
4 NETHERLANDS, IT DOES RESEARCH, BUT IT ALSO HAS FUNDING  
5 INVOLVED, AND THEY'VE MADE A VERY MAJOR ALLOCATION  
6 THERE. AND WE'RE IN THE PROCESS OF NEGOTIATING A  
7 RELATIONSHIP WITH THE NETHERLANDS, AND I THINK IT WILL  
8 BE EFFECTIVE. THERE ARE CLEARLY SOME VERY KEY  
9 SCIENTISTS IN THE NETHERLANDS. IT'S NOT AS BIG AN  
10 OPPORTUNITY AS SOME OF THE OTHER COUNTRIES, BUT IT'S  
11 GOT SOME VERY SPECIAL SCIENTISTS, PARTICULARLY PEOPLE  
12 IN CARDIAC CELLS AND ADULT STEM CELLS, VERY STRONG,  
13 VERY STRONG SCIENTISTS.

14 SO I THINK WHILE THEY'RE DEMANDING, THIS IS A  
15 DEMANDING PROGRAM ON US, I THINK IT IS VERY EFFECTIVE.  
16 I WOULD HOPE THAT WE'LL BE ABLE TO ASSESS THAT IN DUE  
17 COURSE AS BEING REALLY A VERY EFFECTIVE STEP FORWARD IN  
18 OUR PROGRAM.

19 SO JUST QUICKLY THE ROLE OF THE DIVERSITY  
20 PROGRAM. AS I SAID, THIS IS REALLY ART'S GIG. BUT TO  
21 IDENTIFY HOW CIRM CAN ENHANCE DIVERSITY IN THE FIELD OF  
22 REGENERATIVE MEDICINE, SO VERY BROAD GOAL. IT'S  
23 LOCATED AT THE CHARLES DREW UNIVERSITY, SO RIGHT IN THE  
24 AREA THAT REALLY DEMANDS IT BEING ADDRESSED. TARGET  
25 AUDIENCE IS TO ENABLE A GREATER UNDERSTANDING OF HOW

## BARRISTERS' REPORTING SERVICE

1 DIVERSITY AFFECTS, BENEFITS, INCORPORATES THE  
2 FULFILLMENT OF CIRM'S MISSION AND USE THIS KNOWLEDGE AS  
3 A FOUNDATION FOR THE DEVELOPMENT OF FUNDING INITIATIVES  
4 THAT SUPPORT DIVERSITY IN REGENERATIVE MEDICINE.

5 I HAVE, FOR EXAMPLE, THOUGHT THAT WE SHOULD  
6 DEVELOP IPS CELLS FOR SOME OF THE DISEASES THAT EXIST  
7 IN SOME OF THOSE COMMUNITIES. AND I THINK, YOU KNOW,  
8 DREW AND OTHER UNIVERSITIES COULD BE PART OF GENERATING  
9 A RESOURCE WHICH WOULD BE INCREDIBLY EFFECTIVE IN US  
10 INTERROGATING SOME OF THE DISEASES THAT EXIST IN THOSE  
11 POPULATIONS. SO I HOPE SOME OF THAT IS GOING TO COME  
12 OUT OF THOSE DISCUSSIONS. I KNOW ART WORKED REALLY  
13 HARD TO GET OUTCOMES THAT ARE EFFECTIVE FOR US BECAUSE  
14 THIS IS WHAT THE WORKSHOP IS ABOUT. BUT IT INCLUDES  
15 SCIENCE AND DIVERSITY IN REGENERATIVE MEDICINE,  
16 ATTRACTING PATIENTS AND PHYSICIANS TO CLINICAL TRIALS.  
17 SO THESE ARE THE THINGS THAT WE WANT TO GET BENEFIT  
18 FROM.

19 I THINK THE ONE ON THE SCNT, AGAIN, THE  
20 TOPIC'S ABOUT HUMAN AND NONHUMAN PRIMATE, MAMMALIAN AND  
21 NONHUMAN PRIMATE STEM CELL NUCLEAR TRANSFER AND THE  
22 LESSONS LEARNED THERE, ANIMAL OOCYTE, HUMAN NUCLEAR  
23 XENOTRANSFER, THIS IS WHERE YOU USE AN EGG FROM AN  
24 ANIMAL AND A CELL FROM ANOTHER ANIMAL, THE  
25 XENOTRANSPLANT WORK, WHAT'S IT COME TO AND WHERE IS IT

## BARRISTERS' REPORTING SERVICE

1 AT? DOES IT LOOK IMPORTANT? DOES IT LOOK LIKE IT'S  
2 GOING TO BE EFFECTIVE? HUMAN SCNT, THE STATUS.

3 PARTHENOGENESIS, THIS HAS BEEN TOUTED AS  
4 BEING VERY IMPORTANT. WE HAVEN'T SEEN MUCH IN THE WAY  
5 OF GRANTS THAT HAVE BEEN CHOSEN BY THE REVIEW TEAMS.  
6 SO WE WANT TO HAVE A LOOK AT THIS TO SEE IS IT SORT OF  
7 STALLED FOR SOME REASON OR IS THERE PROBLEMS THERE.  
8 LOOKING AT THE SCNT-IPS COMPARISON IN THE MOUSE, CAN  
9 IPS REALLY REPLACE SCNT?

10 AND THERE'S A VERY INTERESTING AREA THAT'S  
11 SLOWLY EXPANDING ON MITOCHONDRIAL DISEASES WHERE SCNT  
12 COULD END UP IN A POTENTIAL THERAPY. WHETHER THAT'S  
13 PART OF WHAT WE DO OR NOT, IT'S CERTAINLY AN  
14 INTERESTING AREA, VERY INTERESTING AREA. IT'S ONE  
15 WHICH WE'VE STRUGGLED WITH, AND I KNOW THAT THE  
16 STANDARDS GROUP SPENT A LOT OF TIME IN THIS AREA. SO  
17 WE WANT TO SEE WHERE WE GET TO WITH ALL OF THESE INPUTS  
18 AND HAVE A REASONED SUMMARY OF THE STATE AND THE  
19 EXPECTATIONS OF HOW WE CAN IMPACT OR SHOULD WE PUT IT  
20 BACK ON THE BACK BURNER. THESE ARE ALL THINGS TO THINK  
21 ABOUT.

22 VP R&D SEARCH, YOU KNOW THE FOCUS IS ON M.D. ,  
23 M.D.-PH.D. 'S WITH CLINICAL DEVELOPMENT EXPERIENCE,  
24 ESPECIALLY PRECLINICAL PHASE I AND II, WITH A PROVEN  
25 TRACK RECORD THERE REPRESENTING DEVELOPMENT PROGRAMS

## BARRISTERS' REPORTING SERVICE

1 FOR THE FDA, COLLABORATOR AND FACILITATOR. WE'VE HAD  
2 SOME CLINICAL CANDIDATE BACKGROUNDS FOCUSED IN BIOTECH  
3 AND REGENERATIVE MEDICINE AND PHARMACEUTICAL AREAS.

4 WE'RE NOW DOWN TO SIX OUT OF 80 POTENTIAL  
5 CANDIDATES. A LOT OF THEM TOOK THEMSELVES OUT BY NOT  
6 REALLY BEING WHAT WE ALL NEED. TERRIFIC PEOPLE, BUT  
7 NOT EXACTLY WHAT WE NEEDED. AND SOME I COULD SEE  
8 WOULDN'T REALLY GET ALONG IN THE SYSTEM. WE'RE A SMALL  
9 TEAM. WE NEED TO WORK WELL TOGETHER.

10 THERE'S SIX, THREE INTERNATIONAL CANDIDATES,  
11 ONE IN CANADA, TWO CALIFORNIA CANDIDATES. WE'RE TRYING  
12 TO NARROW THAT DOWN FURTHER IN THIS NEXT MONTH. THANK  
13 YOU TO THOSE PEOPLE FROM THE ICOC AND STAFF WHO HAVE  
14 BEEN MEETING WITH THEM. IT'S BEEN VERY HELPFUL. I  
15 KNOW IT'S A DRAG ON THE TIME, BUT IT'S VERY HELPFUL.

16 IF I CAN PASS OVER TO COMMUNICATIONS FROM DON  
17 AND FOLLOW UP WITH THE FINANCES AFTER THAT.

18 CHAIRMAN KLEIN: BEFORE WE MAKE THIS  
19 TRANSITION, DR. TROUNSON, THIS POINT THAT YOU'VE RAISED  
20 ABOUT THE UNIVERSITIES, WHETHER PUBLIC OR PRIVATE,  
21 CUTTING BACK ON THEIR OFFICE OF TECHNOLOGY TRANSFER  
22 BUDGETS, IT IS VERY, VERY IMPORTANT FOR US BECAUSE OUR  
23 ABILITY TO PROTECT ACCESS, OUR ABILITY TO PROTECT OUR  
24 PRICING PROVISIONS, OUR ABILITY TO MAKE CERTAIN THAT  
25 THERAPIES THAT ARE DEVELOPED, WE HAVE THE KNOWLEDGE

## BARRISTERS' REPORTING SERVICE

1 THAT'S PROPAGATED TO THE SYSTEM AND OPTIMIZE THE  
2 ABILITY TO MOVE IT DOWNSTREAM TO COMMERCIALIZATION. IF  
3 THERE'S NO PATENT FILED, WE'RE REALLY DISCOURAGING  
4 COMMERCIAL DEVELOPMENT OF THAT PARTICULAR DISCOVERY.

5 SO I'M GOING TO, BEFORE THE NEXT MEETING,  
6 AFTER CONSULTING WITH DR. TROUNSON, ASK THE BOARD IF  
7 THERE'S MEMBERS WHO WANT TO VOLUNTEER FOR A TASK FORCE  
8 THAT WOULD COMMUNICATE ABOUT THIS SPECIFIC ISSUE.  
9 POTENTIALLY IN EACH OF OUR GRANTS, WE COULD SET ASIDE  
10 MONEY WHERE IF, IN FACT, THE SCIENCE OFFICE WAS AWARE  
11 THAT THE INSTITUTION WAS NOT DOING THE PATENT, OUR  
12 SCIENTIFIC STAFF THOUGHT THERE WAS A GREAT POTENTIAL,  
13 OUR VP R&D THOUGHT THERE WAS A GREAT POTENTIAL, WE  
14 COULD FUND SUPPLEMENTAL MONEY TO MAKE SURE THOSE PATENT  
15 RIGHTS ARE PROTECTED BOTH IN THIS COUNTRY AND  
16 POTENTIALLY ON INTERNATIONAL PATENTS, ALTHOUGH THOSE  
17 ARE MORE EXPENSIVE.

18 THIS FUNDAMENTALLY GOES TO PROTECT THE  
19 PATIENTS, IT PROTECTS THE SCIENTISTS, AND IT PROTECTS  
20 THE VOTERS OF CALIFORNIA WHO HAVE INVESTED IN THIS  
21 FIELD TO MAKE CERTAIN WE OPTIMIZE THE ABILITY TO REALLY  
22 COMMERCIALIZE THE DISCOVERIES THAT ARE MADE HERE.

23 WE DON'T WANT A SHORT-TERM INTERRUPTION IN  
24 FUNDING TO LEAVE A GAP WHERE THERE ARE BRILLIANT  
25 DISCOVERIES THAT CAN BE EXTRAORDINARILY VALUABLE TO

## BARRISTERS' REPORTING SERVICE

1 PATIENTS AND NOT HAVE THE POTENTIAL TO FULLY  
2 COMMERCIALIZE THEM. PLEASE LET ME KNOW IF YOU'RE  
3 INTERESTED IN BEING ON A TASK FORCE RELATED TO THIS  
4 SPECIFIC TOPIC.

5 SO WE'D LIKE TO BE ABLE TO PUT WHAT YOU'RE  
6 GOING TO DO IN THIS REPORT ON TWO SCREENS, INCLUDING  
7 THE SCREEN TO MY RIGHT. AND IF WE CAN TAKE A  
8 FIVE-MINUTE BREAK, THEN WE WILL HAVE THE TIME TO MAKE  
9 THAT ADDITIONAL CONNECTION AND WE'LL RECONVENE.

10 (A RECESS WAS TAKEN.)

11 CHAIRMAN KLEIN: OKAY. WE'RE GOING TO  
12 RECONVENE HERE. ALL RIGHT. IF WE COULD RECONVENE, WE  
13 JUST GOT A QUORUM. DR. TROUNSON IS -- LET'S SEE.  
14 COULD STAFF FIND -- PAT, COULD YOU LET EVERYONE OUT  
15 THERE KNOW WE HAVE A QUORUM AND WE'RE RECONVENING?  
16 THANK YOU SO MUCH.

17 WELCOME, DR. QUINT. YOU ARE THE QUORUM. SO  
18 YOU'RE VERY IMPORTANT.

19 MS. LANSING: BOB, WE HAVE A QUORUM IN  
20 PERSON, RIGHT?

21 CHAIRMAN KLEIN: NO. NO. NO. YOU'RE VERY  
22 IMPORTANT TOO, SHERRY.

23 MS. LANSING: I WON'T BE ABLE TO STAY TILL  
24 THE END TODAY.

25 CHAIRMAN KLEIN: I KNOW. THAT'S WHY I'M

## BARRISTERS' REPORTING SERVICE

1 GOING TO IMMEDIATELY MOVE UP ITEMS THAT WE HAVE A VOTE  
2 ON SO THAT WE'RE GOING TO TRY AND GET A REAL FOCUS ON  
3 ITEMS FOR THE VOTE.

4 MS. LANSING: HOW LONG DO YOU ANTICIPATE  
5 THAT, BOB?

6 CHAIRMAN KLEIN: HOW LONG DO WE HAVE?

7 MS. LANSING: I'M SUPPOSED TO BE SOMEPLACE AT  
8 SEVEN. THAT'S WHAT I WAS TRYING TO FIND OUT.

9 CHAIRMAN KLEIN: OKAY. I'LL TRY AND USE THAT  
10 TIME AS PRODUCTIVELY AS HUMANLY POSSIBLE.

11 MS. LANSING: OKAY. I'LL DO MY BEST.

12 CHAIRMAN KLEIN: THANK YOU. DR. TROUNSON,  
13 DESPITE THE FACT THAT I JUST SAID WE'D MOVE THAT OTHER  
14 ITEM UP SO THAT WE UTILIZE IT BEFORE WE HAD A QUORUM,  
15 WE'RE NOW IN A POSITION THAT WE NEED TO MOVE VERY  
16 QUICKLY. MR. TORRES, DID YOU HAVE A COMMENT TO MAKE?

17 MS. LANSING: BOB, I WILL BE AVAILABLE IN THE  
18 MORNING AS WELL IF THAT HELPS.

19 CHAIRMAN KLEIN: OKAY. WE'RE TRYING TO  
20 CONFIRM OUR QUORUM FOR THE MORNING, AND WE HAVE  
21 COMMITMENTS THAT HAVE BEEN MADE THAT IT IS IMPORTANT TO  
22 WORK WITH THE SAFE QUORUM THAT WE HAVE AT THE MOMENT.

23 MS. LANSING: OKAY.

24 CHAIRMAN KLEIN: SO WHAT WE CAN DO, DR.  
25 TROUNSON, CAN WE DEFER A LITTLE BIT THESE

## BARRISTERS' REPORTING SERVICE

1 PRESENTATIONS?

2 DR. TROUNSON: YES.

3 CHAIRMAN KLEIN: SO WE'RE GOING TO MOVE  
4 IMMEDIATELY TO ACTION ITEMS. AND I'D LIKE TO --

5 MS. KING: MR. CHAIRMAN, CAN I MAKE A  
6 RECOMMENDATION, THAT THE ITEM WE TAKE UP IS THE  
7 PROPOSED ADDITIONAL AGENDA ITEM? AND WHETHER OR NOT  
8 THE BOARD WOULD LIKE TO CONSIDER THAT ITEM, THEY NEED  
9 TO VOTE ON THAT FIRST BEFORE THEY CAN EVEN CONSIDER  
10 THAT ITEM. AND THAT'S ONE OF THE ITEMS THAT WE'RE  
11 GOING TO TRY AND GET TO TONIGHT BECAUSE IT'S ESSENTIAL  
12 FOR THE FEBRUARY GRANT REVIEW.

13 CHAIRMAN KLEIN: ALL RIGHT. SO I'M GOING TO  
14 FOLLOW THE RECOMMENDATION OF OUR ESTEEMED BOARD  
15 EXECUTIVE DIRECTOR. IF YOU LOOK IN YOUR BINDER  
16 IMMEDIATELY FOLLOWING THE REGULAR AGENDA, THERE'S AN  
17 ITEM AT THE TOP LABELED NOTICE OF PROPOSED ADDITIONAL  
18 ITEM FOR THE REGULAR MEETING. WE HAVE TO HOLD A VOTE.  
19 THESE INDIVIDUALS AND THEIR WILLINGNESS TO SERVE AND  
20 THE INHERENT NATURE OF HAVING THEM AVAILABLE FOR THE  
21 WORKING GROUP HAVE JUST COME TOGETHER AT THE LAST  
22 MINUTE.

23 SO WOULD WE BE ABLE, DR. TROUNSON, TO HAVE A  
24 PRESENTATION ABOUT THOSE PROPOSED MEMBERS FROM DR.  
25 SAMBRANO? MR. HARRISON.

## BARRISTERS' REPORTING SERVICE

1 MR. HARRISON: IN ORDER FOR THE BOARD TO  
2 CONSIDER THIS ITEM, IT FIRST HAS TO TAKE A VOTE TO  
3 DETERMINE THAT IT'S NECESSARY TO ADDRESS THE MATTER AT  
4 THIS TIME, AND THAT THE NEED TO ADDRESS THE MATTER CAME  
5 TO THE BOARD'S ATTENTION AFTER THE AGENDA WAS POSTED.

6 CHAIRMAN KLEIN: AND THAT'S THE FACT PATTERN  
7 I TRIED TO RESTATE.

8 MR. TORRES: SO MOVED.

9 CHAIRMAN KLEIN: THERE IS A MOTION. IS THERE  
10 A SECOND?

11 DR. POMEROY: SECOND.

12 CHAIRMAN KLEIN: DR. POMEROY IS THE SECOND.  
13 IS THERE DISCUSSION? NO DISCUSSION. PUBLIC COMMENT?  
14 NO PUBLIC COMMENT. ALL IN FAVOR.

15 (CHORUS OF AYES.)

16 CHAIRMAN KLEIN: OPPOSED.

17 (NO RESPONSE.)

18 CHAIRMAN KLEIN: ABSTAIN.

19 (NO RESPONSE.)

20 CHAIRMAN KLEIN: THE AYES HAVE IT. THE ITEM  
21 WILL THEN BE ADDRESSED AFTER WE HEAR AN ANNOUNCEMENT  
22 FROM MS. MELISSA KING.

23 MS. KING: I JUST NEED TO CALL THE MEMBERS  
24 THAT ARE ON THE PHONE AND GET THEIR VOTES. SO SHERRY  
25 LANSING, WHAT IS YOUR VOTE ON THE MOTION?

**BARRISTERS' REPORTING SERVICE**

1 MS. LANSING: FAVOR.

2 MS. KING: DR. BRODY WHAT, IS YOUR VOTE ON  
3 THE MOTION?

4 CHAIRMAN KLEIN: I'M GOING TO HOLD THE ROLL  
5 OPEN WHILE DR. BRODY MAY HAVE HAD TO LEAVE THE PHONE  
6 FOR A MOMENT. IF STAFF WOULD CALL DR. BRODY. SCOTT  
7 TOCHER, COULD YOU GET ON THE PHONE WITH DR. BRODY'S  
8 OFFICE AND INDICATE THAT EVEN THOUGH HE MAY HAVE HAD A  
9 VERY IMPORTANT CALL, IT WOULD BE IMPORTANT IF WE COULD  
10 CLOSE THE ROLL ON THAT ITEM.

11 DR. SAMBRANO.

12 DR. SAMBRANO: RELATED TO THIS ITEM, WE'RE  
13 BRINGING FOR YOUR CONSIDERATION TWO NOMINEES FOR  
14 ALTERNATE GRANTS WORKING GROUP MEMBERS. THESE WOULD  
15 ADDRESS EXPERTISE NEEDS IN CANCER STEM CELLS,  
16 EPIGENETICS, AND TRANSPLANTATION IMMUNOLOGY. THESE  
17 INDIVIDUALS ARE DR. LAURIE JACKSON-GRUSBY. SHE IS AN  
18 EXPERT IN BOTH EPIGENETICS AND CANCER STEM CELLS AND  
19 WOULD CONTRIBUTE TO THE REVIEW THAT'S COMING UP LATER  
20 THIS MONTH. AND SHE IS AT CHILDREN'S HOSPITAL BOSTON  
21 AND THE HARVARD MEDICAL SCHOOL.

22 WE ALSO HAVE DR. MARIA GRAZIA RONCAROLO. SHE  
23 IS THE SCIENTIFIC DIRECTOR AT THE SAN RAFFAELE  
24 SCIENTIFIC INSTITUTE, MILAN, ITALY. AND SHE WOULD  
25 CONTRIBUTE EXPERTISE TO OUR TRANSPLANTATION IMMUNOLOGY

## BARRISTERS' REPORTING SERVICE

1 REVIEW THAT IS COMING IN APRIL.

2 SO WE ASK FOR YOUR APPROVAL OF THESE NOMINEES  
3 AS ALTERNATE GRANTS WORKING GROUP MEMBERS.

4 CHAIRMAN KLEIN: DR. SAMBRANO, WILL THIS  
5 NECESSITATE US TO GOING TO MILAN TO INTERVIEW HER?

6 DR. SAMBRANO: NO. NICE TRIP THOUGH.

7 DR. AZZIZ: SO MOVED.

8 CHAIRMAN KLEIN: MOVED BY DR. AZZIZ. IS  
9 THERE A SECOND?

10 DR. HAWGOOD: SECOND.

11 CHAIRMAN KLEIN: SECOND BY DR. HAWGOOD.

12 SO IS THERE DISCUSSION? IS THERE PUBLIC  
13 COMMENT? ALL IN FAVOR.

14 (CHORUS OF AYES.)

15 CHAIRMAN KLEIN: OPPOSED?

16 (NO RESPONSE.)

17 CHAIRMAN KLEIN: ABSTAIN. AND SHERRY  
18 LANSING.

19 MS. LANSING: IN FAVOR.

20 CHAIRMAN KLEIN: WHAT WE DO NEED TO DO IS  
21 IDENTIFY HER BY NAME WHICH, I THINK, COUNTS. DR.  
22 BRODY, ARE YOU BACK ON THE PHONE YET? I WOULD LEAVE  
23 THIS ROLL CALL OPEN. AND SCOTT TOCHER, OF COURSE, HAS  
24 BEEN IN TOUCH WITH THE OFFICE. SO I'M SURE HE'S GOING  
25 TO BE BACK IN COMMUNICATION SOON.

## BARRISTERS' REPORTING SERVICE

1 ALL RIGHT. LET US GO TO THE CONSIDERATION OF  
2 THE CONCEPT PROPOSAL FOR TOOLS AND TECHNOLOGY. DR.  
3 YAFFE IS GOING TO MAKE THE PRESENTATION FOR THOSE OF  
4 YOU WHO ARE ON THE PHONE.

5 DR. YAFFE: MR. CHAIRMAN AND MEMBERS OF THE  
6 COMMITTEE, I'D LIKE TO PRESENT FOR YOUR CONSIDERATION  
7 CONCEPT PROPOSAL FOR RFA 10-02, TOOLS AND TECHNOLOGIES  
8 FOR TRANSLATIONAL BOTTLENECKS, WHICH WE ALSO CALL TOOLS  
9 AND TECHNOLOGIES II. THIS IS AGENDA ITEM NO. 8.

10 DEVELOPMENT OF NOVEL STEM CELL THERAPIES AND  
11 MEDICAL TREATMENTS DEPENDS ON TRANSLATION OF BASIC  
12 DISCOVERIES OF STEM CELL BIOLOGY. PROGRESS AND RAPID  
13 PROGRESS ALONG THIS TRANSLATIONAL PATHWAY WILL REQUIRE  
14 OVERCOMING TECHNICAL OBSTACLES AND TRANSLATIONAL  
15 BOTTLENECKS. AND IT'S THE PURPOSE AND GOAL OF THIS RFA  
16 TO FIND AND SUPPORT PROGRAMS, RESEARCH PROGRAMS, THAT  
17 ADDRESS THESE TRANSLATIONAL OBSTACLES.

18 THIS PROGRAM WILL FACILITATE THE CREATION OF  
19 NEW TOOLS AND APPROACHES AS WELL AS SUPPORT THE  
20 OPTIMIZATION, IMPROVEMENT, AND/OR SCALE-UP THAT EXIST  
21 IN TOOLS AND TECHNOLOGIES. EXAMPLES OF SUCH PROGRAMS  
22 AND PROJECTS ARE INCLUDED IN THE SHEET THAT'S IN YOUR  
23 BINDER.

24 LET ME JUST HIGHLIGHT A FEW OF THOSE:  
25 DISCOVERY OF NOVEL BIOMARKERS, DEVELOPMENT AND

## BARRISTERS' REPORTING SERVICE

1 VALIDATION OF STEM CELL SCALE-UP TECHNOLOGIES,  
2 DEVELOPMENT AND OPTIMIZATION OF NEW CELL SEPARATION AND  
3 PURIFICATION TECHNIQUES, AND DEVELOPMENT OF  
4 TECHNOLOGIES FOR THE ROBUST AND EFFICIENT DERIVATION OF  
5 FUNCTIONAL CELL TYPES FROM PLURIPOTENT CELLS.

6 WE HAVE RECOGNIZED AND WE'VE BEEN TOLD BY  
7 SCIENTISTS IN THE FIELD --

8 UNIDENTIFIED SPEAKER: EXCUSE ME. DR. BRODY  
9 HAS REJOINED THE CALL.

10 CHAIRMAN KLEIN: THANK YOU, DR. BRODY. THIS  
11 IS ROBERT KLEIN. AND WE WILL BE RETURNING IMMEDIATELY  
12 AFTER THIS ITEM TO THE PRIOR ITEM THAT WE HAD OPEN  
13 PENDING YOUR RETURN FOR A VOTE, ACTUALLY PRIOR TWO  
14 ITEMS, BUT DR. MICHAEL YAFFE IS MAKING A PRESENTATION  
15 ON ITEM NO. 8, CONSIDERATION OF CONCEPT PROPOSAL FOR  
16 TOOLS AND TECHNOLOGY II AWARDS. AND WE'RE SORRY THAT  
17 DURING THE BREAK YOU HAD JUST MUZAK WITHOUT ANY  
18 INDICATION OF WHEN WE RECONVENED, BUT WE ARE VERY  
19 PRIVILEGED TO HAVE YOU BACK. THANK YOU.

20 DR. YAFFE: THIS RFA WILL ALSO SUPPORT THE  
21 DEVELOPMENT OF STEM CELL-BASED DISEASE MODELS WHICH CAN  
22 BE VALUABLE TOOLS FOR ASSAY DEVELOPMENT, FOR DRUG  
23 SCREENING, AND FOR THERAPEUTIC ANALYSIS.

24 SO THE DETAILS OF THE AWARDS THAT WE'RE  
25 PROPOSING UNDER THIS -- WAIT A MINUTE.

## BARRISTERS' REPORTING SERVICE

1 ELIGIBILITY IS THAT THIS PROGRAM WILL BE OPEN  
2 TO APPLICANTS FROM BOTH FOR-PROFIT AND NOT-PROFIT  
3 ORGANIZATIONS IN CALIFORNIA. THERE WILL BE NO  
4 INSTITUTIONAL LIMITS ON THE NUMBER OF APPLICATIONS. AS  
5 PREVIOUSLY APPROVED BY YOU AT THE DECEMBER ICOC  
6 MEETING, THE APPLICATION PROCESS WILL INVOLVE A  
7 PREAPPLICATION, AND THEN A SELECT NUMBER OF THOSE  
8 PROJECTS PROPOSED IN THOSE PREAPPLICATIONS WILL BE  
9 INVITED, THOSE APPLICANTS WILL BE INVITED TO SUBMIT  
10 FULL APPLICATIONS, AND THEN THE FULL APPLICATIONS IN  
11 OUR USUAL MANNER WILL BE REVIEWED BY THE GRANTS WORKING  
12 GROUP, AND THEIR RECOMMENDATIONS WILL BE SENT ON FOR  
13 YOUR ANALYSIS, REVIEW, AND APPROVAL.

14 WE WILL ALLOW AND ACCEPT ONE APPLICATION OR  
15 ONE PREAPPLICATION PER PRINCIPAL INVESTIGATOR.

16 THE DETAILS OF THESE AWARDS ARE THAT WE WILL  
17 SUPPORT RESEARCH FOR UP TO THREE YEARS WITH DIRECT  
18 PROJECT COSTS OF UP TO \$400,000 PER YEAR. AND THE  
19 FUNDING MECHANISM IS THE AWARDS WILL BE AS GRANTS. WE  
20 PROPOSE UP TO 20 AWARDS WITH A TOTAL PROGRAM COST OF  
21 \$40 MILLION.

22 THE PROVISIONAL TIMELINE FOR THE POSTING AND  
23 REVIEW OF THESE APPLICATIONS WILL BE RELEASE OF THE RFA  
24 IN MARCH, PREAPPLICATIONS DUE IN MAY, FULL APPLICATIONS  
25 DUE IN SEPTEMBER, GRANTS WORKING GROUP REVIEW AT OUR

## BARRISTERS' REPORTING SERVICE

1 NOVEMBER GRANTS WORKING GROUP MEETING, AND THE  
2 RECOMMENDATIONS BROUGHT TO YOU AT THE ICOC MEETING IN  
3 JANUARY 2011.

4 SO IN SUMMARY, WE REQUEST YOUR APPROVAL OF  
5 RFA 10-02, TOOLS AND TECHNOLOGIES FOR TRANSLATIONAL  
6 BOTTLENECKS. AGAIN, THE PROGRAM WILL SUPPORT UP TO 20  
7 AWARDS WITH A TOTAL PROGRAM COST OF \$40 MILLION. THANK  
8 YOU.

9 CHAIRMAN KLEIN: THANK YOU VERY MUCH. IN THE  
10 DISCUSSION OF THIS ITEM, I WOULD HOPE THAT WE COULD IN  
11 A MOTION HAVE AN AMENDMENT THAT LEAVES THE ICOC MEETING  
12 DATE OPEN WITH THE POSSIBILITY THAT IT MIGHT BE IN  
13 DECEMBER BECAUSE WE HAVE POTENTIAL FOR A LARGE NUMBER  
14 OF NEW BOARD MEMBERS COMING IN IN DECEMBER. SO IT  
15 WOULD MAKE IT DIFFICULT FOR THEM TO MAKE THE TRANSITION  
16 IMMEDIATELY IN JANUARY TO A BOARD REVIEW OF THIS ITEM.

17 NOW, I WOULD SUGGEST WE LEAVE IT OPEN BECAUSE  
18 WHAT IS POSSIBLE HAS OFTEN ALREADY BEEN PUSHED BY THE  
19 SCIENTIFIC STAFF, AND SO I DON'T WANT TO PREJUDGE WHAT  
20 IS POSSIBLE, BUT JUST LEAVE IT OPEN TO DISCRETION OF  
21 THE SCIENTIFIC STAFF AND THE PRESIDENT.

22 SO WITH THAT, ARE THERE SPECIFIC QUESTIONS  
23 THAT THE BOARD MEMBERS WOULD LIKE TO PURSUE AT THIS  
24 TIME?

25 MR. ROTH: JUST VERY QUICKLY, YOU DID SAY

## BARRISTERS' REPORTING SERVICE

1 GRANTS. BUT THE QUESTION IS WOULD YOU CONSIDER MAKING  
2 IT OPTIONAL FOR LOANS IF THEY WANTED A LOAN INSTEAD OF  
3 A GRANT?

4 DR. TROUNSON: AGAIN, I THINK IT IS OPTIONAL.  
5 IT COULD BE OPTIONAL. THE ISSUE, I GUESS, IS THAT  
6 THESE WILL OFTEN BE MUCH SMALLER GRANTS -- MUCH SMALLER  
7 QUANTITIES INVOLVED IN THE LOANS.

8 ONE OF THE THINGS THAT WE HAVE, DUANE, IS  
9 PRETTY HIGH COST OF THE ELEMENTS IN THE LOANS AND THE  
10 ASSESSMENT. SO I THINK WE'D WANT TO TALK TO YOU AND  
11 THE FINANCE COMMITTEE, IF WE WANT TO DO THAT, TO SEE IF  
12 WE COULD SORT OF AVOID SOME OF THAT HIGH END BECAUSE  
13 OTHERWISE THAT'S A VERY STRONG CARRY COMPONENT BY THE  
14 COMPANY AND MIGHT CAUSE US A DIFFICULTY.

15 SO WITH THAT IN MIND, PERHAPS WE COULD HAVE  
16 FURTHER DISCUSSIONS ABOUT THAT PARTICULAR MATTER.

17 MR. ROTH: I'VE FORGOTTEN. DO WE STILL HAVE  
18 A \$3 MILLION MINIMUM?

19 DR. TROUNSON: YES, WE DO CURRENTLY.

20 CHAIRMAN KLEIN: I THINK IT IS A VERY  
21 IMPORTANT ITEM BECAUSE THERE ARE SOME COMPANIES, I  
22 THINK, THAT BECAUSE OF IP ISSUES MAY PREFER A LOAN TO A  
23 GRANT. SO LEAVING THIS OPTION OPEN IN THE MOTION SO  
24 THE PRESIDENT CAN CONFER AS NEEDED WITH BOARD MEMBERS  
25 AND THE FINANCE COMMITTEE, I THINK, IS PREFERABLE HERE.

## BARRISTERS' REPORTING SERVICE

1 OKAY.

2 DR. TROUNSON: THAT WOULD BE USEFUL FOR US  
3 JUST TO ENGAGE ON THAT, AT LEAST THAT ONE PARTICULAR  
4 ISSUE.

5 CHAIRMAN KLEIN: OKAY. ADDITIONAL QUESTIONS?

6 MR. ROTH: MOTION TO APPROVE.

7 CHAIRMAN KLEIN: MOTION TO APPROVE BY MEMBER  
8 ROTH.

9 DR. AZZIZ: SECOND.

10 CHAIRMAN KLEIN: SECOND FROM DR. AZZIZ.

11 ADDITIONAL DISCUSSION BY THE BOARD?

12 AND IF I COULD RESTATE THE MOTION FOR A  
13 MOMENT, MY UNDERSTANDING OF THE MOTION WOULD BE THAT  
14 THE PROGRAM AS PROPOSED IS TO BE APPROVED WITH TWO  
15 VARIABLES. ONE BEING THAT IT IS LEFT OPEN IN TERMS OF  
16 WHETHER LOANS WILL BE AVAILABLE. THAT WILL BE PURSUED  
17 BY THE PRESIDENT WITH THE FINANCE COMMITTEE, AND YOU  
18 ARE GOING TO BE A PART OF THAT DISCUSSION. AND NO. 2,  
19 DID YOU ACCEPT THE SUGGESTION IN YOUR MOTION THAT WE  
20 LEAVE OPEN TO THE DISCRETION OF THE PRESIDENT AND THE  
21 SCIENTIFIC STAFF WHETHER OR NOT THEY COULD POTENTIALLY  
22 HOLD THE ICOC MEETING IN DECEMBER?

23 MR. ROTH: YES, BOTH ARE ACCEPTED.

24 CHAIRMAN KLEIN: SO WITH BOTH OF THOSE  
25 VARIATIONS TO THE ORIGINAL PROPOSAL, ARE THERE PUBLIC

## BARRISTERS' REPORTING SERVICE

1 COMMENTS? MR. HARRISON.

2 MR. HARRISON: FOR THE RECORD, WE SHOULD JUST  
3 HAVE THE SECOND CONFIRM THAT HE AGREES.

4 CHAIRMAN KLEIN: DR. AZZIZ, DO YOU AGREE --

5 DR. AZZIZ: I DO AGREE.

6 CHAIRMAN KLEIN: -- WITH THOSE VARIATIONS ON  
7 THE MOTION? DR. TROUNSON.

8 DR. TROUNSON: I THOUGHT I JUST SHOULD  
9 MENTION THAT THERE ARE A LOT OF INTERESTS FROM, AS YOU  
10 SAID, FROM THE BIOTECH INDUSTRY, BUT ALSO FROM OUR  
11 COLLABORATIVE FUNDING PARTNERS WHO HAVE SOME REALLY  
12 TERRIFIC TECHNOLOGY THERE WHICH OUR SCIENTISTS AND OUR  
13 BIOTECH COMPANIES ARE INTERESTED IN. SO I'VE BEEN  
14 ASKED TO -- I'VE BEEN ENCOURAGED, IF YOU LIKE, TO BRING  
15 THIS FORWARD. SO I THINK IT WOULD BE -- IT WOULD BE  
16 VERY GOOD FOR THE YOUNG BIOTECH INDUSTRY TO HAVE THIS  
17 RFA. AND AS YOU SAID, I THINK IT WOULD, AGAIN, ENABLE  
18 OUR MISSION TO GET SOME VERY SPECIFIC CAPABILITY,  
19 PARTICULARLY CAPABILITY THAT ENHANCES THE STUDIES IN  
20 THE FDA-REQUIRED PIPELINES AND ALSO FOR SOME OF THE  
21 TRANSLATIONAL COMPONENT PARTS, BUT EVEN SOME OF THE  
22 BASIC BIOLOGY.

23 I THINK THERE'S SOME REALLY LANDMARK  
24 DISCOVERIES GOING ON IN TECHNOLOGY, AND I MEAN IN  
25 IMAGING AND THE ABILITY TO GROW CELLS IN VARIOUS SORT

## BARRISTERS' REPORTING SERVICE

1 OF DRAMATICALLY DIFFERENT WAYS, THAT IT IS A VERY GOOD  
2 TIME TO DO THIS. AND I THINK THE COMPANIES IN  
3 CALIFORNIA PARTICULARLY ARE VERY ENCOURAGED THAT WE'LL  
4 GO THROUGH THIS.

5 CHAIRMAN KLEIN: THANK YOU VERY MUCH, DR.  
6 TROUNSON. SO I WOULD LIKE TO MAKE CERTAIN THAT THE  
7 MEMBERS THAT ARE ON THE PHONE HAVE THE CHANCE FOR  
8 QUESTIONS. SHERRY LANSING, DO YOU HAVE A QUESTION?

9 MS. LANSING: NO. I'M VERY COMFORTABLE WITH  
10 THIS.

11 CHAIRMAN KLEIN: DR. BRODY.

12 DR. BRODY: YES.

13 CHAIRMAN KLEIN: DO YOU HAVE ANY QUESTIONS?

14 DR. BRODY: NO QUESTIONS.

15 CHAIRMAN KLEIN: THANK YOU VERY MUCH. SO  
16 WITH THAT, I'D LIKE TO CALL THE QUESTION. ALL IN  
17 FAVOR.

18 (CHORUS OF AYES.)

19 CHAIRMAN KLEIN: OPPOSED.

20 (NO RESPONSE.)

21 CHAIRMAN KLEIN: ABSTAIN.

22 (NO RESPONSE.)

23 CHAIRMAN KLEIN: AND THEN FOR THE RECORD, DR.  
24 BRODY, YOUR VOTE.

25 DR. BRODY: IS AYE.

## BARRISTERS' REPORTING SERVICE

1 CHAIRMAN KLEIN: SHERRY LANSING, FOR THE  
2 RECORD.

3 MS. LANSING: YES.

4 CHAIRMAN KLEIN: SO THE MOTION PASSES. WITH  
5 THAT, DR. BRODY, TO ELIMINATE ANY CONFUSION IN THE  
6 RECORD, I'D LIKE TO RETURN TO THE PRIOR TWO ITEMS. AND  
7 I'M ACTUALLY GOING TO OPEN THEM IN THE SAME SEQUENCE WE  
8 ORIGINALLY ADDRESSED THEM.

9 THE FIRST ITEM IS REQUIRED TO MAKE A FINDING  
10 THAT, IN FACT, THE ITEM, AS STAFF HAS RELATED, AROSE  
11 IMMEDIATELY BEFORE THE MEETING, THERE WASN'T ADEQUATE  
12 TIME FOR THE NORMAL NOTICE. THIS IS AN ITEM THAT IS  
13 IMPORTANT FOR OUR WORKING GROUP SESSIONS THAT ARE  
14 IMMEDIATELY COMING UP. AND SO WE HAVE TO PASS A MOTION  
15 AS TO AN EXTRAORDINARY ITEM TO APPROVE CONSIDERING IT  
16 AT THIS MEETING BEFORE WE CAN CONSIDER THE MERITS OF  
17 THE MOTION.

18 MS. KING: I JUST WANTED TO MAKE SURE, DR.  
19 BRODY, THAT YOU UNDERSTAND THAT WHAT BOB IS TALKING  
20 ABOUT IS THE PROPOSED ADDITIONAL AGENDA ITEM, WHICH IS  
21 AMONG THE MATERIALS THAT WAS SENT TO YOU. WHAT BOB IS  
22 TRYING TO SAY IS THAT WE HAVE TO HAVE YOUR VOTE ON THAT  
23 MOTION FIRST AND THEN ON THE ACTUAL BUSINESS THAT'S  
24 ENCOMPASSED BY THAT ITEM.

25 CHAIRMAN KLEIN: IF YOU ARE IN POSSESSION OF

## BARRISTERS' REPORTING SERVICE

1 A BINDER OR A VIRTUAL BINDER ON THE INTERNET, THIS  
2 NOTICE OF THE ADDITIONAL ITEM WOULD HAVE FOLLOWED YOUR  
3 ORIGINAL AGENDA IMMEDIATELY. AND IT SAYS AT THE TOP  
4 NOTICE OF PROPOSED ADDITIONAL ITEM.

5 DR. BRODY: THANKS.

6 CHAIRMAN KLEIN: ALL RIGHT. SO WE HAVE IT  
7 WELL IDENTIFIED. THE MOTION, I'D LIKE TO HAVE THE  
8 MOTION REMADE. ACTUALLY I'M GOING TO RETAKE THE VOTE  
9 TO AVOID ANY CONFUSION AND MAKE OUR COUNSEL HAPPY. SO  
10 THE MOTION TO CONSIDER THE ITEM. IS SOMEONE GOING TO  
11 MAKE THE MOTION?

12 MR. TORRES: SO MOVED.

13 CHAIRMAN KLEIN: MOVED BY MR. TORRES.

14 DR. HAWGOOD: SECOND.

15 CHAIRMAN KLEIN: SECOND BY DR. HAWGOOD.  
16 DISCUSSION? PUBLIC DISCUSSION? SEEING NONE, ALL IN  
17 FAVOR.

18 (CHORUS OF AYES.)

19 CHAIRMAN KLEIN: OPPOSED.

20 (NO RESPONSE.)

21 CHAIRMAN KLEIN: FOR THE RECORD, SHERRY  
22 LANSING, YOUR VOTE.

23 MS. LANSING: AYE.

24 CHAIRMAN KLEIN: AND, DR. BRODY, CALL YOUR  
25 NAME.

## BARRISTERS' REPORTING SERVICE

1 DR. BRODY: AYE.

2 CHAIRMAN KLEIN: SO THAT MOTION PASSED.  
3 WE'RE NOW TAKING UP THE MOTION ON CONSIDERING THE  
4 CANDIDATES. DR. BRODY, YOU WOULD ALSO HAVE A COPY OF  
5 THE PROPOSED RESUMES OF THE CANDIDATES. DR. SAMBRANO  
6 HAS INDICATED THAT THESE PEOPLE HAVE EXCELLENT  
7 EXPERIENCE THAT'S DIRECTLY RELEVANT TO THE WORKING  
8 GROUP SESSION THAT'S UPCOMING AND WOULD BE EXTREMELY  
9 VALUABLE. IS THERE A MOTION TO APPROVE?

10 MR. ROTH: SO MOVED.

11 CHAIRMAN KLEIN: SO MOVED BY DUANE ROTH.  
12 SECOND?

13 DR. PRIETO: SECOND.

14 CHAIRMAN KLEIN: SECOND BY DR. PRIETO.  
15 DISCUSSION BY THE BOARD? SEEING NONE, DISCUSSION BY  
16 THE PUBLIC? LIKE TO CALL THE QUESTION. ALL IN FAVOR.

17 (CHORUS OF AYES.)

18 CHAIRMAN KLEIN: OPPOSED.

19 (NO RESPONSE.)

20 CHAIRMAN KLEIN: LIKE TO FOR THE RECORD DO  
21 THE ROLL CALL ON A TELEPHONIC BASIS. SHERRY LANSING.

22 MS. LANSING: YES.

23 CHAIRMAN KLEIN: DR. BRODY.

24 DR. BRODY: AYE.

25 CHAIRMAN KLEIN: THANK YOU. WE ARE NOW VERY

## BARRISTERS' REPORTING SERVICE

1 EFFICIENT. AND THANK YOU. IT'S VERY IMPORTANT ON  
2 THESE ITEMS TO HAVE VERY SOLID EVIDENCE THAT THE QUORUM  
3 WAS PRESENT EXACTLY AT THE TIME THE VOTE TOOK PLACE.

4 WE ARE GOING -- I'M GOING TO ASK THE  
5 PRESIDENT, IN TERMS OF THE ITEM ON MEMBERSHIP FOR THE  
6 SCIENTIFIC ISSUES SUBCOMMITTEE, IS THERE AN ITEM  
7 SEPARATE -- EXCUSE ME. I'M NOT GOING TO GO TO THAT  
8 ITEM. IT'S A DIFFERENT ITEM. I'M GOING TO GO FIRST TO  
9 THE REGULATIONS, ITEM NO. 9.

10 DR. LOMAX, FOR THOSE ON THE PHONE, IS GOING  
11 TO MAKE THE PRESENTATION.

12 MS. LANSING: ARE THERE MORE VOTING THAT'S  
13 GOING TO BE NEEDED?

14 CHAIRMAN KLEIN: THERE ARE. THERE'S THIS  
15 ITEM AND THEN THE FINANCE SUBCOMMITTEE. SO, YES, THERE  
16 ARE TWO VERY SUBSTANTIVE ITEMS, SHERRY. AND HOPEFULLY  
17 WE CAN GET THROUGH THEM IN AN EXPEDITIOUS MANNER.

18 MS. LANSING: OKAY.

19 DR. LOMAX: THANK YOU, MR. CHAIRMAN, MEMBERS  
20 OF THE BOARD. WE ARE PRESENTING FOR YOUR CONSIDERATION  
21 THIS EVENING FINAL ICOC APPROVAL OF REGULATORY  
22 AMENDMENTS TO SECTIONS 100080 AND 100090 OF THE MEDICAL  
23 AND ETHICAL REGULATIONS. THESE SET OF REGULATIONS WAS  
24 FIRST APPROVED BY THE ICOC IN OCTOBER. BASED ON THAT  
25 APPROVAL, WE WERE ABLE TO INITIATE THE PUBLIC COMMENT

## BARRISTERS' REPORTING SERVICE

1 PROCESS. AND WE POSTED, FIRST, THE END OF OCTOBER BOTH  
2 SECTIONS. WE RECEIVED PUBLIC COMMENT ON SECTION 100090  
3 AND DID A SECOND POSTING, WHICH WAS IN THE MONTH OF  
4 NOVEMBER.

5 THE COMMENTS WE RECEIVED ON THE REGULATIONS  
6 ARE PART OF THE PUBLIC RECORD AND INCLUDED IN YOUR  
7 PACKET TODAY. WE FEEL WE'VE BEEN RESPONSIVE TO PUBLIC  
8 COMMENT, AND THIS EVENING WE'D LIKE YOUR CONSIDERATION.

9 WE RECOMMEND -- THE STAFF RECOMMENDS APPROVAL  
10 OF THIS PACKAGE. BASED ON YOUR APPROVAL, IT WILL  
11 ENABLE US TO SUBMIT THE ENTIRE REGULATORY PACKAGE TO  
12 THE OFFICE OF ADMINISTRATIVE LAW AND THEY CAN REVIEW IT  
13 FOR COMPLIANCE WITH CALIFORNIA STATE REGULATIONS AND  
14 ADMINISTRATIVE PROCEDURES.

15 VERY QUICKLY, TO REMIND YOU ALL, THESE ARE A  
16 SET OF AMENDMENTS THAT WILL REVISE OUR OVERSIGHT  
17 REQUIREMENTS FOR STEM CELL RESEARCH. IN PARTICULAR, WE  
18 THINK IT ALIGNS OUR REVIEW REQUIREMENTS WITH THE IPS  
19 EXPERIMENTS, AND IT PROVIDES GREATER FLEXIBILITY FOR  
20 CERTAIN TYPES OF RESEARCH THAT'S NOT UNETHICALLY OF A  
21 CONTROVERSIAL NATURE, AND WILL AUTHORIZE THE USE OF  
22 EMBRYOS IN A WAY THAT'S CONSISTENT WITH THE NIH  
23 REQUIREMENTS, AND WOULD ALIGN US WITH NATIONAL  
24 REGULATIONS, BOTH THE NIH AND NATIONAL ACADEMY  
25 STANDARDS, AND IT MAINTAINS RESTRICTIONS ON PAYMENTS

## BARRISTERS' REPORTING SERVICE

1 FOR MATERIALS USED IN CIRM-FUNDED RESEARCH. THOSE ARE  
2 THE SUBSTANTIVE ELEMENTS OF THESE REGULATIONS.

3 CHAIRMAN KLEIN: SO AS I UNDERSTAND IT, IT'S  
4 PARTICULARLY IMPORTANT TO SCIENTISTS THAT WE HAVE A  
5 HARMONIOUS NATIONAL REGULATORY APPROACH. AND THE FACT  
6 THAT WHERE WE HAVE PAID GAMETE DONORS, WE NEED TO BE  
7 CONSISTENT WITH OTHER STATES AND THE NIH, AND THAT'S  
8 WHAT MAKES IT PARTICULARLY IMPORTANT THAT WE ADOPT THIS  
9 CHANGE.

10 DR. LOMAX: THAT'S CORRECT, MR. CHAIRMAN. IN  
11 ADDITION, JUST TO REMIND YOU ALL, WE DID ACTUALLY PASS  
12 AN INTERIM REGULATION FOR A PERIOD OF 270 DAYS WHICH  
13 AUTHORIZED THIS TYPE OF RESEARCH. THAT REGULATION  
14 ACTUALLY EXPIRED THE END OF THIS YEAR, WHICH KIND OF  
15 GIVES AN ADDED SENSE OF URGENCY TO THIS.

16 CHAIRMAN KLEIN: THE END OF LAST YEAR.

17 DR. LOMAX: END OF LAST YEAR. THEREFORE, OUR  
18 GRANTEES ARE, IN EFFECT, IN REGULATORY LIMBO UNTIL WE  
19 MOVE THIS PACKAGE.

20 CHAIRMAN KLEIN: THIS WAS MOVED FORWARD  
21 THROUGH THE STANDARDS COMMITTEE WITH A GREAT DEAL OF  
22 DISCUSSION AND CONSIDERATION, WHICH WE APPRECIATE.

23 WOULD ANYBODY, TO PUT THIS INTO DEBATE, LIKE  
24 TO MAKE A MOTION TO APPROVE?

25 MR. TORRES: SO MOVED.

## BARRISTERS' REPORTING SERVICE

1 CHAIRMAN KLEIN: MR. TORRES. IS THERE A  
2 SECOND?

3 DR. PRIETO: SECOND.

4 CHAIRMAN KLEIN: SECOND DR. PRIETO. IS THERE  
5 DISCUSSION ON THIS MOTION? IS THERE DISCUSSION OF  
6 THOSE ON THE PHONE? SHERRY LANSING.

7 MS. LANSING: NO. I'M FINE.

8 CHAIRMAN KLEIN: DR. BRODY.

9 DR. BRODY: NO.

10 CHAIRMAN KLEIN: PUBLIC DISCUSSION? I'D LIKE  
11 TO THEN CALL THE QUESTION. ALL IN FAVOR.

12 (CHORUS OF AYES.)

13 CHAIRMAN KLEIN: OPPOSED.

14 (NO RESPONSE.)

15 CHAIRMAN KLEIN: ABSTAIN.

16 (NO RESPONSE.)

17 CHAIRMAN KLEIN: FOR THE RECORD, SHERRY  
18 LANSING.

19 MS. LANSING: I'M IN FAVOR.

20 CHAIRMAN KLEIN: FOR THE RECORD, DR. BRODY.

21 DR. BRODY: AYE.

22 CHAIRMAN KLEIN: THANK YOU. MOTION PASSES.  
23 WE'LL GO ON TO THE NEXT ITEM.

24 MR. TORRES: I THINK WE ALSO SHOULD GIVE A  
25 NOTE OF THANKS TO DR. LOMAX FOR THE HERCULEAN WORK HE'S

## BARRISTERS' REPORTING SERVICE

1 DONE. BEING IN THE OFFICE AS I AM, IT'S JUST AMAZING  
2 THE NATIONAL RESPECT THAT HE HAS IN WORKING WITH SO  
3 MANY ELEMENTS IN THE DEVELOPMENT OF THESE REGS AND  
4 MAKING SURE THAT THE PUBLIC INPUT WAS APPROPRIATE.

5 (APPLAUSE.)

6 CHAIRMAN KLEIN: THANK YOU VERY MUCH. WE'RE  
7 GOING TO GO ON TO ITEM 11, VERY IMPORTANT WORK OF THE  
8 FINANCE SUBCOMMITTEE AND THE LOAN TASK FORCE. AND  
9 ELONA BAUM, OUR GENERAL COUNSEL, HAS PUT IN ENDLESS  
10 HOURS, AS DR. TROUNSON ALLUDED TO. I GET E-MAILS FROM  
11 HER AT 11, 12 O'CLOCK AT NIGHT, ON THE WEEKEND. SO LET  
12 ME TELL YOU, THIS IS -- AND TEXTS AND DRAFTS. AND  
13 MELISSA KING IS CONSTANTLY HELPING ME WITH GATHERING  
14 MATERIALS TOGETHER TO MAKE SURE WE GET A FULL RESPONSE  
15 BACK TO HER IN A TIMELY MANNER. SO WE'RE PULLING STAFF  
16 FROM ALL THE TIMES OF DAY AND NIGHT ON THIS.

17 MS. BAUM: THANK YOU VERY MUCH, CHAIR AND  
18 BOARD. I HAVE NINE SLIDES, AND I'M VERY FLEXIBLE IF  
19 YOU WANT TO ME TO AMP UP THE SPEED OR WHATEVER.

20 CHAIRMAN KLEIN: I THINK IT'S IMPORTANT,  
21 BECAUSE IT'S A CORE PROGRAM, IF YOU COULD GO THROUGH  
22 THEM, AND WE WILL JUST TRY AND BE EXPEDITIOUS.

23 MS. BAUM: OKAY. WE ARE LOOKING FOR THREE  
24 ACTIONS FROM THE BOARD. I ALWAYS THINK IT'S A GOOD  
25 IDEA TO SET WHAT THE REQUESTED ACTION IS, AND THEN I'LL

## BARRISTERS' REPORTING SERVICE

1 DESCRIBE IN MORE DETAIL, VERY FINE DETAIL THROUGH MY  
2 NINE SLIDES.

3 FIRST AND FOREMOST, WHAT WE'RE ASKING IS THAT  
4 THE BOARD APPROVE THE LOAN ADMINISTRATION GUIDELINES  
5 THAT WERE ADOPTED BY THE FINANCE SUBCOMMITTEE ON THE  
6 21ST OF JANUARY WITH A FEW REFINEMENTS THAT I'LL  
7 DISCUSS SHORTLY. ASSUMING THAT THERE IS SUCH APPROVAL  
8 OF THOSE GUIDELINES, THEN WE'RE REQUESTING THAT THE  
9 ICOC DIRECT STAFF TO USE THOSE GUIDELINES IN PREPARING  
10 THE EARLY TRANSLATION II RFA AND ANY OTHER RFA, AS  
11 WE'VE JUST TALKED ABOUT. THE TOOLS AND TECHNOLOGY RFA  
12 WILL LIKELY BE POSTED PRIOR TO FINALIZATION OF THE LOAN  
13 ADMINISTRATION POLICY. SO IT WOULD BE VERY IMPORTANT  
14 THAT WE'RE DIRECTED TO APPLY THESE TERMS FOR ALL  
15 PENDING RFA'S BEFORE WE A HAVE A FINAL LOAN  
16 ADMINISTRATION POLICY ENCOMPASSING THESE PROPOSED  
17 CHANGES IN PLACE. AND, OF COURSE, OBVIOUSLY DIRECT  
18 STAFF TO DRAFT THAT FINAL LOAN ADMINISTRATION POLICY  
19 THAT IS CONSISTENT WITH THESE NEW TERMS.

20 I THOUGHT IT MIGHT BE HELPFUL FOR THE PUBLIC  
21 IF I JUST GAVE A LITTLE BIT OF CONTEXT AS TO WHY THESE  
22 CHANGES WERE CONSIDERED BY THE FINANCE SUBCOMMITTEE. I  
23 THINK WE ALL KNOW THAT THE LOAN PROGRAM IS NEW. AND  
24 THE DISEASE TEAM RFA WAS, IN FACT, ALWAYS INTENDED AS A  
25 PILOT FOR THIS PROGRAM. IT WAS ALWAYS INTENDED THAT WE

## BARRISTERS' REPORTING SERVICE

1 WOULD OBTAIN EXPERIENCE THROUGH IMPLEMENTING THE  
2 DISEASE TEAM RFA IN THE LOAN CONTEXT AND THAT WE WOULD  
3 GET ADDITIONAL INPUT, AND FROM THAT WE WOULD OPTIMIZE  
4 THE PROGRAM. NOT ONLY DID WE GET UNSOLICITED INPUT,  
5 BUT ON DECEMBER 9TH, 2009, THE LOAN TASK FORCE WAS  
6 HELD, AND THEY GOT EXTENSIVE INPUT FROM INDUSTRY,  
7 VENTURE CAPITAL, AND BANKING REPRESENTATIVES.

8 AND WITH ALL OF THAT INPUT, A VERY DETAILED  
9 SET OF PROPOSED TERMS, GUIDELINES WERE PUT FORTH. THEY  
10 ARE REFLECTED IN TAB 9 OF YOUR BINDERS, AND I'LL POINT  
11 OUT THE CHANGES.

12 THE FINANCE CONSIDERED THESE TERMS IN DETAIL.  
13 AND ASIDE FROM THESE TWO CHANGES, WHAT YOU HAVE IN TAB  
14 11 REFLECTS THE APPROVED TERMS THAT WERE ACCEPTABLE TO  
15 THE FINANCE COMMITTEE AS VOTED ON JANUARY 21ST.

16 SO I THOUGHT WHAT I WOULD DO IS LOOK FROM A  
17 30,000 FOOT LEVEL WHAT THESE TERMS ARE. OBVIOUSLY  
18 THERE'S SOME PROPOSED AMENDMENTS, BUT I THINK IT'S VERY  
19 IMPORTANT TO UNDERSTAND THE GENERAL CONTEXT OF THESE  
20 NEW SETS OF TERMS. WHAT THEY DID, WHICH IS A LITTLE  
21 DIFFERENT FROM BEFORE, IS THAT THEY SET FORTH A NUMBER  
22 OF FINANCIAL TERM GUIDELINES THAT WOULD BE USED ON AN  
23 RFA-BY-RFA BASIS WHICH COULD BE CHANGED BY THE FINANCE  
24 COMMITTEE AT THE REQUEST OR RECOMMENDATION OF THE  
25 PRESIDENT. HOWEVER, IF THERE IS NO SUCH REQUEST AND IF

## BARRISTERS' REPORTING SERVICE

1 THERE IS NO VOTE BY THE FINANCE SUBCOMMITTEE, THESE  
2 GUIDELINES WOULD BECOME DEFAULT TERMS. THAT ENABLES  
3 EVERYBODY TO BE A LOT MORE NIMBLE AND RESPONSIVE TO  
4 DIFFERENT ECONOMIC CIRCUMSTANCES, AND I THINK IT MAKES  
5 US A LOT MORE EFFECTIVE IN MANAGING THE LOAN PROGRAM.

6 I'LL START, THEN, TALKING ABOUT A COUPLE OF  
7 THE PROPOSED AMENDMENTS AND THEN GO INTO WHAT THE  
8 FINANCIAL TERMS ARE.

9 THE AMENDMENTS THAT ARE OF ESSENCE IS THE  
10 FIRST ONE BEING REALLY JUST A TERMINOLOGY CHANGE. YOU  
11 MIGHT RECALL THAT WE HAD RECOURSE AND NONRECOURSE  
12 LOANS. AND FOR THE PUBLIC, THAT'S A LITTLE CONFUSING  
13 BECAUSE MOST PEOPLE THINK OF A RECOURSE LOAN AS  
14 REQUIRING SOME SORT OF GUARANTEE OR A SECURITY  
15 INTEREST, COLLATERAL, AND THAT'S NOT THE CASE. SO THE  
16 DECISION WAS MADE TO CHANGE RECOURSE, THE TERM  
17 "RECOURSE LOAN," TO A COMPANY-BACKED LOAN, FUNCTIONS  
18 THE SAME WAY, AND TO CHANGE THE TERM "NONRECOURSE LOAN"  
19 TO A PRODUCT-BACKED LOAN.

20 SO A COMPANY-BACKED LOAN, REPAYMENT IS  
21 REQUIRED REGARDLESS OF THE PRODUCT SUCCESS. BUT WITH A  
22 PRODUCT-BACKED LOAN, NO REPAYMENT OBLIGATIONS ARE  
23 REQUIRED IF THE PRODUCT FAILS AND FORGIVENESS IS GIVEN  
24 THROUGH A PROCESS THAT'S SET FORTH IN SOME DETAIL IN  
25 THE LAP.

## BARRISTERS' REPORTING SERVICE

1 ANOTHER PROPOSED AMENDMENT IS THAT THE LOAN  
2 RECIPIENT WOULD SELECT THE TYPE OF THE LOAN, WHETHER IT  
3 BE A PRODUCT-BACKED LOAN OR A COMPANY-BACKED LOAN.

4 THAT BEING SAID, NOW I WANT TO GO INTO SOME  
5 DETAIL ON THE SPECIFIC FINANCIAL TERMS THAT CAN BE  
6 DECIDED ON AN RFA-BY-RFA BASIS. THE FIRST ONE BEING  
7 THE TERM. IT'S NOW BEEN APPROVED BY THE FINANCE  
8 SUBCOMMITTEE AND RECOMMENDED THAT THERE BE A FIVE-YEAR  
9 TERM WITH PRINCIPAL AND ACCRUED INTEREST DUE AT THE END  
10 OF THE FIVE YEARS. HOWEVER, AT THE LOAN RECIPIENT'S  
11 SOLE DISCRETION, THEY MAY DECIDE TO EXTEND ON A  
12 YEAR-BY-YEAR BASIS PROVIDED THAT, ALWAYS A PROVISIO,  
13 THEY PAY 25 PERCENT OF ACCRUED INTEREST AND THEN EACH  
14 YEAR WILL BE SUBJECT TO INTEREST RATE INCREASES, WHICH  
15 I'LL DISCUSS IN A MINUTE. IN ADDITION, AT THE  
16 RECOMMENDATION OF THE PRESIDENT AND APPROVAL OF THE  
17 FINANCE SUBCOMMITTEE, MAY APPROVE A TERM GREATER THAN  
18 TEN YEARS.

19 NOW, WHAT ARE THE INTEREST RATES? THE  
20 FINANCE SUBCOMMITTEE APPROVED A RATE OF PRIME PLUS 1  
21 PERCENT OR, OR, AND THAT'S A BIG OR, LIBOR PLUS 2  
22 PERCENT. AND THIS IS THE FIRST REFINEMENT THAT I WANT  
23 TO POINT OUT. THIS IS THE FIRST DEPARTURE IN TAB 11  
24 FROM THE APPROVAL OF THE FINANCE SUBCOMMITTEE. WE ARE  
25 RECOMMENDING THAT INSTEAD OF IT BEING PRIME PLUS 1

## BARRISTERS' REPORTING SERVICE

1 PERCENT OR LIBOR PLUS 2 PERCENT, THAT, INSTEAD, THE  
2 BOARD JUST APPROVE THE DEFAULT GUIDELINE TERM OF LIBOR  
3 PLUS 2 PERCENT. IT WOULD BE VERY DIFFICULT TO HAVE A  
4 DEFAULT WITH TWO DIFFERENT INTEREST RATES, SO WE FELT  
5 THAT LIBOR IS A LOT STEADIER AND IT'S NOT SUBJECT TO AS  
6 MUCH CHANGE, SO THAT WAS DECIDED TO BE THE PREFERRED  
7 INTEREST RATE.

8 NOW, I ALSO, AS YOU RECALL, MENTIONED THAT IF  
9 AN EXTENSION IS DESIRED BY A LOAN RECIPIENT, THAT IT  
10 MAY BE PROVIDED SUBJECT TO AN INTEREST RATE INCREASE.  
11 THAT INTEREST RATE INCREASE IS, IN ESSENCE, 1 PERCENT  
12 EVERY YEAR AFTER FIVE YEARS. AND JUST TO MAKE SURE  
13 THAT WE'RE ALL ON THE SAME PAGE, I GAVE A LITTLE  
14 EXAMPLE IN MY SLIDES HERE. I JUST WANT TO MAKE IT  
15 CLEAR THAT YEAR SIX WOULD BE 1 PERCENT OVER BASE, YEAR  
16 SEVEN, 2 PERCENT OVER BASE, YEAR EIGHT 3 PERCENT OVER  
17 BASE. I THINK YOU GET THE PICTURE, SO IT ADDS 1  
18 PERCENT OVER THE CURRENT YEAR.

19 WITH RESPECT -- IF THERE'S ANY QUESTIONS, I  
20 THINK IT WOULD BE BETTER TO HEAR THEM FOR EACH TERM AS  
21 OPPOSED TO AT THE END. AGAIN, WE COULD DO WHAT'S EVER  
22 EASIER FOR THE BOARD.

23 WITH RESPECT TO WARRANTS, THAT HAS BEEN  
24 CHANGED A BIT AS WELL. NOW BOTH COMPANY-BACKED AND  
25 PRODUCT-BACKED LOANS WILL ALWAYS BE SUBJECT TO THE

## BARRISTERS' REPORTING SERVICE

1 20-PERCENT CAP FOR SHARES ON A FULLY DILUTED BASIS.  
2 BUT THE PERCENTS HAVE CHANGED AS OPPOSED FROM THE LAP  
3 OR THE INTERIM LAP THAT'S BEEN IN EFFECT.

4 SO UNDER COMPANY-BACKED LOANS, THERE WOULD BE  
5 EITHER A 10-PERCENT, 25-PERCENT, 50-PERCENT, OR  
6 75-PERCENT WARRANT REQUIREMENT. AND THAT'S THE PERCENT  
7 OF WARRANTS IN RELATION TO THE VALUE OF THE LOAN  
8 AMOUNT. AND THE DETERMINATION AS TO WHICH APPLIES,  
9 WHICH PERCENTAGE APPLIES, THE 10, 25, 50, WILL BE BASED  
10 ON MEETING CERTAIN CREDIT TERMS. AND THIS IS THE ONE  
11 TIME WHERE I DIDN'T PUT ALL THE DETAIL IN MY  
12 PRESENTATION, BUT IT IS IN THE SLIDES. AND IF ANYONE  
13 WANTS TO KNOW WHAT THOSE CREDIT PROVISIONS ARE --

14 CHAIRMAN KLEIN: SO, ELONA, I THINK IT'S  
15 IMPORTANT THERE TO INDICATE THIS IS A COMBINATION OF  
16 CREDIT AND EXTERNAL VALIDATIONS OF THE FINANCIAL  
17 SUPPORT.

18 MS. BAUM: THAT'S TRUE.

19 CHAIRMAN KLEIN: WHY DON'T YOU GIVE THEM AN  
20 INSIGHT TO THAT PROVISION.

21 MS. BAUM: I WAS TRYING TO SAVE TIME, BUT I  
22 THINK IT'S VERY IMPORTANT THAT WE GET IT ALL ON THE  
23 RECORD. A LOAN RECIPIENT IS ELIGIBLE FOR 10 PERCENT OF  
24 THE LOAN AMOUNT IN TERMS OF WARRANTS IF THE LOAN  
25 RECIPIENT SHOWS A PROFIT FOR THE PREVIOUS TWO YEARS.

## BARRISTERS' REPORTING SERVICE

1 IF THE LOAN RECIPIENT IS ENABLE TO DO THAT, BUT THEY  
2 CAN SATISFY THE FOLLOWING TWO ITEMS, THEY CAN ONLY BE  
3 CHARGED WITH 25 PERCENT OF THE LOAN AMOUNT IN TERMS OF  
4 WARRANTS. THOSE TWO CRITERIA ARE AS FOLLOWS, AND THEY  
5 MUST BOTH BE SATISFIED. THEY HAVE TO HAVE RAISED IN  
6 THE PRIOR FINANCING SINCE THEIR INCEPTION THREE TIMES  
7 THE TOTAL AMOUNT OF THE LOAN, AND THEY HAD TO HAVE  
8 ENTERED INTO A CONTRACTUAL ARRANGEMENT WHICH IS STILL  
9 IN EFFECT WITH A BIOTECH OR PHARMACEUTICAL COMPANY  
10 WHICH REQUIRES A REPAYMENT OF LICENSING REVENUES OR  
11 MILESTONE PAYMENTS AND IS PREDICATED ON THE SUCCESS OF  
12 A FUNDED PROJECT. THAT PROJECT DOESN'T HAVE TO BE A  
13 CIRM OR THE CIRM-FUNDED PROJECT. IT JUST HAS TO BE A  
14 PROJECT. AND, AGAIN, THAT'S THE VALIDATION, EVIDENCE  
15 OF VALIDATION.

16 NOW, IF A LOAN RECIPIENT CAN'T MEET BOTH OF  
17 THOSE TWO REQUIREMENTS AND THEY CAN MEET ONE OF THOSE  
18 REQUIREMENTS, THEN THERE WILL BE A 50 PERCENTAGE  
19 REQUIREMENT FOR THE WARRANTS. AND NONE OF THE ABOVE,  
20 IT'S 75 PERCENT.

21 CHAIRMAN KLEIN: I'D LIKE TO POINT OUT THAT,  
22 AGAIN, FOCUS ON THIS, THESE ARE GUIDELINES. SO I MADE  
23 A RECOMMENDATION -- AGAIN, THERE'S TREMENDOUS WORK THAT  
24 DUANE ROTH AND THE TASK FORCE AND FINANCE COMMITTEE HAS  
25 PUT INTO THIS. MY RECOMMENDATION WAS MAKE THESE

## BARRISTERS' REPORTING SERVICE

1 GUIDELINES SO AS FINANCIAL CONDITIONS CHANGE, AS THE  
2 FINANCIAL MARKETS AND THEIR DEMANDS CHANGE, WE MAY FIND  
3 FOLLOW-ON OPPORTUNITY FOR A COMPANY TO GET A LOAN  
4 THAT'S GOING TO TAKE IT TO PHASE III TRIALS, BUT THE  
5 LENDER HAS A PROBLEM HERE. AND WE HAVE TWO  
6 OPPORTUNITIES HERE. ONE, WE'LL LEARN FROM THAT IN  
7 REAL-TIME. GOING FORWARD WE'LL CHANGE OUR CONDITIONS  
8 SO THEY DON'T CREATE AN OBSTACLE.

9 NO. 2, THERE'S A PROVISION IN THESE DOCUMENTS  
10 THAT WITH THE CONSENT OF THE BORROWER AND THE  
11 RECOMMENDATION OF THE PRESIDENT TO THE -- AND THE  
12 RECOMMENDATION OF THE PRESIDENT AND THE SCIENTIFIC  
13 STAFF, WE CAN RETROACTIVELY APPLY THESE TERMS TO  
14 CORRECT THE PROBLEM THAT OTHERWISE WOULD PROHIBIT  
15 EFFECTIVELY THE COMPANY FROM GETTING A NEW VENTURE  
16 CAPITAL INFUSION OR A NEW BANK LOAN THAT IS ESSENTIAL  
17 TO TAKE IT TO A PHASE II TRIAL OR A PHASE III TRIAL.

18 SO WE'RE IN A REAL-TIME LEARNING SITUATION.  
19 WE HAVE WELL-DEFINED GUIDELINES. OUR RATIONALE IS VERY  
20 CLEAR, BUT WE HAVE THE ABILITY FOR THE PRESIDENT AND  
21 THE STAFF TO ADJUST AS ECONOMIC CONDITIONS AND LENDER  
22 REQUIREMENTS CHANGE SO WE DON'T GET INTO A BOX WHERE  
23 WE'RE REALLY PREVENTING SOMETHING GOING ON TO LATER  
24 STAGES OF COMMERCIALIZATION GETTING TO PATIENTS.

25 MS. BAUM: OKAY. NOW, WITH RESPECT TO THE

## BARRISTERS' REPORTING SERVICE

1 PRODUCT-BACKED LOANS, THE PERCENTAGES ARE 50, 60, OR  
2 100 PERCENT, AND I'LL DESCRIBE THE REQUIREMENTS,  
3 STARTING WITH 50. SO IF THE LOAN AMOUNT IS LESS THAN  
4 50 PERCENT OF THE TOTAL FUNDS REQUIRED TO FUND THAT  
5 CIRM-FUNDED PROJECT, THEN THE AMOUNT REQUIRED TO POST  
6 FOR WARRANTS WOULD BE 50 PERCENT.

7 IF THE LOAN AMOUNT IS LESS THAN 75 PERCENT OF  
8 THE TOTAL COST OF THE LOAN, SO YOU UNDERSTAND THAT  
9 WE'RE ANTICIPATING THAT IN SOME INSTANCES THE CIRM  
10 FUNDS AREN'T FULLY FUNDING A PROJECT; BUT IF THEY FUND  
11 LESS THAN -- IF CIRM IS FUNDING LESS THAN 75, THEN THE  
12 POSTED AMOUNT IS 60 PERCENT, AND THEN ANYTHING THAT  
13 DOESN'T SATISFY THAT, WE NEED TO HAVE A HUNDRED PERCENT  
14 OF THE LOAN COVERED BY VALUE OF WARRANTS.

15 CHAIRMAN KLEIN: OKAY. SO I THINK PAYING  
16 ATTENTION HERE TO PRESSURE ON ALL THE MEMBERS, DO WE  
17 HAVE ADDITIONAL QUESTIONS? QUESTIONS FROM THE PUBLIC?  
18 IS THERE A MOTION TO APPROVE?

19 DR. HAWGOOD: SO MOVED.

20 MS. BAUM: THERE'S SOME MORE TERMS.

21 CHAIRMAN KLEIN: WELL, I WANT TO -- I'M GOING  
22 TO PUT IT ON THE RECORD, AND THEN LET YOU FINISH THIS.  
23 DR. HAWGOOD, MOTION TO APPROVE. IS THERE A SECOND?

24 DR. POMEROY: SECOND.

25 CHAIRMAN KLEIN: SECOND, DR. POMEROY. ELONA,

## BARRISTERS' REPORTING SERVICE

1 AND I THINK YOU HIT THE CORE OF IT JUST, SO IF YOU  
2 COULD JUST HIT THE HIGHLIGHTS ON THESE ITEMS.

3 MS. BAUM: VERY EASY TO DO. THE EXISTING  
4 PROVISIONS FOR ACCELERATION HAVE BEEN RECOMMENDED AS  
5 BEING ELIMINATED AND REPLACED WITH ACCELERATION AT  
6 CIRM'S DISCRETION IN THE EVENT OF A CHANGE OF CONTROL.

7 I DID ALLUDE TO ANOTHER INSTANCE WHERE WHAT'S  
8 IN TAB 11 MIGHT NOT IDENTICALLY REFLECT WHAT WAS  
9 APPROVED BY THE FINANCE SUBCOMMITTEE. AND FORGIVENESS  
10 IS ANOTHER ONE OF THOSE AREAS WHERE THE EXACT -- THE  
11 VERBIAGE ISN'T EXACT, BUT I THINK THE SENTIMENT IS AND  
12 THE CONTEXT IS.

13 SO UNDER WHAT WE ARE APPROVING TODAY,  
14 COMPANY-BACKED LOANS WOULD NOT BE ENTITLED TO  
15 FORGIVENESS WHERE A FUNDING HAS BEEN CEASED DUE TO A  
16 MISSED MILESTONE. I BELIEVE THAT IS BASICALLY  
17 CONSISTENT WITH WHAT WAS APPROVED BY THE FINANCE  
18 SUBCOMMITTEE.

19 AGAIN, INTEREST, MOVING ON TO THE NEXT TERM,  
20 WOULD BE COMPOUNDED RATHER THAN SIMPLE. AND FOR THE  
21 MOST PART, THE LAP AMENDMENTS IN THE FUTURE WOULD NOT  
22 APPLY RETROACTIVELY EXCEPT, AS YOU HAD MENTIONED  
23 EARLIER, AS AGREED TO BY A LOAN RECIPIENT AND CIRM.

24 AND FINALLY, AND THIS GETS --

25 CHAIRMAN KLEIN: AND I WOULD SUGGEST, JUST

## BARRISTERS' REPORTING SERVICE

1 FOR READABILITY FOR THIRD PARTIES TRYING TO ABSORB  
2 THIS, LET'S CHANGE THAT HEADNOTE BECAUSE IT IMPLIES A  
3 CONTRADICTION WITH THE TEXT THAT FOLLOWS, AND NOT  
4 EVERYONE WOULD READ THE TEXT HERE. SO IT'S RETROACTIVE  
5 APPLICATION ONLY WITH CONSENT OF THE BORROWER.

6 MS. BAUM: POINT WELL TAKEN.

7 AND FINALLY, THIS GETS TO YET ANOTHER ISSUE  
8 THAT WAS RAISED EARLIER, THE RECOMMENDATION FROM THE  
9 FINANCE SUBCOMMITTEE WAS TO MODIFY THE THRESHOLD FOR  
10 LOANS FROM \$3 MILLION OR MORE TO PERMIT THE FINANCE  
11 SUBCOMMITTEE, BASED ON A RECOMMENDATION FROM THE  
12 PRESIDENT, TO ADJUST THAT THRESHOLD ON A RFA-BY-RFA  
13 BASIS.

14 CHAIRMAN KLEIN: AND THE WORDING HERE SAYS OR  
15 MORE. BASED UPON THE CONVERSATION I JUST HEARD WITH  
16 DUANE ROTH AND THE PRESIDENT, I THINK IT WOULD BE  
17 FROM -- THAT'S WHAT IT USED TO SAY.

18 MS. BAUM: YES.

19 CHAIRMAN KLEIN: SO THE NEW IS OPEN?

20 MS. BAUM: YES.

21 CHAIRMAN KLEIN: THE THRESHOLD IS OPEN?

22 MS. BAUM: RIGHT.

23 CHAIRMAN KLEIN: ALL RIGHT. SO ADDITIONAL  
24 POINTS?

25 MS. BAUM: THOSE ARE ALL THE TERMS.

## BARRISTERS' REPORTING SERVICE

1 CHAIRMAN KLEIN: ALL RIGHT. FINE.  
2 ADDITIONAL DISCUSSION FROM THE BOARD? ADDITIONAL  
3 DISCUSSION OR QUESTIONS FROM THE PUBLIC? I BELIEVE WE  
4 HAVE THE MOTION PENDING. MR. HARRISON, WOULD YOU  
5 RESTATE THE MOTION?

6 MR. HARRISON: SURE, IF I COULD. THE MOTION  
7 WOULD BE TO APPROVE THE GUIDELINES AS SET FORTH IN  
8 EXHIBIT A, TO DIRECT STAFF TO USE THESE TERMS FOR THE  
9 EARLY TRANSLATION II RFA, AND TO DIRECT STAFF TO AMEND  
10 THE LOAN ADMINISTRATION POLICY TO INCORPORATE THE  
11 GUIDELINES.

12 CHAIRMAN KLEIN: NOW, CAN WE, ELONA, HANDLE  
13 ALL THREE APPROVALS FOR YOU IN A SINGLE MOTION?

14 MS. BAUM: I THINK SO.

15 CHAIRMAN KLEIN: ALL RIGHT. I JUST WANTED TO  
16 CONFIRM THAT THAT WAS YOUR UNDERSTANDING.

17 MS. BAUM: YES.

18 CHAIRMAN KLEIN: SO THE INTENT HERE IS TO  
19 HANDLE ALL THREE REQUESTED APPROVALS IN THIS MOTION.  
20 THANK YOU.

21 WITH THAT, I'D LIKE TO CALL THE QUESTION.  
22 ALL IN FAVOR.

23 (CHORUS OF AYES.)

24 CHAIRMAN KLEIN: OPPOSED.

25 (NO RESPONSE.)

## BARRISTERS' REPORTING SERVICE

1 CHAIRMAN KLEIN: ABSTAIN.

2 (NO RESPONSE.)

3 CHAIRMAN KLEIN: FOR THE RECORD, I'D LIKE TO  
4 CALL DR. BRODY.

5 DR. BRODY: AYE.

6 CHAIRMAN KLEIN: SHERRY LANSING.

7 MS. LANSING: YES.

8 CHAIRMAN KLEIN: ALL RIGHT. THANK YOU. SO  
9 THE MOTION PASSES.

10 MR. ROTH: IF I COULD, JUST VERY QUICKLY,  
11 THIS IS A PROCESS THAT WORKED EXTREMELY WELL. NOT ONLY  
12 GREAT INPUT FROM THE TASK FORCE OVER A LONG PERIOD OF  
13 TIME, BUT FROM THE STAFF, ELONA, LYNN HARWELL, JAMES,  
14 MANY PEOPLE THAT WORKED ON THIS.

15 I WILL TELL YOU WHAT REALLY MADE IT BETTER  
16 WAS THE INPUT FROM THE PUBLIC. WE HAD SOME GREAT INPUT  
17 IN THE VARIOUS MEETINGS, BUT ALSO IN LETTERS, PHONE  
18 CALLS, JUST AN AWFUL LOT OF VERY GOOD, CONSTRUCTIVE  
19 COMMENTS. I'M GRATEFUL TO ALL THE PEOPLE THAT WORKED  
20 ON THIS. IT REALLY DID COME OUT GREAT.

21 MR. TORRES: AS A NOVICE, I WANT TO THANK  
22 MR. ROTH AS WELL BECAUSE WHAT HE PROVIDED THROUGHOUT  
23 THIS PROCESS AND AS A MEMBER OF THE FINANCE  
24 SUBCOMMITTEE WAS EXTRAORDINARY. THANK YOU, DUANE.

25 CHAIRMAN KLEIN: I THINK WE SHOULD GIVE DUANE

## BARRISTERS' REPORTING SERVICE

1 A BIG ROUND OF APPLAUSE.

2 (APPLAUSE.)

3 CHAIRMAN KLEIN: FOLLOWED BY A GREAT ROUND OF  
4 APPLAUSE FOR THE STAFF. AND I WOULD SAY THAT IN THE  
5 EARLY PART OF THIS PROCESS, THE FUNDAMENTALS OF THIS  
6 CONTINUING, WITH ADVICE FOR THE CHAIR THROUGH THIS  
7 PROCESS, LYNN HARWELL HAS WORKED VERY HARD ON THIS  
8 PROJECT. ELONA BAUM HAS WORKED VERY HARD ON THIS  
9 PROCESS. MELISSA KING HAS KEPT EVERYONE IN THE LOOP  
10 AND FOCUSED. JAMES HARRISON HAS BEEN A GREAT  
11 CONTRIBUTOR. SO FOR ALL OF THE STAFF CONTRIBUTIONS,  
12 LET'S GIVE THEM A GREAT HAND.

13 (APPLAUSE.)

14 CHAIRMAN KLEIN: ALL RIGHT. SHERRY, I THINK  
15 YOU ARE LIBERATED. I GUESS THERE WAS NO NEED FOR  
16 AUTHORIZATION.

17 SO WHAT I'D LIKE TO DO AT THIS MOMENT IS WE  
18 HAVE THE ITEM THAT HAS ALREADY BEEN SENT TO THE BOARD  
19 THAT DEALT WITH THE DEFERRAL PROGRAM FOR  
20 PREAPPLICATIONS. AND WE HAVE A REPORT THAT'S IN OUR  
21 BINDERS AT THIS TIME; IS THAT CORRECT, DR. TROUNSON?

22 DR. TROUNSON: YES.

23 CHAIRMAN KLEIN: AND IT WAS PREVIOUSLY SENT  
24 TO THE STAFF AS AN ATTACHMENT 10 TO MELISSA'S E-MAIL.  
25 REALIZE EVERYONE MAY NOT HAVE GOTTEN THROUGH THAT, BUT

## BARRISTERS' REPORTING SERVICE

1 WE'RE GOING TO GO THROUGH IT TO TODAY. AND WHO IS  
2 MAKING THE PREAPPLICATION PRESENTATION?

3 DR. TROUNSON: I'M ASKING GIL TO DO THAT.

4 CHAIRMAN KLEIN: ALL RIGHT.

5 DR. TROUNSON: WHAT WE'RE TRYING TO DO IS  
6 BRING FORWARD THE INFORMATION AS WE'RE GATHERING IT IN  
7 A NUMBER OF AREAS, AND SO THAT IT WOULD BE USEFUL FOR  
8 THE BOARD TO KNOW THE PROCESSES THAT WE'RE WORKING OUR  
9 WAY THROUGH SO THAT YOU CAN DIRECT US TO DO SOMETHING  
10 IN ADDITION OR OTHER, IF THAT'S OKAY.

11 CHAIRMAN KLEIN: I'D ALSO LIKE TO SAY IN CASE  
12 ANYONE HERE HAS ANY OTHER DEADLINES THAT I'M NOT AWARE  
13 OF TONIGHT, I HOPE THAT EVERYONE WILL BE PARTICULARLY  
14 ATTENTIVE AND PRESENT AT THE PRESENTATION AND THE  
15 SPOTLIGHT TOMORROW MORNING. THAT PRESENTATION IS ON  
16 IPS CELLULAR THERAPY THAT WE APPROVED IN DISEASE TEAMS.  
17 OBVIOUSLY THIS IS, AS FAR AS I KNOW, ONE OF THE FIRST  
18 APPROVED IN THIS COUNTRY TO TRY AND REACH AN IND.  
19 CERTAINLY IT IS AN HISTORIC OPPORTUNITY TO MOVE THAT  
20 THERAPY FORWARD.

21 MS. LANSING: BOB, WILL WE BE ABLE TO HEAR  
22 THAT ON THE PHONE, OR IS THAT NOT GOING TO BE POSSIBLE?

23 CHAIRMAN KLEIN: WE WILL BE ABLE TO HEAR IT  
24 ON THE PHONE.

25 MS. KING: AND I WILL SEND THE SLIDE DECK TO

## BARRISTERS' REPORTING SERVICE

1 YOU TONIGHT.

2 MS. LANSING: THANK YOU SO MUCH. I'M GOING  
3 TO BE ON A LITTLE LONGER, BUT WE'RE DONE WITH THE  
4 QUORUM, AM I CORRECT?

5 CHAIRMAN KLEIN: WE ARE. WE THANK YOU VERY  
6 MUCH FOR STAYING WITH US.

7 MS. LANSING: THAT'S OKAY. I CAN STAY A  
8 LITTLE LONGER. I DON'T WANT TO INTERRUPT ANYMORE  
9 THOUGH. I WILL BE ABLE TO HEAR IT TOMORROW MORNING.

10 DR. FONTANA: JUST FOR CLARIFICATION, WE'RE  
11 DOING WHAT TOMORROW?

12 CHAIRMAN KLEIN: THERE'S A SPOTLIGHT THAT IS  
13 GOING TO HAVE A PRESENTATION FROM THE DISEASE TEAM THAT  
14 DID THE IPS THERAPY, AND THEN WE'RE GOING INTO OTHER  
15 AGENDA ITEMS. AND THE QUESTION IS HOW FAR WE GET  
16 TOMORROW, BUT WHAT I WANT TO MAKE SURE IS, EVEN THOUGH  
17 WE MAY NOT NEED A QUORUM TOMORROW, EVEN THOUGH WE MAY  
18 NOT NEED A QUORUM TOMORROW, IT IS VERY IMPORTANT, I  
19 THINK, AS A FUNDAMENTAL PIECE OF INFORMATION FOR THIS  
20 BOARD TO DISCUSS IN-DEPTH THESE ISSUES DEALING WITH IPS  
21 CELLS IN THERAPEUTICS USES.

22 WE MAY, AS BOARD MEMBERS, BE CHALLENGED ABOUT  
23 WHY WE ARE APPROVING THIS. AND THIS IS A DISEASE THAT  
24 IS IN ITS RECESSIVE FORM DEADLY, IN ITS DOMINANT FORM A  
25 TREMENDOUS BURDEN ON THE INDIVIDUAL AND THEIR ABILITY

## BARRISTERS' REPORTING SERVICE

1 TO CARRY OUT THEIR LIFE. I THINK DR. TROUNSON WILL BE  
2 MAKING SOME COMMENTS THAT ARE IMPORTANT FOR US TO PLACE  
3 THIS IN THE CONTEXT OF EMBRYONIC STEM CELLS STILL BEING  
4 EXTREMELY IMPORTANT BECAUSE IT WILL BE SOME TIME BEFORE  
5 WE UNDERSTAND THE GENOMIC STABILITY OF IPS CELLS, AND I  
6 THINK IT'S IMPORTANT THAT THE BOARD HAVE A DISCUSSION  
7 THAT PLACES THIS IN THE CONTEXT AND THE CONDITIONS THAT  
8 MADE IT POSSIBLE TO APPROVE A CELLULAR THERAPY FOR THIS  
9 PARTICULAR TYPE OF DISEASE.

10 IT IS DEALING WITH THE SKIN, AND IT IS A  
11 CONDITION WHERE IF THERE'S A PROBLEM WITH THE THERAPY,  
12 IT'S VISIBLE ON THE SURFACE, WHICH IS AN UNCOMMON  
13 SITUATION THAT WE'RE DEALING WITH THERAPEUTICALLY. I  
14 JUST WANT TO MAKE CERTAIN THAT EVEN THOUGH WE WORK  
15 THROUGH OTHER PRIORITIES, WE REALIZE TOMORROW MORNING  
16 THAT IT WOULD BE VERY IMPORTANT TO HAVE AS FULL A BOARD  
17 PRESENCE AND DISCUSSION AS POSSIBLE OF THIS ITEM.

18 MR. SHEEHY: I GUESS I'M CURIOUS WHY WE'RE  
19 NOT GOING AHEAD WITH OUR AGENDA ITEM 10. SINCE THIS  
20 PARTICULAR QUESTION THAT WE'RE DISCUSSING IS RELEVANT  
21 TO A MATTER THAT'S GOING TO BE, I'M ASSUMING,  
22 CONSIDERED BY THE SCIENTIFIC ISSUE SUBCOMMITTEE. I  
23 THINK IT MIGHT BE GERMANE TO GO AHEAD SINCE WE HAVE A  
24 QUORUM, AND THERE SEEMS TO BE SOME QUESTION AS TO  
25 WHETHER WE MIGHT HAVE A QUORUM TOMORROW, THAT WE GO

## BARRISTERS' REPORTING SERVICE

1 AHEAD AND CONSTITUTE THAT SUBCOMMITTEE SO THAT PEOPLE  
2 WILL PAY PARTICULAR ATTENTION TO THIS PRESENTATION  
3 SINCE, AT LEAST BASED ON MY UNDERSTANDING FROM THE LAST  
4 MEETING, THE PREAPPLICATION PROCESS WAS SUPPOSED TO BE  
5 AN ITEM THAT WAS IMMEDIATELY GOING TO BE TAKEN UP ON  
6 THIS SUBCOMMITTEE.

7 CHAIRMAN KLEIN: OKAY. SO THIS SUBCOMMITTEE  
8 CAN BE -- IT IS THE INTENTION TO CONSTITUTE THE  
9 SUBCOMMITTEE. BY THAT ITEM, I WAS INTENDING TO  
10 IMMEDIATELY FOLLOW ON THIS PRESENTATION TO GIVE SOME  
11 CONTEXT FOR THE SUBSTANCE OF ONE OF THE MAJOR ISSUES  
12 THAT WILL BE DISCUSSED BY THE SUBCOMMITTEE.

13 MR. SHEEHY: BUT WE WON'T HAVE A QUORUM.  
14 THIS ITEM, THIS CONSIDERATION, WHICH SEEMS TO REQUIRE A  
15 VOTE, AND WHEN I READ CONSIDERATION, THERE'S AN ISSUE  
16 OF HAVING A VOTE AND WOULD REQUIRE A QUORUM.

17 MS. KING: I DON'T WANT TO DISPUTE ANYTHING  
18 THAT WAS JUST SAID, BUT I JUST WANT TO MAKE CLEAR THAT  
19 UNLESS THE PEOPLE THAT ARE HERE TONIGHT FOR SOME REASON  
20 DON'T SHOW UP TOMORROW, WE SHOULD HAVE A QUORUM  
21 TOMORROW. MAKE SURE YOU UNDERSTAND.

22 CHAIRMAN KLEIN: LET ME ASK THIS QUESTION  
23 HERE. IF I CAN JUST TAKE A MOMENT, THE ONLY VOTE HERE  
24 ON THIS SUBCOMMITTEE IS TO CONSTITUTE THE SUBCOMMITTEE.  
25 SO IF WE HOLD THAT ITEM AS A VOTE IMMEDIATELY, THEN WE

## BARRISTERS' REPORTING SERVICE

1 CAN GO ON TO HAVE PLENTY OF TIME TO HAVE A GOOD  
2 SUBSTANTIVE DISCUSSION OF THE SUBCOMMITTEE.

3 MR. SHEEHY: THAT SOUNDS FINE. I MAKE THAT  
4 MOTION.

5 CHAIRMAN KLEIN: WOULD YOU LIKE TO MAKE A  
6 MOTION TO CONSTITUTE THE SCIENTIFIC ISSUES  
7 SUBCOMMITTEE?

8 MR. SHEEHY: SO MOVED.

9 MR. ROTH: SECOND.

10 CHAIRMAN KLEIN: IS THERE DISCUSSION ON THIS  
11 ITEM, REALIZING WE'RE GOING TO DISCUSS THE SUBSTANCE OF  
12 THIS LATER IN THE AGENDA?

13 DR. AZZIZ: SO WE ARE NOW VOTING ON THE  
14 CONCEPT?

15 CHAIRMAN KLEIN: ONLY THE CONSTITUTION OF THE  
16 COMMITTEE.

17 DR. AZZIZ: WE'RE NOT CONSTITUTING THE  
18 COMMITTEE; WE'RE NOT NAMING YET.

19 CHAIRMAN KLEIN: WE'RE NOT NAMING THE PEOPLE.

20 DR. AZZIZ: WE'RE JUST CREATING THE  
21 COMMITTEE. JUST WANTED TO MAKE SURE.

22 CHAIRMAN KLEIN: PUBLIC COMMENT?

23 MR. TORRES: BASED ON THE MOTION THAT WAS  
24 PASSED AT STANFORD.

25 CHAIRMAN KLEIN: THERE WASN'T A MOTION PASSED

## BARRISTERS' REPORTING SERVICE

1 AT THAT TIME. IT WAS DISCUSSED AND I AGREED TO BRING  
2 IT BACK AND AGENDIZE IT FOR THIS COMMITTEE. SO THIS  
3 VOTE IS TO CREATE --

4 DR. AZZIZ: FORMALIZE THAT MOTION.

5 CHAIRMAN KLEIN: THAT'S RIGHT. SO ANY  
6 ADDITIONAL DISCUSSION? PUBLIC? CALL THE QUESTION.  
7 ALL IN FAVOR.

8 (CHORUS OF AYES.)

9 CHAIRMAN KLEIN: OPPOSED.

10 (NO RESPONSE.)

11 CHAIRMAN KLEIN: ABSTAIN.

12 (NO RESPONSE.)

13 CHAIRMAN KLEIN: FOR THE RECORD, DR. BRODY.

14 DR. BRODY: AYE.

15 CHAIRMAN KLEIN: SHERRY LANSING.

16 MS. LANSING: YES.

17 CHAIRMAN KLEIN: I WANT YOU TO KNOW, SHERRY,  
18 THAT JEFF WAS KIND OF LEANING BACK AND THINKING IS SHE  
19 REALLY THERE.

20 MS. LANSING: I'M HERE.

21 CHAIRMAN KLEIN: HE REALLY APPRECIATES YOUR  
22 PRESENCE.

23 MS. LANSING: I HAVE TO LEAVE.

24 CHAIRMAN KLEIN: WE HAVE GONE THROUGH ALL THE  
25 ITEMS THAT WE NEED TO COVER. YOU ARE FREE TO EXPLORE

## BARRISTERS' REPORTING SERVICE

1 THE WORLD.

2 MS. LANSING: I'M REALLY SORRY. I JUST HAVE  
3 TO GIVE A SPEECH. I'M SORRY I'M NOT THERE. I MISS YOU  
4 ALL. I'LL BE ON THE PHONE IN THE MORNING.

5 CHAIRMAN KLEIN: SHERRY, WE'RE GOING TO BE  
6 LOOKING FOR A VIDEO OF THE SPEECH ON OUR COMPUTER.  
7 THANK YOU.

8 MS. LANSING: TAKE CARE, GUYS.

9 CHAIRMAN KLEIN: SO DR. SAMBRANO.

10 DR. SAMBRANO: MR. CHAIRMAN, MEMBERS OF THE  
11 BOARD, MEMBERS OF THE PUBLIC, WHAT I WANT TO DO IS  
12 SIMPLY PROVIDE YOU WITH AN UPDATE ON SOME  
13 REVIEW-RELATED POLICIES AND ACTIVITIES, BOTH BECAUSE  
14 THEY ARE IMPORTANT AS THEY IMPACT OUR APPLICANTS, OUR  
15 REVIEWERS, OUR STAFF, AND I THINK OUR OVERALL MISSION,  
16 AND I THINK THESE ARE CERTAINLY ISSUES THAT WOULD  
17 BECOME THE SUBJECT OF THIS COMMITTEE.

18 I WANT TO BEGIN, FIRST, BY BRIEFLY GOING OVER  
19 A SLIDE THAT WAS PROVIDED TO YOU REGARDING APPLICATION  
20 REVIEW AT CIRM AND NIH. THAT IS UNDER ITEM 10. THAT  
21 FOLLOWS THE PREAPP REPORT. I THINK IT PROVIDES AN  
22 IMPORTANT PERSPECTIVE AS YOU CONSIDER HOW TO BEST  
23 APPROACH THE SOLICITATION OF APPLICATIONS FOR OUR  
24 RFA'S.

25 IN ADDITION TO THAT, I ALSO WANT TO PRESENT

## BARRISTERS' REPORTING SERVICE

1 SOME RESULTS OF OUR ONGOING SURVEY, IN PARTICULAR FROM  
2 SOME OF THE STEM CELL LEADERSHIP ACROSS CALIFORNIA, AND  
3 JUST TOUCH UPON A COUPLE OF POLICIES THAT ARE  
4 UNDERGOING DEVELOPMENT AND/OR NEED SOME REFINEMENT  
5 RELATED TO THE SUBMISSION OF NEW DATA AFTER AN  
6 APPLICATION DEADLINE AND PETITIONS AND APPEALS.

7 SO I WANT TO START OFF FROM THE PERSPECTIVE  
8 OF NIH. AS MANY OF YOU KNOW, NIH HAS BEEN DEVELOPING  
9 THE PROCESS OF REVIEW FOR OVER 60 YEARS NOW. AND SO IT  
10 PROVIDES AN IMPORTANT REFERENCE AND AN EXAMPLE FROM  
11 WHICH TO LEARN. AND IT ALSO PROVIDES FOR US A STANDARD  
12 FOR COMPARISON AND UNDERSTANDING CIRM'S OWN CAPACITY.

13 SO IF YOU CONSIDER RO1-TYPE RESEARCH  
14 APPLICATIONS, THESE ARE FOR INDIVIDUAL INVESTIGATORS  
15 WHICH ARE TYPICALLY ABOUT 200,000 OR MORE PER YEAR FOR  
16 UP TO FIVE YEARS AND PERHAPS SIMILAR TO OUR OWN BASIC  
17 BIOLOGY TYPE OF AWARD. NIH RECEIVES ABOUT 50,000 OF  
18 THESE TYPES OF APPLICATIONS PER YEAR, WHICH ARE  
19 DISTRIBUTED TO APPROXIMATELY 250 STUDY SECTIONS FOR  
20 REVIEW. EACH STUDY SECTION WOULD BE SIMILAR OR  
21 EQUIVALENT TO OUR OWN GRANTS WORKING GROUP.

22 EACH OF THESE STUDY SECTIONS THEN CONSIDERS  
23 ABOUT 250 APPLICATIONS PER YEAR, AND EACH STUDY SECTION  
24 MEETS ABOUT THREE TIMES PER YEAR. THAT MEANS THAT FOR  
25 EACH ROUND OR EACH MEETING, A STUDY SECTION WILL

## BARRISTERS' REPORTING SERVICE

1 CONSIDER ABOUT 60 TO 90 APPLICATIONS. ABOUT 50 PERCENT  
2 OR MORE OF THOSE ARE TRIAGED. THAT MEANS THAT THEY'RE  
3 NOT ACTUALLY DISCUSSED DURING THAT REVIEW MEETING.

4 AND SO JUST TO PROVIDE A GENERAL SENSE OF HOW  
5 THAT MIGHT COMPARE TO OUR OWN GRANTS WORKING GROUP, I  
6 THINK THERE ARE MANY SIMILARITIES IN TERMS OF HOW THE  
7 REVIEW IS CONDUCTED IN TERMS OF THE PROCESS AND THE  
8 OVERALL REVIEW WORKLOAD OF A TYPICAL NIH STUDY SECTION  
9 WITH THAT OF OUR OWN GRANTS WORKING GROUP.

10 SO THIS TABLE LAYS OUT A COMPARISON ACROSS  
11 SEVERAL FEATURES AND FACTORS OF REVIEW. IF YOU  
12 CONSIDER THE REVIEWERS, FOR EXAMPLE, THE OVERALL NUMBER  
13 IS SIMILAR. NIH HAS ON AVERAGE 20 SCIENTIFIC MEMBERS  
14 AND FOUR ADDITIONAL AD HOC MEMBERS. THE GRANTS WORKING  
15 GROUP HAS BY STATUTE 15 SCIENTIFIC MEMBERS, BUT WE  
16 TYPICALLY ADD WHAT WE CALL SPECIALISTS WHICH CAN RANGE  
17 BETWEEN SIX TO FIFTEEN DEPENDING ON OUR NEEDS. BUT WE  
18 ALSO HAVE THE BENEFIT OF HAVING SEVEN PATIENT ADVOCATE  
19 MEMBERS AS WELL.

20 FOR A REVIEW OF R01 TYPES, AS I MENTIONED  
21 BEFORE, NIH WILL HANDLE ABOUT 60 TO 90 APPLICATIONS.  
22 FOR A SIMILAR TYPE OF AWARD, CIRM MIGHT CONSIDER 45 TO  
23 60. OF COURSE, AS I MENTIONED BEFORE, THE NIH USUALLY  
24 ENCOURAGES TRIAGE. SO THE NUMBER THAT ARE ACTUALLY  
25 DISCUSSED DURING A REVIEW IS ONLY ABOUT 50 PERCENT OF

## BARRISTERS' REPORTING SERVICE

1 THAT. AT CIRM THE GRANTS WORKING GROUP DISCUSSES ALL  
2 APPLICATIONS.

3 THE STANDARD IN TERMS OF REVIEWERS PER  
4 APPLICATION IS THREE. I THINK THAT'S A TYPICAL  
5 STANDARD ACROSS THE BOARD, IN SOME CASES MORE, BUT I  
6 THINK WE'RE SIMILAR THERE. THE NUMBER OF APPLICATIONS  
7 OR AVERAGE NUMBER OF APPLICATIONS THAT ARE REVIEWED BY  
8 A GIVEN SCIENTIFIC REVIEWER FOR NIH HAS BEEN SLOWLY  
9 CREEPING UP, UP TO SEVEN OR TEN, WHERE BEFORE IT WAS  
10 FIVE OR SIX. THE AVERAGE FOR CIRM IS ABOUT TEN PER  
11 REVIEWER.

12 AND THE DURATION OF THE MEETINGS ARE QUITE  
13 SIMILAR. IN BOTH CASES SUMMARY STATEMENTS ARE  
14 GENERATED; THAT IS, A SUMMARY OF THE REVIEW. THE MAJOR  
15 DIFFERENCE THERE IS THAT FOR CIRM WE HAVE TO GENERATE A  
16 PUBLIC SUMMARY, AND SO WE HAVE TO CERTAINLY PAY MORE  
17 ATTENTION TO THE PROTECTION OF INTELLECTUAL PROPERTY  
18 AND PROPRIETARY INFORMATION THAT MIGHT BE PRESENTED BY  
19 AN APPLICANT.

20 THE SCOPE OF REVIEW FOR NIH IS TYPICALLY  
21 BASED ON SCIENTIFIC MERIT. GRANTS WORKING GROUP  
22 CONSIDERS SCIENTIFIC MERIT AS WELL AS PROGRAMMATIC  
23 ISSUES. THE REVIEWS ARE GENERALLY PRETTY SIMILAR, A  
24 RECOMMENDATION AND SCORE IN TERMS OF FUNDING. THE  
25 TIMEFRAME, HOWEVER, IS A LITTLE BIT DIFFERENT. THE

## BARRISTERS' REPORTING SERVICE

1 AVERAGE FOR NIH, FROM THE TIME THE APPLICATIONS ARE DUE  
2 TO AWARD, IS ABOUT 11 MONTHS. FOR CIRM IT'S ABOUT  
3 SEVEN MONTHS. IF YOU ADD TO THAT THE PREAPPLICATION  
4 PROCESS, IT'S ABOUT NINE MONTHS.

5 SO NOW IN CONSIDERING CIRM'S OVERALL CAPACITY  
6 TO PROCESS APPLICATIONS, IF YOU CONSIDER JUST AN  
7 OVERALL OPEN CALL THAT MIGHT BE FOCUSED ON HUMAN STEM  
8 CELL STUDIES, I'M USING AS AN EXAMPLE BASED ON WHAT WE  
9 RECEIVED FOR THE BASIC BIOLOGY I AND II, AN OPEN CALL  
10 COULD PRODUCE BETWEEN 250 AND 300 APPLICATIONS. AND  
11 THE GRANTS WORKING GROUP COULD REASONABLY REVIEW  
12 APPROXIMATELY 60 APPLICATIONS PER REVIEW MEETING.

13 CHAIRMAN KLEIN: DR. SAMBRANO, I THINK, AS  
14 WE'VE STATED BEFORE, THAT'S BASED UPON THE LESS  
15 COMPLICATED APPLICATIONS. IF IT'S A DISEASE TEAM,  
16 ISN'T THE NUMBER THAT CAN BE REVIEWED ABOUT HALF OF  
17 THAT?

18 DR. SAMBRANO: YES, THAT'S CORRECT. SO WHAT  
19 WE'RE LOOKING AT IS PERHAPS COMPARABLE TO AN NIH R01.  
20 AND IF WE WERE TO REVIEW 250 TO 300 APPLICATIONS, WE  
21 ARE LOOKING AT MULTIPLE REVIEW SESSIONS OF THE GRANTS  
22 WORKING GROUP. THAT COULD BE AS MANY AS FOUR TO FIVE.

23 AND SO BASED ON AVERAGE, NIH, IN COMPARISON,  
24 WOULD USUALLY RELY ON ONE STUDY SECTION OVER A YEAR TO  
25 REVIEW ABOUT 250 APPLICATIONS. THEY MIGHT RELY ON TWO

## BARRISTERS' REPORTING SERVICE

1 STUDY SECTIONS IF IT'S MORE THAN THAT.

2 JUST TO GIVE YOU A SENSE OF, HELP EXPLAINING  
3 WHY WE THINK APPROXIMATELY 60 APPLICATIONS FOR THIS  
4 TYPE OF APPLICATION IS A REASONABLE REVIEW LOAD,  
5 THERE'S A FEW FACTORS TO CONSIDER. SO WHAT THIS TABLE  
6 DOES, IT SHOWS HOW THE NUMBER OF APPLICATIONS IMPACTS  
7 THE OVERALL REVIEW WORKLOAD. AND SO IT COMPARES 30  
8 VERSUS 60 VERSUS 90 APPLICATIONS AND HOW WE PROCESS  
9 THEM AND HANDLE THEM.

10 SO BECAUSE WE TYPICALLY HAVE THREE REVIEWERS  
11 REVIEW EACH APPLICATION, FOR 30 APPLICATIONS RECEIVED,  
12 THAT TRANSLATES TO 90 INDIVIDUAL REVIEWS. IF WE WERE  
13 TO RECEIVE 90 APPLICATIONS, THAT WOULD TRANSLATE TO 270  
14 INDIVIDUAL REVIEWS THAT WE HAVE TO PROVIDE.

15 IN TERMS OF THE NUMBER OF APPLICATIONS, THEN,  
16 THAT EACH GRANTS WORKING GROUP REVIEWER WOULD HAVE TO  
17 REVIEW, FOR 30, IT WOULD JUST BE SIX. IF WE WENT AS  
18 HIGH AS 90, THAT'S ABOUT 18 PER REVIEWER. AND  
19 TYPICALLY ABOUT 10 TO 12 IS PRETTY MUCH A FULL LOAD FOR  
20 A GIVEN REVIEWER.

21 GIVEN THE --

22 CHAIRMAN KLEIN: AND, DR. SAMBRANO, COULD YOU  
23 COMMENT ON A DISEASE TEAM? WHAT WOULD THE LOAD BE PER  
24 REVIEWER?

25 DR. SAMBRANO: SO THAT'S PROBABLY THREE TO

## BARRISTERS' REPORTING SERVICE

1 FOUR.

2 THE REVIEW MEETING DURATION IS TYPICALLY FOR  
3 US ABOUT A DAY AND A HALF TO TWO DAYS. SO GIVEN THAT  
4 TIME SCALE, THE ACTUAL DISCUSSION TIME PER APPLICATION,  
5 ASSUMING ABOUT EIGHT HOURS OF DISCUSSION DURING THE  
6 DAY, WOULD TRANSLATE TO ABOUT 16 MINUTES OF DISCUSSION  
7 TIME PER APPLICATION IN ORDER TO CONSIDER 30  
8 APPLICATIONS. THAT QUICKLY REDUCES TO EIGHT MINUTES  
9 WHEN LOOKING AT 60 APPLICATIONS. AND THEN EXTENDING TO  
10 TWO FULL DAYS, WE CAN STILL CONSIDER APPLICATIONS AT  
11 EIGHT MINUTES. HOWEVER, THE REVIEWER WORKLOAD OVERALL  
12 BEFORE THE MEETING, SO THIS IS TIME THAT THE REVIEWERS  
13 SPEND DOING THEIR ANALYSIS AND DETERMINING THE MERITS  
14 OF THE APPLICATION, TRANSLATING IT TO BE EIGHT-HOUR  
15 WORKDAYS, IS ABOUT THREE DAYS PER REVIEWER FOR 30  
16 APPLICATIONS.

17 CHAIRMAN KLEIN: AND SO THERE'S A CONTEXT FOR  
18 THE PUBLIC. IF, IN FACT, AN APPLICATION IS JUST  
19 ABSOLUTELY STERLING OR FALLS OFF THE LOW END BECAUSE  
20 THERE'S A CRITICAL ELEMENT MISSING, THE REVIEW TIME  
21 COULD BE LESS FOR THOSE, BUT, IN FACT, THERE COULD BE  
22 30 OR 40 MINUTES SPENT ON REVIEWS THAT HAD REAL  
23 SUBSTANTIVE ISSUES THAT WERE AT VARIANCE TO THE REPORTS  
24 THAT THE LEAD REVIEWERS HAD SUBMITTED. IT'S IN THE  
25 CONTEXT FOR THE PUBLIC RECORD TO UNDERSTAND THAT THERE

## BARRISTERS' REPORTING SERVICE

1 ARE DETAILED REVIEWS THAT ARE WRITTEN REVIEWS THAT ARE  
2 AVAILABLE TO WORKING GROUP MEMBERS TO READ IN ADVANCE  
3 AND DURING THE SESSIONS FOR EACH OF THESE. SO  
4 DISCUSSION TIME IS FOCUSED ON ISSUES THAT ARE IN  
5 CONTRADICTION TO SOME OF THE CONCLUSIONS OF THE  
6 REVIEWERS OR WHERE THERE'S A SUBSTANTIVE OPPORTUNITY  
7 THAT MAY HAVE BEEN MISSED. BUT IT IS IMPORTANT TO  
8 UNDERSTAND THAT THESE DISCUSSION TIMES ARE IN THE  
9 CONTEXT OF A TREMENDOUS AMOUNT OF PREPARATION FROM THE  
10 SCIENTIFIC STAFF AND THE REVIEWERS.

11 DR. SAMBRANO: YES. THE DISCUSSION TIME IS  
12 WHEN WE BRING TOGETHER THE REVIEWS. AND SO, AS I WAS  
13 ALLUDING TO IN TERMS OF THE OVERALL WORKLOAD AND THE  
14 TIME SPENT, IT'S SIGNIFICANTLY MORE BEFOREHAND. AND SO  
15 AT THE MEETING IS WHEN WE BRING PRELIMINARY SCORES AND  
16 THE OVERALL ASSESSMENT BY REVIEWERS AND BRING IT TO THE  
17 ENTIRE GROUP FOR DISCUSSION.

18 CHAIRMAN KLEIN: JEFF SHEEHY.

19 MR. SHEEHY: JUST AS ANOTHER POINT, I MEAN I  
20 THINK THE NUMBER OF APPS PER REVIEWER IS KIND OF HARD,  
21 AT LEAST WITHIN OUR SCENARIO BECAUSE WE USE SO MANY  
22 SPECIALISTS. AND QUITE OFTEN THE SPECIALISTS WILL BE  
23 BROUGHT ON FOR ONE REVIEW. I THINK THE MOST I'VE EVER  
24 SEEN IS MAYBE THREE FOR A SPECIALIST, MAYBE FOUR. BUT  
25 IT VARIES. SO WHEN WE TALK OF WORKLOAD, SOMEBODY

## BARRISTERS' REPORTING SERVICE

1     LOOKING AT THIS MIGHT SAY, WELL, THERE'S 15 ON THE  
2     GRANTS WORKING GROUP. IF YOU HAVE A LOT OF  
3     APPLICATIONS, THOSE 15 ARE GOING TO BE OVERWHELMED.  
4     BUT WE ACTUALLY BRING IN A LARGE OF NUMBER OF ALTERNATE  
5     AND SPECIALIST REVIEWERS.

6                 SO IN OUR REVIEWS, HOW MANY PEOPLE WOULD YOU  
7     SAY, LIKE IN THE DISEASE TEAMS, HOW MANY REVIEWERS DO  
8     YOU THINK YOU HAD, 60?

9                 DR. SAMBRANO: SO I THINK WE BROUGHT IN ABOUT  
10    20 SPECIALISTS FOR THE DISEASE TEAM REVIEW. AND THEN  
11    IN ADDITION, WE HAD THREE ADDITIONAL REGULATORY  
12    EXPERTS. SO CERTAINLY THE SPECIALISTS PROVIDE US AN  
13    AVENUE BY WHICH WE CAN INCREASE OUR EXPERTISE AND  
14    EXPAND THAT CAPACITY.

15                MR. SHEEHY: BUT YOU'RE ALSO USING BESIDES  
16    THE 15 A POOL OF ALTERNATE REVIEWERS AND SPECIALISTS TO  
17    FILL IT OUT. WE USUALLY DON'T END UP IN A SCENARIO  
18    WHERE ANY REVIEWER IS OVERBURDENED WITH TOO MANY.

19                DR. SAMBRANO: ANY REVIEWER WITH SPECIALISTS  
20    THAT ARE RECRUITED FOR THAT REVIEW GIVES US AN AVERAGE  
21    WORKLOAD OF ABOUT BETWEEN 8 TO 12 APPLICATIONS PER  
22    GRANTS WORKING GROUP MEMBER. AND THAT'S BECAUSE THE  
23    EXPERTISE REQUIREMENTS FOR DIFFERENT APPLICATIONS  
24    VARIES. AND IT'S REQUIRED THAT THE GRANTS WORKING  
25    GROUP MEMBERS BE THE PRIMARY REVIEWERS ON EACH OF THE

## BARRISTERS' REPORTING SERVICE

1 APPLICATIONS. SO THEY STILL HANDLE MOST OF THE LOAD,  
2 AND A SPECIALIST USUALLY COMES IN AS A SECONDARY  
3 REVIEWER.

4 SO THEY DEFINITELY HELP IN REDUCING THE  
5 OVERALL WORKLOAD. BUT, YOU KNOW, FOR A BASIC BIOLOGY  
6 REVIEW, WE STILL HAD ABOUT TEN APPLICATIONS PER  
7 REVIEWER OF THE GRANTS WORKING GROUP. A SPECIALIST  
8 MIGHT ONLY HAVE TWO OR THREE BECAUSE THEY'RE COMING IN  
9 WITH SPECIALIZED EXPERTISE TO ADDRESS THE NEEDS OF  
10 THOSE APPLICATIONS.

11 AND SO THE REVIEWER WORKLOAD APPROXIMATIONS  
12 ARE REALLY BASED ON A REVIEWER SPENDING ABOUT FOUR  
13 HOURS PER APPLICATION, WHICH MAY ACTUALLY NOT BE A LOT.  
14 I THINK SOME REVIEWERS MAY SPEND AS LITTLE AS THAT,  
15 SOME MAY SPEND 8 TO 16 HOURS DEPENDING ON THE  
16 COMPLEXITY OF THE APPLICATION OR HOW MUCH BACKGROUND  
17 RESEARCH THEY NEED TO DO. SO I THINK THAT JUST GIVES  
18 YOU A SENSE OF THE IMPACT OF THE NUMBER OF APPLICATIONS  
19 WE HAVE.

20 NOW, IN TERMS OF CIRM'S CAPACITY TO PROCESS  
21 APPLICATIONS, I THINK IN TERMS OF DEALING WITH THE  
22 DIFFERENT TYPES OF RFA'S, WE HAVE AND CAN REASONABLY  
23 CONDUCT ABOUT FIVE REVIEW MEETINGS PER YEAR. AND SO  
24 THAT TYPICALLY TRANSLATES, AGAIN, SPEAKING OF THE  
25 GENERIC, AVERAGE RO1-LIKE RESEARCH PROPOSAL, ABOUT 300

## BARRISTERS' REPORTING SERVICE

1 APPLICATIONS PER YEAR. IF YOU CONSIDER THAT WE ARE  
2 ANTICIPATING HAVING FOUR RFA'S PER YEAR, MEANING  
3 DISEASE TEAM, EARLY TRANSLATIONAL, BASIC BIOLOGY, TOOLS  
4 AND TECHNOLOGIES, THOSE KINDS OF APPLICATIONS VARY. AS  
5 DISCUSSED, THE DISEASE TEAM APPLICATIONS ARE MUCH MORE  
6 COMPLEX THAN WOULD BE EXPECTED FOR BASIC BIOLOGY OR  
7 TOOLS AND TECHNOLOGIES PERHAPS. BUT OVERALL THAT COULD  
8 PRODUCE ABOUT 800 TO 900 APPLICATIONS PER YEAR IN OPEN  
9 CALLS.

10 SO I THINK THE BOTTOM LINE IN TERMS OF THIS  
11 INFORMATION IS REALLY THAT WE NEED A WAY TO ADEQUATELY  
12 REVIEW MULTIPLE AND VARIED ROUNDS OF RESEARCH PROPOSALS  
13 WITH BROADER RFA SOLICITATION, AND IT MEANS WE NEED TO  
14 CONSIDER MECHANISMS THAT CAN EFFECTIVELY HELP US MANAGE  
15 THOSE APPLICATIONS. AND THERE ARE DIFFERENT APPROACHES  
16 THAT ARE TAKEN BY DIFFERENT FUNDING AGENCIES BECAUSE  
17 THIS PROBLEM ISN'T UNIQUE TO CIRM.

18 SO SOME OF THE DIFFERENT APPROACHES THAT ARE  
19 TAKEN, AS HAS BEEN MENTIONED BEFORE, INCLUDE THINGS  
20 SUCH AS TRIAGE. BUT I THINK THAT HAS SOME LIMITATIONS  
21 IN TERMS OF HOW IT REDUCES REVIEWER WORKLOAD. THERE  
22 ARE LIMITATIONS ON SUBMISSIONS WHICH WE HAVE TRIED.  
23 STRICT ELIGIBILITY CRITERIA IMPOSED ON WHO QUALIFIES AS  
24 AN APPLICANT. THERE IS THE PREAPPLICATION PROCESS THAT  
25 IS USED BY DIFFERENT FUNDING AGENCIES IN DIFFERENT

## BARRISTERS' REPORTING SERVICE

1       WAYS.  THERE ARE FOUNDATIONS THAT ALLOW APPLICATIONS  
2       ONLY BY INVITATION OR ON A FIRST COME, FIRST SERVED  
3       BASIS, BUT THE LATTER TWO, I THINK, WOULD NOT  
4       NECESSARILY SERVE CIRM WELL AND WOULD NOT BE CONSISTENT  
5       WITH OUR OBJECTIVES.

6                SO I WANT TO SAY A LITTLE BIT MORE ABOUT THE  
7       NIH TRIAGE OR THE WAY NIH USES TRIAGE.  THE NIH TRIAGE  
8       OVERALL REDUCES THE NUMBER OF APPLICATIONS THAT ARE  
9       SCORED AND DISCUSSED DURING THE REVIEW MEETING.  NIH  
10      TYPICALLY ENCOURAGES EACH OF THE STUDY SECTIONS TO  
11      TRIAGE 50 PERCENT OR MORE OF THEIR APPLICATIONS.  AND  
12      SO IT DOESN'T REDUCE THE OVERALL NUMBER OF APPLICATIONS  
13      THAT HAVE TO BE REVIEWED OR PROCESSED.  THEY STILL HAVE  
14      TO BE ASSIGNED TO THREE REVIEWERS EACH, THE REVIEWERS  
15      STILL NEED TO WRITE CRITIQUES AND PRESENT THEM, AND THE  
16      STAFF STILL NEEDS TO PRODUCE SUMMARY STATEMENTS THAT  
17      PROVIDE A REVIEW OR ASSESSMENT OF THE REVIEW.

18               THE TRIAGE APPLICATIONS DON'T NECESSARILY GET  
19      SCORED ALTHOUGH I THINK NIH IS TRYING TO PRESERVE THE  
20      PRELIMINARY SCORES AT LEAST TO PROVIDE APPLICANTS WITH  
21      SOME SENSE OF HOW THEY DID, AND THEY DON'T INCLUDE  
22      BUDGET INFORMATION.  THAT'S REALLY THE ONLY DIFFERENCE.  
23      THE REAL BENEFIT OF TRIAGE IS AN EXPEDITED REVIEW  
24      MEETING.  SO IT MAKES THE REVIEW MEETING MUCH SIMPLER  
25      AND MORE TIME TO DISCUSS THOSE APPLICATIONS THAT WERE

## BARRISTERS' REPORTING SERVICE

1 DEEMED TO BE MORE MERITORIOUS.

2 AND AS I MENTIONED, THE OVERALL DETRIMENT OF  
3 THIS IS THAT IT DOESN'T REALLY INCREASE THE OVERALL  
4 CAPACITY FOR REVIEW BY USING THE TRIAGE PROCESS.

5 LIMITATIONS ON SUBMISSIONS, THIS IS SOMETHING  
6 THAT WE HAVE TRIED FOR SEVERAL RFA'S. WE CAN SET  
7 LIMITS ON THE NUMBERS OF APPLICATIONS THAT ARE ACCEPTED  
8 FROM INSTITUTIONAL ORGANIZATIONS. WE CAN VARY THOSE  
9 DEPENDING ON THE ANTICIPATED RESPONSE ON COMPLEXITY OF  
10 THE APPLICATIONS TO BE REVIEWED. AND THE LIMITS DO  
11 HAVE THE BENEFIT THAT THEY SET A VERY FIXED STANDARD  
12 ACROSS ALL INSTITUTIONS. SO WE WOULD EXPECT UP TO A  
13 CERTAIN NUMBER FROM ALL INSTITUTIONS, AND IT LEAVES IT  
14 UP TO THE INSTITUTION TO SELECT WHAT THEIR BEST  
15 CANDIDATES WOULD BE. OF COURSE, THE DETRIMENT IS THAT  
16 SOME INVESTIGATORS MAY NOT BE PERMITTED OR PROVIDED THE  
17 OPPORTUNITY TO COMPETE DUE TO THEIR STATUS AT THE  
18 INSTITUTION FOR NONSCIENTIFIC REASONS. I THINK WE'VE  
19 HEARD PRETTY WELL FROM OUR APPLICANTS AND FROM  
20 INSTITUTIONS, AS WELL AS MEMBERS OF THE BOARD, THAT  
21 THIS IS PROBABLY NOT THE BEST APPROACH FOR CIRM.

22 STRICT ELIGIBILITY CRITERIA, I THINK THIS IS  
23 A POTENTIALLY REASONABLE APPROACH. WE CAN SET  
24 ELIGIBILITY CRITERIA TO ALLOW A NARROWER POOL OF  
25 APPLICANTS OR PROJECTS TO COMPETE. THE CRITERIA, OF

## BARRISTERS' REPORTING SERVICE

1 COURSE, BEING SET ON A MULTITUDE OF FACTORS THAT ALIGN  
2 WITH THE INTENT AND OBJECTIVES OF THE RFA. JUST AS AN  
3 EXAMPLE, YOU WILL REMEMBER THAT THE STEM CELL  
4 TRANSPLANTATION IMMUNOLOGY RFA, IT WAS DECIDED TO NOT  
5 HAVE LIMITS AND TO ESSENTIALLY MAKE IT AN OPEN CALL.

6 ONE OF THE THINGS WE DID DO IS SET UP  
7 STRICTER ELIGIBILITY CRITERIA. I THINK ONE OF THE  
8 OBJECTIVES OF THIS RFA WAS REALLY TO TEAM UP STEM CELL  
9 BIOLOGISTS WITH TRANSPLANTATION IMMUNOLOGISTS. SO WE  
10 MADE THAT AN ELIGIBILITY CRITERIA SO THAT WE WOULD GET  
11 THE MOST RESPONSIVE AWARDS. I THINK GENERALLY THAT  
12 WORKED. WE ENDED UP WITH ABOUT 44 APPLICATIONS  
13 OVERALL.

14 NOW, THE BENEFIT IS AN INCREASED LIKELIHOOD  
15 OF RECEIVING SUBMISSIONS THAT ARE RESPONSIVE TO THE  
16 RFA, BUT THE DETRIMENT IS THAT THIS MIGHT NOT BE  
17 APPLICABLE TO ALL RFA'S. SO THE BASIC BIOLOGY AWARDS,  
18 I THINK IT WOULD BE HARD TO COME UP WITH VERY STRICT  
19 CRITERIA THAT WOULD ALLOW US TO REDUCE THE NUMBER TO A  
20 MANAGEABLE NUMBER THAT COULD BE HANDLED BY THE GRANTS  
21 WORKING GROUP IN A SINGLE MEETING.

22 THE PREAPPLICATION PROCESS, AND THAT IS  
23 PRESENTED IN AT LEAST A SUMMARY OF WHAT WE'VE DONE WITH  
24 THAT IN A REPORT THAT ACCOMPANIES THE SLIDES.  
25 PREAPPLICATIONS OF PROPOSALS ARE UTILIZED BY MANY

## BARRISTERS' REPORTING SERVICE

1 ORGANIZATIONS TO IDENTIFY POTENTIAL PROPOSALS, GOOD  
2 IDEAS THAT ARE BEST ALIGNED WITH THE OVERALL OBJECTIVES  
3 OF THE INSTITUTION OR THE FOUNDATION OR THE RFA.

4 THE ADVANTAGE OVER OTHER MECHANISMS IS THAT  
5 IT DOES PERMIT AN OPEN SOLICITATION. SO IT DOESN'T  
6 NECESSARILY NARROW THE POOL. IT LEAVES THE POOL OPEN,  
7 BUT IT DOES LIMIT THE AMOUNT OF INFORMATION THAT IS  
8 PRESENTED. AND IT FOCUSES THE REVIEW ON THE BIG  
9 PICTURE, ON THE ESSENTIALS RATHER THAN THE FINE POINTS  
10 OF THE PROPOSAL.

11 AN IMPORTANT BENEFIT IS THAT IT INCREASES THE  
12 CAPACITY TO PROCESS MORE PROPOSALS, BUT THERE IS THE  
13 DETRIMENT THAT APPLICANTS RECEIVE LESS FEEDBACK ON THE  
14 OVERALL STRENGTHS AND WEAKNESSES IN A FULL APPLICATION  
15 DUE TO THE RAPID PROCESSING OF THESE TYPES OF  
16 APPLICATIONS.

17 SO I THINK PART OF THE MESSAGE IS THAT,  
18 ALTHOUGH PREAPPLICATIONS IS CERTAINLY ONE VIABLE  
19 APPROACH, THERE ARE POTENTIALLY OTHER VIABLE APPROACHES  
20 AND OTHERS THAT WE CAN TAKE. AND ONE MIGHT CONSIDER IT  
21 ON AN RFA-BY-RFA BASIS.

22 SO WHAT I WANT TO PRESENT TO YOU NOW IS SOME  
23 OF THE --

24 CHAIRMAN KLEIN: CAN WE DO THIS, GIL? AS WE  
25 GO INTO NORMATIVE FEEDBACK, WHAT I'D LIKE TO DO,

## BARRISTERS' REPORTING SERVICE

1 BECAUSE WE'RE GOING TO HAVE DISCUSSION OF THIS, IS SEE  
2 IF WE CAN BREAK FOR DINNER SINCE THEY'RE WAITING ON US  
3 FOR DINNER. AND THEN WE'LL HAVE AN OPPORTUNITY TO GO  
4 THROUGH THIS AND THE DISCUSSION UPON RETURN. THANK YOU  
5 FOR THE EXCELLENT PRESENTATION ON THIS ITEM.

6 SO WITH THAT, JENNA, WHERE ARE WE GOING FOR  
7 DINNER?

8 MS. PRYNE: ACROSS THE HALL.

9 CHAIRMAN KLEIN: IT'S INTERESTING THAT  
10 SENATOR TORRES KNOWS EXACTLY WHERE WE'RE GOING. I'M  
11 GOING -- I'M SURE WE SHOULD JUST FOLLOW. BUT IF WE  
12 WILL PLEASE TRY AND GET BACK, I THINK, IN ABOUT 45  
13 MINUTES. WE DON'T HAVE REALLY AN AGENDA TO COVER HERE  
14 DURING THIS DINNER BREAK, AND I DON'T THINK WE NEED  
15 MORE TIME THAN THAT. WE'LL TRY AND GET BACK IN 35  
16 MINUTES. I DON'T SEE ANY OTHER SUGGESTIONS.

17 IS THE ROOM GOING TO BE SECURE?

18 MS. PRYNE: THERE WILL BE STAFF MEMBERS IN  
19 THE ROOM.

20 CHAIRMAN KLEIN: THERE WILL BE STAFF MEMBERS  
21 IN THE ROOM, BUT IT WILL BE NOT BE SECURE. SO MAYBE IN  
22 THIS ROOM --

23 MS. KING: THIS ROOM WILL BE SECURE IN THAT  
24 THERE WILL BE STAFF MEMBERS IN HERE. IF THE QUESTION  
25 IS CAN THEY LEAVE THEIR LAPTOPS, THE ANSWER IS YES.

## BARRISTERS' REPORTING SERVICE

1 CHAIRMAN KLEIN: OKAY. SO WE'RE GOING TO  
2 ADJOURN FOR ABOUT 35 MINUTES. THANK YOU.

3 (A RECESS WAS TAKEN.)

4 CHAIRMAN KLEIN: DR. POMEROY HAS REMINDED ME  
5 THAT WE HAVE ARRIVED AT THE APPROPRIATE TIME TO  
6 RECONVENE THE MEETING. WHERE ARE WE ON BEING ABLE TO  
7 RECONNECT ON THE TELEPHONE WITH EITHER PARTY WHO WANTS  
8 TO PARTICIPATE? WE DO NOT NEED THEM FOR A QUORUM.

9 DR. SAMBRANO: SO KIND OF CONTINUING WITH THE  
10 PRESENTATION, I WANT TO MOVE ON TO PRESENTING SOME OF  
11 THE FEEDBACK THAT WE'VE GOTTEN, NOT JUST ON THE  
12 PREAPPLICATION PROCESS, BUT JUST IN GENERAL IN TERMS OF  
13 MECHANISMS BY WHICH WE CAN MANAGE LARGE APPLICATION  
14 LOADS.

15 AND SO ONE GROUP THAT WE HAVE RECENTLY  
16 TARGETED OVER THE LAST MONTH WERE 14 CALIFORNIA STEM  
17 CELL RESEARCH LEADERS ACROSS DIFFERENT INSTITUTIONS,  
18 SUCH AS UCSD, UCI, UCSF, STANFORD, UC DAVIS, MANY OF  
19 WHOM HAVE PARTICIPATED IN THE APPLICATION PROCESS AND  
20 RECEIVE GRANTS FROM CIRM. AND BASICALLY THE SURVEY WAS  
21 REALLY AN OPEN QUESTION IN TERMS OF WHAT WORKS FOR  
22 THEM, WHETHER THE PREAPPLICATION PROCESS, THEY RECEIVED  
23 THE PREAPPLICATION REPORT YOU HAVE IN YOUR BINDERS  
24 ALONG WITH THE SLIDE DECK, TO INTRODUCE THE TOPIC, WHAT  
25 THEY FELT IN TERMS OF THE PREAPP PROCESS AND WHETHER

## BARRISTERS' REPORTING SERVICE

1 THEY HAD SUGGESTIONS OR OPINIONS ABOUT OTHER WAYS IN  
2 WHICH WE COULD REASONABLY MANAGE APPLICATIONS.

3 AND WE MET WITH THEM VIA TELECONFERENCE AND  
4 GENERALLY GOT UNANIMOUS AGREEMENT FROM THAT GROUP THAT  
5 A MECHANISM IS REQUIRED TO MANAGE APPLICATIONS FOR CIRM  
6 GIVEN THE OVERALL STRUCTURE OF THE AGENCY. AND ALSO WE  
7 HAD UNANIMOUS AGREEMENT THAT THE PREAPP PROCESS IS AN  
8 APPROPRIATE AND PERHAPS THE FAIREST APPROACH FOR MOST  
9 MECHANISMS, BUT CERTAINLY THAT THERE ARE MINOR  
10 REFINEMENTS THAT CAN BE MADE TO IMPROVE THE PROCESS.

11 DR. STEWARD: GIL, COULD I ASK A QUESTION?  
12 WERE ANY OF THESE PEOPLE AMONGST THE GROUP THAT WAS  
13 EXCLUDED ON THE BASIS OF THEIR PREAPP PROCESS? I'M  
14 ASKING.

15 DR. TROUNSON: THE ANSWER IS YES. THERE WERE  
16 SEVERAL.

17 DR. STEWARD: OKAY.

18 DR. TROUNSON: THESE WERE THE LEADERS OF THE  
19 STEM CELL CENTERS. SO WE ASKED THEM TO BE  
20 REPRESENTATIVE OF A LARGER COHORT. SO THEY'RE ACTUALLY  
21 CENTER LEADERS.

22 DR. SAMBRANO: SO I JUST WANTED TO HIGHLIGHT  
23 JUST SOME OF THE GENERAL SUGGESTIONS THAT WE GOT IN  
24 PARTICULAR RELATED TO THE PREAPP REVIEW. THERE WAS A  
25 SUGGESTION, FOR EXAMPLE, THAT THERE SHOULD BE AN

## BARRISTERS' REPORTING SERVICE

1 OVERLAP OF REVIEWERS THAT PARTICIPATE IN THE  
2 PREAPPLICATION AS WELL AS THE FULL INVITED APPLICATION.  
3 IT HAS HAPPENED THAT IN THE LAST THREE TRIALS OF THE  
4 PREAPP PROCESS, WE HAVE INDEED HAD AN OVERLAP. IT  
5 WASN'T NECESSARILY A REQUIREMENT, BUT I THINK THERE WAS  
6 A FEELING THAT AN OVERLAP WOULD BE HELPFUL IN TERMS OF  
7 PROVIDING A PERSPECTIVE OF LOOKING AT SOME OF THE  
8 PREAPPLICATION PROPOSALS VERSUS THE ONES THAT ARE  
9 SELECTED FOR FULL REVIEW.

10 AND I THINK SIMILARLY THEY FELT THAT THE  
11 GRANTS WORKING GROUP AS A WHOLE SHOULD BE ALLOWED TO  
12 REVIEW THE RESULTS OF THE PREAPP JUST FOR QUALITY  
13 CONTROL PURPOSES.

14 THEY ALSO SUGGESTED THAT WE CONSIDER  
15 MECHANISMS THAT WOULD PROVIDE APPLICANTS SOME FEEDBACK  
16 ON THEIR PREAPPS. AND THIS IS SOMETHING THAT WE ARE  
17 INDEED WORKING ON, AND THAT IS MENTIONED IN THE REPORT.

18 THERE WAS ALSO THE SUGGESTION TO ALLOW SHORT  
19 WRITTEN COMMENTS FROM REVIEWERS SO THAT AN INFORMED  
20 DECISION CAN BE MADE ON PREAPPS WITH A SPLIT VOTE.  
21 THAT, AGAIN, IS ANOTHER OPPORTUNITY THAT WE WANT TO  
22 AFFORD OUR PREAPP REVIEWERS BECAUSE CERTAINLY MANY OF  
23 THEM FELT THEY WANTED TO CONTRIBUTE MORE COMMENTS  
24 SIMPLY BEYOND A YES, NO, MAYBE, OR A TOP APPLICATION.

25 THE SUGGESTION WAS ALSO MADE THAT THE REVIEW

## BARRISTERS' REPORTING SERVICE

1 OF PREAPPS SHOULD NOT BE ANONYMOUS AND THAT THE QUALITY  
2 OF INVESTIGATORS SHOULD BE A REVIEW CRITERION. AND I  
3 THINK IF YOU LOOKED AT THE REPORT, GENERALLY WE CAUGHT  
4 TWO CAMPS, ALMOST 50-50, IN TERMS OF ANONYMITY IN TERMS  
5 OF BASIC BIOLOGY. FOR DISEASE TEAM I THINK THERE WAS  
6 MORE AGREEMENT THAT IT SHOULD NOT BE ANONYMOUS. I  
7 THINK THIS GROUP, IN GENERAL, FELT THAT ANONYMITY WAS  
8 NOT THE WAY TO GO AS A GENERAL POLICY.

9 THEY ALSO MENTIONED THAT PROGRAMMATIC ISSUES  
10 SHOULD NOT BE CONSIDERED AT THIS PREAPP STAGE OF REVIEW  
11 AND THAT THAT WOULD BE MORE APPROPRIATE FOR THE GRANTS  
12 WORKING GROUP REVIEW OF THE FULL APPLICATIONS.

13 AND THAT THE PREAPP APPROACH MAY ALSO NOT BE  
14 APPROPRIATE IN SOME COMPETITIONS, AND ONE THAT WAS  
15 HIGHLIGHTED IN PARTICULAR WAS THE RESEARCH LEADERSHIP  
16 AWARD WHERE THE NUMBER OF APPLICATIONS IS LIKELY TO BE  
17 SMALL. BUT I THINK, YOU KNOW, IF YOU CONSIDER SOME OF  
18 THE DATA AND INFORMATION THAT I PRESENTED EARLIER,  
19 THERE MAY CERTAINLY BE OTHER RFA'S WHERE DIFFERENT  
20 APPROACHES MIGHT BE APPLICABLE.

21 I ALSO WANT TO TOUCH UPON TWO THINGS. ONE  
22 WAS THE SUPPLEMENTAL MATERIALS. AND SO THIS IS  
23 ESSENTIALLY THE SUBMISSION OF NEW DATA, IF YOU WILL,  
24 FOLLOWING THE APPLICATION DEADLINE. AND THIS IS JUST A  
25 COUPLE OF SLIDES. THE FIRST IS REALLY TO GIVE YOU A

## BARRISTERS' REPORTING SERVICE

1 SENSE OF HOW NIH, AS A GENERAL EXAMPLE, DEALS WITH  
2 SUPPLEMENTARY MATERIALS.

3 THEY DO HAVE A POLICY THAT ALLOWS THE  
4 SUBMISSION AFTER THE APPLICATION DEADLINE, BUT THE  
5 SUBMISSION IS COMPLETELY AT THE DISCRETION OF THE  
6 REVIEW OFFICER FOR THE STUDY SECTION. AND SO IT'S  
7 QUITE VARIABLE ACROSS STUDY SECTIONS. AND IN MANY  
8 CASES, IF NOT MOST, SUPPLEMENTAL DATA IS USUALLY NOT  
9 PERMITTED, ESPECIALLY IF THEY HAVE A LARGE INFLUX OF  
10 APPLICATIONS. ONLY NEW INFORMATION THAT IS GENERATED  
11 SINCE THE SUBMISSION OF THE GRANT APPLICATION IS  
12 CONSIDERED AND CERTAINLY NOT LESS THAN 30 CALENDAR DAYS  
13 PRIOR TO THE REVIEW.

14 CHAIRMAN KLEIN: DR. SAMBRANO, I THOUGHT THAT  
15 ON ITEM 2, ON THE NEW INFORMATION, THAT THERE WAS GOING  
16 TO BE A CLARIFICATION THAT THE INFORMATION MAY HAVE  
17 BEEN CREATED, DATA COULD HAVE BEEN CREATED PRIOR TO THE  
18 DEADLINE; BUT IF IT HADN'T BEEN VALIDATED YET, SO IT  
19 WASN'T SUBMITTED BECAUSE THEY DIDN'T HAVE THE  
20 VALIDATION FOR IT YET, THAT IF IT WAS VALIDATED AFTER  
21 THE DEADLINE, IT WOULD BE CONSIDERED NEW INFORMATION  
22 BECAUSE PREVIOUS TO THAT IT WOULDN'T HAVE BEEN  
23 CONSISTENT WITH GOOD SCIENTIFIC POLICY TO SUBMIT IT.

24 DR. TROUNSON: I THINK THIS IS NIH, BOB. SO  
25 WHAT THEY'RE SAYING IS IF IT'S NEW INFORMATION THAT

## BARRISTERS' REPORTING SERVICE

1 WASN'T PRESENTED IN THE GRANT APPLICATION.

2 CHAIRMAN KLEIN: I'M ASKING HOW WE WOULD  
3 APPLY THAT.

4 DR. TROUNSON: NO, THAT'S RIGHT. THIS IS  
5 NIH, RIGHT?

6 DR. SAMBRANO: THAT'S CORRECT. SO, AGAIN,  
7 THIS IS AT THE DISCRETION AT NIH OF THE REVIEW OFFICER  
8 AND HOW THEY WOULD DEFINE THAT IN TERMS OF CONSIDERING  
9 IT NEW DATA OR NOT. I DON'T KNOW. IT WOULD PROBABLY  
10 DEPEND ON THE STUDY SECTION AND THE REVIEW OFFICER.

11 DR. HAWGOOD: BOB, I THINK YOU ARE  
12 INTERPRETING THE INTENT OF NO. 2 AT THE NIH CORRECTLY,  
13 MEANING IT'S WHEN YOU FEEL -- IF YOU DIDN'T FEEL IT WAS  
14 READY FOR PRIME TIME AT THE TIME OF YOUR APPLICATION  
15 EVEN THOUGH SOME OF THE EXPERIMENTS MAY HAVE BEEN DONE  
16 BEFORE, THEN THAT'S APPROPRIATE FOR SUBMISSION AS A  
17 SUPPLEMENT. IT'S WHEN IT WASN'T READY AT THE TIME OF  
18 THE APPLICATION, IT IS NOW READY. IT'S NOT THAT YOU  
19 COULDN'T HAVE DONE AN EXPERIMENT BEFORE.

20 CHAIRMAN KLEIN: THANK YOU FOR THE  
21 CLARIFICATION.

22 DR. SAMBRANO: SO HAVING THAT BACKGROUND  
23 INFORMATION, WE DID SORT OF A PILOT STUDY ON THE  
24 SUBMISSION OF SUPPLEMENTAL INFORMATION. AND THIS WAS  
25 WITH REGARD TO BASIC BIOLOGY II AWARDS. SO WE ADVISED

## BARRISTERS' REPORTING SERVICE

1 ALL OF THE APPLICANTS WHO SUBMITTED A FULL APPLICATION  
2 THAT THEY HAD THE OPPORTUNITY TO SUBMIT SUPPLEMENTAL  
3 INFORMATION, WHICH COULD INCLUDE REFERENCE TO NEW  
4 PUBLICATIONS OR ACCEPTED MANUSCRIPTS FOR PUBLICATION  
5 SINCE THE TIME OF THE APPLICATION SUBMISSION. THEY  
6 COULD REPORT TO US ANY NEW COLLABORATIONS THAT THEY HAD  
7 ESTABLISHED RELATED TO THEIR PROPOSAL, ANY CHANGES IN  
8 FUNDING STATUS, FOR EXAMPLE, IF THEY ACQUIRED NEW  
9 FUNDING THAT WOULD BE SUPPORTIVE OF THE OVERALL  
10 PROJECT, AS WELL AS THE OPPORTUNITY TO SUBMIT NEW DATA,  
11 WHICH WOULD INCLUDE UP TO ONE PAGE OF FIGURES.

12 AND SO I THINK MANY OF US WERE SURPRISED AT  
13 THE RESULT IN THAT 24 OUT OF THE 52 APPLICANTS ACTUALLY  
14 HAD MATERIALS TO SUBMIT. AND SO I THINK THAT BRINGS UP  
15 A COUPLE OF CONCERNS. ONE IS THAT IN TERMS OF THE  
16 OVERALL DEADLINE AND HOW WE CONDUCT THIS AND WHAT WE  
17 ALLOW IS THE POTENTIAL IMPACT ON REVIEWERS. NOW, WE  
18 ALLOWED THREE WEEKS BEFORE THE REVIEW FOR THE  
19 SUBMISSION OF THIS DATA, BUT WE ALSO HAD TO CONSIDER  
20 THE REVIEWERS NEED SUFFICIENT TIME TO EVALUATE IT AND  
21 DETERMINE WHETHER THAT MAKES AN IMPACT ON THEIR OVERALL  
22 REVIEW OR ASSESSMENT OF THE APPLICATION.

23 AND I THINK WE ALSO NEED TO REFINE SOME OF  
24 THE SUBMISSION REQUIREMENTS TO MAKE SURE THAT WE ARE  
25 GETTING CONSISTENCY IN THE KIND OF INFORMATION THAT'S

## BARRISTERS' REPORTING SERVICE

1 ALLOWABLE. AND WHAT WE DO WANT TO AVOID IS APPLICANTS  
2 ESSENTIALLY CIRCUMVENTING ANY OF THE LIMITATIONS ON THE  
3 APPLICATION, SUCH AS PAGE LIMITS OR TEXT LIMITS, VIA  
4 THIS PROCESS. SO CERTAINLY AN AREA THAT I THINK WE  
5 NEED TO GET CONTINUED FEEDBACK, AND WE WANT TO CONTINUE  
6 TO EXPLORE, DEVELOP, AND REFINE.

7 ONE OF THE OTHER AREAS HAS TO DO WITH THE  
8 EXTRAORDINARY PETITIONS AND APPEALS. THESE ARE TWO  
9 VERY SEPARATE POLICIES, AND I THINK THERE IS PERHAPS  
10 SOME CONFUSION BY SOME APPLICANTS AS TO WHAT APPLIES  
11 AND WHEN. AND ONE OF THE THINGS I WANTED TO SHOW YOU  
12 WAS THE LANGUAGE THAT IS PRESENTED TO APPLICANTS IN AN  
13 E-MAIL THAT COMES FROM ME TO THEM TO PRESENT THEIR  
14 SUMMARY STATEMENT OR THEIR REVIEW SUMMARY.

15 AND WITHIN THAT E-MAIL WE DESCRIBE BOTH THE  
16 PROCESS OF APPEALS AND PETITIONS ALONG WITH LINKS TO  
17 OUR CONFLICT OF INTEREST POLICY, A DIRECT LINK TO THE  
18 GRANTS ADMINISTRATION POLICY THAT DESCRIBES THE APPEALS  
19 PROCESS, WHICH, OF COURSE, AS YOU KNOW, IS LIMITED TO  
20 INSTANCES OF CONFLICT OF INTEREST, AND THEN A LINK TO  
21 THE EXTRAORDINARY PETITION POLICY. AND SO THESE ARE  
22 MADE AVAILABLE TO ALL OF THE APPLICANTS.

23 BUT I THINK DESPITE THAT, THE POLICIES, I  
24 THINK, MAY NOT BE AS CLEAR AS THEY COULD BE. AND I  
25 THINK WE NEED TO CONSIDER WHETHER THEY ARE CONSISTENT

## BARRISTERS' REPORTING SERVICE

1 WITH ONE ANOTHER. AND SO I THINK THIS PERHAPS IS  
2 ANOTHER SUBJECT OF THIS ICOC SUBCOMMITTEE IN TERMS OF  
3 THINKING ABOUT SOME OF THE PARAMETERS AROUND THEM. I  
4 THINK WE WANT TO THINK ABOUT REFINEMENTS TO APPEALS AND  
5 EXTRAORDINARY PETITIONS IN ORDER TO ENSURE CLARITY AND  
6 CONSISTENCY. AND I THINK WE WANT TO ENSURE THAT THESE  
7 POLICIES DO SUPPORT AN EFFICIENT REVIEW PROCESS; THAT  
8 IS, IT DOESN'T IMPOSE UPON REVIEWERS OR STAFF IN TERMS  
9 OF OVERWHELMING THE PROCESS, AND THAT THEY ADEQUATELY  
10 SERVE OUR APPLICANTS, OUR REVIEWERS, AND OUR MISSION.

11 SO I THINK THAT CONCLUDES MY OVERALL  
12 PRESENTATION.

13 CHAIRMAN KLEIN: ALL RIGHT. ARE THERE  
14 QUESTIONS OF THE BOARD AT THIS TIME? AS DR. SAMBRANO  
15 SAID, THIS IS GOING TO BE PICKED UP IN THE  
16 SUBCOMMITTEE. BUT I'D LIKE TO KNOW IF THERE'S ANY  
17 QUESTIONS AT THIS TIME OR CLARIFICATIONS.

18 DR. BRENNER: DO YOU IMAGINE THAT THE --  
19 DO YOU THINK THE SAME PEOPLE WHO ARE GOING TO DO THE  
20 PREAPPLICATION REVIEWS WILL BE DOING THE REVIEWS?

21 DR. SAMBRANO: YOU MEAN PREAPPLICATION  
22 REVIEWERS WOULD BE THE SAME AS THE FULL APPLICATION? I  
23 THINK THE IDEA IS THAT THERE WOULD BE SOME OVERLAP  
24 AMONG THOSE INDIVIDUALS. TYPICALLY WE REACH OUT TO A  
25 BROADER GROUP FOR THE PREAPPLICATION BECAUSE THE

## BARRISTERS' REPORTING SERVICE

1 OVERALL NUMBER IS MUCH GREATER. SO THE IDEA IS TO TRY  
2 TO CAPTURE AS MANY REVIEWERS. AND SO WE'RE TALKING  
3 ABOUT, YOU KNOW, POTENTIALLY 40 TO 50 FOR A LARGE CALL  
4 FOR THE PREAPP REVIEWERS AND 15 GRANTS WORKING GROUP  
5 MEMBERS, BUT MAYBE TEN SPECIALISTS FOR THE GRANTS  
6 WORKING GROUP REVIEW.

7 CHAIRMAN KLEIN: DR. STEWARD.

8 DR. STEWARD: JUST A QUESTION. I THOUGHT  
9 THAT I PICKED UP SORT OF A DIFFERENCE OF OPINION IN  
10 TERMS OF THE RECOMMENDATIONS. AND I THINK THE LAST ONE  
11 WAS THAT THE PREAPPLICATION REVIEW SHOULD NOT INCLUDE A  
12 PROGRAMMATIC REVIEW. BUT GOING BACK TO SORT OF THE  
13 FIRST PRINCIPLES, I THOUGHT THAT WAS ONE OF THE KEY  
14 FACTORS THAT WENT INTO THE PREAPPLICATION.

15 DR. SAMBRANO: NO. ONE OF THE KEY FACTORS IS  
16 THE CRITERIA, BUT ALSO THE RESPONSIVENESS TO THE RFA,  
17 MEANING THAT THE SUBJECT MATTER OF THE PROPOSAL IS  
18 DIRECTLY RELATED TO THE KINDS OF PROJECTS WE'RE LOOKING  
19 FOR.

20 DR. STEWARD: COULD YOU SORT OF DISTINGUISH  
21 BETWEEN PROGRAMMATIC AND --

22 DR. SAMBRANO: FOR EXAMPLE, RESPONSIVENESS TO  
23 AN RFA MIGHT BE IF WE HAVE AN RFA AS WE DID FOR THE  
24 COMPREHENSIVE COMPETITION WHOSE AIMS WERE TO HAVE  
25 INVESTIGATORS WORK ON HUMAN EMBRYONIC STEM CELLS, WE

## BARRISTERS' REPORTING SERVICE

1 WOULD EXPECT THAT THAT PROJECT WOULD INVOLVE HUMAN  
2 EMBRYONIC STEM CELLS IN SOME WAY. IF IT DOES NOT, THEN  
3 IT WOULD NOT BE RESPONSIVE.

4 PROGRAMMATIC CONSIDERATIONS WOULD BE THINKING  
5 ABOUT PORTFOLIO DISEASE TYPES OR VIRTUALLY ANYTHING  
6 ELSE THAT RELATES TO OUR OVERALL MISSION AND GETTING  
7 THAT ACCOMPLISHED.

8 CHAIRMAN KLEIN: OKAY. DR. AZZIZ.

9 DR. AZZIZ: JUST TO CLARIFY TWO THINGS. ONE,  
10 THE SPECIFICS. THIS IS A LOT OF VERY GOOD DATA, BY THE  
11 WAY, GATHERED. SO I REALLY THINK IT'S VERY GOOD.  
12 WE'RE GOING TO DISCUSS THIS IN THE SUBGROUP; IS THAT  
13 CORRECT?

14 SECOND THING IS, AND AGAIN WE MAY LEAVE THIS  
15 FOR THE SUBGROUP, BUT AS I MENTIONED EARLIER, THIS IS  
16 SORT OF INTERESTING DATA THAT ACTUALLY NEEDS TO BE  
17 SHARED MORE WIDELY. IF YOU, FOR EXAMPLE, THINK, WELL,  
18 THIS IS WHAT WE'RE USING, WE HAD TO GO THROUGH THIS,  
19 AND YOU LOOK AT THE LITERATURE, THERE'S NOTHING REALLY  
20 IN THE LITERATURE, SO YOU KEEP REPEATING THE EXPERIMENT  
21 OVER AND OVER AGAIN. SO IT IS IMPORTANT, I THINK, AT  
22 THIS POINT TO BEGIN TO CODIFY THE MANAGERIAL PROCESS  
23 FINDINGS OF THE INSTITUTE ABOVE AND BEYOND JUST THEIR  
24 SCIENTIFIC VALUE BECAUSE THE LESSONS BEING LEARNED AS  
25 WE ESTABLISH THIS REALLY MERIT, AND THERE'S A BODY OF

## BARRISTERS' REPORTING SERVICE

1 LITERATURE IN THIS, AND SO WE OFTEN FAIL TO DO THIS,  
2 WHICH MEANS THAT THEY HAVE TO GO BACK AND REDO THIS  
3 EXPERIMENT, AND THE NEXT TIME AROUND THIS HAS BEEN DONE  
4 BEFORE, BUT WE CAN'T FIND IT. SO I THINK WE NEED TO  
5 PUBLISH IT AT SOME POINT.

6 DR. HAWGOOD: JUST ONE POINT OF  
7 CLARIFICATION. ARE THE PREAPPLICATIONS RANKED OR  
8 SCORED, OR IS IT SIMPLY A BINARY OR TRIPART, YES, NO,  
9 OR MAYBE?

10 DR. SAMBRANO: IT'S A LITTLE BIT OF BOTH. SO  
11 WHAT WE ASK REVIEWERS TO DO, THEY EACH WILL GET, SAY,  
12 APPROXIMATELY 20 TO 30 PREAPPLICATIONS, AND WE ASK THEM  
13 TO CLASSIFY THEM OR BIN THEM INTO YES, INVITE CATEGORY  
14 AND, NO, DO NOT INVITE, MAYBE INVITE, AND OPTIONALLY TO  
15 IDENTIFY THE TOP TWO OR THREE IN THEIR PILE. AND SO  
16 THAT PLUS HAVING THREE REVIEWERS FOR EACH PREAPP ALLOWS  
17 US TO DO SORT OF RANKING OR BINNING BASED ON THE VERY  
18 TOP, THOSE THAT GOT THE TOP, TOP, TOP, VERSUS AT THE  
19 VERY BOTTOM NO, NO, NO.

20 SO WE GO THROUGH THAT SUBSEQUENTLY, THE CIRM  
21 SCIENCE OFFICERS, AND DETERMINE WHAT REALLY ARE THE  
22 BEST. AND WE GO THROUGH A PROCESS OF LOOKING AT  
23 RESPONSIVENESS OF THE PREAPPLICATIONS AND ESSENTIALLY  
24 CONFIRMING THE FINDINGS OR REAFFIRMING THE FINDINGS OF  
25 THE EXTERNAL REVIEWERS.

## BARRISTERS' REPORTING SERVICE

1 DR. HAWGOOD: THE REASON I ASK IS THE NIH IS  
2 GOING TO SHORTER APPLICATIONS AND, TO BE HONEST,  
3 SHORTER WRITTEN REVIEWS. I DON'T KNOW ABOUT TIME OF  
4 REVIEW, BUT PROBABLY TIME OF REVIEW AS WELL FOCUSING ON  
5 IMPACT ON INVESTIGATOR MORE THAN EXPERIMENTAL DETAIL.  
6 I KNOW THE WELLCOME TRUST JUST CAME OUT WITH A WHOLE  
7 THING ALONG SIMILAR LINES WITH EVERYONE SUGGESTING  
8 MAYBE LESS IS MORE. AND IF YOU WERE RANKING  
9 PREAPPLICATIONS, YOU COULD ACTUALLY SORT OF RUN A  
10 LITTLE CORRELATION BETWEEN HOW ACCURATE WERE THE  
11 RANKINGS OF PREAPPLICATIONS TO THE EVENTUAL RANKINGS OF  
12 THE FULL APPLICATION AND FIGURE OUT WHETHER LESS REALLY  
13 IS MORE.

14 DR. SAMBRANO: I THINK YOU COULD DO THAT. I  
15 THINK THE CAVEAT IS THAT IT'S DIFFICULT TO COMPARE THE  
16 CONTENT OF A FULL APPLICATION TO THE PREAPP BECAUSE  
17 WHAT YOU GET IN A PREAPP IS REALLY THE ESSENCE OF AN  
18 IDEA, AND THE FULL APPLICATION IS THE DETAILS.

19 DR. HAWGOOD: I UNDERSTAND THAT. I'M JUST  
20 SUGGESTING THAT IT WOULD BE INTERESTING TO LOOK WHETHER  
21 THE RANKING OF THE ESSENCE OF THE IDEA ACTUALLY TURNED  
22 OUT TO BE VERY CLOSE TO THE RANKING OF THE FULL  
23 APPLICATION; OR WHEN YOU GOT IT WRONG, WHAT WAS THE  
24 POSSIBLE REASON YOU GOT IT WRONG.

25 MS. GIBBONS: JUST A QUICK CLARIFICATION, SO

## BARRISTERS' REPORTING SERVICE

1 WE HAVE THIS COMPARATIVE ANALYSIS AND WE HAVE THE PILOT  
2 STUDY, WHICH HAS BEEN REALLY ILLUMINATING BECAUSE WE'VE  
3 DISCUSSED THIS SO PASSIONATELY, BUT THEN IT GOES BACK  
4 TO SUBCOMMITTEE, THEN IT COMES BACK TO US TO  
5 MEMORIALIZE, THERE WILL BE A RECOMMENDATION THAT WE'LL  
6 THEN VOTE ON?

7 CHAIRMAN KLEIN: YES. AT THIS POINT THE  
8 PREAPPLICATION PROCESS IS IN PLACE FOR THE TWO ROUNDS  
9 THAT ARE IN PROCESS. BUT THE PREAPPLICATION WITH THE  
10 BENEFIT OF ALL THIS NEW INFORMATION WOULD BE REVIEWED  
11 IN THE SUBCOMMITTEE AND COME BACK TO US. THE FINAL  
12 DECISION WILL BE MADE AT THIS BODY.

13 I'D LIKE TO SAY THAT THE STAFF HAS BEEN VERY  
14 THOUGHTFUL ABOUT THEIR EXPERIMENT THAT THEY'RE DOING  
15 FOR MORE UPDATED INFORMATION CLOSER TO THE APPLICATION  
16 PEER REVIEW. IT'S CERTAINLY PROVIDED AN ENHANCEMENT TO  
17 THE PROCESS THAT I REALIZE YOU'RE IN THE PROCESS OF  
18 STUDYING AND REFINING. BUT ADDITIONALLY, GOING THROUGH  
19 AND REACHING OUT TO THE USER GROUPS TO GET THEIR FEEL,  
20 PERSPECTIVES ON THE PREAPP PROCESS IS VERY HELPFUL  
21 INFORMATION.

22 AND FINALLY, TRYING TO ENHANCE THE  
23 UNDERSTANDING OF THE EXTRAORDINARY PETITION PROCESS BY  
24 ENHANCING IN DIRECT COMMUNICATION WITH THE APPLICANTS  
25 ABOUT THAT, I THINK, IS VERY RESPONSIVE AS WELL. SO

## BARRISTERS' REPORTING SERVICE

1     THANK YOU TO THE STAFF FOR TRYING TO COVER THESE BASES  
2     ON A MORE EVOLVING CONTINUUM AS THEY COME UP, BUT THE  
3     STAFF IS TRYING TO BE VERY RESPONSIVE IN THIS REGARD.

4             DR. TROUNSON: I THINK JUST TO, IN ADDITION,  
5     WE'RE TRYING TO SORT SOME INFORMATION FROM THE  
6     BIOTECHNOLOGY INDUSTRY AS WELL. ONE MIGHT IMAGINE, FOR  
7     EXAMPLE, THAT THEY WOULD MUCH PREFER TO HAVE THE LIMITS  
8     ON THE INSTITUTIONS, PARTICULARLY IF THEY CAN LIMIT  
9     SOME OF THE BIGGER INSTITUTIONS, AND THEY WOULDN'T  
10    NECESSARILY BE SO AFFECTED BY A LIMITED NUMBER. BUT AS  
11    IT'S TURNED OUT THUS FAR, AND WE'RE STILL GOING TO HAVE  
12    ANOTHER GENERALIZED DISCUSSION, WE CAN GET THEM  
13    ALTOGETHER, A GROUP OF THEM, BECAUSE SOMETIMES YOU GET  
14    A DIFFERENT RESPONSE WHEN YOU WORK WITH THEM IN A GROUP  
15    THAN YOU DO TO INDIVIDUALS.

16            BUT THE INDIVIDUALS THAT HAVE SPOKEN TO ME,  
17    BECAUSE THEY'RE NOT AVAILABLE FOR SOME OF THESE  
18    TELEPHONE HOOKUPS, HAVE REALLY BEEN VERY SUPPORTIVE  
19    ALSO OF THE PREAPPLICATION PROCESS. SO IT'S  
20    INTERESTING, IT'S INTERESTING THAT THEY HAVEN'T REALLY  
21    MADE THE ODD SUGGESTION AS SOMETHING THAT WE JUST  
22    COULDN'T DO WITHIN THE LEGAL FRAMEWORK, BUT ESSENTIALLY  
23    THEY'RE VERY SUPPORTIVE. SO WE'RE ACTUALLY -- WHAT  
24    THEY'VE GIVEN US IS DIFFERENT PERSPECTIVES, AND SOME OF  
25    THOSE DIFFERENT PERSPECTIVES COULD COME BACK AND BE

## BARRISTERS' REPORTING SERVICE

1 THOUGHTFULLY UTILIZED AS MODIFICATIONS.

2 YOU WILL REMEMBER THE LITTLE HOOVER  
3 COMMISSION WANTED US TO MADE SOME MODIFICATION TO THIS  
4 PROCESS ANYWAY. AND SO THERE'S SOME USEFUL  
5 MODIFICATIONS, I THINK, WILL COME FROM THE SUGGESTIONS  
6 FROM THIS COHORT OF PEOPLE REPRESENTING THOSE  
7 POPULATIONS.

8 CHAIRMAN KLEIN: ON THE SUGGESTION THAT THERE  
9 BE SOME MORE FORMAL FEEDBACK ON THE PREAPPLICATION  
10 PROCESS, WHAT'S THE STATUS OF THAT, THE SUGGESTION THAT  
11 THERE BE SOME ACTUAL FEEDBACK FOR PREAPPLICATIONS THAT  
12 WERE NOT MOVING FORWARD IN TERMS OF SOME FEEDBACK TO  
13 THE SCIENTISTS TO GIVE THEM THE KEY POINTS?

14 DR. TROUNSON: SO I THINK GIL EXPLAINED THAT  
15 WE WANT TO OBTAIN SOME MORE INFORMATION FROM THE  
16 EXTERNAL REVIEWERS, SOME COMMENTS ABOUT WHY THEY DIDN'T  
17 LIKE OR WHY THEY DIDN'T THINK IT WAS THE TOP ECHELON OR  
18 WHY IT WAS, BUT PARTICULARLY WHY IT WASN'T, SO WE COULD  
19 ACTUALLY PASS ON THAT INFORMATION TO THE APPLICANTS.

20 YOU KNOW, YOU GET VERY FEW COMPLAINTS FROM  
21 ANYONE ON THIS PREAPPLICATION PROCESS, EVEN SOME OF THE  
22 SENIOR PEOPLE WHO GET DROPPED BACK, BECAUSE THEY SEE AN  
23 OPPORTUNITY COMING AGAIN FORWARD WITH A NEW APPLICATION  
24 USUALLY WITHIN THE 12-MONTH PERIOD THAT WAS SET UP.  
25 BUT I THINK IT COULD BE HELPFUL IF WE COULD GIVE THEM

## BARRISTERS' REPORTING SERVICE

1 SOME IDEA OF WHAT THE MAJOR DEFICIENCY WAS, BUT A  
2 COUPLE OF TIMES THE STAFF HAVE IDENTIFIED THE PROJECT  
3 HAS NOT BEEN STEM CELLS. AND THAT WAS IN A COUPLE OF  
4 INSTANCES JUST WAY OFF THE MARK. IT WAS NOT TO DO WITH  
5 STEM CELLS. AND ESSENTIALLY WE PUT THAT BACK TO THEM,  
6 AND THEY RECOGNIZE, RIGHT, WELL, IT WASN'T REALLY STEM  
7 CELLS. THERE WASN'T A COMPLAINT ABOUT IT, BUT WE POINT  
8 OUT THAT DESPITE AN INTERESTING IDEA, BUT IT REALLY  
9 DIDN'T FIT IN OUR PORTFOLIO AS WE REQUESTED, AND  
10 WOULDN'T FIT IN OUR PORTFOLIO EVER, I THINK, SOME OF  
11 THEM.

12 CHAIRMAN KLEIN: RIGHT. OKAY. ADDITIONAL  
13 POINTS FROM THE BOARD? FROM THE PUBLIC? THANK YOU.  
14 EXCELLENT REPORT.

15 SO, DR. TROUNSON, IS THERE ANYTHING ELSE  
16 YOU'D LIKE TO COVER TONIGHT, OR WOULD YOU LIKE TO PICK  
17 UP THE OTHER PENDING ITEMS IN THE MORNING? WHAT IS  
18 YOUR CHOICE?

19 DR. TROUNSON: IT MIGHT BE ENLIGHTENING TO GO  
20 TO BED WITH SOME VISUALS. AND I THINK DON OR AMY WOULD  
21 PROBABLY BE HERE TO ENTERTAIN YOU WITH SOME INFORMATION  
22 THAT WOULDN'T BE TOO HARD CORE AT THIS POINT IN TIME  
23 AND MIGHT SAVE A LITTLE TIME IN THE MORNING. WE DON'T  
24 NEED TO VOTE ON ANY OF THIS, BUT IT'S MORE INFORMATION.  
25 I THINK THERE'S SOME QUITE INTERESTING MATERIAL THERE,

## BARRISTERS' REPORTING SERVICE

1 WOULDNT TAKE LONG TO DO.

2 MR. GIBBONS: SO IN ALAN'S -- WELL, FIRST OF  
3 ALL, THANK YOU, BOARD MEMBERS, FOR TAKING THE TIME AT  
4 THIS HOUR TO HEAR THIS. AND BACK AT THE NEW YEAR,  
5 PRESIDENT TROUNSON SENT YOU KIND OF A YEAR-END REVIEW  
6 AND INCLUDED IN IT A SYNOPSIS OF OUR OFFICE'S WORK OVER  
7 THE PAST YEAR OR SO. I'M NOT GOING TO GO THROUGH THAT.  
8 THERE'S A COPY OF IT IN YOUR BINDER. IF YOU WANT TO  
9 ASK QUESTIONS ABOUT IT FOR ME NOW OR OFF-LINE, BE HAPPY  
10 TO TAKE YOUR QUESTIONS AT ANY TIME.

11 SO THIS REPORT TONIGHT IS REALLY WHAT HAVE WE  
12 DONE OVER THE LAST FEW WEEKS, DOING NOW, AND GOING  
13 FORWARD. THAT'S AN IMPORTANT PIECE. ON YOUR LEFT  
14 THERE IS MYOCARDIAL PRECURSOR CELLS, AND BELOW IT IS  
15 THE NEURAL STEM CELLS. SO MY POINT HERE IS THAT OUR  
16 WORK IS REACHING FOR THE HEART AND THE BRAIN OF THE  
17 CONSUMER. AND WE REALLY ARE CONSCIOUS IN OUR OFFICE OF  
18 THE NEED TO DO BOTH. WHEN WE LOOK AT OUR PORTFOLIO ON  
19 YOUTUBE, WE WANT SOME STUFF THAT REACHES FOR THE HEART  
20 AND SOME THAT REACHES FOR THE BRAIN.

21 THE NO. 1 VIDEO UP THERE THAT AMY WILL TELL  
22 YOU IN A LITTLE BIT IS A VERY PERSONAL ONE ON A  
23 PARKINSON'S PATIENT. NO. 2 AND 3 ARE VERY HARD CORE  
24 DIDACTIC THINGS ABOUT STEM CELL SITES. PEOPLE ARE  
25 GOING THERE LOOKING FOR DIFFERENT TYPES OF MATERIAL,

## BARRISTERS' REPORTING SERVICE

1 AND WE HAPPEN TO BE VERY CONSCIOUS OF WHAT WE'RE DOING.

2 SO I'M GOING TO BRIEFLY GO THROUGH THE  
3 DIFFERENT TYPES OF COMMUNICATIONS WE'RE THINKING ABOUT,  
4 OBVIOUSLY WORKING WITH THE TRADITIONAL MEDIA. WHAT IS  
5 MOST IMPORTANT IN MANY OF OUR SHOPS THESE DAYS IS  
6 BYPASSING WHAT'S LEFT OF TRADITIONAL MEDIA, USING  
7 VARIOUS ELECTRONIC SERVICES AND OTHER MEANS TO BYPASS  
8 THE MEDIA BECAUSE THERE'S SO LITTLE OF IT LEFT. PAPERS  
9 ARE SO SMALL, NUMBER OF WRITERS ARE SO FEW.

10 I STILL THINK THE GOLD STANDARD IN  
11 COMMUNICATION IS FACE TO FACE. WHEN SOMEONE HEARS YOU  
12 GIVE A TALK ABOUT SOMETHING AND YOU'RE EXCITED ABOUT IT  
13 AND YOU'RE PASSIONATE ABOUT IT, THEY REMEMBER IT MUCH  
14 BETTER THAN THEY REMEMBER AN ARTICLE IN THE PAPER THAT  
15 MORNING.

16 SO FOR THE LAST COUPLE MONTHS NOW I'VE BEEN  
17 PREPARING A SLIDE DECK FOR THE BOARD. WE'RE HOPING  
18 THAT WE CAN ENLIST YOU TO GO OUT TO CHAMBERS OF  
19 COMMERCE, COMMONWEALTH CLUBS, AND LIKE ENTITIES TO GIVE  
20 SOME PRESENTATIONS. BACK IN JUNE WHEN I REDID MY  
21 CONTRACT WITH THE PR FIRM, I NOTIFIED THEM THAT ONCE  
22 THAT DECK WAS DONE, I WAS GOING TO ENLIST THEM TO DO A  
23 NEW VERSION THAT WAS VERY, VERY WARM AND FUZZY TO GIVE  
24 TO PATIENT ADVOCACY GROUPS SO THAT THEY COULD USE IT.

25 THE TOWN FORUMS WE BEGAN LAST YEAR. FIRST

## BARRISTERS' REPORTING SERVICE

1 TIME CIRM TOOK ITS MESSAGE STRAIGHT TO THE PEOPLE WERE  
2 VERY POPULAR. WE'RE GOING TO BE DOING THEM AGAIN THIS  
3 SPRING. STEM CELL AWARENESS DAY HAS GROWN THE LAST TWO  
4 YEARS.

5 ALAN MENTIONED ALL THE WORKSHOPS, THE GRANTEE  
6 MEETINGS COMING UP NEXT MONTH. WE ARE OFFERING FOR A  
7 FIVE-HOUR WORKSHOP PRIOR TO THAT MEETING COMMUNICATIONS  
8 TRAINING, REALLY HELPING TO BE BETTER AMBASSADORS FOR  
9 THE SCIENCE. WE TOLD ALL THE PEOPLE THAT SIGNED UP,  
10 ABOUT 400 PEOPLE SIGNED UP FOR THE MEETING, THE FIRST  
11 50 PEOPLE THAT RESPONDED WOULD GET INTO THIS WORKSHOP.  
12 WITHIN TWO DAYS WE WERE BOOKED SOLID WITH A TEN-PERSON  
13 WAITING LIST. IT'S A GOOD MIX OF SENIOR AND JUNIOR  
14 INVESTIGATORS. IT'S NOT ALL POST DOCS. WE GOT SOME  
15 SENIOR PEOPLE THAT REALIZED THEY COULD BE BETTER AT  
16 THIS.

17 THE ANNUAL REPORT IS MOSTLY AT THE PRINTER  
18 NOW. AND I'LL TELL YOU A LITTLE ABOUT OUR HIGH SCHOOL  
19 CURRICULUM.

20 THOSE OF YOU IN THE L.A. BASIN OR IF YOU READ  
21 THE CLIP PACKET, THIS WAS WEEK BEFORE LAST, SUNDAY  
22 FRONT PAGE OF THE *L.A. TIMES*. WHAT I LOVE IS THEY  
23 REALLY DID GET OUR MESSAGE, SPEEDING STEM CELL CURES TO  
24 PATIENTS. WE GOT 35 NEWS STORIES WITHIN A COUPLE DAYS  
25 AROUND YOUR OCTOBER MEETING WHERE THE DISEASE TEAMS

## BARRISTERS' REPORTING SERVICE

1 WERE APPROVED. BUT I REALLY STARTED WORKING WITH MY  
2 TEAM TO SAY NEWS STORIES ARE NICE, BUT WE WANT SOME  
3 FEATURE COVERS THAT REALLY GETS INTO THE HEART OF WHAT  
4 WE'RE DOING, GETS INTO THE PATIENTS A LITTLE BIT MORE,  
5 AND HAS A LITTLE MORE DEPTH. SO WE REALLY STARTED TO  
6 TRY TO GET THOSE STORIES PLACED WITH EACH OF THE MAJOR  
7 METROPOLITAN AREAS.

8 THIS WAS THE FIRST RESULT. *THE TIMES* GAVE IT  
9 GOOD PLAY, GOOD PICTURES, LOT OF SPACE. AND THEN THIS  
10 PAST MONDAY, THE SECOND STORY APPEARED ON THE FRONT  
11 PAGE OF THE *SAN DIEGO UNION TRIBUNE* WITH A PICTURE OF A  
12 COUPLE OF INVESTIGATORS YOU GUYS PROBABLY RECOGNIZE  
13 DOING OUR CANCER DISEASE TEAM.

14 MR. SHEEHY: I JUST HAD A QUICK QUESTION  
15 ABOUT THE CLIP PACKET. ODDLY ENOUGH, SINCE WE'RE  
16 TALKING ABOUT CLIPS IN THE *UNION TRIBUNE*, WHAT'S THE  
17 CRITERIA FOR INCLUSION BECAUSE I WAS A LITTLE BIT  
18 SURPRISED TO HEAR FROM EXTERNAL SOURCES ABOUT THE *UNION*  
19 *TRIBUNE* EDITORIAL TODAY BEFORE I SAW IT IN MY CLIP  
20 PACKET. THAT SEEMS LIKE SOMETHING THAT SHOULD BE --  
21 ALL OF US WOULD LIKE TO HAVE AS SOON AS -- I WOULD  
22 EXPECT A SPECIAL DISTRIBUTION OF AN EDITORIAL FROM A  
23 NEWSPAPER ABOUT OUR AGENCY BECAUSE I GET CALLS AND I  
24 HAVE TO TALK TO PEOPLE ABOUT IT, AND I DON'T -- I  
25 HAVEN'T SEEN IT, YET WE'RE PAYING FOR A CLIP PACKET.

## BARRISTERS' REPORTING SERVICE

1 AND THAT SEEMS LIKE SOMETHING THAT WOULD COME UP, BAM,  
2 CIRM, MAJOR CALIFORNIA DAILY, AND I HAVEN'T SEEN IT. I  
3 HAVE GOTTEN NO COMMUNICATION FROM CIRM ON THAT, YET  
4 I'VE GOTTEN SEVERAL EXTERNAL CALLS ASKING ME WHAT'S  
5 GOING ON? WHAT DO YOU THINK?

6 I DON'T -- A LOT OF US, I THINK, ARE KIND OF  
7 IN FIRST RESPONDER AT LEAST WITHIN OUR CERTAIN  
8 COMMUNITIES; AND IF WE DON'T GET THESE THINGS, THEN WHY  
9 DO WE PAY FOR A CLIP PACKET?

10 MR. TORRES: I WOULD LIKE TO RESPOND TO THAT  
11 POINT. AND I THINK THAT'S A VERY IMPORTANT ISSUE THAT  
12 THIS COMMUNICATIONS SUBCOMMITTEE THAT LEEZA AND I  
13 TALKED ABOUT EARLIER NEEDS TO UNDERTAKE. AND THAT IS A  
14 VERY CAREFUL REVIEW OF THIS CONTRACT WITH FLEISCHMAN  
15 HILLER IN TERMS OF WHAT THEY'RE ACTUALLY DOING BECAUSE  
16 WHAT JEFF POINTS OUT IS NOT A RARE OCCASION. IT  
17 HAPPENS OFTEN. I THINK THAT'S PART OF THE  
18 JURISDICTION, AND YOUR REPORTS ARE OBVIOUSLY GOING TO  
19 BE PRESENTED OR REVIEWED BY THE SUBCOMMITTEE AS WELL  
20 BECAUSE WE NEED TO MAKE SURE THAT WE'RE ON TOP OF THIS.  
21 WE JUST NEED TO DO MORE OF THIS KIND OF EDUCATION.

22 MR. GIBBONS: THIS WAS ACTUALLY NOT  
23 FLEISCHMAN HILLER. THIS WAS MY JUDGMENT CALL. THEY  
24 ALWAYS SEND ME THOSE THINGS IN ADVANCE. AND WHEN IT'S  
25 SOMETHING I FEEL THAT YOU WILL BE MOST EMPOWERED IF YOU

## BARRISTERS' REPORTING SERVICE

1 HAD A RESPONSE FROM US AT THE SAME TIME, I TRY  
2 DESPERATELY TO GET YOU THAT RESPONSE AT THE SAME TIME.

3 MR. TORRES: WAIT A MINUTE. YOU DIDN'T  
4 DECIDE FOR FLEISCHMAN NOT TO GIVE US THAT.

5 MR. GIBBONS: YES, I DID.

6 MR. TORRES: WHY?

7 MR. GIBBONS: BECAUSE I WANTED TO GET A  
8 RESPONSE TO THE BOARD MEMBERS AT THE SAME TIME SO THEY  
9 COULD SEE THE TALKING POINTS. SO THAT'S WHY I VERY  
10 QUICKLY THIS MORNING WROTE THAT RESPONSE BY 9:30 SO WE  
11 COULD SHIP IT BACK OUT TO YOU, EDITORIAL AND THE  
12 RESPONSE, AND THE RESPONSE GOT DELAYED.

13 MR. TORRES: WELL, THE ONLY REASON I KNEW  
14 ABOUT THE EDITORIAL WAS BECAUSE MY FORMER STAFFER AT  
15 THE PARTY SENT IT TO ME AT 12:30 THIS MORNING.

16 MR. GIBBONS: IT APPEARED IN THIS MORNING'S  
17 PAPER. IT WENT ONLINE THIS MORNING.

18 MR. TORRES: OKAY. IT'S ANOTHER ISSUE THAT  
19 WE NEED TO DISCUSS.

20 MR. GIBBONS: IT WENT ONLINE. IT'S TODAY'S  
21 PAPER. IT WASN'T YESTERDAY'S PAPER. IT WAS TODAY'S  
22 PAPER, AND IT WENT ONLINE AT MIDNIGHT.

23 MR. TORRES: NO, I KNOW, BUT THAT'S SOMETHING  
24 THAT SHOULD HAVE BEEN INCLUDED IN THE SUMMARIES IS WHAT  
25 JEFF IS SAYING AND I AGREE.

## BARRISTERS' REPORTING SERVICE

1 MR. GIBBONS: I UNDERSTAND THAT. I TAKE THAT  
2 CRITICISM.

3 MR. TORRES: IT'S NOT CRITICISM. IT'S JUST  
4 IN TERMS OF THE PROCESS THAT WE NEED.

5 MR. GIBBONS: LIKE I SAID, I FEEL LIKE I NEED  
6 TO EMPOWER YOU WITH A RESPONSE THAT HAS THE TALKING  
7 POINTS. SO I TRIED TO DO IT, AND MY GOAL WAS TO GET  
8 BOTH THE EDITORIAL AND THE RESPONSE TO THE ENTIRE BOARD  
9 BY 9:30.

10 MR. TORRES: WHICH WE DID TODAY. AND THANK  
11 GOD DUANE WAS ABLE TO SEND THAT LETTER, AND I BELIEVE  
12 IT'S GOING TO BE PUBLISHED ON FRIDAY, CORRECT?

13 MR. GIBBONS: CORRECT.

14 CHAIRMAN KLEIN: I THINK IT'S IMPORTANT,  
15 THOUGH, THAT THE BOARD NEEDS TO SEE THESE IMMEDIATELY.  
16 I MEAN IF THERE'S A RESPONSE, THAT'S GREAT, BUT DON'T  
17 HOLD UP THE INFORMATION.

18 MR. SHEEHY: I TALKED TO --

19 DR. STEWARD: WE'RE HAVING A LITTLE POLL OVER  
20 HERE, AND IF YOU SENT OUT SOMETHING AT NINE THIS  
21 MORNING, I DIDN'T GET IT.

22 MR. SHEEHY: NO, YOU HAVEN'T GOTTEN IT. YOU  
23 HAVEN'T SEEN IT.

24 MR. GIBBONS: I HAD A MAJOR DOCTOR'S  
25 APPOINTMENT AND WE HAD SOME ISSUES, AND IT DIDN'T GET

## BARRISTERS' REPORTING SERVICE

1 DONE IN TIME.

2 DR. STEWARD: I THOUGHT YOU SAID YOU SENT IT  
3 OUT.

4 MR. GIBBONS: I SAID MY GOAL WAS TO GET IT  
5 OUT BY 9:30. IT DID NOT HAPPEN.

6 MR. SHEEHY: I TALKED TO A REPORTER TODAY.  
7 SO THAT -- AND THEY CALL ME, I DON'T KNOW WHAT HE'S  
8 TALKING ABOUT, AND I'M PAYING -- HOW MUCH ARE WE PAYING  
9 THEM TO CLIP FOR US? THERE'S THIS ASSUMPTION THAT  
10 SOMEHOW YOU CAN CONTROL PEOPLE'S CONTACT WITH US, WHICH  
11 YOU DON'T. AND AS SOMEONE WHO TALKS TO THE MEDIA ALL  
12 THE TIME AS PART OF MY REGULAR BUSINESS, SOMEBODY CALLS  
13 UP AND SAYS WHAT DID YOU THINK OF THAT EDITORIAL IN THE  
14 *UNION TRIBUNE*, AND IT DOESN'T MAKE ANY OF US LOOK GOOD.

15 MR. GIBBONS: GUARANTEE, IN THE FUTURE --

16 MR. SHEEHY: DOESN'T MAKE YOU LOOK GOOD; IT  
17 DOESN'T MAKE ME LOOK GOOD.

18 MR. GIBBONS: -- I WILL DO IT IN A TWO-STEP  
19 PROCESS. YOU WILL GET THE NEGATIVE IMMEDIATELY AND THE  
20 TALKING POINTS SECOND RATHER THAN HOLDING IT UP. OKAY?  
21 CHANGE OF POLICY.

22 MR. TORRES: IT CAN'T BE DONE THAT -- IT  
23 SHOULDN'T BE DONE IN THAT WAY. WE'VE TALKED ABOUT IT  
24 MANY TIMES. I THINK YOU DO A PRETTY GOOD JOB, IN MY  
25 OPINION. I THINK WE NEED TO MAKE SURE THAT THE

## BARRISTERS' REPORTING SERVICE

1 SUBCOMMITTEE, AND THERE'S A REASON WHY, THERE'S SOME  
2 IDEAS THAT NEED TO BE ARTICULATED THAT I'VE HEARD  
3 ALREADY TONIGHT FROM LEEZA AND OTHERS THAT NEED TO BE  
4 PART OF THE DISCUSSION.

5 MR. GIBBONS: ABSOLUTELY.

6 MR. TORRES: AND SO MAKING A QUICK DECISION  
7 LIKE THAT IS ALSO --

8 MR. GIBBONS: BUT IT SOUNDS LIKE THERE'S A  
9 CERTAIN FORM THAT YOU WANT ME TO SEND THE NEGATIVE  
10 EDITORIAL IMMEDIATELY.

11 MR. TORRES: NO. I JUST THINK THAT WE SHOULD  
12 BE GETTING INFORMATION TO THE BOARD MEMBERS AS QUICKLY  
13 AS WE CAN.

14 MR. GIBBONS: THAT'S WHAT I'M GOING TO START  
15 DOING, MAKING SURE THAT HAPPENS.

16 MR. TORRES: I ALSO DO THINK THAT IT REQUIRES  
17 US TO GO OVER THAT CONTRACT TO SEE WHAT THEY'RE  
18 ACTUALLY DOING.

19 CHAIRMAN KLEIN: I THINK THAT THE OTHER ISSUE  
20 IS GENERALLY THEY NEED TO GET A BROADER SCOPE TO US. I  
21 GOT A NUMBER OF BIOTECH SOURCES THAT SENT ME NEGATIVE,  
22 MAJOR NEGATIVE STATEMENT IN *INVESTORS BUSINESS DAILY*,  
23 MAJOR FINANCIAL INDUSTRY PIECE, AND IT DOESN'T SHOW UP  
24 IN OUR CLIP SERVICE, WE NEED TO REALIZE THAT THE  
25 FINANCIAL SECTOR AND THE BUSINESS SECTOR COMMUNICATIONS

## BARRISTERS' REPORTING SERVICE

1 ARE VERY IMPORTANT TO THE COMPANIES IN THE FIELD AND TO  
2 OUR EVENTUAL SUCCESS. SO BROADENING THAT SERVICE SO WE  
3 PICK UP WHAT'S HAPPENING IN THE BUSINESS COMMUNITY IS  
4 VERY VALUABLE TO US, I THINK.

5 DR. POMEROY: BOB, CAN WE GET THAT EDITORIAL  
6 SENT OUT?

7 MR. GIBBONS: THERE ARE COPIES. I BROUGHT  
8 THEM WITH ME RIGHT HERE.

9 DR. POMEROY: RIGHT WHERE?

10 CHAIRMAN KLEIN: WHAT WE SHOULD KNOW AS  
11 BACKGROUND IS THAT THE PUBLISHER OF THE *SAN DIEGO UNION*  
12 *TRIBUNE* IS VERY SUPPORTIVE OF STEM CELL RESEARCH, BUT  
13 IT ACTUALLY TOOK ME GETTING TO THE PUBLISHER AND HAVING  
14 THE PUBLISHER CALL A MEETING TWO YEARS AGO BECAUSE WE  
15 COULDN'T GET ANYTHING IN THE EDITORIAL SECTION. THE  
16 CHIEF EDITOR, IF IT'S STILL THE SAME INDIVIDUAL --

17 MR. ROTH: JUST TO UPDATE, WE'RE GIVING THIS  
18 FAR TOO MUCH CREDIT FOR HAVING INFLUENCED. THE PAPER  
19 WAS SOLD, AND THERE'S A NEW EDITORIAL GROUP.

20 CHAIRMAN KLEIN: IS IT THE SAME EDITOR?

21 MR. ROTH: I DID NOT GET CALLED. I WOULD  
22 USUALLY HAVE BEEN QUERIED.

23 CHAIRMAN KLEIN: DID THEY RETAIN THE SAME  
24 EDITOR? SO OUR HISTORY THERE HAS BEEN THAT THERE WAS  
25 AN EDITOR THERE WHO ACTUALLY HAD AN IDEOLOGICAL ISSUE

## BARRISTERS' REPORTING SERVICE

1 WITH EMBRYONIC STEM CELLS. THE PUBLISHER ACTUALLY  
2 CONVENED MEETINGS AND ACTUALLY PRINTED AN ENTIRE PAGE  
3 OF OUR RESPONSE WITHOUT LETTING THE EDITOR EDIT IT FROM  
4 A THREE-HOUR MEETING. I DO BELIEVE THAT WE REALLY NEED  
5 TO GO BACK OUT THERE TO THE EDITORIAL BOARDS AND MAKE  
6 SOME IN-DEPTH MEETINGS, INCLUDING THE SCIENTISTS, OR IF  
7 WE CAN'T GET THE ATTENTION, PERHAPS HAVING PART OF THE  
8 BIOTECH SECTOR GET THE ATTENTION OF THESE GROUPS, BUT  
9 THIS IS A CONTINUING PROCESS.

10 DR. POMEROY: ONE MORE QUESTION. YOU  
11 REFERRED TO THE COMMITTEE THAT'S GOING TO BE DEALING  
12 WITH THESE. AND SO WHICH COMMITTEE IS THAT?

13 CHAIRMAN KLEIN: THIS IS A SUBCOMMITTEE ON  
14 STRATEGIC COMMUNICATION THAT IS GOING TO MEET ON  
15 COMMUNICATIONS POLICY AND NEW STRATEGIES.

16 DR. POMEROY: I'M SORRY. I MISSED WHEN WE  
17 CREATED THAT COMMITTEE.

18 CHAIRMAN KLEIN: THAT COMMITTEE WAS CREATED  
19 IN DECEMBER AT THE DECEMBER BOARD MEETING.

20 DR. POMEROY: THANK YOU.

21 CHAIRMAN KLEIN: CLAIRE, IF YOU'D LIKE TO  
22 JOIN THAT COMMITTEE.

23 DR. POMEROY: NOT TONIGHT.

24 DR. TROUNSON: CHAIR, I DON'T WANT TO  
25 DISTRACT, YOU KNOW, FROM ANY OF THOSE COMMENTS AT ALL,

## BARRISTERS' REPORTING SERVICE

1 BUT THIS PARTICULAR ISSUE HAS GROWN OUT OF A VERY  
2 SPECIFIC AND STRANGE CRITIQUE THAT WAS BY SOMEBODY WHO  
3 REALLY DIDN'T KNOW ANYTHING ABOUT THE INSTITUTE. ART  
4 TORRES WAS THERE AT THE MEETING, AND IT WAS REALLY VERY  
5 UNFORTUNATE, AND THEN IT'S BEEN PICKED UP AS A  
6 CONSEQUENCE. SO, YOU KNOW, IT HAS ACTUALLY GROWN FROM  
7 SOMETHING THAT WAS COMPLETELY INACCURATE IN THE FIRST  
8 PLACE AND THEN HAS BEEN EMPOWERED BY SOME REPORTING  
9 THEREAFTER.

10 AND THAT HAPPENS, BUT I WOULDN'T, LITTLE LIKE  
11 DUANE, IN THE SENSE OF IT, I THINK IT NEEDS TO HAVE A  
12 PERSPECTIVE, THAT IT WAS AN IRRATIONAL, IN MY OWN VIEW,  
13 IRRATIONAL ATTACK ON THE GOVERNANCE OF THE INSTITUTE  
14 WITHOUT ANY REAL INFORMATION BACKING IT UP. AND IT'S  
15 BEEN CARRIED FORWARD IN A MOST UNFORTUNATE WAY. I  
16 THINK THE RESPONSES THAT HAVE BEEN DEVELOPED HAVE BEEN  
17 APPROPRIATE. AND ACTUALLY I'M NOT SURE THAT I FEEL WE  
18 NEED TO OVERWHELM THIS LITTLE BIT OF ILL FORTUNE IN  
19 SOME RESPECTS FROM WHERE IT ORIGINATED.

20 CHAIRMAN KLEIN: I THINK WE NEED TO DISCUSS  
21 IN THE EXECUTIVE -- AT LEAST HAVE AN EXECUTIVE  
22 DISCUSSION ABOUT OUR RESPONSE BECAUSE I'D LIKE TO HEAR  
23 DON'S PERSPECTIVE AFTER THE MEETING ON WHAT WE SHOULD  
24 DO IN TERMS OF GETTING TO THOSE EDITORIAL BOARDS THE  
25 RIGHT INFORMATION SO THEY DON'T PRECIPITATE A CHAIN OF

## BARRISTERS' REPORTING SERVICE

1 THESE MISINTERPRETATIONS.

2 DR. TROUNSON: I THINK THAT IS ACTUALLY THE  
3 POINT. THERE WERE SEVERAL PUBLICATIONS WHO PICKED UP  
4 ON THIS STORY AND WROTE IT IN A MOST UNFORTUNATE WAY  
5 BECAUSE IT DERIVED FROM A VERY POOR CRITIQUE. I THINK  
6 IT WAS REALLY UNFORTUNATE.

7 CHAIRMAN KLEIN: DR. TROUNSON IS REFERRING TO  
8 THE FACT THAT THERE'S A NEW APPOINTEE ON THE FINANCIAL  
9 OVERSIGHT COMMITTEE, CHAIRED BY THE CONTROLLER, THIS IS  
10 AN APPOINTEE OF THE CONTROLLER, RETIRED DOCTOR OF  
11 MEDICINE WHO RETIRED FROM PRACTICE AT USC. HE DID HAVE  
12 A PRETTY NOTEWORTHY CAREER IN THE L.A. BASIN BEFORE HIS  
13 RETIREMENT, BUT WE CERTAINLY HAVE A NUMBER OF  
14 INDIVIDUALS IN THE L.A. BASIN WHO HAVE DIRECT  
15 PARTICIPATION WITH THIS BOARD WHO HOPEFULLY COULD REACH  
16 OUT AND AT LEAST PROVIDE THE INFORMATION. WHETHER IT'S  
17 ACCEPTED OR NOT, IT'S UP TO THE MEMBER. BUT WE NEED TO  
18 CERTAINLY GET THIS INFORMATION TO THAT MEMBER SO HE CAN  
19 MAKE AN OBJECTIVE JUDGMENT ON REAL INFORMATION, NOT  
20 EVIDENTLY SECONDHAND OR THIRDHAND INFORMATION THAT IS  
21 BEING USED RIGHT NOW AND LED TO THIS POSITION.

22 I ACTUALLY WASN'T AT THIS FINANCIAL OVERSIGHT  
23 COMMITTEE. MY DAUGHTER CHOSE TO GIVE BIRTH TO HER  
24 FIRST CHILD THAT DAY.

25 (APPLAUSE.)

## BARRISTERS' REPORTING SERVICE

1 CHAIRMAN KLEIN: FROM MY PERSPECTIVE, GOD  
2 SAVED ME FROM A MUCH WORSE DAY. DON HAS SOME MORE TO  
3 SAY HERE. I THINK WE SHOULD TRY AND LET DON FINISH.

4 MR. GIBBONS: SO, AGAIN, YOUR FRONT PAGE  
5 STORY WAS RIGHT ON MESSAGE. THERE'S A QUOTE FROM IT,  
6 "THE GRANT FROM THE CALIFORNIA INSTITUTE FOR  
7 REGENERATIVE MEDICINE MAY HELP JAMIESON AND HER  
8 COLLEAGUES FULFILL THAT QUEST MORE QUICKLY THAN  
9 TRADITIONAL DRUG RESEARCH AND DEVELOPMENT PROGRAMS  
10 BECAUSE IT BRINGS TOGETHER RESEARCHERS, CLINICIANS, AND  
11 INDUSTRY PROFESSIONALS FROM THE START."

12 BETTINA IS NOT HERE TONIGHT, BUT SHE GRANTED  
13 AN INTERVIEW TO THE REPORTER, AND WE HONED IN THAT IDEA  
14 OF BRINGING THE TEAM TOGETHER, MULTIDISCIPLINARY TEAM,  
15 FROM THE BEGINNING, AND REPORTER GOT IT.

16 I'M NOT GOING TO DISCUSS THIS VERY MUCH, BUT  
17 BYPASSING THE MEDIA IS VERY IMPORTANT TO US AS IS WITH  
18 ANY INFORMATION OFFICE. AND THE WEB SITE IS AN  
19 IMPORTANT PIECE OF IT, BUT ONLY ONE PIECE OF IT. AND  
20 AMY ADAMS WILL GO OVER THAT IN MORE DETAIL.

21 I MENTIONED THAT I HAVE DEVELOPED A SLIDE  
22 DECK FOR THE BOARD. IT'S IN THE FINAL STAGES OF  
23 APPROVAL. WE HOPE TO SEND YOU EACH A JUMP DRIVE THAT  
24 WILL HAVE IT PERSONALIZED FOR YOUR USE SO THAT WHEN YOU  
25 USE THE MAP OF OUR GRANTS, YOU WILL HAVE A SUBMAP FOR

## BARRISTERS' REPORTING SERVICE

1 YOUR REGION. IF WE A GRANT OF -- A MAP OF THE GRANTS  
2 BY DISEASE AND YOU'RE TALKING TO A SPECIFIC DISEASE  
3 GROUP, WE'LL BREAK OUT GRANTS IN YOUR AREA DEALING WITH  
4 THAT DISEASE.

5 MR. TORRES: ON THAT POINT, MR. CHAIRMAN, IF  
6 I MAY. THANK YOU, DON, FOR HELPING IN THAT WHOLE AREA.  
7 AND THE BOARD ALSO NEEDS TO KNOW THAT EACH MEMBER OF  
8 THE LEGISLATURE AND EACH MEMBER OF OUR CALIFORNIA  
9 CONGRESSIONAL DELEGATION RECEIVED A LETTER SPECIFICALLY  
10 DESIGNED TO PINPOINT FOR THEIR BENEFIT WHAT PROJECTS  
11 ARE OPERATING IN THEIR INDIVIDUAL DISTRICTS, NO. 1.

12 NO. 2, WHERE THE BRIDGES PROGRAM IS OPERATING  
13 BECAUSE IT OPERATES NOT ONLY IN RESEARCH INSTITUTIONS,  
14 BUT ALSO COMMUNITY COLLEGES AND STATE UNIVERSITY  
15 CAMPUSES AS WELL.

16 AND TO THOSE LEGISLATORS OR MEMBERS OF  
17 CONGRESS WHO DID NOT HAVE GRANTS GIVEN IN THEIR  
18 DISTRICTS, THEY ALSO RECEIVED A LETTER WITH THE MACRO  
19 VIEW OF WHAT WE HAVE BEEN DOING FOR THE TAXPAYERS OF  
20 THIS STATE, NO. 1; AND, NO. 2, TRYING TO ADDRESS MANY  
21 OF THE, SOME OF THE ISSUES, HOW WE HAVE RESPONDED TO  
22 THE LITTLE HOOVER COMMISSION RECOMMENDATIONS, WHICH I  
23 THINK HAVE BEEN OUTSTANDING, AS DR. HOLLANDER POINTED  
24 OUT AT THE CONTROLLER'S COMMITTEE AND OTHERS HAVE  
25 POINTED OUT AS WELL.

## BARRISTERS' REPORTING SERVICE

1 SO WE'RE TRYING, AS DON SAYS, NOT TO BYPASS,  
2 BUT TO ACCENTUATE BEYOND TRADITIONAL MEDIA MEANS TO  
3 COMMUNICATE WITH OUR REPRESENTATIVES, ELECTED  
4 REPRESENTATIVES. THIS, OF COURSE, INCLUDES SENATORS  
5 FEINSTEIN AND BOXER, TO LET THEM KNOW JUST HOW WE'RE  
6 DOING, WHAT WE'RE DOING, AND WHAT KIND OF RESOURCES WE  
7 ARE PROVIDING FOR THE STATE.

8 CHAIRMAN KLEIN: SO IN THAT REGARD, I THINK  
9 WE ALL OWE YOU, ART, A REAL APPRECIATION FOR THE EFFORT  
10 YOU PUT INTO THAT. BUT I THINK IT WOULD BE APPROPRIATE  
11 IF YOU WANT TO RECOGNIZE NICK FOR THE TREMENDOUS EFFORT  
12 HE DID IN CIRCULARIZING THAT LETTER WITH MY COMMENTS,  
13 YOUR COMMENTS, DUANE'S COMMENTS, AND I THINK DR.  
14 TROUNSON'S ALONG THE WAY.

15 MR. TORRES: YES, ABSOLUTELY. THANK YOU,  
16 NICK. AND, SECONDLY, THANK YOU, DUANE, AND THANK YOU,  
17 ALAN, BECAUSE ALL FOUR OF US SIGNED THAT LETTER TO OUR  
18 ELECTED REPRESENTATIVES TO MAKE SURE -- IT'S ALL AN  
19 EFFORT OF WORKING TOGETHER AS A TEAM TO MAKE SURE THAT  
20 PEOPLE KNOW WHO WE ARE AND WHAT WE'RE DOING AND HOW  
21 WE'RE MEETING AND CONFRONTING THE ISSUES THAT ARE  
22 PRESENTED TO US AND I THINK IN A VERY THOUGHTFUL WAY.

23 MR. SHEEHY: I HATE TO TAKE US BACK TO THIS  
24 CHART, BUT COULD WE ACTUALLY -- NOT TO BE A CRITIC, BUT  
25 I LOOK AT THIS. THIS DOESN'T SAY ANYTHING TO ME. YOU

## BARRISTERS' REPORTING SERVICE

1 KNOW, IF I'M A PARKINSON'S PATIENT, I WANT TO SEE  
2 PARKINSON'S. I'M AN HIV PATIENT, I HAVE NO IDEA THAT  
3 WE SPENT BETWEEN 40 AND 50 -- WE COMMITTED BETWEEN 40  
4 AND \$50 MILLION TO FIGHT HIV/AIDS.

5 AND BOTH THE PERCENTAGE THING ON THE SIDE,  
6 WHICH IS MISLEADING BECAUSE IT DOESN'T ACTUALLY GET TO  
7 THE AMOUNT OF MONEY WE'RE SPENDING, WHICH I THINK HAS  
8 FAR GREATER IMPACT. AND THE CLUMPING OF DISEASES,  
9 PEOPLE WHO ARE PATIENTS AND PATIENT ADVOCATES LOOK AND  
10 SAY WHAT ARE YOU DOING TO CURE ME? AND, YOU KNOW,  
11 WE'VE GOT SEVERAL PROMISING PARKINSON'S PROJECTS GOING  
12 FORWARD. WE'VE GOT A PROMISING HUNTINGTON'S PROJECT.  
13 WE'RE TALKING ABOUT NEW EYES FOR PEOPLE WITH MACULAR  
14 DEGENERATION.

15 SO OUTSIDE OF HEART DISEASE AND DIABETES, YOU  
16 KNOW, THAT'S THE ONLY THING THAT REALLY JUMPS OUT TO ME  
17 THAT HAS ANY MEANING. I WONDER IF WE COULD GET -- AND  
18 THEN HAVING THE DOLLARS IN THERE BECAUSE THE DOLLARS, I  
19 SEE 7 PERCENT FOR DIABETES, AND THAT DOESN'T REALLY  
20 CAPTURE THE DISEASE TEAM THAT MAY ACTUALLY -- IT WAS A  
21 REALLY SUBSTANTIAL INVESTMENT THAT MAY HAVE A  
22 MEANINGFUL IMPACT ON THE COURSE OF THAT DISEASE. I  
23 JUST, SINCE WE'RE PAYING --

24 MR. GIBBONS: I AGREE WITH YOU AND IT'S A  
25 FRUSTRATION FOR ME AS WELL. LET ME TELL YOU WHAT ELSE

**BARRISTERS' REPORTING SERVICE**

1 IS IN THE SLIDE DECK.

2 MR. SHEEHY: I'M SURE YOU -- THIS IS  
3 CONTRACTED OUT, SO YOU COULD HAVE THOSE PEOPLE WE'RE  
4 PAYING DO THIS.

5 MR. GIBBONS: THIS IS ALL DONE IN-HOUSE.

6 MR. SHEEHY: BUT YOU'RE HAVING THE SLIDE DECK  
7 DONE.

8 MR. GIBBONS: I'M HAVING -- OUR AGREEMENT WAS  
9 I DO THE BOARD DECK AND THEY WOULD CRITIQUE IT, AND  
10 THEN THEY WOULD DO THE PATIENT ADVOCACY DECK FOR ME  
11 BECAUSE I WANTED IT DONE -- THE THING IS, WHAT YOU'RE  
12 NOT SEEING HERE IS A COUPLE THINGS. WE DO HAVE THE  
13 SAME NUMBERS RUN BY DOLLARS RATHER THAN PERCENTS. BUT  
14 THE BIGGEST PROBLEM IS THAT OUR GRANTS ADMINISTRATION  
15 SYSTEM IS UNDER CONSTRUCTION. AS A RESULT, I CAN'T GET  
16 YOU -- I CAN'T RUN A PROGRAM AND GET YOU THE  
17 PARKINSON'S NUMBERS. BUT THAT'S THE REASON I SAID THAT  
18 WE WILL WORK WITH EVERY BOARD MEMBER AND MAKE SURE YOU  
19 CAN PERSONALIZE IT BECAUSE WE CAN GO IN AND FIND THAT  
20 INFORMATION FOR YOU AND GET YOU THAT. IT'S JUST IT'S  
21 NOT AUTOMATED YET. IT WILL BE EVENTUALLY, BUT IT'S NOT  
22 NOW AUTOMATED. GETTING EVEN THIS LEVEL OF GRANULARITY  
23 HAS ONLY BEEN IN THE LAST COUPLE MONTHS BECAUSE IT'S  
24 ALL TIED UP INTO THE REVISION OF OUR GRANTS MANAGEMENT  
25 PROCESS.

## BARRISTERS' REPORTING SERVICE

1 I'VE BEEN WANTING DATA AS GRANULAR AS  
2 PARKINSON'S SINCE I WALKED IN THE DOOR HERE, AND I'VE  
3 BEEN TALKING ABOUT SINCE THAT DAY. BUT BECAUSE GETTING  
4 THE GRANTS IN AND OUT THE DOOR HAVE BEEN MORE IMPORTANT  
5 THAN THIS DATA I NEED FOR COMMUNICATIONS, IT HASN'T  
6 HAPPENED YET, BUT IT IS IN THE WORKS.

7 MS. GIBBONS: IMPLEMENTING THAT PROCESS, WILL  
8 WE HAVE A CENTRAL PLACE WHERE WE CAN HAVE ACCESS TO THE  
9 VIDEO ASSETS THAT WE CAN CUSTOMIZE? THAT'S WHAT YOU  
10 ARE SAYING?

11 MR. GIBBONS: YEAH.

12 MS. GIBBONS: BUT YOU'RE SAYING EVEN IN  
13 ADVANCE OF THAT, YOU CAN DO THAT WITH US INDIVIDUALLY  
14 NOW?

15 MR. GIBBONS: YES.

16 CHAIRMAN KLEIN: WHAT WE'D LIKE TO DO IS  
17 CONSOLIDATE REQUESTS SO THAT WE CAN SERVE SEVERAL  
18 PEOPLE. SO IF YOU WILL COORDINATE THAT THROUGH  
19 MELISSA, THAT WOULD BE FABULOUS, LEEZA. AND, OF  
20 COURSE, IN THE SUBCOMMITTEE WE'RE GOING TO TRY AND  
21 IDENTIFY THOSE RESOURCES SO EVERYONE CAN KNOW AND THE  
22 PUBLIC CAN KNOW BECAUSE OUR FUNDAMENTAL OBLIGATION IS  
23 TO GET TO THE PUBLIC THROUGH THE TRADITIONAL MEDIA,  
24 THROUGH THE NEW MEDIA. AND I THINK THIS IS -- WHEN  
25 THIS DATA AND SLIDE DECKS ARE REFINED, IT WILL GIVE US

## BARRISTERS' REPORTING SERVICE

1 A GREAT TOOL THAT WE CAN USE.

2 AND I'M GOING TO BE SENDING EVERYONE THE  
3 LETTER THAT I'M DOING FOR THE ANNUAL REPORT RIGHT AWAY,  
4 WHICH ATTEMPTS TO IDENTIFY TEN MESSAGING POINTS ABOUT  
5 WHY WE'RE UNIQUE, WHAT TREMENDOUS VALUE IS OUR AGENCY  
6 PROVIDING UNIQUELY TO CALIFORNIA SO THAT WE CAN  
7 THEMATICALLY ANSWER AT LEAST WITH A CORE OF MESSAGES  
8 THAT TALK ABOUT WHY THIS AGENCY IS WORTH SUPPORTING  
9 WITH TAX DOLLARS IN CALIFORNIA AND WHAT IT  
10 STRATEGICALLY DOES FOR MOVING THERAPIES CLOSER TO THE  
11 PATIENTS.

12 MR. TORRES: I THINK LEEZA WOULD ALSO LIKE TO  
13 HEAR WHAT VIDEOS YOU'VE SENT OUT TO THE LEGISLATURE.

14 MR. GIBBONS: WE SENT BOTH THE ALZHEIMER'S  
15 VIDEOS WITH LAFERLA AS WELL AS THE CATRIONA JAMIESON  
16 CANCER VIDEO, AND THEY'VE BEEN VERY WELL RECEIVED.

17 DR. TROUNSON: JUST IN ANSWER TO JEFF'S  
18 COMMENT, A LOT OF THE MORE BASIC STUDIES ARE NOT  
19 SPECIFIED BY DISEASE. SO WHAT I USE IS A DECK, WHICH I  
20 CAN GET AVAILABLE TO PEOPLE WHO ARE INTERESTED, WHERE  
21 THE DISEASE ONES WITH THE TRANSLATION, THE DISEASE  
22 TEAMS, AND ANY OF THE PROMINENT BASIC STUDIES WHERE IT  
23 HAS EASILY BEEN IDENTIFIED AND CAN BE BROUGHT THROUGH,  
24 AND THAT THE AMOUNT OF DOLLARS WITH RESPECT TO THE  
25 OVERALL INVESTMENT IN RESEARCH CAN BE WORKED OUT PRETTY

## BARRISTERS' REPORTING SERVICE

1 SIMPLY.

2 MR. GIBBONS: IT'S IN THE SLIDE DECK ALREADY.

3 DR. TROUNSON: WE COULD DO SOMETHING LIKE  
4 THAT THAT IS A BIT EASIER TO DO THAN TO TRY AND DRILL  
5 INTO EVERY ONE OF THE BASIC STUDIES WHERE IT'S ARGUABLE  
6 WHETHER IT'S TOUCHING ONE DISEASE OR ANOTHER  
7 SPECIFICALLY.

8 MR. SHEEHY: I WAS JUST TALKING IN TERMS OF  
9 PRESENTATION. I DON'T THINK ANYTHING WOULD HAVE TO BE  
10 EXACT. IMPACTFUL COMMUNICATIONS SHOULD BE REALLY  
11 SPECIFIC. EVEN I CAN BALLPARK FOUR OR FIVE DISEASES  
12 OFF THE TOP OF MY HEAD, BUT THIS DOESN'T DO ANYTHING.

13 MR. GIBBONS: I WAS JUST TRYING TO GIVE A  
14 TINY SAMPLE OF THE SLIDE DECK, THAT MUCH MORE OF THE  
15 DECK DEALS WITH OUR TRANSLATIONAL PORTFOLIO BECAUSE  
16 THAT'S WHERE THE SPECIFICS ARE. SO I DEVOTED A MUCH  
17 LARGER CHUNK OF IT TO DISEASE TEAMS WHERE YOU CAN DIG  
18 INTO THE HIV GRANTS, ETC., SO THAT'S IN THERE IN MUCH  
19 MORE DETAIL. THIS WAS JUST THE OPENING SNAPSHOT.

20 CHAIRMAN KLEIN: I THINK, DON, PLEASE  
21 PROCEED, AND I KNOW AMY HAS GOT SOME MATERIALS AS WELL.

22 MR. GIBBONS: SO, AGAIN, I'VE ASKED THE  
23 AGENCY TO TAKE A FORMAL DECK THAT WAS MEANT FOR  
24 CHAMBERS OF COMMERCE AND KIND OF A HIGHER END AND MAKE  
25 IT MUCH MORE PATIENT FRIENDLY AND WARM. THEY'RE IN THE

## BARRISTERS' REPORTING SERVICE

1 PROCESS OF DOING THAT.

2 THE TOWN FORUMS, TWO HAVE BEEN SET. THE ONE  
3 IN SAN DIEGO IS APRIL 20TH, NOT THE MARCH 31ST IT SAYS  
4 HERE. AND ED BAETGE FROM NOVOCELL AND SAM PFAFF FROM  
5 SALK HAVE AGREED TO SPEAK. WE'RE FOCUSING ON THE  
6 DISEASE TEAMS AGAIN, BUT FROM THE BROADER CONCEPT OF  
7 WHAT DOES IT TAKE TO GET TO THE CLINIC. I DON'T THINK  
8 THE PUBLIC HAS A REALLY GOOD UNDERSTANDING OF THAT.

9 THE ONE IN SAN FRANCISCO IS ACTUALLY GOING TO  
10 BECOME THE TRADITIONAL PUBLIC PREMEETING TO THE ISSCR,  
11 THE INTERNATIONAL SOCIETY FOR STEM CELL RESEARCH, THAT  
12 CIRM IS HOSTING IN JUNE.

13 AND THEN THE ONE IN L.A. WILL BE PROBABLY A  
14 WEEK BEFORE THIS, BUT WE'RE STILL TRYING TO NAIL DOWN  
15 THE DATES WITH THE TWO SPEAKERS.

16 MR. SHEEHY: I HATE TO KEEP INTERRUPTING, BUT  
17 IS THERE ANY ATTEMPT TO TRY TO TAILOR THESE  
18 PRESENTATIONS TO THE COMMUNITIES AND IMPACT OF DISEASE  
19 WITHIN THESE VARIOUS COMMUNITIES? I DO SEE, IT'S  
20 INTERESTING TO MAKE A MATCH BETWEEN PEOPLE WHO ARE IN A  
21 PARTICULAR AREA. BUT JUST FOR AN EXAMPLE, YOU KNOW,  
22 IT'S NOT ROCKET SCIENCE TO SAY THAT IF YOU ARE IN SAN  
23 FRANCISCO AND YOU CARRY A HIGH BURDEN OF HIV DISEASE,  
24 EVEN THOUGH NEITHER ONE OF THE INVESTIGATORS WHO ARE  
25 LEADING THOSE PROJECTS ARE FROM SAN FRANCISCO, IT MIGHT

## BARRISTERS' REPORTING SERVICE

1 BE SOMETHING THAT MIGHT HAVE A LITTLE BIT LARGER IMPACT  
2 TO INCLUDE AT LEAST ONE OF THOSE PRESENTATIONS. WHEN  
3 YOU COME BACK TO THIS COMMUNITY, YOU MIGHT HAVE A  
4 LARGER INTEREST, MIGHT BE MOTIVATING FOR LEGISLATORS  
5 WHO REPRESENT THESE COMMUNITIES TO FEEL LIKE THAT WE'RE  
6 DOING A GOOD JOB BECAUSE THEIR CORE CONSTITUENCIES IN  
7 SOME OF THESE DISTRICTS ARE HEAVILY IMPACTED BY THIS  
8 DISEASE, AND THEY MIGHT LIKE TO HEAR THAT WE'RE  
9 ACTUALLY DOING SOMETHING THAT MIGHT MAKE A MEANINGFUL  
10 DIFFERENCE IN THE COURSE OF DISEASE FOR THESE  
11 INDIVIDUALS.

12 MR. GIBBONS: I ABSOLUTELY AGREE. THE  
13 PROBLEM WITH THE ONE IN SAN FRANCISCO IS THAT IT'S NOT  
14 JUST OUR EVENT. IT'S CO-HOSTED BY ISSCR. AND I HAVE  
15 TO WORK WITH THEIR EDUCATION COMMITTEE ON IT. AND SO  
16 IT'S NOT GOING TO BE SPECIFICALLY ON CIRM'S DISEASE  
17 TEAMS. IT'S GOING TO BE MORE BROADLY ON THE CONCEPT OF  
18 GETTING TO CLINIC SAFELY AND STEM CELL TOURISM BECAUSE  
19 THAT'S WHAT THE COMMITTEE AT ISSCR HAS REQUESTED.

20 THE DISEASE TEAMS WILL BE SAN DIEGO AND L.A.  
21 IT'S NOT GOING TO BE THE FOCUS OF THE ONE HERE.

22 CHAIRMAN KLEIN: I THINK THAT IT IS IMPORTANT  
23 TO DISCUSS THAT IN THE SUBCOMMITTEE BECAUSE ISSCR,  
24 WE'RE HOSTING THEM HERE. WE'RE CONTRIBUTING A LOT TO  
25 THAT. AND WHATEVER GROUP WE'RE INTERFACING WITH, I

## BARRISTERS' REPORTING SERVICE

1 THINK WE HAVE TO HAVE DEFINED STRATEGIC OBJECTIVES FOR  
2 COMMUNICATIONS RELATED TO ANY MAJOR EVENT. THOSE ARE  
3 CONDITIONS UNDER WHICH THEY HAVE TO NEGOTIATE WITH US  
4 IN GOOD FAITH. AND WE HAVE TO BE ABLE TO GET THE  
5 MESSAGE OUT TO THE PUBLIC. WE HAVE AN OBLIGATION TO  
6 GET THE MESSAGE OUT TO THE PUBLIC. AND WHATEVER THE  
7 FORMAL GROUP IS THAT WE'RE DEALING WITH OR SPEAKING TO,  
8 WE'RE GOING TO HAVE TO TAKE A POSITION ON OUR STRATEGIC  
9 OBJECTIVES, NOT JUST THEIRS. SO IT IS IMPORTANT THAT  
10 WE'RE HAVING THIS, BUT I THINK WE MAY BE GETTING -- WE  
11 MAY ASK THEM TO GET MORE OUT OF IT THAN THEY CURRENTLY  
12 EXPECT.

13 MR. GIBBONS: STEM CELL AWARENESS DAY HAS  
14 BEEN SET FOR THIS COMING YEAR. IT WILL BE OCTOBER 6TH,  
15 WEDNESDAY. AND OUR INTERNATIONAL PARTNERS ARE GETTING  
16 VERY INVOLVED THIS YEAR. THEY WANT TO BRING IT INTO  
17 THE SCHOOL SYSTEMS OF THEIR COUNTRIES. THERE'S A LOT  
18 OF INTEREST IN THE SCHOOL SYSTEMS HERE. IF YOU  
19 REMEMBER RIGHT, WE REACHED 5,000 STUDENTS IN THE  
20 CALIFORNIA HIGH SCHOOLS ON THAT DAY.

21 ANNUAL REPORT, AS I MENTIONED, IS MOSTLY AT  
22 THE PRINTER. WE HOPE TO GET IT TO YOU IN SACRAMENTO.

23 CHAIRMAN KLEIN: AND I WOULD SAY I'VE SEEN  
24 THE DRAFT OF THE ANNUAL REPORT. IT'S BEAUTIFULLY DONE.  
25 TREMENDOUS AMOUNT OF WORK FROM DON AND AMY IN THIS. I

## BARRISTERS' REPORTING SERVICE

1 THINK AMY IS THE LEAD ON THIS PARTICULAR ITEM, BUT IT'S  
2 A BEAUTIFUL PIECE AS LAST YEAR'S WAS.

3 MR. GIBBONS: AND THEN NEXT WEEK WE ARE GOING  
4 TO BE HAVING OUR HIGH SCHOOL CURRICULUM GO LIVE. IT  
5 CONSISTS OF AN INTRODUCTORY LESSON, WHICH IS THE ONE  
6 THAT WAS USED BY OUR INVESTIGATORS LAST FALL AND ROAD  
7 TESTED IN SCHOOLS OF THE AREA LAST SPRING. AND THEN  
8 FOUR MODULES ABOUT DIFFERENT ASPECTS OF STEM CELL  
9 SCIENCE, EACH ONE CAN BE TAUGHT IN A SINGLE DAY OR  
10 STRETCH OVER THE COURSE OF A WEEK IF THEY DO ALL THE  
11 VARIOUS ACTIVITIES ATTACHED TO IT.

12 THE VERY OPENING PAGE OF EACH ONE, HOWEVER,  
13 IS THE GUIDELINES IN THE MANDATED CURRICULUM THAT THESE  
14 LESSONS CAN SUBSTITUTE FOR. WE'VE BEEN TOLD VERY  
15 CLEARLY TEACHERS DON'T HAVE TIME TO ADD SOMETHING, SO  
16 YOU'VE GOT TO TEACH TO THE CURRICULUM. SO THE OPENING  
17 SECTION OF EACH MODULE STATES THE GUIDELINE, WHICH  
18 SECTION OF THE GUIDELINE THIS LESSON WOULD FULFILL, AND  
19 WHAT WE'RE SUBSTITUTING.

20 I'VE GOT A QUOTE FROM GLORIA ROMERO, WHO'S  
21 THE STATE SENATOR WHO CARRIED THE BILL TO ASK THE STATE  
22 TEACHERS TO WORK WITH US THAT WE WILL BE USING IN THE  
23 PRESS RELEASE WHEN IT GOES OUT HOPEFULLY NEXT WEEK.  
24 AND SO THIS IS SENATOR ROMERO'S COMMENTS. "THE LAUNCH  
25 OF THIS NEW EDUCATIONAL PORTAL BRINGS US A STEP CLOSER

## BARRISTERS' REPORTING SERVICE

1 TO ENSURING CALIFORNIA HAS A WORKFORCE WITH THE  
2 EDUCATIONAL AND TECHNICAL TRAINING NEEDED TO FILL  
3 POSITIONS AT THE STEM CELL AND BIOTECH INDUSTRIES OF  
4 THE STATE. WE KNOW THAT A SOLID EDUCATION TODAY IS OUR  
5 BEST CHANCE FOR ECONOMIC RECOVERY IN CALIFORNIA  
6 TOMORROW. BY PROVIDING TEACHERS AND STUDENTS WITH THE  
7 RESOURCES THEY NEED TO BE PREPARED FOR THE JOBS AND  
8 INDUSTRIES THIS STATE HAS AND WILL HAVE, WE CAN SECURE  
9 A PROSPEROUS ECONOMIC FUTURE DUE TO CALIFORNIA'S  
10 INGENUITY AND INNOVATION."

11 THAT'S ALL I'VE GOT. I'M GOING TO TURN IT  
12 OVER TO AMY, BUT I'LL ANSWER ANY FURTHER QUESTIONS IF  
13 YOU HAVE ANYTHING FOR ME BEFORE I TURN IT OVER TO AMY.

14 MS. GIBBONS: WHEN IS STEM CELL AWARENESS DAY  
15 THIS YEAR?

16 MR. GIBBONS: OCTOBER 6TH.

17 CHAIRMAN KLEIN: OKAY. AMY.

18 MS. ADAMS: MR. CHAIRMAN, MEMBERS OF THE  
19 BOARD AND MEMBERS OF THE PUBLIC, I AM AS TIRED AS YOU  
20 ARE AND I WANT TO GO HOME. SO I WILL TRY TO GET  
21 THROUGH THIS QUICKLY WITHOUT TALKING TOO FAST.

22 SO I'M GOING TO TALK ABOUT OUR ONLINE AND  
23 SOCIAL MEDIA COMMUNICATIONS. AND PART OF WHY WE  
24 THOUGHT IT WAS IMPORTANT TO TALK TO YOU ABOUT THESE  
25 COMMUNICATIONS IS BECAUSE I THINK NOT EVERYONE IS ON

## BARRISTERS' REPORTING SERVICE

1 FACEBOOK AND YOUTUBE AND ALL THESE OTHER WEB 2.0  
2 TECHNOLOGIES, AND WE THOUGHT IT WAS IMPORTANT TO  
3 EXPLAIN WHY WE'RE THERE.

4 SO THE GOAL OF ALL OF OUR COMMUNICATIONS IS  
5 TO REACH ALL OF OUR DEMOGRAPHICS WITH INFORMATION ABOUT  
6 CIRM'S MISSION AND ACCOMPLISHMENTS. CIRM SERVES A LOT  
7 OF DEMOGRAPHICS. WE HAVE CIRM EMPLOYEES, WE HAVE THE  
8 BOARD MEMBERS, WE HAVE PATIENT ADVOCACY GROUPS, WE HAVE  
9 THE PEOPLE OF CALIFORNIA WHO VOTED FOR PROPOSITION 71  
10 AND WANT TO KNOW WHAT WE'RE DOING, WE HAVE OUR  
11 INTERNATIONAL PARTNERS, AND WE WANT TO TALK TO ALL OF  
12 THEM. SO WE HAVE A WEB PAGE, WE HAVE A FACEBOOK FAN  
13 PAGE, WE HAVE A YOUTUBE CHANNEL, WE HAVE A BLOG, A  
14 FLICKR PHOTO STREAM, AND WE NOW HAVE A MONTHLY DIGEST.

15 SO IN ALL OF THESE COMMUNICATIONS WE TRY  
16 MAINTAIN THE SAME MESSAGES, WHICH IS THAT CIRM IS  
17 CREATING STEM-CELL BASED CURES, AND WE ARE AN ECONOMIC  
18 BENEFIT TO CALIFORNIA.

19 SO I WANT TO TALK FIRST ABOUT THE WEB PAGE.  
20 SO THE GOAL OF THE WEB SITE IS TO PROVIDE ALL OF THE  
21 AUDIENCES WITH USEFUL, ACCESSIBLE CONTENT. IN THIS  
22 PAST YEAR WE RECENTLY MOVED TO A DRAMATICALLY REVISED  
23 WEB SITE AND MOVED IT IN-HOUSE, SO WE HAVE A LOT MORE  
24 CONTROL OVER WHAT GOES UP, WHEN IT GOES UP. AND WE  
25 MAINTAINED ALL THE CONTENT FROM THE OLD SITE, BUT WE'VE

## BARRISTERS' REPORTING SERVICE

1 BEEN TRYING TO ADD A LOT OF CONTENT INTENDED FOR THE  
2 PUBLIC.

3 IF YOU LOOKED AT THE SITE TWO YEARS AGO, YOU  
4 CAN GO INTO WEB ARCHIVES AND LOOK AT WEB SITES. SO TWO  
5 YEARS AGO THE WORD "STEM CELL" WAS BARELY EVEN  
6 MENTIONED ON OUR WEB SITE. THERE WAS NO CONTENT TO  
7 EXPLAIN TO PEOPLE WHY CIRM EXISTS, WHAT WE'RE TRYING TO  
8 DO, WHAT WE'RE FUNDING, WHY WE'RE FUNDING IT, AND WE'RE  
9 REALLY TRYING TO DO THAT NOW.

10 SO I'M GOING TO SHOW YOU A COUPLE OF THE  
11 TYPES OF THINGS WE'RE PUTTING UP, A LITTLE INFORMATION  
12 ABOUT THE SITE. SO WE GET ABOUT 11,000 UNIQUE VISITORS  
13 A MONTH. PEOPLE SPEND THREE TO FOUR MINUTES ON THE  
14 SITE. THEY VIEW THREE TO FOUR PAGES. THREE TO FOUR  
15 MINUTES DOESN'T SEEM LIKE A LOT, ALTHOUGH IT MIGHT  
16 RIGHT NOW. IF YOU THINK ABOUT YOUR DAY AND YOUR WEB  
17 BROWSING, STAYING ON A SITE THAT'S NOT TRYING TO SELL  
18 YOU SOMETHING OR DOESN'T HAVE CELEBRITY GOSSIP,  
19 ACTUALLY STAYING PAST A MINUTE OR TWO IS CONSIDERED  
20 GOOD. SO WE'RE PRETTY PLEASED WITH THAT.

21 55 PERCENT OF OUR AUDIENCE IS IN CALIFORNIA.  
22 THE REMAINING 45 PERCENT ARE IN 109 DIFFERENT  
23 COUNTRIES. I THINK THAT REALLY INDICATES THAT PEOPLE  
24 WORLDWIDE ARE LOOKING TO CIRM AS A LEADER, AND THEY'RE  
25 LOOKING TO CIRM FOR INFORMATION ABOUT STEM CELL

## BARRISTERS' REPORTING SERVICE

1 RESEARCH.

2 SO THE FIRST THING WE REALLY PUT UP WAS A  
3 STEM CELL BASICS PRIMER. THIS IS A SERIES OF PAGES,  
4 CONTAINS INFORMATION, DEFINITIONS OF DIFFERENT STEM  
5 CELL TYPES, HOW YOU CREATE NEW STEM CELLS, WHY YOU  
6 CREATE NEW STEM CELLS. OF THESE PAGES, THE MOST  
7 POPULAR IS COMMON QUESTIONS AND STEM CELL RESEARCH. SO  
8 IT'S TRYING TO DISPEL MYTHS ABOUT WHERE CELLS COME  
9 FROM, WHAT WE DO WITH THEM. THAT'S THE MOST POPULAR OF  
10 THESE PAGES.

11 ALTOGETHER OUR PRIMER RECEIVED JUST UNDER 900  
12 UNIQUE VISITS LAST MONTH. SO THESE ARE PRETTY POPULAR  
13 PAGES.

14 INTERACTIVITY, SO WE'RE TRYING TO CREATE A  
15 LOT OF INTERACTIVE CONTENT. I THINK WE ALL KNOW THAT  
16 IF YOU INTERACT WITH SOMETHING, YOU LEARN MORE FROM IT,  
17 PLUS IT'S FUN. THIS IS A MAP WE DEVELOPED. IF YOU  
18 CLICK ON THE L.A. REGION, THE L.A. REGION WILL BLOW UP.  
19 YOU CAN SEE THE INDIVIDUAL DOTS REPRESENTING OUR  
20 GRANTEES. YOU CAN CLICK ON THE DOTS, AND WHAT YOU SEE  
21 HERE IS THAT I'VE CLICKED ON UCLA, YOU'VE GOT  
22 INFORMATION ABOUT HOW MUCH FUNDING HAS GONE THERE, HOW  
23 MANY GRANTS THEY'VE GOTTEN. THIS HAS A PICTURE OF  
24 THEIR MAJOR FACILITY, BUT I SOMETIMES HAVE VIDEOS UP  
25 THERE, WHATEVER IS RELEVANT FOR THAT SCHOOL. THAT HAD

## BARRISTERS' REPORTING SERVICE

1 JUST UNDER 400 UNIQUE VIEWS LAST MONTH. SO PEOPLE ARE  
2 ENJOYING IT.

3 WE'RE STARTING TO POST MAGAZINE-STYLE  
4 FEATURES ON THIS SITE. THESE ARE MULTIMEDIA FEATURES.  
5 THIS ONE HAS A LITTLE FLASH SLIDE SHOW. WE HAVE VIDEOS  
6 EMBEDDED. THIS ONE FOCUSES ON OUR MACULAR DEGENERATION  
7 DISEASE TEAM, AND PEOPLE SEEM TO ENJOY IT. PEOPLE  
8 SPEND A LITTLE OVER FOUR MINUTES READING THIS PAGE AND  
9 HAS CAUGHT THE ATTENTION OF PEOPLE -- OF PUBLICATIONS  
10 OUTSIDE CIRM. SO THE FOUNDATION FOR BIOMEDICAL  
11 RESEARCH IS REPRINTING THIS. THEY ARE AN ORGANIZATION  
12 THAT SUPPORTS -- TRIES TO EDUCATE PEOPLE ABOUT ANIMAL  
13 RESEARCH AND ITS IMPORTANCE. THEY HAVE A PUBLICATION  
14 THAT HAS A VIEWERSHIP OF OVER A HUNDRED THOUSAND AND  
15 THEY'RE REPRINTING THIS, WHICH IS GREAT.

16 SO THIS IS THE CHART AGAIN. I WANT TO  
17 ADDRESS SOMETHING YOU SAID, JEFF. THE REASON WE'RE  
18 EVEN ABLE TO PRODUCE THIS IS BECAUSE OF SOME REALLY  
19 HARD WORK ON THE PART OF KELLY SHEPHERD IN THE SCIENCE  
20 OFFICE. UNTIL RECENTLY NO ONE WAS REALLY KEEPING TRACK  
21 OF WHAT DISEASES OUR DIFFERENT GRANTS ADDRESSED. SO  
22 SHE HAS DEvised A WAY TO SCORE ALL OF OUR GRANTS, NOT  
23 JUST ON DISEASE CATEGORY, BUT ON THE TYPE OF STEM CELL  
24 USED AND THE TYPE OF STEM CELLS BEING DERIVED AND  
25 WHETHER THEY HAVE INTERNATIONAL PARTNERS.

## BARRISTERS' REPORTING SERVICE

1 THE SCIENCE OFFICE IS NOW USING THAT, SCORING  
2 THAT DATA. AND MOST IMPORTANTLY, AMY LEWIS IN THE  
3 SCIENCE OFFICE NOW HAS A SYSTEM WHEREBY SHE CAN STORE  
4 THAT INFORMATION AND IS NOW ABLE TO START OUTPUTTING  
5 THESE REPORTS. ALL THE DATA ISN'T IN IT YET, SO SHE  
6 CANNOT YET OUTPUT COMPLETE REPORTS, WHICH IS WHY AT  
7 THIS POINT, WHEN WE DEVELOPED THESE ABOUT A MONTH AGO,  
8 THE KIND OF GRANULAR INFORMATION YOU WERE ASKING FOR  
9 WAS ACTUALLY INCREDIBLY HARD TO COME BY, SO THIS WAS A  
10 FIRST STEP.

11 MR. SHEEHY: WE USE IT FOR PROGRAMMATIC  
12 REVIEW AT THE GRANTS WORKING GROUP.

13 MS. ADAMS: I'M NOT SURE HOW YOU GET THAT.  
14 WHEN I ASK FOR IT FROM THE GRANTS MANAGEMENT OFFICE,  
15 THIS IS WHAT I GET. BUT GOING FORWARD, WE'RE GOING TO  
16 BE ABLE TO GET THAT KIND OF INFORMATION, WHICH I THINK  
17 IS REALLY GOING TO BE ABLE TO ADDRESS WHAT YOU ARE  
18 TRYING TO GET AT.

19 AND THIS ACTUALLY EVEN GETS CLOSER TO WHAT  
20 YOU ARE GOING TO WANT. THIS IS ONE OF THE MOST POPULAR  
21 FEATURES ON OUR NEW SITE. IT'S A LIST OF OUR GRANTS.  
22 RIGHT NOW YOU CAN SEARCH THOSE GRANTS BY RFA AND BY  
23 SCHOOL, SO I CAN SELECT STANFORD AND SEE ALL THE GRANTS  
24 THAT HAVE GONE TO STANFORD. I CLICK ON THE GRANT NAME,  
25 I CAN GET INFORMATION ABOUT THE ABSTRACT. WE'LL BE

## BARRISTERS' REPORTING SERVICE

1 PUBLISHING THE PROGRESS REPORTS. WHAT WE'RE WORKING ON  
2 RIGHT NOW, THANKS TO THIS NEW DATA THAT WE'RE  
3 COLLECTING, YOU'RE GOING TO BE ABLE TO SELECT  
4 ALZHEIMER'S DISEASE OR PARKINSON'S DISEASE OR  
5 INTERNATIONAL PARTNERSHIPS WITH AUSTRALIA OR A  
6 COMBINATION OF THOSE. YOU CAN SELECT MULTIPLE  
7 CATEGORIES AND SEE WHICH GRANTS FIT THOSE CATEGORIES.

8 SO IN THE NEXT COUPLE MONTHS, YOU WILL BE  
9 ABLE TO GO TO THE SITE AND SPECIFICALLY FIND OUT WHICH  
10 GRANTS APPLY TO YOUR DISEASE WHICH I THINK IS  
11 INCREDIBLY VALUABLE.

12 CHAIRMAN KLEIN: I THINK THAT WILL BE A GREAT  
13 ADDITION. TOOK A LOT OF WORK FOR THAT TO BE CREATED,  
14 AND I THINK WE NEED TO APPRECIATE THAT WORK.

15 MS. ADAMS: HUGE AMOUNT OF WORK BOTH IN THE  
16 SCIENCE OFFICE, AND THE GRANTS MANAGEMENT OFFICE, I  
17 THINK, DOESN'T GET A LOT OF CREDIT AND THEY'RE WORKING  
18 VERY HARD WITH ME ON THIS.

19 GOING FORWARD, WE WANT MORE PEOPLE. WE HAVE  
20 GREAT CONTENT. WE WANT MORE PEOPLE TO SEE IT. PART OF  
21 THAT IS GETTING MORE LINKS TO OUR SITE. WE'RE WORKING  
22 REALLY HARD TO IMPROVE HOW WELL WE SEARCH ON SEARCH  
23 ENGINES. AND WE WANT TO BE WHERE PEOPLE ARE. NOT  
24 EVERYONE IS ON GOOGLE SEARCHING FOR STEM CELL  
25 INFORMATION. THEY'RE ON FACEBOOK AND SO ARE WE.

## BARRISTERS' REPORTING SERVICE

1           OUR FACEBOOK FAN PAGE. WE HAVE MANY FANS.  
2           SO THE GOAL OF THE FACEBOOK FAN PAGE IS TO CREATE A  
3           COMMUNITY OF PEOPLE WHO ARE ENGAGED IN THE DAILY  
4           ADVANCES OF CIRM. SO IN CASE ALL OF YOU ARE NOT ON  
5           YOUR FACEBOOK PAGE EVERY DAY, I WANT TO GIVE A LITTLE  
6           EXPLANATION ABOUT WHY FACEBOOK IS VALUABLE.

7           FACEBOOK IS REALLY FANTASTIC FOR QUICKLY  
8           SPREADING CONTENT. SO HERE'S WHAT HAPPENS. IN THIS  
9           EXAMPLE, THIS IS A SCREEN SHOT FROM A COUPLE DAYS AGO,  
10          I POSTED A LINK TO THE *SAN DIEGO UNION TRIBUNE*, THE  
11          STORY OVER THE WEEKEND. AND WHAT YOU SEE BENEATH IT,  
12          YOU HAVE A COUPLE OF THUMBS UP. FOUR PEOPLE LIKED IT,  
13          ONE PERSON COMMENTED ON IT. SO WHAT HAPPENS? I POST  
14          THAT LINK. IT GOES OUT TO THE NEWS FEEDS OF ALL MY  
15          FANS. IF ANY OF MY FANS LIKE IT OR COMMENT ON IT, IT  
16          GOES TO THE NEWS FEEDS OF THEIR 100, 200 FRIENDS. IF  
17          ANY OF THOSE PEOPLE LIKE IT OR COMMENT ON IT, IT GOES  
18          TO ALL OF THOSE FRIENDS' NEWS FEEDS. SO IF I POST ONE  
19          INTERESTING POST, IT GOES TO THOUSANDS OF PEOPLE.

20          I THINK IT'S A FANTASTIC WAY. ART, YOU MADE  
21          THIS POINT, THAT YOU NEED TO BOTH WORK WITH THE MEDIA  
22          AND DO WHAT YOU CAN TO AMPLIFY IT AND MAKE THE MOST OF  
23          WHAT MEDIA IS OUT THERE, AND I THINK THIS IS A  
24          FANTASTIC WAY OF DOING THAT.

25          MR. SHEEHY: DO YOU EVER USE IT TO RESPOND TO

## BARRISTERS' REPORTING SERVICE

1 NEGATIVE INFORMATION, SUCH AS THESE EDITORIALS?

2 MS. ADAMS: YOU KNOW, SO FAR I HAVEN'T. THE  
3 FACEBOOK PAGE IS PRETTY NEW, AND I'VE BEEN PUTTING A  
4 LOT OF WORK INTO JUST TRYING TO FIGURE OUT WHAT KINDS  
5 OF THINGS I POST PEOPLE ARE INTERESTED IN. AND SO FAR  
6 WHAT THEY SEEM INTERESTED IN IS SORT OF NEWS ABOUT  
7 POSSIBLE ADVANCES TO TREAT DISEASE. SO I HAVEN'T USED  
8 IT FOR THAT, BUT I'M NOT OPPOSED TO DOING IT FOR THAT  
9 EITHER. IT'S WORTH TRYING AT SOME POINT.

10 WHAT I DO FIND IS THAT IF I POST THINGS THAT  
11 AREN'T OF INTEREST, I LOSE FANS. SO I HAVE REALLY A  
12 QUICK INDICATOR OF WHAT'S INTERESTING, BUT I THINK THAT  
13 COULD BE A GOOD USE OF FACEBOOK. WE CAN TRY IT.

14 CHAIRMAN KLEIN: AMY, I THINK JEFF'S POINT  
15 HERE IS A VERY COGENT ONE. AND IN THE POLITICAL ARENA,  
16 ONE OF THE MOST IMPORTANT THINGS IS TO GET THE FACTS  
17 BACK OUT. I MEAN TO THE EXTENT THAT THERE ARE FACTUAL  
18 MISREPRESENTATIONS, AS THERE HAVE BEEN IN THIS  
19 EDITORIAL, IF WE CAN IMMEDIATELY GET UP ON THE WEB  
20 SITE, FACEBOOK, WHAT THE CORRECT FACTS ARE IN CONTRAST  
21 TO WHAT HAS BEEN ASSERTED, THE PROBLEM, AS YOU KNOW, IS  
22 IF YOU DON'T RESPOND IMMEDIATELY IN POLITICS, YOU'VE  
23 LOST THE ARGUMENT BECAUSE IT'S BY DEFAULT ASSUMED THAT  
24 YOU DIDN'T HAVE A REBUTTAL.

25 SO TIMING IS ESSENTIAL. TO THE EXTENT THAT

## BARRISTERS' REPORTING SERVICE

1 FACEBOOK CAN MAGNIFY OR AMPLIFY, AS YOU PROPERLY PUT  
2 IT, WHAT YOU PUT ON THE WEB SITE AS IMMEDIATE FACTUAL  
3 REBUTTAL, I THINK IT CAN BE GREAT TOOL TO GETTING THE  
4 RIGHT INFORMATION OUT TO THE PUBLIC. AS A STRATEGIC  
5 ISSUE, SPEED IS VITAL TO OUR SURVIVAL IN GETTING THE  
6 FACTS TO THE PUBLIC BECAUSE, GIVEN THE FACTS, WE KNOW  
7 THE PUBLIC IS VERY SUPPORTIVE.

8 DR. TROUNSON: COULD I ASK, I JUST WONDERED  
9 IF THAT'S THE RIGHT FORUM FOR IT. I'M ASKING BECAUSE I  
10 DON'T KNOW. I UNDERSTAND FACEBOOK HAS GOT A HUGE  
11 NUMBER OF MIDDLE-AGED WOMEN AS THE SORT OF PRIMARY  
12 GROUP.

13 MS. ADAMS: OUR PRIMARY AUDIENCE IS ACTUALLY  
14 LIKE --

15 CHAIRMAN KLEIN: IT'S SUBSTANTIALLY YOUNGER,  
16 ALAN.

17 DR. TROUNSON: I'M LEARNING. I'M LEARNING.  
18 I JUST WONDERED IF -- THERE ARE OTHER MECHANISMS. I  
19 JUST WONDERED IF LINKEDIN OR ONE OF THESE OTHERS WHERE  
20 PEOPLE MIGHT BE MORE POLITICALLY ASTUTE IN THE SPACE.  
21 I DON'T KNOW. I'M JUST ASKING WHETHER THE SITE CAN  
22 DICTATE --

23 CHAIRMAN KLEIN: AMY MIGHT MAKE A STRATEGIC  
24 DECISION THAT IT'S NOT RIGHT FOR A PARTICULAR MESSAGE.  
25 THE WEB SITE RESPONSE IS ADEQUATE AND IT'S NOT

## BARRISTERS' REPORTING SERVICE

1 APPROPRIATE TO PUT IT ON FACEBOOK BECAUSE IT WILL HAVE  
2 TOO MANY NEGATIVES TO IT. SO THIS IS GOING TO BE A  
3 STRATEGIC APPLICATION OF IT. AS YOU SAY, THERE'S OTHER  
4 SOCIAL MEDIA THAT MAY HIT MORE OF THE BUSINESS  
5 COMMUNITY IF IT'S A BUSINESS-TYPE ISSUE. BUT I DO  
6 THINK THAT IT IS STRATEGICALLY IMPORTANT TO CREATE A  
7 STRATEGY WITH MODIFICATIONS OF IT AS APPROPRIATE TO  
8 IMMEDIATELY GET THE FACTS OUT THERE BECAUSE WE CAN  
9 PROVE TIME AND TIME AGAIN HOW THE CAMPAIGNS, POLITICAL  
10 CAMPAIGNS, LIVE OR DIE BY GETTING THE RIGHT  
11 INFORMATION. WE HAVE AN OBLIGATION TO GET THE FACTS TO  
12 THE PUBLIC. LET THEM DECIDE ON WHAT THE ANSWER IS.

13 MS. ADAMS: ACTUALLY TWITTER IS AN EXCELLENT  
14 TOOL FOR DOING THAT KIND OF THING. WE DO NOT YET TWEET  
15 ONLY BECAUSE THERE IS ONE OF ME AND THERE IS MANY  
16 SOCIAL MEDIA OUTLETS. BUT IN THE NEXT COUPLE MONTHS  
17 I'M THINKING THAT WE WILL BE TWEETING. TWITTER --

18 CHAIRMAN KLEIN: AND WE CAN CONTRACT WITH  
19 SOMEONE BECAUSE THAT CAN CONSUME A LOT OF TIME.

20 MS. ADAMS: GOING TO GET ME A TWEETER?

21 MS. GIBBONS: I WOULD GET NICK TO TWEET.

22 CHAIRMAN KLEIN: NICK.

23 MS. GIBBONS: WHO DOES THE SCIENTIFIC  
24 BLOGGING? YOU DO EVERYTHING.

25 MS. ADAMS: AND DON AND THEN TODD DUBNICOFF

## BARRISTERS' REPORTING SERVICE

1 ALSO IN MY OFFICE HAS STARTED DOING THIS.

2 CHAIRMAN KLEIN: MAYBE YOU SHOULD LET THEM  
3 KNOW WHO THE CONSULTANT GROUPS ARE BECAUSE THERE ARE  
4 CONSULTING GROUPS THAT WRITE STORIES FOR THE ANNUAL  
5 REPORT, SO THEY HAVE A NUMBER OF OUTSOURCED RESOURCES  
6 THAT ARE HELPING THEM. THEY DON'T ACTUALLY HAVE TO DO  
7 EVERYTHING IN COMMUNICATIONS. THEY HAVE SOME EXCELLENT  
8 PEOPLE.

9 MS. ADAMS: WE HAVE SOME VERY GOOD  
10 FREELANCERS. CAN I TALK ABOUT THIS WHEN WE GET TO THE  
11 BLOG BECAUSE I AM GOING TO TALK ABOUT THAT, AND I WOULD  
12 LOVE TO. ALTHOUGH BOB BRINGS UP A GOOD POINT. I  
13 REALLY WANT TO CREDIT, I SHOWED YOU THE FEATURE STORY  
14 WE DID, AND IT WAS MY WONDERFUL INTERN EMANUEL ROMERO  
15 WHO WROTE THAT FEATURE THAT'S GETTING PICKED UP AND IS  
16 GETTING SO MUCH ATTENTION. AND WE DO WORK WITH  
17 FREELANCE WRITERS.

18 OUR FACEBOOK FAN PAGE, THANK YOU MELISSA.  
19 ALL RIGHT. MOVING RIGHT ALONG. OUR GOAL IS TO  
20 INCREASE FANS. MAINTAIN ENGAGEMENT, I DIDN'T SHOW YOU  
21 THIS. I HAVE AN ANALYTIC TOOL IN FACEBOOK. WHAT IT  
22 TELLS ME IS THAT OUR FANS ARE VERY ENGAGED, MORE  
23 ENGAGED THAN OTHER FAN SITES OF EQUIVALENT SIZE. ALL  
24 THAT SAYS IS THAT THEY SEEM TO BE INTERESTED IN WHAT  
25 WE'RE POSTING. THAT'S GOOD. WE'RE GOING TO START

## BARRISTERS' REPORTING SERVICE

1 USING SOME FACEBOOK CAMPAIGNS TO TRY TO INVOLVE FANS  
2 WHO ARE REALLY TRYING TO USE THE TOOL TO GET MORE FANS,  
3 GET MORE ENGAGEMENT, GET MORE VIEWS. FACEBOOK --

4 MR. TORRES: WHAT PORTION OF THE FANS ARE  
5 GRANTEES? CAN WE FIGURE THAT OUT?

6 MS. ADAMS: I DON'T KNOW THE NAMES OF ALL OF  
7 OUR GRANTEES; BUT WHEN I GO IN AND LOOK AT THE LIST OF  
8 OUR FANS, I DON'T RECOGNIZE MANY NAMES. SO NOT MANY OF  
9 THEM ARE GRANTEES, THE PI'S; BUT IF THEY ARE GRAD  
10 STUDENTS, I WOULDN'T KNOW. WHAT I DO NOTICE IS THE  
11 PEOPLE WHO COMMENT APPEAR TO BE MOSTLY PATIENT  
12 ADVOCATES OR PEOPLE WHO CARE VERY DEEPLY ABOUT REALLY  
13 THE PATIENT SIDE.

14 MR. TORRES: DO WE HAVE A WAY AT LEAST NOW TO  
15 IDENTIFY WHO'S UTILIZING THE WEB SITE, WHO THEY ARE?

16 MS. ADAMS: YEAH. YEAH. YEAH. AND FACEBOOK  
17 IS, THE LAST I LOOKED, THE SIXTH HIGHEST REFERRER OF  
18 PEOPLE TO OUR WEB SITE. SO BEING ON FACEBOOK, NOT ONLY  
19 IS IT SPREADING INTERESTING NEWS, BUT IT'S DRIVING  
20 PEOPLE TO OUR SITE.

21 YOUTUBE, WE HAVE A YOUTUBE CHANNEL. WE  
22 STARTED THIS ABOUT A YEAR AGO. WE HAVE 25 VIDEOS  
23 POSTED. WE HAVE THESE SAME VIDEOS POSTED ON OUR WEB  
24 SITE. OUR WEB SITE ALSO CONTAINS ALL OF THE SPOTLIGHT  
25 PRESENTATIONS THAT YOU SEE AND A COUPLE SEMINARS. SO

## BARRISTERS' REPORTING SERVICE

1 WHY BE ON YOUTUBE IF THE VIDEOS ARE ALREADY ON OUR WEB  
2 SITE? WHAT I'M GOING TO SHOW YOU IS THAT IT'S AN  
3 INCREDIBLE WAY, AGAIN, OF SPREADING AND GETTING MORE  
4 PEOPLE TO WATCH OUR VIDEOS.

5 HERE'S THE PAGE. I WANT TO JUST SHOW ONE  
6 THING ON THIS PAGE BECAUSE CLAIRE IS HERE. SO WHAT'S  
7 FEATURED RIGHT NOW ON THE YOUTUBE CHANNEL IS A VIDEO I  
8 SHOT WITH JAN NOLTA AND GERHARD BAUER, WHO WERE SO  
9 WONDERFUL. AND YOU CAN SEE THE STARS NEXT TO THAT  
10 VIDEO. PEOPLE REALLY ENJOY THAT VIDEO. IT'S ABOUT  
11 THEIR GMP FACILITY. THAT WAS REALLY FUN.

12 THAT CHANNEL GETS ABOUT 180 VIEWS A DAY.  
13 WE'VE HAD ABOUT 40,000 TOTAL VIDEO VIEWS IN THE PAST  
14 YEAR.

15 OUR AUDIENCE, MOSTLY OLDER, 45 TO 54, EVENLY  
16 SPLIT BETWEEN MEN AND WOMEN.

17 CHAIRMAN KLEIN: AND IT'S WORTH LOOKING AT  
18 THE VIDEOS, SOME VERY EXCELLENT VIDEOS ON THAT SITE. I  
19 THINK IT'S A VERY GOOD PRODUCT.

20 MS. ADAMS: THIS IS SOME INFORMATION ABOUT  
21 HOW PEOPLE FIND US ON YOUTUBE.

22 DR. PRIETO: HOW DO YOU KNOW THE AGE OF  
23 VIEWERS ON THE YOUTUBE?

24 MS. ADAMS: YOUTUBE TOLD ME. THAT CHART THAT  
25 I JUST SHOWED YOU IS SOMETHING THAT I GOT FROM YOUTUBE.

## BARRISTERS' REPORTING SERVICE

1 THIS IS JUST A SCREEN SHOT OF SOME OF MY YOUTUBE  
2 ANALYTICS. I'M GOING TO SHOW YOU, YOUTUBE HAS FABULOUS  
3 ANALYTICS. IT'S REALLY A LOT OF FUN.

4 SO THIS SHOWS ME HOW PEOPLE ARE FINDING MY  
5 VIDEOS ON YOUTUBE. AND YOU HAVE TO EXCUSE. THAT ONE  
6 DROP, THAT DOESN'T MEAN NO ONE SAW OUR VIDEOS THAT DAY.  
7 THAT MEANT YOUTUBE WENT DOWN THAT DAY, SO WE HAVE NO  
8 DATA.

9 WHAT I REALLY WANT TO POINT OUT HERE, I DON'T  
10 KNOW IF YOU CAN READ THIS, BUT THE TOP, THAT LISTS THE  
11 WAYS PEOPLE ARE FINDING OUR CONTENT. THE TOP ONE IS  
12 YOUTUBE SEARCH, WHICH IS 36 PERCENT. THE FOURTH ONE  
13 DOWN IS GOOGLE SEARCH, WHICH IS 11 PERCENT. SO THAT'S  
14 47 PERCENT OF PEOPLE ARE FINDING OUR VIDEOS BY  
15 SEARCHING.

16 THE SECOND ONE DOWN IN EMBEDDED PLAYERS, SO  
17 YOU CAN TAKE A YOUTUBE VIDEO, ANYONE CAN GO TO OUR  
18 SITE, GRAB THE CODE FOR OUR VIDEOS AND PUT IT ON THEIR  
19 SITE. SO RIGHT NOW UC DAVIS HAS OUR GMP FACILITY VIDEO  
20 ON THEIR SITE AS AN EMBEDDED PLAYER. I'M GOING TO TALK  
21 MORE ABOUT THAT IN A BIT.

22 SO 47 PERCENT ARE FINDING OUR VIDEOS VIA  
23 SEARCH. AND THESE ARE THE KINDS OF SEARCH TERMS  
24 THEY'RE USING. THESE ARE SEARCH TERMS FOR A VIDEO WE  
25 SHOT WITH MARK HUMAYUN AND A WONDERFUL PATIENT ADVOCATE

## BARRISTERS' REPORTING SERVICE

1 ABOUT MACULAR DEGENERATION. THIRTY-THREE PERCENT OF  
2 PEOPLE ARE FINDING IT VIA YOUTUBE SEARCHES, SO THESE  
3 PEOPLE ARE ON YOUTUBE. THEY'RE ON THE YOUTUBE CHANNEL,  
4 AND THEY ARE SEARCHING WORDS LIKE MACULAR DEGENERATION,  
5 STEM CELLS AND MACULAR DEGENERATION, WHAT IS MACULAR  
6 DEGENERATION, MACULA DEGENERATION. PEOPLE ARE ON  
7 YOUTUBE SEARCHING REALLY SERIOUS STUFF.

8 I DON'T GO TO YOUTUBE FOR INFORMATION BECAUSE  
9 WHO KNOWS WHAT'S OUT THERE, BUT OTHER PEOPLE ARE AND  
10 LUCKILY OUR VIDEOS ARE THERE.

11 WHEN PEOPLE FIND -- USE THOSE SEARCH TERMS TO  
12 FIND OUR VIDEOS, THEY SEEM PRETTY ENGAGED. PEOPLE ARE  
13 REALLY WATCHING OUR VIDEOS, AND THIS IS KIND OF A  
14 COMPLICATED CHART, BUT I WILL TRY TO EXPLAIN IT WITHOUT  
15 A POINTER. SO ON THE CHART, THE X AXIS IS THE LENGTH  
16 OF THE VIDEO. SO THE LEFT SIDE IS THE BEGINNING OF THE  
17 VIDEO, THE RIGHT SIDE IS THE END OF THE VIDEO. THE  
18 GREEN LINE SHOWS HOW ATTENTIVE PEOPLE ARE TO OUR  
19 VIDEOS. HERE'S HOW YOUTUBE ASSESSES THAT. THEY LOOK  
20 AT ALL VIDEO OF A SIMILAR LENGTH, AND FOR ANY VIDEO  
21 PEOPLE ARE CLICKING AWAY, PEOPLE DON'T WATCH WHOLE  
22 VIDEOS ONLINE NO MATTER HOW WONDERFUL THEY ARE. SO  
23 THEY COMPARE HOW OFTEN PEOPLE ARE CLICKING AWAY FROM MY  
24 VIDEO COMPARED TO OTHER PEOPLE'S VIDEOS, ALL OTHER  
25 PEOPLE'S VIDEOS. AND SO IF THEY ARE CLICKING AWAY LESS

## BARRISTERS' REPORTING SERVICE

1 OFTEN, THEN THE GREEN LINE IS HIGHER. SO THEY ARE MORE  
2 ATTENTIVE. AND THE GRAY LINE IN THE MIDDLE IS SORT OF  
3 AN AVERAGE RATE OF CLICKING AWAY FROM MY VIDEO.

4 SO WHAT YOU SEE HERE IS THAT THEY START OUT  
5 PRETTY ATTENTIVE, THEY GET VERY ATTENTIVE. THEY DROP  
6 OFF PERILOUSLY CLOSE TO AVERAGE, BUT THEN WE REBOUND.

7 MR. TORRES: NOT ON CLAIRE'S VIDEO.

8 MS. ADAMS: NOT ON CLAIRE'S VIDEO. AND I PUT  
9 THE CURSOR AT THE PEAK OF THEIR INTEREST. AND WHAT  
10 HAPPENS IS THAT IN THE VIDEO THAT'S RIGHT NEXT TO IT,  
11 IT PUTS THE CURSOR AT THAT SAME POINT, AND I CAN SEE  
12 WHAT'S GOING ON IN THE VIDEO. I CAN SEE EXACTLY WHAT  
13 PEOPLE ARE INTERESTED IN. AT THIS POINT IN THE VIDEO,  
14 THIS REALLY FABULOUS WOMAN IN TIBURON WHO IS A PAINTER  
15 WITH MACULAR DEGENERATION, SHE'S TALKING ABOUT HOW SHE  
16 HOPES STEM CELL RESEARCH WILL LEAD TO A CURE FOR THE  
17 DISEASE BEFORE HER GRANDKIDS DEVELOP SYMPTOMS. AND  
18 SHE'S THERE PAINTING WITH HER GRANDKIDS. IT'S A REALLY  
19 EMOTIONAL MOMENT, AND PEOPLE ARE REALLY ENGAGED BY  
20 THAT.

21 I HAVE TO CREDIT TODD, TODD DUBNICOFF, WHO  
22 WAS HERE EARLIER WITH THE VIDEO CAMERA. HE'S THE GUY  
23 WHO SHOOTS ALL OF OUR VIDEOS AND HE DOES THE  
24 PROJECTION. HE AND I TALK ABOUT EDITING AND THE STORY  
25 LINE AND HE DOES THE PRODUCTION. WE REALLY LOOK AT

## BARRISTERS' REPORTING SERVICE

1 THAT TO TRY TO MAKE SURE THAT IF WE'RE GOING TO PUT ALL  
2 THIS MONEY AND EFFORT INTO MAKING VIDEOS, SOMEONE SEES  
3 THEM.

4 CHAIRMAN KLEIN: I THINK IT WAS A GREAT COUP  
5 GETTING SUSAN BOYLE TO DO A VIDEO FOR US.

6 MS. ADAMS: I'M ON IT. AT THIS TOP YOU SEE A  
7 RED BAR. THAT'S YOUTUBE'S SUMMARY OF ATTENTION. SO  
8 THAT'S THEIR SUMMARY OF THAT WAGGING GREEN LINE. AND  
9 WHAT YOU SEE IS THAT THE GRAY BAR IS MOSTLY FILLED WITH  
10 RED. THAT MEANS PEOPLE ARE MOSTLY ATTENTIVE.

11 I DIDN'T JUST SHOW YOU THAT VIDEO BECAUSE  
12 IT'S OUR ONE GOOD ONE. THIS SHOWS THAT ALL OF OUR  
13 VIDEOS PEOPLE ARE VERY ATTENTIVE TO. I JUST WANT TO  
14 POINT OUT PAUL KNOEPFLER, THE SECOND TO BOTTOM VIDEO  
15 WITH NO RED LINE, HE HASN'T BEEN RATED YET. IT'S NOT  
16 THAT PEOPLE DON'T LIKE HIM. YOUTUBE HASN'T GIVEN ME  
17 DATA ON HIM YET, SO IGNORE THAT.

18 WHAT YOU SEE IS THAT OUR LEAST POPULAR VIDEOS  
19 ARE AVERAGE AND THEY GO UP FROM THERE. THE BOTTOM ONE  
20 IS THAT SHORT CATRIONA JAMIESON VIDEO THAT WAS  
21 PRESENTED TO YOU A COUPLE MEETINGS AGO, PEOPLE ARE  
22 VERY, VERY ATTENTIVE TO THAT. IT'S REALLY BEEN A GOOD  
23 ONE.

24 CHAIRMAN KLEIN: SO WHY IS THAT ONE SUCH A  
25 SMALL PERCENTAGE OF THE VIEWS?

## BARRISTERS' REPORTING SERVICE

1 MS. ADAMS: YOU KNOW, I HAVE BEEN WORKING TO  
2 CHANGE THAT. PART OF WHY IT'S SUCH A SMALL PERCENTAGE  
3 OF VIEWS, IT DOESN'T LOOK LIKE PEOPLE ARE SEARCHING  
4 LEUKEMIA MUCH. SO I'VE LOOKED INTO CHANGING THE WAY  
5 WE'RE TAGGING THAT VIDEO. I'VE ALSO BEEN FEATURING  
6 THAT VIDEO FOR THE PUBLIC PAGE, AND THAT'S GETTING MORE  
7 VIEWS. I'VE CONTACTED THE LEUKEMIA AND LYMPHOMA  
8 SOCIETY TO LET THEM KNOW ABOUT THIS VIDEO TO SEE IF  
9 THEY WANT TO USE IT. THEY DIDN'T HAVE ANYTHING TO DO  
10 WITH FUNDING THIS WORK, SO THEY DON'T WANT TO USE THE  
11 VIDEO, BUT WE'RE TRYING TO GET MORE ATTENTION TO IT.  
12 I'M OPEN TO IDEAS. IT'S SUCH A GREAT VIDEO, IT SHOULD  
13 GET MORE VIEWS. BUT WE'RE PLAYING TRYING TO FIND A  
14 WAY.

15 SO I MENTIONED THAT YOU CAN EMBED YOUTUBE  
16 VIDEOS ON DIFFERENT SITES. THEY'RE EMBEDDED ON OUR  
17 SITE. THEY'RE EMBEDDED ON MANY OF OUR GRANTEE SITES.  
18 THEY GET EMBEDDED IN BLOGS. IT'S A REALLY INTERESTING  
19 WAY OF REACHING AUDIENCES THAT I WOULD NEVER KNOW HOW  
20 TO REACH ON MY OWN.

21 SO THIS IS AN EXAMPLE OF HOW PEOPLE CAN USE  
22 THE EMBEDDING FEATURE. SO THIS IS THE DATA FOR VIEWS  
23 OF THE VIDEO I SHOT WITH DR. IRVING WEISSMAN TALKING  
24 ABOUT THE DIFFERENCES BETWEEN ADULT AND EMBRYONIC STEM  
25 CELLS. IT'S A PRETTY TECHNICAL VIDEO, BUT PEOPLE SEEM

## BARRISTERS' REPORTING SERVICE

1 VERY ATTENTIVE TO IT. WHAT YOU NOTICE IS HE GOES  
2 ALONG, FIVE, TEN VIEWS A DAY, AND ALL OF A SUDDEN HE'S  
3 GOT 70 VIEWS, AND I WANT TO KNOW WHAT'S GOING ON.

4 SO I WENT IN TO LOOK AT HOW PEOPLE WERE  
5 FINDING THE VIDEO, AND WHAT YOU SEE IS THAT HUGE PURPLE  
6 SPIKE, AND WHAT THAT CORRESPONDS TO AT THE TOP LINE  
7 THERE IS AN EMBEDDED PLAYER. SO SOMEONE HAS EMBEDDED  
8 IT SOMEWHERE AND IT'S CAUSED A HUGE SPIKE.

9 SO I LOOKED AT WHO HAS EMBEDDED THE VIDEO,  
10 AND YOU SEE THE SECOND ONE IS CIRM. THE TOP ONE IS  
11 SOME URL THAT I CANNOT PRONOUNCE. THE REASON I CAN'T  
12 PRONOUNCE IT IS BECAUSE IT'S A PORTUGUESE HEALTH BLOG.  
13 ON MY OWN I WOULD NEVER REACH OUT TO PORTUGUESE HEALTH  
14 READERS, BUT THERE YOU HAVE IT. SEVENTY PORTUGUESE  
15 PEOPLE WHO I HOPE SPEAK ENGLISH SAW THIS VIDEO. I JUST  
16 THINK THAT'S A WONDERFUL EXAMPLE OF WHY WE'RE PUTTING  
17 OUR CONTENT OUT THERE.

18 GOING FORWARD, WE WANT TO PRODUCE MORE  
19 VIDEOS, WE WANT MORE WATCHING THEM, WE WANT PEOPLE TO  
20 REMAIN VERY ATTENTIVE. WE'RE GOING TO START DOING MORE  
21 DISEASE-SPECIFIC VIDEOS, AND THIS IS WHERE I HAVE A  
22 SPECIFIC AGENDA TO ALL THE PATIENT ADVOCACY PEOPLE IN  
23 THE ROOM. I WOULD LOVE TO REALLY START USING OUR  
24 PATIENT ADVOCACY BOARD MEMBERS IN THESE VIDEOS. THE  
25 PATIENT ADVOCATES IN THE VIDEOS REALLY HELP PEOPLE PAY

## BARRISTERS' REPORTING SERVICE

1 ATTENTION TO THE SCIENCE. AND I WOULD LOVE TO WORK  
2 WITH MORE OF YOU ON THOSE VIDEOS.

3 THIS ONE IS FAST, OUR BLOG. WHEN DON GIBBONS  
4 FIRST JOINED CIRM, ONE OF THE THINGS HE NOTICED IS THAT  
5 THERE WAS NO WAY TO FIND OUT THE BENEFIT OF CIRM  
6 FUNDING, WHAT ARE PEOPLE DOING WITH OUR FUNDING. SO HE  
7 STARTED POSTING THESE SHORT SUMMARIES OF INTERESTING  
8 PAPERS ON THE WEB SITE. AND WE'VE BEEN MAINTAINING  
9 THAT EVER SINCE 2008, COUPLE POSTS A MONTH. IN OCTOBER  
10 WE MOVED THAT TO A BLOG. I THINK BY NOW YOU ALL  
11 UNDERSTAND WHY I MOVED IT TO A BLOG, MOVED IT OFF OUR  
12 WEB SITE. MORE PEOPLE WILL SEE IT. AND WE CONTINUE TO  
13 POST A COUPLE POSTS A MONTH.

14 THESE HIGHLIGHT PAPERS BY GRANTEES. I THINK  
15 IT'S A FANTASTIC WAY OF TALKING ABOUT PAPERS THAT MAYBE  
16 AREN'T GETTING PICKED UP IN THE MAINSTREAM MEDIA. ALL  
17 OF THE GRANTEE INSTITUTIONS HAVE REALLY GOOD NEWS  
18 OFFICES WRITING REALLY GOOD PRESS RELEASES, WORKING  
19 VERY HARD WITH THE MEDIA, BUT THE MEDIA ISN'T ALWAYS  
20 PICKING UP STORIES. WE KNOW THAT. SO THIS IS A GOOD  
21 WAY OF HIGHLIGHTING THAT SCIENCE.

22 WE LINK TO THE GRANTEE INSTITUTIONS. WE LINK  
23 TO THE GRANTEES' PRESS RELEASES. WE WANT TO MAKE SURE  
24 THEY GET CREDIT.

25 AND THERE'S NOT MUCH I WANT TO SAY ABOUT THIS

## BARRISTERS' REPORTING SERVICE

1 BECAUSE WE JUST MOVED TO THE BLOG. I HAVE VERY LITTLE  
2 DATA AT THIS POINT ABOUT WHO'S SEEN IT AND WHAT THEY  
3 THINK. WHAT I DO NOTICE IS THAT EVERY TIME WE POST, I  
4 SEE AN UP TICK IN TRAFFIC FROM BLOGSPOT TO THE CIRM WEB  
5 SITE. AND THIS BLOG IS ONE OF THE TOP 20 REFERRERS OF  
6 PEOPLE TO OUR WEB SITE. SO IT DOES SEEM TO BE WORKING  
7 IN TERMS OF GETTING PEOPLE'S ATTENTION AND DRIVING THEM  
8 TO THE SITE WHERE THEY WILL SEE MORE CONTENT.

9 FINALLY, ONE OF MY FAVORITES, FLICKR. THIS  
10 WAS OUR FIRST FORAY INTO SOCIAL MEDIA. FLICKR, FOR  
11 THOSE OF YOU WHO DON'T KNOW IT, IS THE MOST POPULAR  
12 PLACE TO POST IMAGES, AND IT'S ALSO THE MOST POPULAR  
13 PLACE TO SEARCH FOR IMAGES. WE HAVE 54 IMAGES POSTED.  
14 THEY GET SEEN ABOUT 200, 250 TIMES A DAY. WE'VE HAD  
15 ABOUT 70,000 TOTAL VIEWS.

16 EACH IMAGE IS POSTED WITH A CAPTION  
17 DESCRIBING THE SCIENCE THAT LED TO THE IMAGE AND HOW  
18 THAT SCIENCE COULD LEAD TO CURES. WE ALSO, OF COURSE,  
19 GIVE CREDIT TO THE GRANTEE, AND WE HAVE A LINK TO CIRM  
20 AND TO THE GRANTEE INSTITUTIONS. THE FLICKR SITE IS,  
21 AGAIN, ONE OF THE TOP 20 REFERRERS OF PEOPLE TO OUR WEB  
22 SITE. SO PEOPLE ARE CLEARLY LOOKING AT THESE IMAGES  
23 THINKING CIRM MUST BE PRETTY COOL IF WE'RE PRODUCING  
24 THESE IMAGES. THEY'RE CLICKING THE LINK AND COMING TO  
25 OUR WEB SITE AND LEARNING MORE ABOUT US. I THINK

## BARRISTERS' REPORTING SERVICE

1 THAT'S GREAT.

2 ONE OF THE MOST IMPORTANT ASPECTS OF THIS  
3 FLICKR PHOTO STREAM IS THAT NEWS OUTLETS USE IT. SO  
4 WE'VE HAD THE *BOSTON GLOBE*, THE LOCAL ABC CHANNEL HAS  
5 USED OUR IMAGES IN A PRODUCTION, THE *NEW YORK TIMES*,  
6 REUTERS, *SCIENCE*, *THE SCIENTIST*, I THINK *NEW SCIENTIST*  
7 USED SOME. A LOT OF PUBLICATIONS HAVE USED THESE  
8 IMAGES. AND HERE'S WHY THAT'S IMPORTANT.

9 WHEN A PUBLICATION HAS AN IMAGE TO RUN WITH A  
10 STORY, THAT STORY RUNS HIGHER IN THE PAPER, MORE PEOPLE  
11 WILL SEE IT. IF THE STORY HAS AN IMAGE, IT RUNS ON THE  
12 FRONT PAGE OF THE WEB SITE INSTEAD OF THE BACK PAGE OF  
13 THE WEB SITE. MORE PEOPLE SEE IT. ANYTHING ON A WEB  
14 SITE THAT'S ASSOCIATED WITH AN IMAGE GETS CLICKED MORE  
15 THAN SOMETHING THAT'S NOT ASSOCIATED WITH AN IMAGE. SO  
16 BY PROVIDING NEWS OUTLETS WITH IMAGES, WHAT FEW STORIES  
17 ARE ACTUALLY GETTING WRITTEN ABOUT STEM CELL RESEARCH,  
18 WE'RE UPPING THE CHANCES OF THEIR GETTING READ. AND IT  
19 IS NOT A BAD THING THAT WE ALWAYS GET CREDITED. SO  
20 RIGHT NEXT TO A BIG SPLASHY PHOTO AT THE TOP OF THE  
21 NEWS STORY IS OUR NAME AND, OF COURSE, THE GRANTEE'S  
22 NAME WHO TOOK THE PHOTO.

23 WE HAVE A MONTHLY DIGEST. WE STARTED PUTTING  
24 OUT THIS MONTHLY DIGEST JUST IF THERE WERE ANY PEOPLE  
25 OUT THERE WHO WE WEREN'T CATCHING WITH OUR OTHER

## BARRISTERS' REPORTING SERVICE

1 COMMUNICATION MECHANISMS, THEY COULD GET CAUGHT UP  
2 HERE. SO WE SUMMARIZE ANY RFA'S THAT HAVE GONE OUT,  
3 ANY WORKSHOP REPORTS, ANY PRESS RELEASES, ANYTHING  
4 THAT'S HAPPENED AT CIRM THAT MONTH.

5 PEOPLE CAN SIGN UP TO GET THIS ON OUR WEB  
6 SITE. IT GOES TO ABOUT 900 PEOPLE. IT ALSO GOES TO A  
7 LARGE NUMBER OF DISEASE ADVOCACY GROUPS. THE SERVICE  
8 WE USE TO PUT OUT THIS NEWSLETTER GIVES ME SOME  
9 COMPARISONS, AND IT LETS ME SEE HOW MANY PEOPLE HAVE  
10 OPENED MY E-MAIL. WE ALL KNOW WE DON'T OPEN ALL OF THE  
11 E-MAILS THAT COME IN FROM ORGANIZATIONS. WE HAVE A  
12 HIGHER OPEN RATE THAN IS AVERAGE. WE HAVE A HIGHER  
13 RATE OF PEOPLE CLICKING THE LINKS WITHIN OUR NEWSLETTER  
14 THAN IS AVERAGE FOR THIS KIND OF LIST, SO I THINK  
15 THAT'S GOOD.

16 SO IN SUMMARY, WE WANT OUR INFORMATION OUT  
17 THERE WHERE PEOPLE CAN FIND IT. WE WANT TO BE  
18 PRODUCING MORE INFORMATION. WE WANT MORE PEOPLE SEEING  
19 IT. AND THANK YOU VERY MUCH FOR YOUR TIME.

20 (APPLAUSE.)

21 CHAIRMAN KLEIN: SO ANY OTHER QUESTIONS FOR  
22 AMY? THANK YOU VERY MUCH. YES, MR. JENSEN.

23 MR. JENSEN: I'M DAVID JENSEN WITH THE  
24 CALIFORNIA STEM CELL REPORT. I HAD A QUESTION FOR YOU,  
25 CHAIRMAN KLEIN. EARLIER IN THE DISCUSSION OF THE CFAOC

## BARRISTERS' REPORTING SERVICE

1 AND THE *SAN DIEGO UNION* EDITORIAL, PERHAPS I MISHEARD  
2 YOU, BUT DID YOU SUGGEST THERE SHOULD BE AN EXECUTIVE  
3 SESSION TO DISCUSS A RESPONSE TO THOSE?

4 CHAIRMAN KLEIN: NO, NOT AN EXECUTIVE  
5 SESSION. NO. A DISCUSSION AMONG EXECUTIVE LEADERSHIP  
6 ABOUT HOW TO GET THE INFORMATION OUT TO FACTUALLY  
7 RESPOND. SO IN OTHER WORDS, I NEEDED TO TALK TO THE  
8 PRESIDENT. AND AS I INDICATED, I NEEDED SOME INPUT  
9 FROM DON. CERTAINLY I WOULD THEN ASK ART OR JEFF OR  
10 JUST GET SOME INPUT FROM INDIVIDUALS IN THE EXECUTIVE  
11 AND BOARD MEMBERS WHO ARE INTERESTED IN COMMUNICATION  
12 TO ADVISE HOW WE CAN GET THE FACTS OUT THERE. AS I  
13 SAID EARLIER, IF WE CAN GET THE FACTS TO THE PEOPLE,  
14 THAT'S OUR OBLIGATION. AND WE REALLY NEED TO GET FACTS  
15 OUT.

16 IN THIS CASE WE HAVE A MAJOR PUBLICATION THAT  
17 DOESN'T SEEM TO HAVE GOTTEN THOROUGHLY RESEARCHED  
18 INFORMATION. THEY WERE WORKING OFF OF INFORMATION THAT  
19 WE KNOW WAS FACTUALLY VERY INCONSISTENT WITH WHAT WAS  
20 PRESENTED, IN FACT, AT THE HEARING.

21 MS. KING: NOT A CLOSED SESSION OF THE BOARD.

22 MR. JENSEN: I JUST WANTED TO CLARIFY.

23 CHAIRMAN KLEIN: NO. NO. ABSOLUTELY NOT.  
24 THANK YOU VERY MUCH FOR CLARIFYING. I APPRECIATE THAT.

25 SO IF WE CAN, I'D LIKE TO ADJOURN TONIGHT,

## BARRISTERS' REPORTING SERVICE

1 BUT WITH, AGAIN, A REMINDER THIS SHOULD BE AN EXTREMELY  
2 GOOD SESSION 8:30 IN THE MORNING. THEY PUT A HUGE  
3 AMOUNT OF TIME IN IT. THEY'RE BRINGING ALL THREE  
4 MEMBERS OF THIS IPS TEAM. DR. TROUNSON, COULD YOU DO  
5 ME THE FAVOR OF PROPERLY PRONOUNCING THIS SPECIFIC  
6 TREATMENT THAT THEIR DISEASE TEAM FOCUSES ON?

7 DR. TROUNSON: NOW YOU'RE CHALLENGING ME.  
8 EPIDERMOLYSIS BULLOSA.

9 CHAIRMAN KLEIN: SO IF YOU COME TO THE  
10 MEETING, YOU WON'T HAVE TO PRONOUNCE IT. IF YOU DON'T  
11 COME, WE'RE GOING TO CALL ON YOU AT THE NEXT BOARD  
12 MEETING. THIS SHOULD BE REALLY EXTREMELY VALUABLE,  
13 VERY INTERESTING INFORMATION. AND PLEASE MAKE A  
14 SPECIAL EFFORT TO BE THERE.

15 SCOTT, DO YOU HAVE AN ANNOUNCEMENT OF ANY  
16 KIND? REMIND EVERYONE TOMORROW MORNING IT IS AT  
17 MISSION BAY, MISSION BAY CONFERENCE CENTER, THE SECOND  
18 FLOOR. IT'S AT MISSION BAY, 8:30.

19 (THE MEETING WAS THEN ADJOURNED AT 09:28  
20 P.M.)

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

HOTEL WHITCOMB  
1231 MARKET STREET  
SAN FRANCISCO, CALIFORNIA  
ON  
FEBRUARY 3, 2010

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.



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