### 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: HARVEY MORSE AUDITORIUM

CEDARS-SINAI MEDICAL CENTER

8700 BEVERLY BOULEVARD LOS ANGELES, CALIFORNIA

DATE: DECEMBER 8, 2011

9 A.M.

REPORTER: BETH C. DRAIN, CSR

CSR. NO. 7152

BRS FILE NO.: 89381

### INDEX

| ITEM DESCRIPTION   | PAGE NO. |
|--|----------|
| 1. CALL TO ORDER.  | 4        |
| 2. PLEDGE OF ALLEGIANCE.   | 4        |
| 3. ROLL CALL.  | 4        |
| REPORTS & DISCUSSION ITEMS   |          |
| 4. CHAIRMAN'S REPORT.  | 6        |
| 5. PRESIDENT'S REPORT  | 14       |
| ACTION ITEMS   |          |
| 6. CONSIDERATION OF FINANCIAL AUDIT FOR FISCAL YEAR 2010-2011 2010/2011 FINANCIAL SUPPLEMENT           | 30       |
| 7. CONSIDERATION OF STRATEGIC PLAN   | 36       |
| 8. CONSIDERATION OF INTELLECTUAL PROPERTY SUBCOMMITTEE MISSION STATEMENT                               | 66       |
| 9. CONSIDERATION OF RESEARCH LEADERSHIP AWARD APPLICATION  | 71       |
| CLOSED SESSION   | NONE     |
| ACTION ITEMS   |          |
| 12. CONSIDERATION OF APPOINTMENT OF PATIENT ADVOCATE AND SCIENTIFIC MEMBERS OF THE GRANTSWORKING GROUP | 83       |
| 13. CONSIDERATION OF APPOINTMENT AND/OR REAPPOINTMENT OF MEMBERS OF THE STANDARDS WORKING GROUP        | 86       |
| 14. CONSIDERATION OF AMENDMENTS TO THE GRANTS ADMINISTRATION POLICY                                    | 90       |
|  |          |

2

| I N D E X (CONT'D.)  |      |  |
|--|------|--|
| 15. CONSIDERATION OF BRIDGE FUNDING COMPONENT OF OPPORTUNITY FUND                                  | 109  |  |
| 16. CONSIDERATION OF EXTERNAL INNOVATION COMPONENT OF OPPORTUNITY FUND                             | 147  |  |
| 17. CONSIDERATION OF HPSC CONCEPT PROPOSAL   | 155  |  |
| 18. CONSIDERATION OF RESOLUTION HONORING DR. JOHN SLADEK, FORMER CHAIR OF THE GRANTS WORKING GROUP | 99   |  |
| 19. CONSIDERATION OF MINUTES FROM OCTOBER 2011 BOARD MEETING                                       | 97   |  |
| DISCUSSION ITEMS   |      |  |
| 20. PUBLIC COMMENT.  | NONE |  |

| LOS ANGELES, CALIFORNIA; THURSDAY, DECEMBER 8, 2011  |
|--|
| 9 A.M  |
|  |
| CHAIRMAN THOMAS: I'D LIKE TO WELCOME                 |
| EVERYBODY TO THE DECEMBER MEETING OF THE INDEPENDENT |
| CITIZENS' OVERSIGHT COMMITTEE FOR THE CALIFORNIA     |
| INSTITUTE OF REGENERATIVE MEDICINE. IT'S A VERY      |
| BEAUTIFUL DAY HERE IN LOS ANGELES, AND WE'RE VERY    |
| PLEASED TO BE HERE, SHLOMO, AT CEDARS-SINAI. AND     |
| THANK YOU VERY MUCH FOR HOSTING THIS MEETING.        |
| LET'S PROCEED NOW, MARIA, WITH THE PLEDGE            |
| OF ALLEGIANCE.                                       |
| (THE PLEDGE OF ALLEGIANCE.)                          |
| CHAIRMAN THOMAS: MARIA, WILL YOU PLEASE              |
| CALL THE ROLL.                                       |
| MS. BONNEVILLE: ROBERT PRICE.                        |
| DR. PRICE: HERE.                                     |
| MS. BONNEVILLE: FLOYD BLOOM. DAVID                   |
| BRENNER. JACOB LEVIN FOR SUSAN BRYANT.               |
| DR. LEVIN: HERE.                                     |
| MS. BONNEVILLE: MARCY FEIT.                          |
| MS. FEIT: HERE.                                      |
| MS. BONNEVILLE: TED KRONTIRIS.                       |
| DR. KRONTIRIS: HERE.                                 |
| MS. BONNEVILLE: LEEZA GIBBONS.                       |
| 4  |
|  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

|    | DANKISTERS REFORMING SERVICE             |
|----|--|
| 1  | MS. GIBBONS: HERE.                       |
| 2  | MS. BONNEVILLE: MICHAEL GOLDBERG. SAM    |
| 3  | HAWGOOD. STEPHEN JUELSGAARD.             |
| 4  | DR. JUELSGAARD: HERE.                    |
| 5  | MS. BONNEVILLE: SHERRY LANSING.          |
| 6  | MS. LANSING: HERE.                       |
| 7  | MS. BONNEVILLE: TED LOVE. BERT LUBIN.    |
| 8  | MS. BONNEVILLE: SHLOMO MELMED.           |
| 9  | DR. MELMED: HERE.                        |
| 10 | MS. BONNEVILLE: PHIL PIZZO. CLAIRE       |
| 11 | POMEROY. FRANCISCO PRIETO.               |
| 12 | DR. PRIETO: HERE.                        |
| 13 | MS. BONNEVILLE: ELIZABETH FINI. ROBERT   |
| 14 | QUINT. DUANE ROTH. JOAN SAMUELSON. DAVID |
| 15 | SERRANO-SEWELL.                          |
| 16 | MR. SERRANO-SEWELL: PRESENT.             |
| 17 | MS. BONNEVILLE: JEFF SHEEHY. JONATHAN    |
| 18 | SHESTACK. OSWALD STEWARD.                |
| 19 | DR. STEWARD: HERE.                       |
| 20 | MS. BONNEVILLE: JONATHAN THOMAS.         |
| 21 | CHAIRMAN THOMAS: HERE.                   |
| 22 | MS. BONNEVILLE: ART TORRES.              |
| 23 | MR. TORRES: HERE.                        |
| 24 | MS. BONNEVILLE: KRISTINA VUORI.          |
| 25 | DR. VUORI: HERE.                         |
|    | r-                                       |
|    | 5  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | MS. BONNEVILLE: JAMES ECONOMOU.                     |
|----|---|
| 2  | DR. ECONOMOU: HERE.                                 |
| 3  | MS. BONNEVILLE: DR. BURTIS. SORRY.                  |
| 4  | DR. BURTIS: HERE.                                   |
| 5  | CHAIRMAN THOMAS: MARIA, DO WE HAVE A                |
| 6  | QUORUM?   |
| 7  | MS. BONNEVILLE: NOT YET. NOT CURRENTLY.             |
| 8  | WE'RE WAITING FOR A FEW MEMBERS.                    |
| 9  | CHAIRMAN THOMAS: OKAY. I KNOW THERE ARE             |
| 10 | SOME OTHERS WHO ARE HERE WHO HAVEN'T COME YET, BUT  |
| 11 | SHALL WE PROCEED NONETHELESS?                       |
| 12 | MS. BONNEVILLE: YES.                                |
| 13 | CHAIRMAN THOMAS: I'D LIKE TO START WITH             |
| 14 | THE CHAIRMAN'S REPORT. FIRST AND FOREMOST, I WANTED |
| 15 | TO TALK TO THE BOARD ABOUT THE GERON SITUATION. AS  |
| 16 | WE ALL KNOW, A NUMBER OF DAYS AGO GERON DECIDED TO  |
| 17 | SUSPEND ITS TRIAL ON THE POTENTIAL THERAPY FOR      |
| 18 | SPINAL CORD INJURY USING CELLS DERIVED FROM HUMAN   |
| 19 | EMBRYONIC STEM CELLS. THIS WAS A BIG SURPRISE       |
| 20 | OBVIOUSLY TO US ALONG WITH THE REST OF THE WORLD.   |
| 21 | AND OUR IMMEDIATE CONCERN GOES OUT TO THE PATIENTS  |
| 22 | AND THEIR FAMILIES WHO WERE JUSTIFIABLY EXTREMELY   |
| 23 | DISAPPOINTED WITH THIS TURN OF EVENTS.              |
| 24 | HOWEVER, AS WE KNOW, BUSINESS BEING WHAT            |
| 25 | IT IS, THE COMPANY WHICH HAD REALLY BEEN FOCUSING   |
|    | 6   |

| 1  | SORT OF JOINTLY ON CANCER PRODUCTS AND THE STEM CELL |
|----|--|
| 2  | THERAPY RECENTLY HAD A CHANGE IN LEADERSHIP AND NOW  |
| 3  | HAS A CEO WHO PREFERS AND IS MOST INTERESTED IN      |
| 4  | ONCOLOGICAL PRODUCTS. AND THAT PARTICULAR            |
| 5  | ORIENTATION PLUS THE FACT THAT THEY FELT THAT THE    |
| 6  | CANCER PRODUCTS WERE POTENTIALLY FURTHER ALONG IN    |
| 7  | THE PROCESS AND THAT THE STEM CELL TRIAL WOULD TAKE  |
| 8  | LONGER, WHEN HELD UP AGAINST THE PRISM OF ECONOMIC   |
| 9  | REALITY FOR THE COMPANY, DECIDED TO MAKE A BUSINESS  |
| 10 | DECISION AND TO SUSPEND THAT TRIAL.                  |
| 11 | THEY WENT TO GREAT LENGTHS TO SAY THAT THE           |
| 12 | PHASE I TRIALS TO DATE HAD SHOWN NO PROBLEMS WITH    |
| 13 | SAFETY OR TOXICITY; THAT IS TO SAY, THINGS HAD GONE  |
| 14 | AS HOPED TO THIS POINT, THAT THERE WAS NO ISSUE      |
| 15 | WHATSOEVER WITH THE VIABILITY OF THE UNDERLYING      |
| 16 | SCIENCE, THAT THIS WAS PURELY A BUSINESS DECISION.   |
| 17 | I BELIEVE THAT THOSE COVERING THE GERON              |
| 18 | DECISION FOR THE MOST PART UNDERSTOOD THAT. THERE    |
| 19 | ARE THOSE OUT THERE THAT HAVE CHOSEN TO EXTRAPOLATE  |
| 20 | TO QUESTION STEM CELL SCIENCE IN GENERAL. AND I SAY  |
| 21 | TO THOSE THAT IF YOU WERE TO QUERY THE MANY, MANY    |
| 22 | RESEARCHERS WORLDWIDE IN STEM CELL RESEARCH AS WELL  |
| 23 | AS THE COMPANIES WHO ARE INVOLVED DEVELOPING STEM    |
| 24 | CELL-RELATED PRODUCTS, YOU WOULD HEAR THAT UNIFORMLY |
| 25 | THERE IS UNWAVERING, UNDIMINISHED ENTHUSIASM FOR     |

| 1  | PROCEEDING WITH STEM CELL TECHNOLOGY.                |
|----|--|
| 2  | HERE AT CIRM WE ECHO THAT OBVIOUSLY. WE              |
| 3  | ARE FULLY COMMITTED TO ADVANCING THE CAUSE OF STEM   |
| 4  | CELL RESEARCH AND WE UNDERSTAND THAT THIS IS A NEW   |
| 5  | FIELD. IT'S A CUTTING-EDGE FIELD. WE'RE GOING TO     |
| 6  | HAVE ADVANCES AND ISSUES THAT COME UP ALONG THE WAY. |
| 7  | IT'S NOT A LINEAR PROCESS. THERE WILL BE FITS AND    |
| 8  | STARTS. THIS WAS A VERY HIGHLY PUBLICIZED            |
| 9  | INVESTMENT AND, THEREFORE, IT'S GOTTEN A LOT OF      |
| 10 | PRESS. BUT WHEN YOU SORT OF TAKE A LOOK AND YOU DO   |
| 11 | A REALITY CHECK, THIS IS ONE OF 44 PROJECTS, MAJOR   |
| 12 | PROJECTS, THAT WE'VE FUNDED DEMONSTRATING THAT IT IS |
| 13 | BUT ONE IN MANY AVENUES THAT ARE BEING PURSUED TO    |
| 14 | DATE. AND THAT'S JUST WITH CIRM. THERE ARE           |
| 15 | OBVIOUSLY MANY, MANY OTHERS WORLDWIDE THAT ARE BEING |
| 16 | PURSUED AS WELL.                                     |
| 17 | THIS TECHNOLOGY IS CONTINUING TO ADVANCE.            |
| 18 | IT IS SCIENCE, AFTER ALL, SO ADVANCEMENT IS          |
| 19 | INCREMENTAL, BUT IT IS INEXORABLY MARCHING FORWARD,  |
| 20 | AND WE ARE 150 PERCENT BEHIND THE FIELD AND WILL     |
| 21 | CONTINUE TO FUND THE BEST AND THE BRIGHTEST PROJECTS |
| 22 | THAT COME TO US HERE IN THE STEM CELL STATE OF       |
| 23 | CALIFORNIA.  |
| 24 | WOULD JUST LIKE TO ADD AS AN ASIDE THAT,             |
| 25 | TWO ASIDES ACTUALLY, WE HAD, AS YOU KNOW, THE        |
|    |  |

| 1  | MEETING ON THE MESA LAST WEEK IN LA JOLLA, WHICH,    |
|----|--|
| 2  | ALAN OR ELLEN, I DON'T KNOW IF YOU ARE GOING TO      |
| 3  | COMMENT ON, SOMEBODY MIGHT. OKAY. FANTASTIC EVENT.   |
| 4  | AND WHAT I WANTED TO REPORT TO YOU WAS IT BEING LAST |
| 5  | WEEK WAS IN THE WAKE OF THE GERON DECISION. THERE    |
| 6  | WAS OBVIOUSLY LOTS OF DISCUSSION ON THIS, AND THE    |
| 7  | SENTIMENT THERE WAS THIS IS CLEARLY UNFORTUNATE,     |
| 8  | LAMENTABLE, BUT THINGS ARE PROCEEDING APACE. YOU     |
| 9  | SAW THAT IN THE SCIENCE PANELS ALL DAY WEDNESDAY,    |
| 10 | AND YOU HEARD IT ECHOED JUST AS STRONGLY IN THE      |
| 11 | COMPANY PANELS THAT WERE HELD ON THURSDAY. SO        |
| 12 | NOBODY VIEWS THIS AS A MAJOR SETBACK. IT'S A         |
| 13 | BUSINESS DECISION. AND THAT'S WHERE IT ENDS.         |
| 14 | I WILL LASTLY POINT OUT, AND I THINK THE             |
| 15 | BOARD WOULD BE VERY INTERESTED TO HEAR THIS, THAT    |
| 16 | THE GERON, AS YOU KNOW, HAD HAD FOUR PATIENTS        |
| 17 | ENROLLED PRIOR TO THEIR DECISION. THEY HAD HAD A     |
| 18 | FIFTH PATIENT WHO HAD BEEN APPROVED, AND THEN THE    |
| 19 | DECISION CAME ALONG TO DISCONTINUE, BUT THERE WAS A  |
| 20 | JOINT DECISION BETWEEN THE PATIENT AND THE COMPANY   |
| 21 | TO GO AHEAD AND HAVE THE PROCEDURE WITH THAT FIFTH   |
| 22 | PATIENT.   |
| 23 | AS IT HAPPENS, I AND MR. HARRISON WENT AND           |
| 24 | MET WITH, WE WERE INVITED TO, MET WITH THIS FIFTH    |
| 25 | PATIENT. AND THAT WAS A VERY ILLUMINATING MEETING,   |

| 1  | WHICH GETS TO THE VERY CORE OF WHY WHAT WE'RE DOING  |
|----|--|
| 2  | HERE IS SO IMPORTANT. YOU WOULD HAVE EXPECTED THIS   |
| 3  | PERSON TO BE HORRIBLY DOWN BASED ON THE TRAGIC       |
| 4  | SEQUENCE OF EVENTS THAT HAD TAKEN PLACE IN HER LIFE. |
| 5  | WE WENT IN LOOKING TO CHEER HER UP, AND WE GOT IN    |
| 6  | THERE ONLY TO FIND THAT SHE WAS EXTREMELY HAPPY TO   |
| 7  | SEE US, VERY UPBEAT, VERY GRATEFUL THAT SHE HAD BEEN |
| 8  | ABLE TO PARTICIPATE IN THIS TRIAL. I THINK SHE HAD   |
| 9  | A GOOD, REALISTIC SENSE THAT THE PATH WAS LONG AND   |
| 10 | THE ODDS WERE LONG TO RECOVERY, BUT SHE WAS SO       |
| 11 | GRATEFUL TO BE A PART OF THIS AND ALSO VERY          |
| 12 | INTERESTED IN BEING SOMEBODY WHO HELPS PAVE THE WAY  |
| 13 | THROUGH THE EVALUATION OF HER AND HER TEST FOR THOSE |
| 14 | THAT FOLLOW THAT HAVE SPINAL CORD INJURIES THAT ARE  |
| 15 | BEING TREATED BY STEM CELL THERAPIES.                |
| 16 | SO FAR FROM US HAVING TO CHEER HER UP,               |
| 17 | JAMES, I THINK YOU'D AGREE, SHE CHEERED US UP. IT    |
| 18 | WAS A REMARKABLE MEETING. BUT I WANTED TO REPORT     |
| 19 | THAT TO YOU JUST TO GIVE YOU THE PATIENT VIEW OF THE |
| 20 | VIABILITY AND THE PROMISE OF STEM CELL RESEARCH. SO  |
| 21 | THE TAKEAWAY HERE IS WE'RE VERY SORRY, VERY          |
| 22 | DISAPPOINTED WITH THE DEVELOPMENTS AT GERON. WE      |
| 23 | REMAIN TOTALLY COMMITTED TO THE CAUSE, AND WE WILL   |
| 24 | CONTINUE ALONG WITH THE MANY, MANY OUTSTANDING       |
| 25 | PROJECTS THAT WE HAVE BOTH FUNDED TO DATE AND THAT   |
|    |  |

| 1  | WE WILL FUND IN THE FUTURE AS WE CONTINUE TO         |
|----|--|
| 2  | EVALUATE THOSE PROPOSALS THAT COME TO US.            |
| 3  | ON OTHER MATTERS, AS I SAY, WE HAD THE               |
| 4  | MEETING ON THE MESA. I WANTED TO CONGRATULATE        |
| 5  | EVERYBODY. STAFF WORKED INCREDIBLY HARD ON THIS.     |
| 6  | DUANE, WHO ISN'T HERE UNFORTUNATELY, OBVIOUSLY       |
| 7  | WORKED INCREDIBLY HARD AS HE DOES EVERY YEAR. THIS   |
| 8  | WAS, IN MY OPINION, AN A-PLUS EVENT. THE             |
| 9  | COMBINATION OF THE SCIENCE DAY AND THE COMPANY DAY,  |
| 10 | I THOUGHT, WERE TERRIFIC. THEY BOTH SUCCEEDED THE    |
| 11 | OPENING DAY CEREMONIES FOR THE NEW CONSORTIUM        |
| 12 | BUILDING DOWN IN LA JOLLA. THE BUILDING IS           |
| 13 | SPECTACULAR. IT WAS A VERY WELL-ATTENDED OPENING     |
| 14 | DAY WITH COMMENTS FROM VARIOUS IMPORTANT DIGNITARIES |
| 15 | WHO HAD PLAYED KEY ROLES STARTING WITH DENNY SANFORD |
| 16 | OBVIOUSLY AND MANY OTHERS.                           |
| 17 | SO THE THREE DAYS JUST HAD A GREAT FEEL,             |
| 18 | AND EVERYBODY IS SO ENTHUSIASTIC ABOUT THE CHANCE TO |
| 19 | DO COLLABORATIVE RESEARCH THERE TO HELP ADVANCE THE  |
| 20 | FIELD. I WAS VERY IMPRESSED AND MANY KUDOS TO        |
| 21 | ELONA, ELLEN, DON, ALAN IN ABSENTIA, AND ALL,        |
| 22 | PATENT, EVERYBODY WHO HAD A ROLE IN THAT, VERY WELL  |
| 23 | DONE.  |
| 24 | WE ALSO HAD THE, AND I WILL JUST MENTION             |
| 25 | THIS ONLY IN PASSING, THE LAST OF THE CLINICAL       |
|    |  |

| 1  | DEVELOPMENT ADVISORY PANEL REVIEWS OF OUR DISEASE    |
|----|--|
| 2  | TEAM I PROJECTS THAT WERE RECOMMENDED BY THE         |
| 3  | EXTERNAL ADVISORY PANEL, THAT ELLEN, I'M SURE, WILL  |
| 4  | TALK ABOUT PERHAPS A BIT TODAY, BUT IT TAKES A LOT   |
| 5  | OF POSTGAME EVALUATION AND GIVE-AND-TAKE WITH ALL OF |
| 6  | THE TEAMS. AND WE WILL BE RECEIVING A REPORT BY      |
| 7  | ELLEN AT A FUTURE SESSION ON WHAT THOSE PROGRESS     |
| 8  | REPORTS YIELDED AND WHERE THINGS ARE GOING FROM      |
| 9  | HERE.  |
| 10 | I THINK THAT THE LET'S SEE HERE. I                   |
| 11 | THINK THAT ACTUALLY ABOUT COVERS MY PART HERE. OH,   |
| 12 | ONE OTHER THING I'D LIKE TO MENTION. ANOTHER         |
| 13 | FANTASTIC EVENT WAS THE CITY OF HOPE TWO-DAY         |
| 14 | CONFERENCE WHERE, AS YOU KNOW, THE CITY OF HOPE      |
| 15 | ANNUALLY FOR THE LAST FEW YEARS NOW HAS HOSTED A     |
| 16 | STEM CELL CONFERENCE AND CO-SPONSORED IT WITH        |
| 17 | SCIENTISTS FROM A PARTICULAR COUNTRY. THIS YEAR WE   |
| 18 | HAD A HOST OF ISRAELI SCIENTISTS, AND THE            |
| 19 | PRESENTATIONS THAT THEY GAVE WERE FIRST-RATE, WHICH  |
| 20 | AMPLY DEMONSTRATED WHAT, OF COURSE, IS WELL-KNOWN,   |
| 21 | WHICH IS THEY'VE GOT SOME GREAT SCIENCE GOING ON     |
| 22 | OVER THERE AND ARE MAKING MAJOR CONTRIBUTIONS TO THE |
| 23 | FIELD.   |
| 24 | WE ARE BUSILY AT WORK TRYING TO REFINE THE           |
| 25 | TERMS OF A COLLABORATIVE FUNDING PARTNERSHIP WITH    |
|    |  |

| 1  | ISRAEL, MUCH AS WE HAVE WITH MANY OTHER COUNTRIES,   |
|----|--|
| 2  | AND THAT IS A WORK IN PROGRESS WITH A FEW NUANCES    |
| 3  | AND WRINKLES TO BE IRONED OUT, BUT WE HOPE TO REPORT |
| 4  | BACK TO YOU AT A FUTURE SESSION THAT THAT IS, IN     |
| 5  | FACT, IN PLACE AS WELL.                              |
| 6  | SO WITH THAT, THAT CONCLUDES MY CHAIRMAN'S           |
| 7  | REPORT. I WOULD LIKE TO NOW TURN IT OVER TO DR.      |
| 8  | TROUNSON TO GIVE HIS PRESIDENT'S REPORT. DR.         |
| 9  | TROUNSON.  |
| 10 | DR. TROUNSON: THANK YOU VERY MUCH.                   |
| 11 | CHAIRMAN THOMAS: DR. TROUNSON, I FORGOT              |
| 12 | ONE THING, WHICH I'M REMISS IN NOT DOING.            |
| 13 | (P.A. SYSTEM INTERFERENCE.)                          |
| 14 | DR. MELMED SAYS TO IGNORE THIS AND CARRY             |
| 15 | ON.  |
| 16 | THE ONE THING I DID VERY IMPORTANTLY OMIT,           |
| 17 | I WANTED TO MAKE SURE EVERYBODY MET DR. MATT         |
| 18 | PLUNKETT, WHO HAS JOINED US AS OUR CFO OVER HERE     |
| 19 | STANDING UP. COMES TO US WITH IMPECCABLE             |
| 20 | CREDENTIALS, PH.D. IN CHEMISTRY, LIFE SCIENCES       |
| 21 | INVESTMENT BANKER, FORMER CFO AT IPERIAN, HIGHLY     |
| 22 | VERSED IN ALL OF THE ISSUES THAT CONFRONT AN         |
| 23 | ORGANIZATION LIKE CIRM, A VERY PROACTIVE PLAYER IN   |
| 24 | THE DEVELOPMENT OF THE LOAN PROGRAM THAT WE HAVE     |
|    |  |
| 25 | HERE AT CIRM FOR COMPANIES. MATT JOINED US A COUPLE  |

| 1  | WEEKS AGO, AND WE HAVE THE GREAT LUXURY OF HAVING   |
|----|---|
| 2  | SOMEBODY COME WITH US WHO REQUIRES NO GETTING UP TO |
| 3  | SPEED WHATSOEVER AND HAS IMMEDIATELY SEIZED THE     |
| 4  | REINS AND TAKEN MANY PROACTIVE STEPS. AND WE'RE     |
| 5  | JUST DELIGHTED TO HAVE YOU HERE. SO I WANTED        |
| 6  | EVERYBODY TO SAY HELLO TO MATT.                     |
| 7  | SORRY. THANKS, ALAN.                                |
| 8  | DR. TROUNSON: OKAY. THANK YOU, CHAIR.               |
| 9  | ONE OF THE REASONS WHY I WAS NOT AT THE MEETING ON  |
| 10 | THE MESA WAS I WAS GETTING A DOCTOR OF LAWS, AND I  |
| 11 | UNDERSTAND IT DOES TRUMP JAMES HARRISON NOW. SO,    |
| 12 | CHAIR, YOU MIGHT NEED TO TAKE MY ADVICE ON SOME     |
| 13 | MATTERS OF LAW, PERHAPS ONLY AUSTRALIAN LAW, BUT    |
| 14 | NEVER MIND.   |
| 15 | THERE IS SOME REALLY INTERESTING WORK, AS           |
| 16 | USUAL, BEING PUBLISHED EACH MONTH. SO I WANTED TO   |
| 17 | GIVE YOU SOME LOOK INTO SOME OF THESE. ONE OF THESE |
| 18 | I THOUGHT WAS PRETTY INTERESTING, THE FACT THAT     |
| 19 | FETAL CELLS TRAFFIC TO INJURED MATERNAL MYOCARDIUM. |
| 20 | SO IN THE EVENT IN PREGNANCY THAT THERE'S AN INJURY |
| 21 | TO THE HEART, THE FETUS ACTUALLY DOES A JOB IN      |
| 22 | ACTUALLY RETURNING CELLS TO THE FEMALE HEART, FETAL |
| 23 | CELLS, TO REPAIR THE PART. AND I THINK THIS IS A    |
| 24 | REALLY INTERESTING PIECE OF NEWS. I'VE KNOWN FOR A  |
| 25 | LONG TIME THAT YOU CAN DETECT, AND YOU PROBABLY DO, |
|    |   |

| 1  | FETAL CELLS IN THE CIRCULATION, MATERNAL             |
|----|--|
| 2  | CIRCULATION. SOMETIMES FOR DECADES YOU CAN DETECT    |
| 3  | THEM.  |
| 4  | AND SO IN THE MATERNAL SYSTEM THERE IS AN            |
| 5  | EXCHANGE OF CELLS AND THEY DO LIVE FOR A VERY LONG   |
| 6  | TIME, POSSIBLY FOR THE LIFETIME OF THE WOMAN.        |
| 7  | WELL, IN THE MICE THEY GFP LABELED THE               |
| 8  | FETAL CELLS IN THE FETUSES, AND THEY SHOWED THAT     |
| 9  | THEY HOME TO MATERNAL HEART IF YOU INDUCE A          |
| 10 | MYOCARDIAL INFARCTION. SO IF THERE'S AN INFARCT,     |
| 11 | DAMAGED HEART OCCUR, THESE FETAL CELLS CAN BE FOUND  |
| 12 | IN THE HEART. AND THEY DID THIS AT THEY INDUCED      |
| 13 | THE MYOCARDIAL INFARCTION AT DAY 12, SO THAT'S ABOUT |
| 14 | TWO-THIRDS OF THE WAY THROUGH GESTATION. AND THEN    |
| 15 | THEY LOOKED A WEEK OR TWO WEEKS LATER WHERE THEY     |
| 16 | FOUND REALLY 20 TIMES THE NUMBER OF CELLS IN THE     |
| 17 | INJURED HEART THAN YOU WOULD FIND IN A SHAM-OPERATED |
| 18 | HEART WHERE THERE'S NO INJURY. SO IF THERE'S AN      |
| 19 | INJURY, THESE CELLS, THESE FETAL CELLS, TRAFFIC TO   |
| 20 | THE INJURED HEART.                                   |
| 21 | AND WHAT'S MORE, THESE GFP CARDIOMYOCYTES            |
| 22 | IN THE MICE WERE BEATING IN SYNCHRONY WITH THE       |
| 23 | NEIGHBORING MATERNAL CARDIOMYOCYTES. SO THEY LOOKED  |
| 24 | LIKE THEY'D TAKEN ON FULL FUNCTIONAL BEHAVIOR OF THE |
| 25 | MATERNAL CELLS. SO THERE'S A ROLE HERE FOR THE       |
|    |  |

| 1  | FETUS IN PROTECTING MOTHERS. AND YOU CAN IMAGINE     |
|----|--|
| 2  | THIS COULD WELL BE A STRONG EVOLUTIONARY DRAW.       |
| 3  | AND I WOULD NOTE ACTUALLY, AND IT WAS                |
| 4  | NOTED IN THE PAPER, THAT 50 PERCENT OF WOMEN RECOVER |
| 5  | FROM HEART FAILURE SPONTANEOUSLY PERIPARTUM, WHICH   |
| 6  | IS THE HIGHEST OF ANY KNOWN GROUP WITH               |
| 7  | CARDIOMYOPATHY. SO IT DOES FIT WITH THE HUMAN        |
| 8  | SITUATION, AND I THINK THIS IS EXTREMELY             |
| 9  | INTERESTING.   |
| 10 | THE OTHER BIT OF INTEREST IN THAT PAPER              |
| 11 | WAS THAT 40 PERCENT OF THOSE CELLS EXPRESS CDX2,     |
| 12 | WHICH IS A PLACENTAL-TYPE MARKER. SO IT LOOKS LIKE   |
| 13 | THESE CELLS MIGHT HAVE COME FROM THE PLACENTA, NOT   |
| 14 | SPECIFICALLY FROM THE FETUS. SO IF THAT'S THE CASE,  |
| 15 | SOME PLACENTAL STEM CELLS MIGHT BE VERY IMPORTANT    |
| 16 | FOR US TO LOOK AT IN TERMS OF MYOCARDIAL             |
| 17 | REGENERATION. I THOUGHT YOU'D BE INTERESTED IN THAT  |
| 18 | BECAUSE I THINK IT'S A PRETTY NEAT PAPER PUBLISHED   |
| 19 | IN CIRCULATION RESEARCH FROM THE MT. SINAI SCHOOL OF |
| 20 | MEDICINE, YOUR COUSINS, I GUESS, OVER IN NEW YORK.   |
| 21 | SO THIS PICTURE, WHICH YOU WILL SEE IN               |
| 22 | YOUR HANDOUT, JUST GIVES YOU THE WHOLE IDEA THAT THE |
| 23 | GREEN EMBRYO WAS ACTUALLY DONATING CELLS THAT ENDED  |
| 24 | UP IN THE HEART. AND SHOWN ON THE RIGHT-HAND SIDE,   |
| 25 | HOWEVER YOU'RE LOOKING AT THAT, GIVES YOU THE IDEA   |
|    |  |

| 1  | THAT YOU CAN SEE THEM AS CARDIOMYOCYTES AND          |
|----|--|
| 2  | ENDOTHELIAL CELLS. SO THAT WAS REALLY INTERESTING.   |
| 3  | THERE WAS ALSO, I THINK, ANOTHER IMPORTANT           |
| 4  | PAPER PUBLISHED IN NATURE MEDICINE USING IPS-DERIVED |
| 5  | NEURONS TO UNCOVER A PHENOTYPE WITH TIMOTHY          |
| 6  | SYNDROME. NOW, THERE'S A COUPLE OF IMPORTANT         |
| 7  | ELEMENTS IN THIS. THE DEFECTS IN VOLTAGE-GATED       |
| 8  | CALCIUM CHANNELS ARE RELATED TO AUTISM, BIPOLAR      |
| 9  | DISORDER, AND SCHIZOPHRENIA. SO TIMOTHY SYNDROME IS  |
| 10 | CAUSED BY A POINT MUTATION IN AN ALTERNATIVELY       |
| 11 | SPLICED EXON OF THE L-TYPE CHANNEL, AND IT           |
| 12 | INACTIVATES THAT CHANNEL. SO 60 PERCENT OF THESE     |
| 13 | KIDS HAVE AUTISM. SO IT'S A VERY DEEP PENETRANT FOR  |
| 14 | THAT GENETIC DISORDER. SO IT'S VERY COMMON, VERY,    |
| 15 | VERY COMMON, THAT THESE KIDS WILL HAVE AUTISM.       |
| 16 | SO THESE IPS CELLS, WHILE THEY HAVE THE              |
| 17 | CHANNEL DEFECT, THEY SHOWED DIFFERENTIATION DEFECTS  |
| 18 | IN CALCIUM SIGNALING, DECREASED GENE EXPRESSION IN   |
| 19 | LOWER CORTICAL LAYERS, AND CALLOSAL PROJECTION       |
| 20 | NEURONS, AND ABNORMAL EXPRESSION OF TYROSINE         |
| 21 | HYDROXYLASE, AND INCREASED PRODUCTION OF             |
| 22 | NOREPINEPHRINE AND DOPAMINE. SO THEY CONTINUE THEIR  |
| 23 | PHENOTYPIC ABNORMALITY IN THE CULTURE DISH. SO THIS  |
| 24 | IS A GOOD DISEASE-IN-A-DISH MODEL.                   |
| 25 | THE PHENOTYPE, INTERESTINGLY, CAN BE                 |
|    | 17   |

| 1  | REVERSED BY TREATMENT WITH ROSCOIVITINE              |
|----|--|
| 2  | CYCLIN-DEPENDENT KINASE INHIBITOR AND ATYPICAL       |
| 3  | L-TYPE CHANNEL BLOCKER. SO IT SHOWS THAT THIS PAPER  |
| 4  | SHOWS VERY NEATLY, I THINK, THAT THESE CALCIUM       |
| 5  | CHANNELS ARE REGULATING DIFFERENTIATION OF THOSE     |
| 6  | CRITICAL CORTICAL NEURONS WHICH ARE PROBABLY THE     |
| 7  | PRIMARY CAUSE OF AUTISM IN TIMOTHY SYNDROME. SO      |
| 8  | AGAIN, THIS UNDERLINES THE REALLY NEAT MODELING THAT |
| 9  | YOU CAN GET FROM MAKING IPS CELLS AND THEN DISEASE   |
| 10 | IN A DISH. AND THIS HOPEFULLY WILL BRING US THROUGH  |
| 11 | TO DRUGS WHICH MAY WELL HAVE A VERY POSITIVE EFFECT  |
| 12 | ON THESE KIND OF DISORDERS.                          |
| 13 | THE THIRD PAPER WAS ONE PUBLISHED OUT OF             |
| 14 | THE KAROLINSKA INSTITUTE IN SWEDEN AND, AGAIN, WAS,  |
| 15 | I THINK, AN INTERESTING STUDY. THIS WAS WITH A       |
| 16 | PATIENT WHO HAS A TRACHEAL TUMOR SHOWN HERE IN       |
| 17 | GREEN. SO THIS IS A TUMOR WHICH INVOLVES THE         |
| 18 | TRACHEA AND UPPER BRONCHI THERE. AND SO IN ORDER TO  |
| 19 | ACTUALLY REMOVE THIS TUMOR, YOU ALSO HAD TO REMOVE   |
| 20 | PART OF THE TRACHEA, MAIN PART OF THE TRACHEA, AND   |
| 21 | ALSO THE INITIAL BRONCHIAL TREE.                     |
| 22 | AND SO WHAT THEY DID WAS MANUFACTURE,                |
| 23 | TOTALLY MANUFACTURE, AN ORGAN SHOWN ON THE           |
| 24 | RIGHT-HAND SIDE. SO THEY DID ALL THESE DRAWINGS TO   |
| 25 | MAKE SURE IT ALL FITTED WITH THE ANATOMY OF THE      |
|    |  |

| 1  | PATIENT. AND THEN SHOWN BELOW ARE A BIOREACTOR       |
|----|--|
| 2  | WHICH WHEN THEY MADE THIS ARTIFICIAL TRACHEA AND     |
| 3  | BRONCHUS, THEN THEY PUT THE CELLS INTO THE           |
| 4  | BIOREACTOR. SO GOING BACK, THEY DEVELOPED WHAT IS    |
| 5  | CALLED A POSS-PCU. IT'S A NANOCOMPOSITE POLYMER OF   |
| 6  | A NAME WHICH IS ALMOST IMPOSSIBLE TO PRONOUNCE       |
| 7  | COVALENTLY BONDED TO POLYCARBONATE UREA. SO THIS IS  |
| 8  | AN ARTIFICIAL MATRIX, AND IT'S ONE WHICH IS MEANT TO |
| 9  | REMAIN IN THE BODY. DOESN'T DISSOLVE AWAY.           |
| 10 | AND THEY MADE THAT, WHEN THEY FIGURED OUT            |
| 11 | ALL THE DIMENSIONS, PROCESSED BY AN EXTRUSION-PHASE  |
| 12 | INVERSION METHOD. SO THIS IS TOP QUALITY             |
| 13 | ENGINEERING WITH THESE POLYMERS TO EXACTLY FIT THE   |
| 14 | ANATOMICAL SPACE THAT IT HAD TO REPLACE.             |
| 15 | THEY SEEDED THE BIOREACTOR WITH THE                  |
| 16 | PATIENT'S BONE MARROW CELLS, AND SPECIFICALLY        |
| 17 | MONONUCLEOCYTES, AND SO THEY SEEDED THAT FOR 36      |
| 18 | HOURS IN THAT BIOREACTOR THAT I SHOWED YOU. AND      |
| 19 | THEN POSTOPERATIVELY THEY GAVE THE PATIENTS GCSF AND |
| 20 | EPOETIN BETA. GCSF WILL MOBILIZE STEM CELLS, BLOOD   |
| 21 | STEM CELLS, THE BONE MARROW STEM CELLS, SO IT WILL   |
| 22 | HELP IN GETTING MORE OF THE STEM CELLS INTO THE      |
| 23 | CIRCULATION.   |
| 24 | NOW, THIS GRAFT IS FUNCTIONING NORMALLY,             |
| 25 | VERY NORMALLY FIVE MONTHS AFTER THE GRAFT WAS        |
|    |  |

| 1  | ESTABLISHED. THERE'S EXTRACELLULAR MATRIX COATING    |
|----|--|
| 2  | OF THE POLYMER. CD105, WHICH IS STROMAL MESENCHYMAL  |
| 3  | STEM CELLS, THEY HAVE PATENT ANASTOMOSES, SO THE     |
| 4  | BLOOD SYSTEM IS ATTACHED TO IT. IT'S LINED WITH      |
| 5  | VASCULARIZED NEOMUCOSA AND PARTLY COVERED WITH       |
| 6  | HEALTHY EPITHELIUM WITH THE APPROPRIATELY            |
| 7  | UPREGULATED RECEPTORS AND BIOMARKERS. SO IT LOOKS    |
| 8  | LIKE THIS IS NOW A FUNCTIONAL TRACHEA AND BRONCHUS,  |
| 9  | AND IT IS A RATHER NICE PIECE OF TISSUE ENGINEERING. |
| LO | AND I THOUGHT THIS IS THE KIND OF WORK WHICH IS NOW  |
| L1 | ATTRACTING A LOT OF ATTENTION FOR SURGEONS IN THOSE  |
| L2 | KIND OF SITUATIONS.                                  |
| L3 | SO I THINK THE LAST ONE I WANTED TO BRING            |
| L4 | TO YOUR ATTENTION WAS, I THINK, SOME REALLY MAJOR    |
| L5 | ADVANCES IN LORENZ STUDER'S LAB AT SLOAN KETTERING   |
| L6 | WHICH WAS PUBLISHED IN NATURE. AND DOPAMINE          |
| L7 | PRODUCING NEURONS CAN BE DERIVED FROM PLURIPOTENTIAL |
| L8 | STEM CELLS, EMBRYONIC STEM CELLS, AND IPS CELLS.     |
| L9 | AND THEY LOOK VERY PROMISING IN VITRO, BUT THEY      |
| 20 | PERFORM RATHER POORLY WHEN THEY HAVE BEEN PUT INTO   |
| 21 | ANIMAL MODELS.                                       |
| 22 | SO THIS HAS BEEN A BIT OF A HANDICAP IN              |
| 23 | THE FIELD. BUT THE TEAM HERE AT THE SLOAN KETTERING  |
| 24 | HAS PRODUCED DA NEURONS USING A DIFFERENT METHOD.    |
| 25 | IT'S A FLOOR-PLATE STRATEGY, AND I'VE BEEN IMPRESSED |
|    |  |

| 1  | WITH THAT PARTICULAR STRATEGY THIS TEAM HAS HAD FOR  |
|----|--|
| 2  | A WHILE. AND IT INVOLVES 11 DAYS OF EXPOSURE TO      |
| 3  | SONIC HEDGEHOG AND WNT SIGNALING GIVING AN           |
| 4  | ENGRAFTABLE NEURON AFTER 25 DAYS. SO THESE CELLS IN  |
| 5  | VITRO LOOK DIFFERENT TO THE ONES THAT WERE BEING     |
| 6  | PRODUCED BY OTHERS.                                  |
| 7  | AND THEY SHOWED THAT YOU COULD GET VERY              |
| 8  | EFFICIENT INTEGRATION OF ENGRAFTMENT OF THESE CELLS  |
| 9  | IN TWO RODENT MODELS, THE MOUSE AND THE RAT, AND     |
| 10 | ALSO IN THE MONKEY MODEL OF PARKINSON'S DISEASE,     |
| 11 | WHICH IS VERY NEW, WHICH SHOWS THAT THESE CELLS ARE  |
| 12 | THERE AND THEY APPEAR TO BE FUNCTIONAL. THEY'VE      |
| 13 | RETURNED THOSE ANIMALS TO THE PRE-PARKINSON'S STATE. |
| 14 | THEY SURVIVED WITH FULL FUNCTIONAL COMPETENCE AS DA  |
| 15 | MIDBRAIN NEURONS IMPORTANTLY WITHOUT ANY OVERGROWTH  |
| 16 | BECAUSE THE FETAL CELL PROBLEM WITH TRANSPLANTATION  |
| 17 | IN PARKINSON'S IS FREQUENTLY THE OVERGROWTH OF THOSE |
| 18 | CELLS GIVING AN EXAGGERATED PHENOTYPE TO THOSE       |
| 19 | PATIENTS WHEN IT HAPPENS.                            |
| 20 | SO THESE DATA, I THINK, ARE VERY                     |
| 21 | ENCOURAGING FOR THE USE OF PLURIPOTENTIAL STEM CELLS |
| 22 | AND THE COMPLETE SPECIFICATION OF DA NEURONS AS      |
| 23 | DISTINCT FROM WHAT WE WERE HAVING BEFORE THAT ARE    |
| 24 | NEEDED IN THE RESTORATION OF PARKINSON'S DISEASE.    |
| 25 | SO I'M VERY ENCOURAGED BY THAT WORK.                 |
|    |  |

| 1  | WELL, THE CHAIR HAS REPORTED TO YOU ON THE           |
|----|--|
| 2  | GERON TRIAL, AND THE NOTES HERE REALLY JUST UNDERPIN |
| 3  | SOME OF THE THINGS THAT THE CHAIR WAS TALKING ABOUT, |
| 4  | THAT THE REASON FOR THEIR DECISION WAS STRICTLY      |
| 5  | FINANCIAL WITH THE LIMITED FUNDING THAT THEY HAD     |
| 6  | AVAILABLE. AND THE CURRENT SITUATION IN THE VENTURE  |
| 7  | CAPITAL MARKET IS PRETTY TOUGH TO GET FUNDING AT     |
| 8  | THESE SO-CALLED EARLY STAGES.                        |
| 9  | SO WHAT I'M INTERESTED IN IS THAT THERE'S            |
| 10 | AT LEAST NOW FOUR TEAMS THAT ARE WORKING TO TRY AND  |
| 11 | TAKE OVER THIS PROJECT. THERE ARE FOUR OF THEM. I    |
| 12 | AM NOT AWARE IF ANY OF THOSE FOUR HAVE DROPPED ANY   |
| 13 | OF THEIR INTEREST IN TAKING OVER THIS PROJECT. SO    |
| 14 | AT THIS STAGE, WHILE THEY KEEP ME INFORMED, I DON'T  |
| 15 | HAVE ANY INFORMATION TO INDICATE THAT THEY WILL TAKE |
| 16 | OVER, BUT I'M EXTREMELY OPTIMISTIC. AND I JUST       |
| 17 | WANTED TO INFORM YOU OF THAT, THAT WE ARE WORKING    |
| 18 | BEHIND THE SCENES TO REALLY HELP THESE PROSPECTIVE   |
| 19 | NEW ENTITIES TAKE OVER THAT PROJECT. AND I REASSURE  |
| 20 | YOU THAT THE GERON COMPANY ITSELF IS VERY POSITIVE   |
| 21 | ABOUT WANTING TO MOVE THAT PROJECT INTO A NEW        |
| 22 | ENTITY. SO EVERYTHING THAT I SEE AT THIS SPACE       |
| 23 | TELLS ME THAT IT WILL TRANSMIT ONWARDS.              |
| 24 | I THINK WE WANTED TO BRING TO YOUR                   |
| 25 | ATTENTION A PAPER WE'VE JUST PUBLISHED, NANCY KOCH,  |
|    | 22   |
|    |  |

| 1  | ELONA BAUM, AND MYSELF, IN THE JOURNAL CELL STEM    |
|----|---|
| 2  | CELL ON THE ISSUE OF NONPATENTABILITY OF HUMAN      |
| 3  | EMBRYONIC STEM CELLS IN EUROPE. I'M HAPPY TO SEND   |
| 4  | YOU THE PAPER BECAUSE IT'S JUST IT WAS JUST         |
| 5  | PUBLISHED THIS WEEK. AND IF YOU'D LIKE TO READ IT,  |
| 6  | IT'S A VERY SHORT PAPER BY US ON WHAT WE THINK THE  |
| 7  | ISSUES ARE HERE.                                    |
| 8  | BUT SUMMARIZED VERY QUICKLY, WE EXPECT              |
| 9  | SIGNIFICANT, BUT VARIED IMPACT IN THE EU, AND THIS  |
| 10 | WILL NOT MARK AN END TO HUMAN EMBRYONIC STEM CELL   |
| 11 | WORK IN EUROPE.                                     |
| 12 | THE BASIC SCIENCE, THERE WILL BE MINIMAL            |
| 13 | IMPACT. IN THE TRANSLATIONAL SCIENCE, THE IMPACT    |
| 14 | EXPECTED, BUT PARTICIPANTS WILL RESPOND IN ACCORD   |
| 15 | WITH THEIR INDIVIDUAL INTERESTS. AND CLINICAL       |
| 16 | TRIALS, WE EXPECT CLINICAL TRIALS WILL STILL OCCUR  |
| 17 | IN THE EU. SO THEY WERE OUR MAJOR POINTS IN RESPECT |
| 18 | TO THIS. AND AS I SAID, I CAN GET CANDACE TO SEND   |
| 19 | ANY OF YOU OR ALL OF YOU A COPY OF THAT PAPER WHICH |
| 20 | HAS JUST COME OUT IN CELL STEM CELL.                |
| 21 | UPCOMING RFA'S, JUST TO ALERT YOU WITH              |
| 22 | WHAT'S HAPPENING, THE CREATIVITY AWARDS, THE GRANTS |
| 23 | WORKING GROUP REVIEW OF APPLICATIONS WILL BE IN     |
| 24 | FEBRUARY, SO IT'S EARLY NEXT YEAR.                  |
| 25 | EARLY TRANSLATIONAL III, GRANTS WORKING             |
|    |   |

| 1  | GROUP WILL BE REVIEWING THAT IN MARCH NEXT YEAR. SO  |
|----|--|
| 2  | FEBRUARY, MARCH EACH MONTH.                          |
| 3  | DISEASE TEAM THERAPY DEVELOPMENT, PART 2,            |
| 4  | THE RESEARCH AWARD, THE GRANTS REVIEW OF             |
| 5  | APPLICATIONS WILL BE IN APRIL, AGAIN, THE NEXT       |
| 6  | MONTH. SO JEFF AND COLLEAGUES ARE GOING TO HAVE A    |
| 7  | BUSY TIME MOVING FORWARD. SORRY, BUT SOME PEOPLE     |
| 8  | ENJOY IT AND OTHERS FIND IT REALLY QUITE A TASK TO   |
| 9  | GET TO THEM ALL. BUT ANYWAY, IT'S GOING TO BE A      |
| 10 | BUSY TIME.   |
| 11 | BASIC BIOLOGY IV, GRANTS WORKING GROUP               |
| 12 | REVIEW WILL BE IN JUNE.                              |
| 13 | AND WE ARE PUTTING TO YOU AN IPS CELL                |
| 14 | INITIATIVE AND CONCEPT AT THIS MEETING AND HOPEFULLY |
| 15 | A GENOMICS INITIATIVE IN JANUARY. SO WE HAVE A BUSY  |
| 16 | TIME, A REAL BUSY TIME COMING UP.                    |
| 17 | JUST TO INFORM YOU QUICKLY, WE'RE ENGAGED            |
| 18 | IN A PUBLIC/PRIVATE PARTNERSHIP WITH NINDS ON        |
| 19 | NEURODEGENERATIVE DISEASES. IN 2011 NINDS PROPOSED   |
| 20 | A PUBLIC/PRIVATE PARTNERSHIP, GOVERNMENT AGENCY,     |
| 21 | PATIENT ADVOCATE FOUNDATIONS, AND BIOPHARMACEUTICAL  |
| 22 | INDUSTRY IN IPS RESEARCH. AND SO THIS HAS BEEN       |
| 23 | HAPPENING. IPS CELL RESEARCH RESOURCE IN             |
| 24 | NEURODEGENERATIVE DISEASES TARGETS SPECIFICALLY      |
| 25 | HUNTINGTON'S DISEASE, PARKINSON'S DISEASE, AND ALS.  |
|    |  |

| 1  | AND THE REVIEW CRITERIA ARE AS DESCRIBED, WHICH IS   |
|----|--|
| 2  | MUCH THE SAME AS OURS.                               |
| 3  | WE ARE GOING TO BE PROVIDING FUNDING TO              |
| 4  | MERITORIOUSLY REVIEWED CALIFORNIA APPLICANTS AND     |
| 5  | THEN ONE APPLICANT, I THINK, IS A PI FROM UC IRVINE  |
| 6  | WITH A FOCUS ON HUNTINGTON'S DISEASE THAT HAS        |
| 7  | EVOLVED OUT OF THAT PARTICULAR PROCESS.              |
| 8  | A COLLABORATIVE FUNDING PARTNERSHIP                  |
| 9  | UPDATE, WE'RE NOW ACTUALLY WORKING VERY CLOSELY WITH |
| 10 | NIH. A POTENTIAL DISEASE TEAM RESEARCH AWARD         |
| 11 | COLLABORATIONS ARE BEING CONSIDERED BY THE NIH AND   |
| 12 | THEIR INTRAMURAL AND EXTRAMURAL MEMBERS. WE'RE       |
| 13 | HAVING A PARKINSON'S DISEASE ROUNDTABLE DISCUSSION   |
| 14 | IN DECEMBER AND WE'LL HAVE ANOTHER ONE IN MARCH, AND |
| 15 | WE'RE LOOKING AT STANDARDIZATION, THAT'S FOR STUDY   |
| 16 | SUBJECTS' CONSENTS AND MTA'S, MATERIAL TRANSFER      |
| 17 | AGREEMENTS, SO THAT WE CAN GET THAT HARMONIZED       |
| 18 | ACROSS THAT SPACE.                                   |
| 19 | WE HAVE AN ET III, THE EARLY TRANSLATION             |
| 20 | RFA, NOW HAS CHINA, GERMANY, AND JAPAN INVOLVED.     |
| 21 | AND THE BASIC BIOLOGY RFA HAS CHINA, GERMANY,        |
| 22 | FRANCE, AND INDIA INVOLVED. SO NEW PARTNERS NOW      |
| 23 | COMING INTO THOSE RFA'S.                             |
| 24 | THE PARKINSON'S DISEASE ROUNDTABLE                   |
| 25 | DISCUSSION IS HAPPENING ON DECEMBER THE 16TH, AND WE |
|    |  |

| 1  | WOULD WELCOME ANY OF THE BOARD MEMBERS WHO ARE       |
|----|--|
| 2  | INTERESTED IN THAT. IT'S A WAY OF TRYING TO BRING    |
| 3  | NIH INTEREST TOGETHER WITH OUR INTEREST AND SEE IF   |
| 4  | WE CAN ACTUALLY ACCELERATE AND IMPROVE OUR CAPACITY  |
| 5  | BY CREATING SOME LINKAGES TO THE FAST-MOVING         |
| 6  | PARKINSON'S PROJECTS THAT ARE SUPPORTED BY THE       |
| 7  | NATIONAL INSTITUTES OF HEALTH. SO IT BUILDS ON OUR   |
| 8  | COLLABORATIVE AGREEMENT, AND IT'S ENABLING US TO     |
| 9  | MAKE CONNECTIONS IN THIS FIRST AREA OF PRIORITY THAT |
| 10 | WE'VE IDENTIFIED AS OUR FIRST AREA OF PRIORITY.      |
| 11 | BRIEFLY, AND THERE ARE SOME ADDITIONAL               |
| 12 | NOTES IN YOUR DOCUMENT THAT I'M NOT GOING TO TALK ON |
| 13 | BECAUSE THEY'RE THERE FOR YOU TO READ, BUT THERE WAS |
| 14 | A VERY GOOD MEETING ON THE MESA, THE STEM CELL       |
| 15 | MEETING ON THE MESA, WHICH INCLUDED THE INVESTOR AND |
| 16 | PARTNERING FORUM. THIS MAY WELL BECOME AN ANNUAL     |
| 17 | EVENT, I THINK. THE ARM GROUP, THE ALLIANCE FOR      |
| 18 | REGENERATIVE MEDICINE, IS INVOLVED. THEY SEE THIS    |
| 19 | AS A VERY USEFUL PARTNERING EVENT. IT'S CONNECTED    |
| 20 | TO SOME STRONG SCIENCE.                              |
| 21 | THE OPENING OF THE SANFORD CENTER THERE IS           |
| 22 | ALSO A STRONG REASON FOR THEM TO BE ASSOCIATED. AND  |
| 23 | ALL THE STEM CELL COMPANIES FROM AROUND THE U.S.     |
| 24 | HAVE SHOWN STRONG INTEREST IN GOING THERE. AND IF    |
| 25 | IT IS ON THE CALENDAR FOR THE PHARMACEUTICAL AND     |
|    |  |

| 1  | BIOTECH COMPANIES, THEN THEY WILL REGISTER THAT EACH |
|----|--|
| 2  | YEAR AND END UP COMING. SO I THINK IT'S LIKELY THAT  |
| 3  | THAT'S GOING TO CONTINUE. AND SO I THINK THAT'S A    |
| 4  | REALLY GOOD DEVELOPMENT IN THIS SPACE. IT'S          |
| 5  | ENABLING PARTNERSHIPS TO BE DEVELOPED RIGHT ACROSS   |
| 6  | THE SPACE AND, OF COURSE, WILL INCLUDE SOME OF OUR   |
| 7  | TEAMS THAT ARE EVOLVING THROUGH THE DISEASE TEAMS OR |
| 8  | EVEN IN EARLY TRANSLATION.                           |
| 9  | SO WE THINK THAT THIS IS A REALLY                    |
| 10 | IMPORTANT NEW DEVELOPMENT MEETING BECAUSE IT HAS     |
| 11 | THAT COMPONENT. IT'S GOT A STRONG SCIENCE COMPONENT  |
| 12 | AND ALSO GOT A STRONG BIOTECH COMPONENT, AND WITH    |
| 13 | BOTH OF THEM I THINK THAT ENABLES PARTNERSHIPPING TO |
| 14 | REALLY EVOLVE STRONGLY. AND IN ADDITION TO THAT, WE  |
| 15 | HAVE THE MEETINGS IN SAN FRANCISCO THAT HAPPEN EVERY |
| 16 | JANUARY, THE J. P. MORGAN MEETINGS, WHICH WILL TEND  |
| 17 | TO BACK THAT MEETING UP BECAUSE IT'S NOT LONG AFTER. |
| 18 | IT'S AT THE END OF NOVEMBER IN LA JOLLA AND THEN IN  |
| 19 | JANUARY IN SAN FRANCISCO.                            |
| 20 | YOU UPCOMING WORKSHOP MEETINGS, THERE'S A            |
| 21 | TISSUE ENGINEERING WORKSHOP, TO REMIND YOU, WE'RE    |
| 22 | HOSTING JANUARY 12TH TO THE 13TH IN SAN FRANCISCO.   |
| 23 | OUR GOAL IS TO ADDRESS OPPORTUNITIES FOR STEM CELLS  |
| 24 | AND TISSUE ENGINEERING, AND WE'RE USING A CLOSED     |
| 25 | MEETING WITH COLD SPRING HARBOR RULES TO ENABLE A    |

| 1  | LOT OF DISCUSSION OF CURRENT RESEARCH AND            |
|----|--|
| 2  | UNPUBLISHED DATA.                                    |
| 3  | THERE'S ALSO THE ROUNDTABLE ON PARKINSON'S           |
| 4  | DISEASE ON DECEMBER THE 16TH AS I'VE ALREADY SAID.   |
| 5  | YOU'VE BEEN INTRODUCED TO MATTHEW                    |
| 6  | PLUNKETT, IN CASE YOU DIDN'T RECOGNIZE HIM IN A TIE. |
| 7  | NO, HE'S NOT IN A TIE AT ALL. HE'S IN A NICE SUIT    |
| 8  | AND SHIRT. HE'S A VERY WELCOME ADDITION TO THE TEAM  |
| 9  | AND IS ALREADY MAKING SOME VERY INTERESTING          |
| 10 | CONNECTIONS BETWEEN INDUSTRY, FINANCE, AND US        |
| 11 | ALREADY. SO WE WELCOME YOU, MATT. AND WE'RE          |
| 12 | ALREADY ENJOYING THE INTELLECT THAT YOU'VE BROUGHT   |
| 13 | AND THE EXPERIENCE THAT YOU BRING FROM A DIFFERENT   |
| 14 | SECTOR. AND PARTICULARLY I THINK ELONA AND MATT      |
| 15 | WILL WORK REALLY HAND IN HAND TO HELP US DELIVER     |
| 16 | SOME OF OUR BUSINESS INTERESTS AND ACTUALLY          |
| 17 | RECONFIGURE SOME OF OUR FINANCING TO BE EVEN MORE    |
| 18 | EFFECTIVE AND HOPEFULLY TO DRAW IN SOME MORE FUNDING |
| 19 | FROM THE OUTSIDE.                                    |
| 20 | FISCALLY I'M REPORTING TO YOU ON THE                 |
| 21 | EXPENDITURES OF THE THREE MONTHS. THIS IS A PRETTY   |
| 22 | USUAL PRESENTATION. I THINK MATT WILL HAVE A MUCH    |
| 23 | MORE DETAILED PRESENTATION IN THE FUTURE WHEN HE'S   |
| 24 | LOGGED ON AND BECOMES THE FINANCIAL GURU OF ALL      |
| 25 | EXPENDITURES. SO IT'S SHOWN HERE. THE BLUE IS THE    |
|    | 28   |

| 1  | BUDGET ALLOCATION FOR SALARIES AND BENEFITS AND     |
|----|---|
| 2  | OE&E. SO THAT'S THE MATERIALS EXPENDITURE AND SO ON |
| 3  | IN THE OTHER SPACE THERE, THE MIDDLE SPACE, AND THE |
| 4  | END IS THE TOTAL OVERALL. SO YOU'VE GOT BUDGET IN   |
| 5  | ORANGE AS EXPENDITURE RECORDED JULY TILL OCTOBER,   |
| 6  | AND THE ENDING BALANCE IS IN GREEN.                 |
| 7  | AND YOU SHOULD NOTE THAT THERE'S A BIT OF           |
| 8  | A DELAY IN THIS THREE MONTHS. SO WE'LL BE A LITTLE  |
| 9  | BIT BEHIND IN TERMS OF PAYING THE EXPENSES, BUT     |
| 10 | WE'RE PRETTY MUCH, I JUDGE, TO BE VERY CLOSE TO     |
| 11 | BEING ON BUDGET AT THIS POINT IN TIME FROM ALL OUR  |
| 12 | EXPERIENCES. SO WE'RE ON BUDGET. WE'RE NOT          |
| 13 | EXPERIENCING ANY EXCESSES OF EXPENDITURE AT THIS    |
| 14 | STAGE. AND SO I CAN REPORT TO YOU FINANCIAL WATER   |
| 15 | IS CALM. WE'RE HAPPY TO ANSWER ANY QUESTIONS YOU    |
| 16 | HAVE ON THAT.                                       |
| 17 | SO FROM US, FROM ALL OF US, AND YOU WILL            |
| 18 | SEE THERE SEEMS LIKE A LOT OF US, BUT THEY'RE A     |
| 19 | FANTASTIC GROUP OF PEOPLE, I HAVE TO SAY, CHAIR.    |
| 20 | AND I WANT TO THANK EACH AND EVERY ONE OF THEM.     |
| 21 | THEY DON'T ALWAYS COME HERE, BUT THIS IS THE GROUP  |
| 22 | THAT UNDERPINS ALL THE CAPACITY. THIS IS WHAT WE    |
| 23 | REPORT TO YOU ON. THEY'RE BUILDING ALL OF THIS      |
| 24 | CAPACITY BEHIND US. AND I TELL YOU THEY WORK,       |
| 25 | THEY'RE THE HARDEST WORKING GROUP OF PEOPLE THAT    |
|    | 20  |
|    |   |

| 1  | I'VE REALLY EVER COME ACROSS. AND WHENEVER I NEED   |
|----|---|
| 2  | OR WE NEED THEM TO PITCH IN BECAUSE THERE'S         |
| 3  | SOMETHING THAT NEEDS TO BE DONE, THEY DO IT NO      |
| 4  | MATTER WHAT TIME OF THE DAY OR EVENING OR WEEKEND.  |
| 5  | SO HATS OFF TO THAT WONDERFUL GROUP OF PEOPLE. AND  |
| 6  | THANK YOU VERY MUCH.                                |
| 7  | (APPLAUSE.)   |
| 8  | CHAIRMAN THOMAS: THANK YOU VERY MUCH, DR.           |
| 9  | TROUNSON. I'D LIKE TO TAKE ONE THING SLIGHTLY OUT   |
| 10 | OF ORDER, WHICH IS PUBLIC COMMENT WHICH IS LISTED   |
| 11 | TOWARDS THE END HERE. I THINK WE HAVE SOME PEOPLE   |
| 12 | HERE WHO WOULD LIKE TO SAY A FEW WORDS. AND RATHER  |
| 13 | THAN HAVE TO SIT THROUGH HOURS WORTH OF AGENDA      |
| 14 | ITEMS, IF THERE ARE MEMBERS OF THE PUBLIC WHO WOULD |
| 15 | LIKE TO MAKE PUBLIC COMMENT, LET'S DO WE HAVE ANY   |
| 16 | MEMBERS OF THE PUBLIC WHO WOULD LIKE TO MAKE PUBLIC |
| 17 | COMMENT? WE DON'T. OKAY. WELL, VERY GOOD. THANK     |
| 18 | YOU.  |
| 19 | OKAY.   |
| 20 | MS. BONNEVILLE: CHAIRMAN, I JUST WANTED             |
| 21 | TO THE RECORD SHOULD REFLECT THAT MEMBERS QUINT,    |
| 22 | SHEEHY, PIZZO, AND SHESTACK HAVE ARRIVED AND WE NOW |
| 23 | HAVE A QUORUM.                                      |
| 24 | CHAIRMAN THOMAS: THANK YOU VERY MUCH,               |
| 25 | MARIA. ON TO ITEM NO. 6, CONSIDERATION OF THE       |
|    | 30  |
|    | J <b>U</b>  |

| 1  | FINANCIAL AUDIT FOR THE PAST FISCAL YEAR. WE HAVE,   |
|----|--|
| 2  | I BELIEVE, RUSS ROBERTSON FROM MGO TO MAKE A         |
| 3  | PRESENTATION. MR. ROBERTSON.                         |
| 4  | MR. ROBERTSON: THANK YOU. MY NAME IS                 |
| 5  | RUSS ROBERTSON. I'M WITH MACIAS, GINI, & O'CONNELL.  |
| 6  | WE'VE BEEN THE INDEPENDENT AUDITOR FOR CIRM FOR THE  |
| 7  | PAST FIVE YEARS NOW. I HAVE BEEN THE MANAGER ON THE  |
| 8  | ENGAGEMENT FOR THE PREVIOUS LAST YEAR AND THIS YEAR. |
| 9  | AND I WANTED TO THANK THE COMMITTEE FOR ALLOWING US  |
| 10 | TO REPORT ON THE FINANCIAL STATEMENTS FOR THIS YEAR. |
| 11 | FOR THIS YEAR WE LOOKED AT THE YEAR-END              |
| 12 | JUNE 30TH, 2011. THAT WAS OUR SCOPE OF WORK. AND     |
| 13 | WE LOOKED AT IT WAS A FINANCIAL STATEMENT AUDIT.     |
| 14 | AND AS A BY-PRODUCT, WE ALSO ISSUED WHAT WE CALL THE |
| 15 | SAS 114 REQUIRED COMMUNICATION LETTER. AND I         |
| 16 | BELIEVE IN YOUR PACKET TODAY YOU HAVE BOTH OF THOSE  |
| 17 | REPORTS, AND I'LL BE REFERRING TO THOSE AS I GO OVER |
| 18 | THE KIND OF RESULTS LATER ON IN THIS TALK HERE.      |
| 19 | INITIALLY I'D LIKE TO JUST KIND OF QUICKLY           |
| 20 | OUTLINE THE RESPONSIBILITIES OF THE INDEPENDENT      |
| 21 | AUDITOR AS COMPARED TO THE MANAGEMENT OF CIRM. OUR   |
| 22 | RESPONSIBILITY IS TO PLAN AND PERFORM THE AUDIT TO   |
| 23 | OBTAIN A REASONABLE ASSURANCE THAT THE FINANCIAL     |
| 24 | STATEMENTS ARE FAIRLY STATED IN ALL MATERIAL RESPECT |
| 25 | AND IS PRESENTED IN ACCORDANCE WITH GENERALLY        |
|    |  |

| 1  | ACCEPTED ACCOUNTING PRINCIPLES.                      |
|----|--|
| 2  | WE ALSO OBTAIN AN UNDERSTANDING, AN                  |
| 3  | OVERALL UNDERSTANDING, OF THE INTERNAL CONTROL OVER  |
| 4  | BOTH THE FINANCIAL REPORTING AND THE COMPLIANCE, ANY |
| 5  | COMPLIANCE THAT ARE SIGNIFICANT LAWS THAT CIRM HAS   |
| 6  | TO FOLLOW AND ANY REGULATIONS OR ANY OTHER           |
| 7  | AGREEMENTS THAT YOU MAY HAVE IN PLACE. WE ALSO       |
| 8  | THROUGH THE COURSE OF OUR AUDIT IDENTIFY ANY         |
| 9  | SIGNIFICANT DEFICIENCIES OR MATERIAL WEAKNESSES IN   |
| 10 | THOSE CONTROLS. WE WOULD ALSO REPORT THOSE TO YOU    |
| 11 | AS WELL.   |
| 12 | MANAGEMENT'S RESPONSIBILITIES, IT'S                  |
| 13 | MANAGEMENT WHO PRODUCES THE FINANCIAL STATEMENTS.    |
| 14 | THEY ARE REQUIRED OR RESPONSIBLE FOR PREPARING THOSE |
| 15 | FINANCIAL STATEMENTS IN ACCORDANCE WITH THE          |
| 16 | GENERALLY ACCEPTABLE PRINCIPLES, AND THEY ALSO ARE   |
| 17 | RESPONSIBLE FOR DESIGNING AND MAINTAINING A SYSTEM   |
| 18 | OF INTERNAL CONTROLS WHICH WILL ALLOW THEM TO        |
| 19 | PRESENT THE FINANCIAL STATEMENTS ACCORDING TO GAP.   |
| 20 | SO I'LL GO INTO THE TWO REPORTS YOU HAVE             |
| 21 | HERE. THE FIRST ONE I'LL GO THROUGH IS THE           |
| 22 | FINANCIAL STATEMENT AUDIT ITSELF. AND THROUGH THE    |
| 23 | COURSE OF OUR WORK, WE WERE ABLE TO DO OUR           |
| 24 | PROCEDURES AND GAIN SUFFICIENT EVIDENCE TO ALLOW US  |
| 25 | THAT I'M PLEASED TO ANNOUNCE THAT WE HAVE ISSUED AN  |
|    |  |

| 1  | UNQUALIFIED OPINION, WHICH IS THE HIGHEST LEVEL OF   |
|----|--|
| 2  | ASSURANCE THAT COULD BE GIVEN DURING A FINANCIAL     |
| 3  | STATEMENT AUDIT. WE DIDN'T FIND ANY MATERIAL         |
| 4  | WEAKNESSES OR SIGNIFICANT DEFICIENCIES THROUGH OUR   |
| 5  | WORK IN INTERNAL CONTROLS AND THE PRESENTATION OF    |
| 6  | THE FINANCIAL STATEMENTS. SO THAT JUST SHOWS THE     |
| 7  | DILIGENCE THAT MANAGEMENT HAS OF EMPLOYING THE       |
| 8  | GENERAL THE GUIDANCE THE GAP HAS SET FORTH TO        |
| 9  | PREPARE THESE FINANCIAL STATEMENTS. THERE WAS NO     |
| 10 | SIGNIFICANT DEFICIENCIES TO REPORT.                  |
| 11 | AND ALSO IN THAT REPORT, HAD THERE BEEN              |
| 12 | SOME MANAGEMENT COMMENTS THAT WE WANTED TO           |
| 13 | COMMUNICATE WITH YOU, THEY'D HAVE BEEN THERE. AND    |
| 14 | AGAIN, THERE WERE NONE THAT WERE SIGNIFICANT TO      |
| 15 | REPORT. SO THAT'S ALSO ANOTHER SOURCE OF EVIDENCE    |
| 16 | TO SHOW THAT MANAGEMENT IS DILIGENT IN PREPARING     |
| 17 | THESE FINANCIAL STATEMENTS AN ADHERING TO THE GAP    |
| 18 | GUIDANCE.  |
| 19 | THE SECOND OF THE REPORTS, THIS IS A                 |
| 20 | BY-PRODUCT OF OUR BEFORE I GO INTO THAT, ACTUALLY    |
| 21 | IF YOU DO TAKE THE TIME TO GO THROUGH THE FINANCIAL  |
| 22 | STATEMENT AUDIT, I JUST WANTED TO POINT OUT A COUPLE |
| 23 | SECTIONS IN THERE THAT I BELIEVE ARE THE MOST        |
| 24 | CRITICAL. THE FIRST IN THE FRONT OF IT IS CALLED     |
| 25 | THE "MANAGEMENT DISCUSSION ANALYSIS." AND YOU KNOW,  |
|    |  |

| 1  | WITHOUT THESE DOCUMENTS OR THIS SECTION, IT HELPS    |
|----|--|
| 2  | GIVE CONTEXT TO THE FINANCIAL STATEMENTS, THE        |
| 3  | ECONOMIC CONTEXT, THE HISTORICAL CONTEXT. SO BEFORE  |
| 4  | YOU READ THE FINANCIAL STATEMENTS, I SUGGEST LOOKING |
| 5  | AT THAT SECTION FIRST BECAUSE IT GIVES YOU KIND OF   |
| 6  | AN OVERALL SUMMARY OF THE YEAR'S ACTIVITY, SOME      |
| 7  | CHANGES, CHANGES IN REVENUE THAT WERE SIGNIFICANT,   |
| 8  | AND IT'S KIND OF OUTLINED IN THERE TO SHOW EXACTLY   |
| 9  | DURING THE YEAR WHAT EXACTLY OCCURRED IN OPERATIONS. |
| 10 | THE SECOND REPORT IS WHAT WE CALL THE                |
| 11 | REQUIRED COMMUNICATION LETTER, AND THAT IS REQUIRED  |
| 12 | BY OUR STANDARDS TO ISSUE WITH THIS REPORT. AND IT   |
| 13 | COMMUNICATES A FEW THINGS, FOR EXAMPLE, THE          |
| 14 | ACCOUNTING PRINCIPLES USED BY THE MANAGEMENT. IN     |
| 15 | THAT SECTION YOU WILL ACTUALLY SEE THAT MANAGEMENT   |
| 16 | HAS APPLIED A NEW GOVERNMENTAL ACCOUNTING STANDARD   |
| 17 | THIS YEAR. IT'S GASB 54. SO IF YOU COMPARE THE TWO   |
| 18 | YEARS, THE PRESENTATIONS OF FUND BALANCE IS GOING TO |
| 19 | LOOK SLIGHTLY DIFFERENT BECAUSE OF THE               |
| 20 | CLASSIFICATIONS AND THE DESIGNATIONS THAT GASB HAS   |
| 21 | REQUIRED ENTITIES, GOVERNMENTAL ENTITIES, TO SHOW    |
| 22 | FUND BALANCE NOW. SO THEY'RE GOING TO BE SLIGHTLY    |
| 23 | DIFFERENT IF YOU COMPARE THE TWO YEARS. AND IN THAT  |
| 24 | SECOND REPORT IT KIND OF OUTLINES EXACTLY WHAT THAT  |
| 25 | IS AND JUST IDENTIFIES THAT MANAGEMENT HAS APPLIED   |
|    |  |

| 1  | THAT NEW ACCOUNTING PRINCIPLE.                       |
|----|--|
| 2  | HAD THERE BEEN ANY, LIKE I SUGGEST, ANY              |
| 3  | SIGNIFICANT DEFICIENCIES, THOSE ALSO WOULD HAVE BEEN |
| 4  | REPORTED, ANY SUBSTANTIAL ESTIMATES THAT ARE USED BY |
| 5  | CIRM. FOR CIRM THERE ISN'T ANY SUBSTANTIAL           |
| 6  | ESTIMATES USED IN THE FINANCIAL STATEMENTS.          |
| 7  | COMPENSATED ABSENCES IS NOT SIGNIFICANT. THAT WOULD  |
| 8  | HAVE BEEN WE WOULD HAVE DISCLOSED THAT IF IT HAD     |
| 9  | BEEN SIGNIFICANT TO THE FINANCIAL STATEMENTS, BUT    |
| 10 | FOR CIRM IT'S NOT SIGNIFICANT, AND THEY DON'T USE    |
| 11 | ANY SIGNIFICANT ESTIMATES.                           |
| 12 | SO WITH THAT, I JUST WANTED TO THANK                 |
| 13 | CIRM'S MANAGEMENT FOR THE ASSISTANCE IN PREPARING    |
| 14 | THESE FINANCIAL STATEMENTS AND GOING THROUGH THE     |
| 15 | AUDIT FOR THIS YEAR. NO ISSUES WERE BROUGHT TO       |
| 16 | LIGHT OR OUR ATTENTION. SO, AGAIN, IT JUST SHOWS     |
| 17 | THE HARD WORK AND THE MANNER THAT THEY PUT THESE     |
| 18 | FINANCIAL STATEMENTS ARE ACCURATE AND THEY DO A      |
| 19 | LOT THEIR DILIGENCE IN PUTTING THESE TOGETHER IS     |
| 20 | SUBSTANTIAL. SO WITH THAT, I CAN TAKE ANY QUESTIONS  |
| 21 | OR IF YOU HAVE ANY COMMENTS FOR THIS YEAR.           |
| 22 | CHAIRMAN THOMAS: COMMENTS BY MEMBERS OF              |
| 23 | THE BOARD? MARCY, ON BEHALF OF THE FINANCE           |
| 24 | SUBCOMMITTEE, WOULD YOU LIKE TO MAKE A COMMENT HERE? |
| 25 | MS. FEIT: JUST WANT TO AGAIN ECHO THANK              |
|    |  |

| 1        | YOU TO THE STAFF FOR THEIR WORK IN MAKING SURE THAT  |
|----------|--|
| 2        | WE PRODUCE THE RIGHT FINANCIAL STATEMENTS AND  |
| 3        | ENTRIES. AND I HAVE NO OTHER COMMENTS. THANK YOU.  |
| 4        | CHAIRMAN THOMAS: THANK YOU. AND GIVEN  |
| 5        | THAT WE'VE GOTTEN THE MOST GLOWING AUDIT WE CAN GET,   |
| 6        | WE'RE VERY GRATEFUL FOR THAT, AS ALWAYS, CONSISTENT  |
| 7        | WITH WHAT WE'VE HAD IN THE PAST. SO THANK YOU VERY   |
| 8        | MUCH FOR YOUR REPORT.  |
| 9        | MR. ROBERTSON: THANK YOU.  |
| 10       | CHAIRMAN THOMAS: NEXT UP ON THE AGENDA IS  |
| 11       | A DISCUSSION AND PRESENTATION OF THE ONGOING   |
| 12       | DISCUSSION ABOUT THE STRATEGIC PLAN. DR. FEIGAL,   |
| 13       | WOULD YOU PLEASE PRESENT.  |
| 14       | DR. FEIGAL: HI. I'M PLEASED TO BRING YOU   |
| 15       | AN UPDATE ON OUR ONGOING DISCUSSIONS ABOUT THE   |
| 16       | STRATEGIC PLAN. WHAT WE'D LIKE TO DO TODAY IS GIVE   |
| 17       | YOU AN UPDATE ON THE DISCUSSIONS. YOU WERE PROVIDED  |
| 18       | A PREREAD TEN DAYS AGO. I HOPE YOU'VE TAKEN A  |
| 19       | CHANCE TO REVIEW IT AND GO THROUGH IT QUICKLY  |
| 20       | BECAUSE I'M NOT GOING TO GO THROUGH IT STEP BY STEP,   |
| 21       | BUT JUST ASSUME ALL OF YOU HAVE READ AND COME  |
| 22       | PREPARED IF YOU HAVE ANY QUESTIONS REGARDING THAT.   |
| 23       | IN ADDITION, WHAT I'D LIKE TO DO IS  |
|          |  |
| 24       | PROVIDE YOU SOME ADDITIONAL UPDATES ON CONTINUED   |
| 24<br>25 | PROVIDE YOU SOME ADDITIONAL UPDATES ON CONTINUED STAKEHOLDERS DISCUSSIONS THAT WE'VE HAD SINCE THE |

| 1  | PREREAD THAT YOU RECEIVED. AND THIRDLY, WE'D LIKE    |
|----|--|
| 2  | TO GET YOUR INPUT ON THE TYPE OF INFORMATION THAT    |
| 3  | YOU WOULD FIND USEFUL TO INFORM A MORE DETAILED      |
| 4  | DISCUSSION OF THE STRATEGIC PLAN WHICH WE'RE         |
| 5  | PLANNING TO BRING TO YOU IN JANUARY. SO THOSE ARE    |
| 6  | THE THREE OBJECTIVES OF THE PRESENTATION TODAY.      |
| 7  | SO BRIEFLY, THESE ARE THE ELEMENTS. I'M              |
| 8  | GOING TO CONCISELY GO OVER THE DRAFT OF THE 2012     |
| 9  | STRATEGIC PLAN ELEMENTS, AN UPDATE ON STAKEHOLDERS'  |
| 10 | INPUT, AND THEN WE'LL GO THROUGH NEXT STEPS.         |
| 11 | SO THE CURRENT SITUATION, AS YOU KNOW, IS            |
| 12 | WE HAVE THE STRATEGIC PLAN INITIALLY IN '06, UPDATED |
| 13 | '09-'10, EXTERNAL REVIEW OCTOBER 2010, AND NOW WE'RE |
| 14 | REVISING IT FOR 2012. THIS IS JUST A LISTING OF THE  |
| 15 | DISCUSSIONS TO DATE. THEY HAVE BEEN RATHER           |
| 16 | EXTENSIVE. WE'VE HAD A LOT OF INTERNAL DISCUSSIONS,  |
| 17 | A LOT OF EXTERNAL DISCUSSIONS. WE'VE ALREADY HAD     |
| 18 | TWO DISCUSSIONS WITH YOU IN OUR PROCESS UPDATES. WE  |
| 19 | WILL ALSO BE SHARING OUR DRAFT OF THESE PLANS, THE   |
| 20 | SAME PREREADS THAT YOU'VE SEEN AT THE PREVIOUS BOARD |
| 21 | AND NOW THIS ONE, WITH OUR INSTITUTE OF MEDICINE     |
| 22 | REVIEW COMMITTEE.                                    |
| 23 | SO AS IN PRIOR YEARS, WE'RE SEEKING YOUR             |
| 24 | PERSPECTIVES AND YOUR INPUT AS WE SHAPE THIS PLAN.   |
| 25 | WE ARE ACTUALLY AT STEP 2 AT THIS POINT.             |
|    | 37   |
|    |  |

| 1  | WE'RE SEEKING INPUTS AND WE'RE TRYING TO             |
|----|--|
| 2  | CONSOLIDATE, PUT THEM TOGETHER, SO THAT WE CAN EMBED |
| 3  | THAT INPUT IN THE FINAL STRATEGIC PLAN.              |
| 4  | THE PROCESS THAT WE USED FOR GETTING                 |
| 5  | STRATEGIC INPUT WAS REALLY GOING THROUGH THREE MAJOR |
| 6  | ISSUES THAT WE WANTED INPUT ON. WE WANTED TO OBTAIN  |
| 7  | PERSPECTIVES ON HOW WELL CIRM IS DOING IN ACHIEVING  |
| 8  | ITS GOALS. SECONDLY, WE WANT TO DETERMINE WHETHER    |
| 9  | PROPOSED REVISIONS TO OUR STRATEGIC OBJECTIVES AND   |
| 10 | STRATEGIES WERE APPROPRIATE; AND, THIRDLY, WE WANTED |
| 11 | TO IDENTIFY ADDITIONAL AREAS OR ACTIVITIES FOR CIRM  |
| 12 | TO CONSIDER TO FOCUS ON FOR MOVING FORWARD.          |
| 13 | WHAT I'M NOW GOING TO DO IS GO THROUGH               |
| 14 | WHAT THE ELEMENTS OF THE STRATEGIC PLAN ARE. WE      |
| 15 | HAVEN'T CHANGED OUR MISSION AND VISION. THE MISSION  |
| 16 | IS AS YOU SEE. BRIEFLY, IT'S TO ADVANCE THE SCIENCE  |
| 17 | INTO POTENTIAL THERAPIES OR CURE FOR PATIENTS.       |
| 18 | THAT'S OUR GOAL.                                     |
| 19 | I'VE DIVIDED WHERE WE ARE IN TERMS OF THE            |
| 20 | SPECTRUM OF CIRM'S LIFE SPAN INTO THE THREE          |
| 21 | FOLLOWING BINS. THE FIRST PHASE HAS BEEN             |
| 22 | EXPLORATION. WE DON'T KNOW WHERE THE DISCOVERIES     |
| 23 | ARE GOING TO LEAD US. AND FOR THAT REASON, WE'VE     |
| 24 | ACTUALLY EXPLORED A BROAD NUMBER OF DISEASES, A      |
| 25 | BROAD NUMBER OF PLATFORMS, AND WE'VE ESTABLISHED THE |
|    | 20   |

| 1  | FOUNDATION FOR LEADERSHIP IN STEM CELL RESEARCH.     |
|----|--|
| 2  | NOW WE'RE IN WHAT WE'RE CALLING THE FOCUS STAGE.     |
| 3  | PERHAPS WE CAN THINK OF A BETTER TERM, BUT FOR LACK  |
| 4  | OF A BETTER TERM, THAT'S WHAT WE'RE CALLING IT NOW.  |
| 5  | SO THAT'S WHERE WE ARE NOW IN THINKING FORWARD FOR   |
| 6  | THE NEXT FIVE YEARS.                                 |
| 7  | THIS IS WHERE WE'RE THINKING. DO WE NEED             |
| 8  | TO PRIORITIZE OUR PROJECTS AND INVESTMENTS, DRIVING  |
| 9  | CLINICAL TRIALS FOR PATIENTS TO GENERATE THAT        |
| 10 | PRELIMINARY EVIDENCE OF THERAPEUTIC BENEFIT, AND     |
| 11 | DEVELOPING PARTNERSHIPS WITH PATIENTS, PARTNERSHIPS  |
| 12 | WITH INDUSTRIES, PARTNERSHIPS WITH A VARIETY OF      |
| 13 | OTHER FUNDERS THAT WE MAY WANT TO WORK WITH. SO      |
| 14 | THAT IN 2016 AND BEYOND WE CAN BE IN THE DELIVERY    |
| 15 | PHASE WHERE WE'RE FACILITATING THE COMMERCIALIZATION |
| 16 | OF THERAPIES, WE'RE ADVANCING THE THERAPIES TO       |
| 17 | PATIENTS, AND WE'RE ENABLING A BUSINESS MODEL SO     |
| 18 | THAT STEM CELL-BASED THERAPIES CAN MOVE FORWARD.     |
| 19 | THESE ARE OUR PROPOSED CHANGES TO THE                |
| 20 | '09-'10 STRATEGIC OBJECTIVES. ON THE TOP YOU SEE     |
| 21 | THE ONES FROM '09-'10, AND ON THE BOTTOM YOU SEE THE |
| 22 | PROPOSED 2012 STRATEGIC OBJECTIVES. YOU CAN SEE      |
| 23 | THAT WE'VE MORPHED THE FIVE CATEGORIES INTO FOUR     |
| 24 | WITH SCIENTIFIC, MEDICAL, ECONOMIC, AND SOCIAL       |
| 25 | OBJECTIVES. THE DESCRIPTORS ARE UNDERNEATH. WE       |
|    | 20   |

| 1  | WANT TO ACCELERATE THE UNDERSTANDING OF STEM CELL    |
|----|--|
| 2  | SCIENCE AND APPLICATIONS TOWARDS HUMAN DISEASES AND  |
| 3  | INJURY, ADVANCE UNDER THE MEDICAL OBJECTIVE THE      |
| 4  | SCIENCE INTO THE CLINICAL TRIALS TO ACHIEVE          |
| 5  | PRELIMINARY EVIDENCE OF THERAPEUTIC BENEFIT TO       |
| 6  | PATIENTS. THIRD IS THE ECONOMIC OBJECTIVE TO DRIVE   |
| 7  | DEVELOPMENT FOR CALIFORNIA FROM STEM CELL SCIENCE.   |
| 8  | AND SOCIAL, THIS IS WHERE WE WANT TO INCREASE THE    |
| 9  | AWARENESS OF CALIFORNIA AS THE LEADER IN STEM CELL   |
| 10 | RESEARCH AND ITS THERAPIES.                          |
| 11 | UNDERNEATH THE DESCRIPTORS ON THIS SLIDE             |
| 12 | ARE THE STRATEGIES. AND UNDER SCIENTIFIC, MEDICAL,   |
| 13 | ECONOMIC, AND SOCIAL, YOU'VE HAD THE OPPORTUNITIES   |
| 14 | ALREADY TO REVIEW THIS IN YOUR PREREAD DOCKET, BUT   |
| 15 | YOU WILL SEE SOME OF THE STRATEGIES THAT WE'RE USING |
| 16 | TO HOPEFULLY GET TO THESE OBJECTIVES.                |
| 17 | I'D NOW LIKE TO GIVE YOU A SUMMARY OF THE            |
| 18 | INPUT THAT WE'VE RECEIVED TO DATE. AND WE WENT TO    |
| 19 | FIVE DIFFERENT CITIES TO GET INPUT FOR THESE PUBLIC  |
| 20 | AND INDUSTRY AND BOARD MEETINGS. OCTOBER 21ST AND    |
| 21 | 31ST WERE PUBLIC MEETINGS, ONE IN SOUTHERN           |
| 22 | CALIFORNIA AT USC, ONE IN NORTHERN CALIFORNIA AT UC  |
| 23 | SAN FRANCISCO. WE HAD TWO INDUSTRY MEETINGS, ONE IN  |
| 24 | SAN DIEGO AT SANFORD-BURNHAM ON OCTOBER 27TH, ONE AT |
| 25 | ELAN IN SOUTH SAN FRANCISCO ON OCTOBER 28. AND       |
|    |  |

| 1  | THEN, OF COURSE, WE HAD THE BOARD MEETING BACK IN    |
|----|--|
| 2  | OCTOBER AT UC IRVINE.                                |
| 3  | THERE WERE FIVE KEY THEMES THAT CAME                 |
| 4  | ACROSS FROM LOOKING AT A SYNTHESIS OF THE INPUT      |
| 5  | RECEIVED TO DATE, AND THOSE FIVE THEMES ARE AS       |
| 6  | FOLLOWS. THE FIRST WAS THAT CIRM HAS ESTABLISHED     |
| 7  | MOMENTUM, THAT CIRM HAS MADE GREAT INITIAL PROGRESS  |
| 8  | IN ESTABLISHING AN EXTENSIVE PROGRAM IN SUPPORT OF   |
| 9  | STEM CELL RESEARCH AND THE ADVANCEMENT OF SCIENCE.   |
| 10 | THAT THEME CAME ACROSS FROM ALL OF THESE DIFFERENT   |
| 11 | MEETINGS.  |
| 12 | THE SECOND THEME THAT CAME ACROSS WAS THAT           |
| 13 | YOU HAVE SUSTAINABILITY. I THINK THAT WAS REALLY OF  |
| 14 | PARTICULAR INTEREST AT OUR BOARD MEETING FROM        |
| 15 | OCTOBER, BUT ALSO CAME ACROSS IN OTHER SESSIONS THAT |
| 16 | WE HAD BOTH IN PUBLIC WITH THE INDUSTRY, THAT CIRM   |
| 17 | NEEDS TO BE MORE AGGRESSIVE IN FINDING ALTERNATIVE   |
| 18 | FUNDING RESOURCES AND TO IMPLEMENT GREATER           |
| 19 | CREATIVITY IN IDENTIFYING THE TYPES OF ORGANIZATIONS |
| 20 | THAT MAY BE ABLE TO CONTRIBUTE TO THE SUSTAINABILITY |
| 21 | OF CIRM'S WORK.                                      |
| 22 | THE THIRD WAS IN COMMUNICATION AND PUBLIC            |
| 23 | AWARENESS, THAT ROBUST PUBLIC AFFAIR TACTICS ARE     |
| 24 | NECESSARY AND THAT CIRM NEEDS TO BETTER COMMUNICATE  |
| 25 | THE ORGANIZATIONAL INITIATIVES AS WELL AS EDUCATE    |
|    |  |

| 1  | THE PUBLIC MORE BROADLY. THAT'S NOT TO SAY WE'RE     |
|----|--|
| 2  | STARTING AT GROUND ZERO. WE'RE STARTING WITH A VERY  |
| 3  | STRONG FOUNDATION, BUT WHAT WE HEARD WAS THAT WE     |
| 4  | NEED TO EXPAND AND STRENGTHEN THAT.                  |
| 5  | FOURTH IS GLOBAL NETWORKING, THAT CIRM               |
| 6  | NEEDS TO PROVIDE GREATER OPPORTUNITIES FOR           |
| 7  | NETWORKING AND BREED COLLABORATIVE PROJECTS THAT     |
| 8  | UNITE ACADEMIA AND INDUSTRY AS WELL AS RESEARCHERS   |
| 9  | ACROSS GEOGRAPHIC REGIONS. THE POINT THAT'S COMING   |
| 10 | ACROSS IS WE NEED TO UTILIZE OPPORTUNITIES WHEREVER  |
| 11 | IT'S COMING FROM AND TRY TO BRING IT INTO            |
| 12 | CALIFORNIA.  |
| 13 | AND THE FIFTH WAS PROCESS OPTIMIZATION,              |
| 14 | THAT GREATER TRANSPARENCY IN THE FUNDING PROCESS IS  |
| 15 | NEEDED, AND THERE IS A GREAT NEED FOR THE PROCESS TO |
| 16 | BE LESS BUREAUCRATIC AND EASIER TO NAVIGATE. WE      |
| 17 | HEARD THIS VERY STRONGLY FROM THE INDUSTRY MEETINGS. |
| 18 | AND IT WAS REALLY HELPING THEM NOT JUST WITH         |
| 19 | REEXPLAINING THE PROCESS, BUT REALLY TRYING TO GIVE  |
| 20 | THEM CUES ON LESSONS LEARNED AND WHAT WOULD HELP     |
| 21 | THEM BE MORE LIKELY TO BE SUCCESSFUL IN OUR FUNDING  |
| 22 | INITIATIVES.   |
| 23 | I'M NOT I DON'T HAVE TIME TO GO THROUGH              |
| 24 | ALL OF THESE, BUT THIS IS THE BACKGROUND DOCUMENTS   |
| 25 | THAT SUPPORT THE KEY THEMES THAT I TALKED ABOUT      |
|    | 43   |

| 1  | EARLIER. MAYBE I'LL BRIEFLY GO OVER IT. FOR THE      |
|----|--|
| 2  | PUBLIC, THE ICOC INPUT, AND THE INDUSTRY INPUT, I    |
| 3  | THINK WHAT WE HEARD FROM MANY GROUPS IS TO SHARE     |
| 4  | LESSONS LEARNED, THAT CIRM HAS OVER 450 AWARDS, WE   |
| 5  | HAVE HUNDREDS AND HUNDREDS OF INVESTIGATORS, AND     |
| 6  | DOZENS OF DIFFERENT COMPANIES THAT WE WORK WITH.     |
| 7  | WE'RE LEARNING A LOT. CAN WE FIND WAYS TO SHARE      |
| 8  | THOSE LESSONS LEARNED ACROSS OUR VARIOUS             |
| 9  | CONSTITUENTS.  |
| 10 | UNDER MEDICAL WHAT WE HEARD IS REALLY VERY           |
| 11 | CLEARLY PEOPLE WANT TO SEE A THERAPEUTIC MILESTONE   |
| 12 | REACHED, THAT IT'S GOOD THAT WE HAVE A LOT OF        |
| 13 | ACTIVITY, THAT WE'RE MOVING TOWARDS THE CLINIC, BUT  |
| 14 | IN THE NEXT FIVE YEARS, PEOPLE WANT TO SEE THE       |
| 15 | REACHING OF A THERAPEUTIC MILESTONE. IT DOESN'T      |
| 16 | DEFINE WHAT THAT MILESTONE HAS TO LOOK LIKE OR IN    |
| 17 | WHAT DISEASE OR WITH WHAT PLATFORM, BUT BASICALLY    |
| 18 | THEY WANT TO SEE A THERAPEUTIC MILESTONE REACHED.    |
| 19 | IN ADDITION, THERE NEEDS TO BE A GREATER             |
| 20 | OUTREACH TO CREATE COMMUNICATION BRIDGES WITH        |
| 21 | ACADEMIC AND INDUSTRY. AND PARTICULARLY WHAT WE      |
| 22 | HEARD FROM INDUSTRY, I THINK, IS ACCESS TO           |
| 23 | EXPERTISE, ALSO FROM ACADEMIA, AN ACCESS TO CORE     |
| 24 | SKILL SETS THAT WOULD BE NEEDED TO HELP THEM BE      |
| 25 | SUCCESSFUL IN MOVING THEIR PROJECTS TOWARDS AND INTO |
|    |  |

| 1  | CLINICAL TRIALS.                                     |
|----|--|
| 2  | FOR ECONOMIC, WHAT WE HEARD WAS REALLY               |
| 3  | ABOUT CREATING FUNDING OPPORTUNITIES, FINDING        |
| 4  | FUNDING PARTNERS, PERHAPS DEVELOPING SOME CREATIVE   |
| 5  | THREE-WAY AGREEMENTS BETWEEN CIRM, BETWEEN A FUNDING |
| 6  | PARTNER, BETWEEN AN INVESTIGATOR. ALSO WHAT WE       |
| 7  | HEARD FROM THE ICOC WAS DEVELOP SOME SORT OF A       |
| 8  | MATRIX FOR THE FUNDING PLATFORMS SO THAT IT WAS      |
| 9  | CLEAR WHERE WE WERE PUTTING OUR INVESTMENTS, THAT    |
| 10 | THAT WOULD HELP US REALLY MAKE BETTER INFORMED       |
| 11 | DECISIONS ABOUT WHERE TO INVEST IN THE FUTURE.       |
| 12 | AND ONCE AGAIN, COMMUNICATE, COMMUNICATE             |
| 13 | THE DETAILS OF THE FUNDING PROCESS, CREATE A SHORTER |
| 14 | APPROVAL PROCESS BETWEEN APPLICATION AND ACTUALLY    |
| 15 | GETTING MONEY BACK TO THE APPLICANT. AND THE         |
| 16 | SUGGESTION WAS ALSO MADE TO CREATE SOME SORT OF A    |
| 17 | CIRM CHAMPION OR AN ADVOCATE WITHIN THE AGENCY THAT  |
| 18 | COULD HELP INDUSTRY WHO'S NOT USED TO WRITING        |
| 19 | ACADEMIC-TYPE GRANTS FIGURE OUT HOW TO NAVIGATE THE  |
| 20 | SYSTEM. THE OTHER OPTION, OF COURSE, IS TO FIGURE    |
| 21 | OUT A MORE USER FRIENDLY INTERFACE SO THAT THEY      |
| 22 | WOULD BE ABLE TO INTERACT WITHOUT THE NEED FOR THAT  |
| 23 | CHAMPION.  |
| 24 | IN TERMS OF SOCIAL, I THINK WHAT WE HEARD            |
| 25 | THROUGHOUT IS TO ENSURE PUBLIC AWARENESS, TO PROMOTE |
|    |  |

| 1  | CIRM'S WORK, AND TO REALLY IDENTIFY AND PROMOTE      |
|----|--|
| 2  | CIRM'S EXPERTISE AND HELP EDUCATE PATIENTS ON WHAT   |
| 3  | WE'RE DOING IN OUR DIFFERENT RESEARCH. ALSO I THINK  |
| 4  | WHAT CAME OUT, A SUGGESTION WAS MADE THAT PERHAPS    |
| 5  | CIRM COULD TAKE A STAND TO EDUCATE PATIENTS ON THE   |
| 6  | TYPE OF STEM CELL RESEARCH THAT'S DONE BY VERY       |
| 7  | CONSCIENTIOUS INSTITUTIONS AND ORGANIZATIONS PERHAPS |
| 8  | THROUGH THE CONDUCT OF CLINICAL TRIALS VERSUS A      |
| 9  | VARIETY OF THINGS THAT THEY MAY SEE OUT THERE        |
| 10 | REGARDING ACCESS TO STEM CELL THERAPIES SO THAT THEY |
| 11 | CAN DISTINGUISH THE DIFFERENCE BETWEEN A VERY        |
| 12 | RIGOROUSLY DEFINED AND WELL PUT TOGETHER CLINICAL    |
| 13 | TRIAL VERSUS READY ACCESS TO PERHAPS SOME CELLS THAT |
| 14 | PEOPLE MIGHT BE PROMOTING THAT THEY TAKE.            |
| 15 | THIS IS JUST THE MORE DETAILED INFORMATION           |
| 16 | BEHIND THAT SUMMARY SLIDE THAT I JUST SHOWED YOU,    |
| 17 | AND YOU ALSO HAVE THAT IN YOUR PREREAD DOCKET. IT'S  |
| 18 | THE PUBLIC, IT'S THE ICOC, AND IT'S THE INDUSTRY     |
| 19 | MEETINGS.  |
| 20 | LET ME NOW GIVE YOU AN UPDATE ON SOME OF             |
| 21 | THE THINGS WHICH MAY BE IN YOUR PREREAD, BUT         |
| 22 | ADDITIONAL THINGS THAT ARE NOT. AND THIS IS          |
| 23 | ADDITIONAL STAKEHOLDERS' INPUT. ON NOVEMBER 10TH     |
| 24 | CIRM HAD A MEETING THAT WAS FOCUSED MEETING WITH     |
| 25 | INDUSTRY ADVISORS THAT WAS FOCUSED ON THE DEFINITION |
|    |  |

| 1  | OF SUCCESS AND PORTFOLIO MANAGEMENT, ON OUR LOAN     |
|----|--|
| 2  | PROGRAM, ON OUR CO-FUNDING REQUIREMENTS, ON OUR      |
| 3  | TRANSLATIONAL SUPPORT PROGRAMS, AND ON THE           |
| 4  | POSSIBILITY OF PUTTING TOGETHER A PHARMA SUMMIT.     |
| 5  | RECOMMENDATIONS TO CIRM FROM THAT ADVISOR            |
| 6  | MEETING INCLUDED CONCENTRATE ON GETTING THE BEST     |
| 7  | PROJECTS THROUGH EARLY CLINICAL TRIALS, FOCUS ON     |
| 8  | PORTFOLIO MANAGEMENT TO ENSURE CIRM'S BEST PROGRAMS  |
| 9  | OBTAIN THE ESSENTIAL CONTINUED FINANCIAL SUPPORT     |
| 10 | THROUGH EARLY CLINICAL PROOF OF CONCEPT, AND CUT     |
| 11 | PROGRAMS THAT ARE NOT PERFORMING. USE FORECASTING    |
| 12 | AND DECISION ANALYSIS TO SHAPE FUTURE FUNDING        |
| 13 | PROGRAMS AND DETERMINE HOW MANY PROGRAMS CIRM CAN    |
| 14 | SUPPORT THROUGH THE CLINIC, BUT DO THAT NOW. DO THE  |
| 15 | FORECASTING NOW. SIMPLIFY THE LOAN PROGRAM, PERHAPS  |
| 16 | A LOAN PLUS ROYALTY, AND MAKE IT FLEXIBLE SO THAT    |
| 17 | COMPANIES MAY HAVE SOME OPTIONS IN TAKING A LOAN     |
| 18 | WHEN THEY WORK WITH US.                              |
| 19 | THEY ALSO COMMUNICATED VERY STRONGLY THAT            |
| 20 | CIRM IS HERE TO DERISK PROJECTS, AND WE SHOULD       |
| 21 | REMAIN COMMITTED TO CO-FUNDING AT THE EARLIER STAGES |
| 22 | OF THE DEVELOPMENT. AND IN ADDITION, THEY THOUGHT    |
| 23 | IT WOULD BE WISE, IT WOULD BE VERY HELPFUL IF THERE  |
| 24 | WAS A PHARMA SUMMIT THAT WAS PUT TOGETHER THAT       |
| 25 | ACTUALLY ENABLED CIRM TO BRING FORWARD WHAT TYPES OF |
|    |  |

| THINGS WERE MOVING FORWARD INTO THE CLINIC AND HELP INFORM THE WHOLE PHARMA AND BIOTECH COMMUNITY AND GET THEIR INPUT ON WAYS THAT WE MAY BE ABLE TO BRING THOSE FORWARD. |
|---|
| GET THEIR INPUT ON WAYS THAT WE MAY BE ABLE TO BRING  |
|   |
| THOSE FORWARD.  |
|   |
| WE RECEIVED STAKEHOLDERS' INPUT FROM OUR  |
| COLLABORATIVE FUNDING PARTNERS. AS YOU KNOW, WE   |
| WORK WITH 12 DIFFERENT COUNTRIES, TWO INTERNATIONAL   |
| STATES, TWO DIFFERENT FOUNDATIONS, A DOMESTIC STATE,  |
| AND ALSO MOST RECENTLY THE NATIONAL INSTITUTES OF   |
| HEALTH. AND WE HELD TWO TELECONS WITH THEM IN   |
| NOVEMBER, AND THEY PROVIDED FEEDBACK AND SUGGESTIONS  |
| ON WAYS THAT CIRM COULD STRENGTHEN AND ENHANCE OUR  |
| COLLABORATIONS. AND THE SUGGESTIONS INCLUDED  |
| DEVELOPMENT OF A CAPABILITY MAP TO SHOW STRENGTHS   |
| AND EXPERTISE ACROSS THE DIFFERENT COLLABORATIVE  |
| FUNDING PARTNERS, TO ALLOW MULTIPLE CFP CLASSES WITH  |
| CIRM. RIGHT NOW WE DO IT ONE ON ONE.  |
| THAT THE COLLABORATIVE FUNDERS WOULD LIKE   |
| MORE INPUT INTO THE DEVELOPMENT OF CONCEPTS FOR   |
| RFA'S, THAT THEY WOULD BENEFIT IF WE WOULD HELP   |
| FOSTER, FACILITATE THE HARMONIZING OF MATERIAL  |
| TRANSFER AGREEMENTS AND INFORMED CONSENTS WHERE   |
| POSSIBLE. AND THEY WERE VERY INTERESTED IN FORGING  |
| PARTNERSHIPS FOR CLINICAL TRIALS, PARTICULARLY AS WE  |
| GO BEYOND PERHAPS THE EARLY, SMALL, VERY FIRST IN   |
|   |

| 1  | HUMAN TO THE MULTICENTER LARGER PHASE I OR PHASE II, |
|----|--|
| 2  | THE POSSIBILITY OF DOING INTERNATIONAL CLINICAL      |
| 3  | TRIALS.  |
| 4  | WE RECEIVED STAKEHOLDER INPUT FROM OUR               |
| 5  | PATIENT ADVOCATE ORGANIZATIONS AND HELD TWO TELECONS |
| 6  | ON DECEMBER 2D AND 5TH WITH LEADERS OF PATIENT       |
| 7  | ADVOCATE ORGANIZATIONS. AND HERE THE FOCUS WAS ON    |
| 8  | SOCIAL AND MEDICAL OBJECTIVES. AND HERE ARE SOME OF  |
| 9  | THE KEY POINTS THAT WERE INCLUDED. I THINK FIRST     |
| 10 | AND FOREMOST WAS REALLY DEVELOP COMMUNICATION FOR    |
| 11 | THE LAY PUBLIC THAT'S PROVIDED IN AN UNDERSTANDABLE  |
| 12 | FORMAT AND IN A VENUE WHERE QUESTIONS COULD BE       |
| 13 | ASKED. THEY PARTICULARLY APPRECIATED, AT LEAST THE   |
| 14 | PEOPLE ON THE PHONE, AND GRANTED THIS IS A SAMPLING, |
| 15 | THIS DOESN'T REPRESENT ALL THE DIFFERENT VIEWS, THIS |
| 16 | IS JUST A SAMPLING OF THE DIFFERENT VIEWS OUT THERE, |
| 17 | BUT THEY APPRECIATED THE PATIENT ADVOCACY EVENTS     |
| 18 | WHERE THERE'S ACTUALLY PRESENTATIONS AND THERE'S A   |
| 19 | POSSIBILITY OF HAVING Q AND A DURING THAT SAME TIME  |
| 20 | POINT.   |
| 21 | THEY ALSO WANTED MESSAGES THEY COULD USE             |
| 22 | THAT WERE WRITTEN IN A CLEAR, CONCISE, EASY-TO-USE   |
| 23 | WAY. AND THEY ALSO SUGGESTED THAT CIRM COULD HELP    |
| 24 | BUILD A COALITION OR COMMUNITY OF PATIENT ADVOCATES. |
| 25 | AND THERE WAS ALSO A SUGGESTION THAT CIRM HELP SET   |
|    |  |

| 1  | UP A CORE GROUP OF ADVOCATES TO MEET REGULARLY WITH  |
|----|--|
| 2  | CIRM. AND THIS GROUP ACTUALLY HAD A SET OF GOALS     |
| 3  | AND OBJECTIVES FOR THEM TO PURSUE AS A GROUP.        |
| 4  | THERE WAS ALSO GREAT INTEREST IN TRYING TO           |
| 5  | HELP THE ORGANIZATIONS AND THE CONSTITUENTS THAT     |
| 6  | LOOK TO THEM UNDERSTAND MORE ABOUT CLINICAL TRIALS   |
| 7  | AND WHY THEY'RE SO IMPORTANT IN DEVELOPING           |
| 8  | THERAPIES.   |
| 9  | WE ALSO RECEIVED STAKEHOLDER INPUT FROM              |
| 10 | OUR CLINICAL DEVELOPMENT ADVISORS. AS JON THOMAS     |
| 11 | NOTED EARLIER, I'LL COME BACK TO YOU IN EITHER ONE   |
| 12 | OF THE EARLY QUARTER ONE ICOC BOARD MEETINGS TO TELL |
| 13 | YOU MORE DETAIL ABOUT WHAT WE ACHIEVED THROUGH OUR   |
| 14 | SESSIONS WITH OUR CLINICAL DEVELOPMENT ADVISORS.     |
| 15 | BUT SPECIFICALLY FOR THESE PARTICULAR TELECONS, WE   |
| 16 | WERE ASKING THEM ABOUT OUR STRATEGIC PLAN. AND THIS  |
| 17 | IS JUST SOME OF THE KEY PERSPECTIVES AND SUGGESTIONS |
| 18 | THAT THEY PROVIDED.                                  |
| 19 | THEY AGREED, AS DID MANY OF OUR OTHER                |
| 20 | STAKEHOLDERS, THAT SUCCESS FOR CIRM WOULD LIE IN     |
| 21 | GENERATING PROGRAMS THAT WENT INTO CLINICAL          |
| 22 | DEVELOPMENT, AND THAT SUCCESS WOULD IN ORDER TO      |
| 23 | HAVE SUCCESS IN THE NEXT FIVE YEARS, WE REALLY NEED  |
| 24 | TO WORK ON GENERATING CLINICAL PROOF OF CONCEPT.     |
| 25 | THEY ALSO FELT VERY STRONGLY THAT STRIKING           |
|    |  |

| 1  | PARTNERSHIPS SO THAT THE TEAMS THAT DO HAVE SOME     |
|----|--|
| 2  | PROMISING WORK FROM THEIR EARLY STUDIES HAVE THE     |
| 3  | PATHWAY FORGED THAT THEY CAN MOVE TOWARDS            |
| 4  | COMMERCIALIZATION.                                   |
| 5  | THEY ALSO STRONGLY RECOMMENDED THAT THEY             |
| 6  | FELT THAT CIRM WAS PROVIDING ACTIVE, BUT EVEN MORE   |
| 7  | ACTIVE AND FREQUENT OVERSIGHT AND ACCESS TO          |
| 8  | EXPERTISE, EXPERTISE IN REGULATORY, WITH             |
| 9  | MANUFACTURING, PRECLINICAL, CLINICAL, PRODUCT        |
| 10 | DEVELOPMENT, REALLY HELP THEM ACHIEVE WHAT THEY NEED |
| 11 | TO DO AND HELP THEM EXECUTE ON WHAT THEY WANT TO DO  |
| 12 | AND HAVE SORT OF A LESSONS LEARNED BOOT CAMP FOR     |
| 13 | INVESTIGATORS SO THAT WE'RE ACTUALLY SHARING LESSONS |
| 14 | LEARNED FROM ALL THESE DIFFERENT GROUPS THAT WE'RE   |
| 15 | WORKING WITH.  |
| 16 | WE ALSO TALKED WITH LEADERS FROM THE                 |
| 17 | INTERNATIONAL SOCIETY FOR CELLULAR THERAPY. WE HAD   |
| 18 | A TELECON WITH THEM ON NOVEMBER 28TH, AND THEY MAY   |
| 19 | GO BACK TO THEIR BROADER MEMBERSHIP TO GET           |
| 20 | ADDITIONAL INPUT. BUT THESE ARE JUST SOME OF THEIR   |
| 21 | INITIAL THOUGHTS. THEY REALLY STRONGLY THOUGHT THAT  |
| 22 | THIS WAS A TIME WHERE WE NEED TO MANAGE EXPECTATIONS |
| 23 | FOR THE FIELD PARTICULARLY FOR THE LAY PUBLIC AND    |
| 24 | FOR LEGISLATORS. THEY GAVE US SOME ADVICE IN TERMS   |
| 25 | OF WHAT WILL CONSTITUTE SUCCESS.                     |
|    |  |

| 1  | FOR SCIENCE, SUCCESS WOULD BE A MAJOR                |
|----|--|
| 2  | BREAKTHROUGH IN OUR UNDERSTANDING OF THE SCIENCE.    |
| 3  | PERHAPS WE HAVE A BETTER UNDERSTANDING OF IN VIVO    |
| 4  | PRECLINICAL PROOF OF CONCEPT OR MECHANISM OF ACTIONS |
| 5  | OF OURSELVES. FOR MEDICAL, ONCE AGAIN, IT'S PUTTING  |
| 6  | PRODUCTS INTO WELL-DESIGNED CLINICAL TRIALS THAT ARE |
| 7  | WELL EXECUTED. AND FOR THE STEM CELL HUB, SUCCESS    |
| 8  | IS AN INFLUX OF TALENT AND OF JOBS INTO CALIFORNIA.  |
| 9  | THEY RECOMMENDED THAT WE CONTINUE TO                 |
| 10 | SUPPORT THE BASIC RESEARCH, AND ON THE CLINICAL SIDE |
| 11 | TO BE VERY CRITICAL ABOUT WHAT IT TAKES TO GET INTO  |
| 12 | PHASE I AND PROCEED TO PHASE II. DON'T BE AFRAID TO  |
| 13 | KILL PROJECTS AND FOCUS ON THE HIGHEST PROBABILITY   |
| 14 | FOR SUCCESS. SHARE LESSONS LEARNED FROM OUR DISEASE  |
| 15 | TEAM I AND OUR 14 TEAMS THAT ARE CURRENTLY GOING     |
| 16 | FORWARD FOR IND-ENABLING STUDIES AND GET INTO THESE  |
| 17 | FIRST-IN-HUMAN TRIALS. AND FOR PRIVATE INDUSTRY,     |
| 18 | TRY TO INCREASE CIRM'S ENGAGEMENT WITH INDUSTRY FOR  |
| 19 | OUR GWG SELECT REVIEWERS. WHEN WE'RE LOOKING AT      |
| 20 | CLINICAL APPLICATION PROJECTS THAT HAVE INDUSTRY     |
| 21 | EXPERIENCE, HELP THE START-UPS, PARTICULARLY IN      |
| 22 | TRYING TO CONNECT WITH VENTURE CAPITALISTS AND OTHER |
| 23 | SOURCES OF FUNDING.                                  |
| 24 | WE ALSO RECEIVED STAKEHOLDER INPUT FROM              |
| 25 | THE ALLIANCE FOR REGENERATIVE MEDICINE AND HELD A    |
|    |  |

| 1  | TELECON WITH THEM THE WEEK OF NOVEMBER 21ST. AND     |
|----|--|
| 2  | SOME OF THEIR FEEDBACK INCLUDED THEIR COMMENT ON THE |
| 3  | SOCIAL STRATEGIC OBJECTIVE, THAT CIRM ACTUALLY FOCUS |
| 4  | ON A BROADER MESSAGE, SUCH AS THE VALUE OF CIRM, THE |
| 5  | VALUE OF REGENERATIVE MEDICINE, AND THE VALUE OF THE |
| 6  | REGENERATIVE MEDICINE THAT CIRM FUNDS, THAT WE       |
| 7  | SHOULD EMPHASIZE THAT WE'RE WORKING TOWARDS A        |
| 8  | NATIONAL STRATEGY FOR THIS TYPE OF SCIENCE, THAT WE  |
| 9  | BE MORE EXPLICIT ABOUT OUR INTENT TO ENGAGE          |
| LO | REGULATORS, PAYERS, AND CONGRESS TO ADVANCE SCIENCE  |
| L1 | INTO THE CLINIC. AND THEY SUGGESTED METRICS FOR      |
| L2 | MEASURING THAT SOCIAL IMPACT.                        |
| L3 | FOR ECONOMIC, THEY SUGGESTED ADDING                  |
| L4 | FOLLOW-ON INVESTMENT AND FINANCIAL SUPPORT FOR THE   |
| L5 | MOST PROMISING OF CIRM PROJECTS. AND THEY NOTED THE  |
| L6 | LEGISLATOR AND PUBLIC WOULD SEE SUCCESS FOR US NOT   |
| L7 | JUST IN OUR BUILDINGS OBVIOUSLY, BUT AS THE OTHER    |
| L8 | STAKEHOLDERS ARE TELLING US, AS HAVING THERAPIES     |
| L9 | INVESTMENT.  |
| 20 | SO NOW WE'RE AT THE STEP, I THINK, WHERE             |
| 21 | YOU'RE UP TO SPEED ON WHERE WE ARE WITH OUR PROCESS  |
| 22 | AND WHERE WE ARE WITH THE STAKEHOLDERS' INPUT TO     |
| 23 | DATE. WE'RE ON DECEMBER 8TH TODAY WITH THE UPDATE    |
| 24 | TO THE BOARD. THE NEXT STEPS WILL BE ON DECEMBER     |
| 25 | 20TH, WE'RE GOING TO RECEIVE A FIRST VERSION TO      |

| 1  | SENIOR MANAGEMENT OF WHAT THAT STRATEGIC PLAN COULD  |
|----|--|
| 2  | LOOK LIKE. ON JANUARY 3D, THERE WILL BE A SECONDARY  |
| 3  | VERSION SEND TO THE BROADER STAFF. WE'RE GOING TO    |
| 4  | BRING YOU AN UPDATE AT THE BOARD MEETING ON JANUARY  |
| 5  | 17TH AND RECEIVE ADDITIONAL INPUT AND COMMENTS FROM  |
| 6  | YOU AND DO THIS AGAIN ON FEBRUARY 15TH SO THAT BY    |
| 7  | MARCH 21ST BOARD, WE'LL BE BRINGING YOU A FINAL      |
| 8  | VERSION OF THE STRATEGIC PLAN FOR YOUR               |
| 9  | CONSIDERATION.                                       |
| 10 | SO AT THIS POINT I'D BE HAPPY TO ANSWER              |
| 11 | QUESTIONS.   |
| 12 | CHAIRMAN THOMAS: THANK YOU, DR. FEIGAL.              |
| 13 | VERY SUCCINCT AND COMPREHENSIVE SIMULTANEOUS         |
| 14 | PRESENTATION. VERY ENLIGHTENING. THANK YOU.          |
| 15 | COMMENTS FROM THE BOARD? SENATOR TORRES.             |
| 16 | MR. TORRES: YES. I JUST WANT TO THANK                |
| 17 | YOU AS WELL BECAUSE I THINK THAT YOU HAVE REALLY     |
| 18 | CAST A WIDE NET IN TERMS OF REACHING OUT FOR ALL THE |
| 19 | STAKEHOLDERS. AND I THINK THAT'S GOING TO BE VERY    |
| 20 | IMPORTANT TO ESTABLISH THE CREDIBILITY AND THE       |
| 21 | SUBSTANCE OF THIS REPORT. AND I THINK IT'S GOING TO  |
| 22 | BE VERY, VERY HELPFUL TO NOT ONLY POLICYMAKERS, BUT  |
| 23 | CLEARLY TO THE LEGISLATURE AND TO THE CONSTITUTIONAL |
| 24 | OFFICERS. THANK YOU.                                 |
| 25 | CHAIRMAN THOMAS: MR. SHEEHY.                         |
|    |  |

| 1  | MR. SHEEHY: YOU MIGHT WANT TO GO BACK A              |
|----|--|
| 2  | COUPLE OF SLIDES. AND THIS IS JUST FOR               |
| 3  | CLARIFICATION. I JUST DIDN'T UNDERSTAND A COUPLE OF  |
| 4  | CONCEPTS, AND THIS WAS ON THE BUSINESS.              |
| 5  | DR. FEIGAL: TELL ME WHEN.                            |
| 6  | MR. SHEEHY: KEEP GOING, ONE MORE, ONE                |
| 7  | MORE, ONE MORE, ONE MORE. OKAY. YEAH. IT'S JUST      |
| 8  | TO UNDERSTAND SOME OF THESE TERMS. SO WHEN YOU SAY   |
| 9  | FORECASTING AND DECISION ANALYSIS, WHAT DOES THAT    |
| 10 | MEAN? I'M SURE FOR SOME OF THE INDUSTRY FOLKS HERE,  |
| 11 | THAT'S REALLY CLEAR, BUT FOR ME I DON'T REALLY       |
| 12 | UNDERSTAND WHAT THAT MEANS. I MEAN I KIND OF GET     |
| 13 | FORECASTING, BUT WHAT ARE YOU TRYING TO FORECAST?    |
| 14 | WHEN YOU SAY DECISION ANALYSIS, WHAT IS THAT?        |
| 15 | BECAUSE THAT'S GOING TO SHAPE OUR FUTURE THEY        |
| 16 | RECOMMEND THAT THAT SHAPES OUR FUTURE FUNDING        |
| 17 | PROGRAM. SO IF I COULD UNDERSTAND WHAT THAT PROCESS  |
| 18 | MIGHT LOOK LIKE AND WHAT THAT ACTUALLY               |
| 19 | DR. FEIGAL: WHAT I'LL DO IS I CAN MAKE               |
| 20 | SOME COMMENTS. I DON'T KNOW IF MATT OR ELONA OR      |
| 21 | ALAN WOULD LIKE TO MAKE ADDITIONAL, BUT PART OF THAT |
| 22 | WAS THE WAY WE LOOK AT IT IS WHERE DO WE WANT TO BE  |
| 23 | AT X POINT OF TIME AND AN ORDER, IF WE WANT TO HAVE  |
| 24 | ONE TRIAL, TWO TRIALS, THREE TRIALS. IT'S LOOKING    |
| 25 | AT THE END GAME AND THEN WORKING BACKWARDS IN TERMS  |
|    | 54   |
|    |  |

| 1  | OF IF THIS IS WHERE WE WANT TO BE IN THE NEXT FIVE   |
|----|--|
| 2  | YEARS, WHAT DO WE HAVE TO DO NOW IN TERMS OF MOVING  |
| 3  | FORWARD, BUT IT'S ALSO LOOKING AT WHERE OUR          |
| 4  | INVESTMENTS ARE.                                     |
| 5  | BUT LET ME JUST SEE IF MATT OR ALAN, WHO             |
| 6  | ACTUALLY WERE AT THE MEETING, HAVE ANY ADDITIONAL    |
| 7  | COMMENTS.  |
| 8  | DR. TROUNSON: SO THAT'S RIGHT. SO IT'S A             |
| 9  | PROCESS OF LOOKING AT WHERE YOU WANT TO BE AT THE    |
| 10 | END OF THE, SAY, FIVE YEARS OR TEN YEARS, AND THEN   |
| 11 | HOW DO YOU GET TO THAT STAGE IF YOU WANT X NUMBER OF |
| 12 | PROJECTS IN THE CLINIC? WHAT HAVE YOU GOT TO DO TO   |
| 13 | ENABLE THAT? WHAT HAVE YOU GOT TO DO TO ENSURE THAT  |
| 14 | THE FALL-OFF IN STUDIES, WHICH YOU ARE GOING TO GET  |
| 15 | IN THAT TIME, DO YOU HAVE SUFFICIENT NUMBERS? DO     |
| 16 | YOU HAVE THE STRENGTH IN THE PORTFOLIO TO MAKE THE   |
| 17 | DISTANCE? SO IT'S LOOKING AT THE END POINT AND       |
| 18 | BUILDING IT BACKWARDS, JEFF.                         |
| 19 | SO THAT'S THE WAY THOSE SORT OF PEOPLE               |
| 20 | FIGURE OUT WHETHER THIS IS WORTHWHILE INVESTING IN.  |
| 21 | WHAT HAVE YOU GOT TO HAVE AT THAT END POINT, AND     |
| 22 | WHAT DO YOU DO TO GET THERE ESSENTIALLY?             |
| 23 | MR. SHEEHY: I THINK THAT SOUNDS LIKE THE             |
| 24 | FORECASTING PIECE, BUT THIS DECISION ANALYSIS SOUNDS |
| 25 | LIKE SOME SORT OF METRIC THAT MIGHT BE APPLIED TO    |
|    |  |

| 1  | YOUR FORECASTING PROCESS, BUT I'M NOT SURE. IT'S A  |
|--|---|
| 2  | TERM THAT DOESN'T   |
| 3  | MS. BAUM: I THINK WHAT THEY HAD MEANT AT  |
| 4  | THE TIME IS THAT THERE'S A LOT OF DIFFERENT   |
| 5  | OPPORTUNITY CALLS AND THERE'S A LOT OF DIFFERENT  |
| 6  | ASSUMPTIONS. SO THEY ACTUALLY WE SAID THAT WE   |
| 7  | WERE HAVING A NEW CFO COMING, AND THEY SAID THAT  |
| 8  | WOULD BE WELL VERSED ON DOING THIS. BUT WE HAD  |
| 9  | STATED THAT, ASSUMING THAT WE WANT TO GET X NUMBER  |
| 10   | IN PHASE II, WHAT WOULD YOU SUGGEST THAT WE DO IN   |
| 11   | TERMS OF LOOKING AT THE VARIOUS SCENARIOS ASSUMING  |
| 12   | THAT WE ARE JUST HAVING OUR PORTFOLIO MOVING  |
| 13   | FORWARD.  |
|  |   |
| 14   | NOW, WE'RE GOING TO DO SOMETHING THAT'S A   |
| 14<br>15                                     | NOW, WE'RE GOING TO DO SOMETHING THAT'S A LITTLE MORE POROUS TOO AND IMPORT READY-MADE  |
|  |   |
| 15   | LITTLE MORE POROUS TOO AND IMPORT READY-MADE  |
| 15<br>16                                     | LITTLE MORE POROUS TOO AND IMPORT READY-MADE PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE  |
| 15<br>16<br>17                               | LITTLE MORE POROUS TOO AND IMPORT READY-MADE PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A   |
| 15<br>16<br>17<br>18                         | LITTLE MORE POROUS TOO AND IMPORT READY-MADE PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A DECISION ANALYSIS, WOULD COME INTO PLAY.  |
| 15<br>16<br>17<br>18<br>19                   | LITTLE MORE POROUS TOO AND IMPORT READY-MADE PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A DECISION ANALYSIS, WOULD COME INTO PLAY.  DR. FEIGAL: I THINK THE POINT, THE INTENT   |
| 15<br>16<br>17<br>18<br>19                   | LITTLE MORE POROUS TOO AND IMPORT READY-MADE  PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE  SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A  DECISION ANALYSIS, WOULD COME INTO PLAY.  DR. FEIGAL: I THINK THE POINT, THE INTENT  IS THIS EXERCISE IT'S LIKELY TELL OUR   |
| 15<br>16<br>17<br>18<br>19<br>20             | LITTLE MORE POROUS TOO AND IMPORT READY-MADE  PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE  SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A  DECISION ANALYSIS, WOULD COME INTO PLAY.  DR. FEIGAL: I THINK THE POINT, THE INTENT  IS THIS EXERCISE IT'S LIKELY TELL OUR  INVESTIGATORS KEEP THE END IN MIND AS YOU'RE   |
| 15<br>16<br>17<br>18<br>19<br>20<br>21       | LITTLE MORE POROUS TOO AND IMPORT READY-MADE  PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE  SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A  DECISION ANALYSIS, WOULD COME INTO PLAY.  DR. FEIGAL: I THINK THE POINT, THE INTENT  IS THIS EXERCISE IT'S LIKELY TELL OUR  INVESTIGATORS KEEP THE END IN MIND AS YOU'RE  DESIGNING. AND THAT'S WHAT WE'RE NOW TRYING TO   |
| 15<br>16<br>17<br>18<br>19<br>20<br>21<br>22 | LITTLE MORE POROUS TOO AND IMPORT READY-MADE  PROGRAMS POTENTIALLY. AND, THEREFORE, A LITTLE MORE  SOPHISTICATED ANALYSIS, WHICH THEY REFER TO AS A  DECISION ANALYSIS, WOULD COME INTO PLAY.  DR. FEIGAL: I THINK THE POINT, THE INTENT  IS THIS EXERCISE IT'S LIKELY TELL OUR  INVESTIGATORS KEEP THE END IN MIND AS YOU'RE  DESIGNING. AND THAT'S WHAT WE'RE NOW TRYING TO  DO THAT. WHERE DO WE WANT TO BE AND THEN TRY AND |

| 1  | MR. SHEEHY: THEN THANK YOU. THAT'S                  |
|----|---|
| 2  | HELPFUL. TRYING TO UNDERSTAND.                      |
| 3  | THE OTHER QUESTION I HAD WAS ABOUT                  |
| 4  | DERISKING PROJECTS. AND THIS SEEMS LIKE THAT THIS   |
| 5  | IS DIRECTLY RELEVANT TO THE GERON EXPERIENCE. AND   |
| 6  | I'M WONDERING WHAT THAT PROCESS LOOKS LIKE BECAUSE  |
| 7  | CLEARLY THERE WAS FINANCIAL RISKS THAT WE WERE      |
| 8  | UNABLE TO IMPACT AND THAT KIND OF FELL APART ON US. |
| 9  | I KIND OF GET A SENSE OF IT, BUT I REALLY DON'T     |
| 10 | BECAUSE IT SEEMS LIKE, ESPECIALLY GIVEN WHAT WE'VE  |
| 11 | JUST EXPERIENCED, THAT THERE IS SIGNIFICANT RISK    |
| 12 | THAT THEY WOULD LIKE FOR US TO PERHAPS TACKLE,      |
| 13 | GETTING TACKLED EARLIER. SO IF I CAN GET SOME       |
| 14 | GRANULARITY, I GUESS, ON THAT CONCEPT.              |
| 15 | DR. FEIGAL: I THINK WHAT IT IS, THEY                |
| 16 | WEREN'T WE CAN LOOK AT ILLUSTRATIVE EXAMPLES. IN    |
| 17 | GENERAL, THEY'RE TALKING ABOUT WHAT WE TERM THE     |
| 18 | VALLEY OF DEATH OR BRIDGE TO CURE, THE STEPS IN     |
| 19 | PRODUCT DEVELOPMENT THAT ARE RISKY. AND I DON'T     |
| 20 | MEAN BECAUSE THEY'RE UNSAFE. THEY'RE RISKY BECAUSE  |
| 21 | THE SCIENCE IS INNOVATIVE, BECAUSE THE REGULATORY   |
| 22 | PATHWAY IS UNCLEAR, AND BECAUSE THERE MIGHT BE      |
| 23 | TECHNOLOGICAL ISSUES THAT COULD COME INTO PLAY. SO  |
| 24 | THERE'S A LOT OF UNKNOWNS AND UNCERTAINTY THAT MAKE |
| 25 | INVESTING IN THAT RISKY.                            |
|    | F 7   |

| 1  | SO WHAT THEY'RE SAYING IS THAT PART OF THE           |
|----|--|
| 2  | ROLE OF CIRM, AND IT IS WHAT WE'VE TAKEN ON AS A     |
| 3  | STATE AGENCY, IS TO TAKE ON SOME OF THOSE INNOVATIVE |
| 4  | PROJECTS WHERE THE SCIENCE IS GOOD, BUT WHERE THE    |
| 5  | REGULATORY PATHWAY IS RISKY OR WHERE THERE MAY BE    |
| 6  | CONTINUED TECHNOLOGICAL ISSUES THAT NEED TO BE       |
| 7  | ADDRESSED, THAT WE IN A QUALITY WAY TAKE ON SOME OF  |
| 8  | THOSE RISKS OURSELVES AS WE TRY AND DERISK THE       |
| 9  | PROJECT TO MAKE IT MORE ATTRACTIVE FOR VENTURE       |
| 10 | CAPITAL OR FOR INDUSTRY TO INVEST. AND I THINK       |
| 11 | THAT'S REALLY WHAT THEY WERE SAYING.                 |
| 12 | IT DOESN'T MEAN THAT WE'RE BETTER                    |
| 13 | PREDICTORS, BUT THEY'RE JUST SAYING WE AS A STATE    |
| 14 | AGENCY ARE IN A BETTER POSITION TO DO THAT.          |
| 15 | DR. TROUNSON: SO IN ADDITION TO THAT,                |
| 16 | THEY FELT THAT TO DERISK FOR US, THERE'S A DERISKING |
| 17 | FOR THEM BECAUSE THERE'S FINANCE THERE, BUT          |
| 18 | DERISKING FOR US IS TO GET ALL OF THE SO-CALLED      |
| 19 | DUCKS IN ORDER. THERE IS A POSSIBILITY OF GETTING    |
| 20 | AN END PLAYER EARLY ON EVEN IF THEY'RE NOT IF        |
| 21 | THEY'RE ONLY COMMITTED TO, SAY, 10 OR 15 OR 20       |
| 22 | PERCENT OF THE PROJECT, YOU START TO GET THEM        |
| 23 | COMMITTED IN THE PROCESS. YOU TEND TO DERISK FOR US  |
| 24 | THAT IT GOES ON AGROUND LIKE THE GERON ONE BECAUSE   |
| 25 | IF THERE IS A BIGGER PARTNER IN THERE WHO'S          |
|    |  |

| 1  | COMMITTED TO THAT AND WANTS TO SEE IT EVOLVE ON,    |
|----|---|
| 2  | THERE'S LESS CHANCE THAT A DECISION LIKE THE GERON  |
| 3  | ONE WOULD OCCUR, JEFF.                              |
| 4  | SO I THINK IT'S BEING SORT OF A BIT MORE            |
| 5  | CLEVER OR A BIT MORE PROACTIVE IN TERMS OF GETTING  |
| 6  | PARTNERSHIPS THAT WILL SEE THE DISTANCE AND GET THE |
| 7  | ENTITY COMMITTED FOR THE WHOLE TRACK AND MORE       |
| 8  | COMMITTED THAN SIMPLY JUST ONE OF SEVERAL PROJECTS  |
| 9  | FOR A COMPANY OR A SINGLE PROJECT FOR A COMPANY.    |
| 10 | DR. FEIGAL: AND I THINK THAT WAS THE                |
| 11 | INTENT BEHIND THE STRATEGIC FUND PARTNERSHIP IS TO  |
| 12 | GET MORE OF A COMMITMENT. AT THE LAST BOARD MEETING |
| 13 | YOU HAD THE OPPORTUNITY TO HEAR ABOUT THE INTENT OF |
| 14 | THAT PROGRAM AND ITS GOALS. SO ALAN IS ABSOLUTELY   |
| 15 | RIGHT. I WAS GIVING YOU THE DERISKING FROM THE      |
| 16 | COMPANY END; BUT HE, OF COURSE, WAS GIVING THE      |
| 17 | DERISKING FROM OUR END OF MAKING SURE THAT THERE IS |
| 18 | SOME KIND OF CONTINUATION FUNDING FOR THESE TYPE OF |
| 19 | PROJECTS.   |
| 20 | MR. SHEEHY: AND SO LOOKING AT BOTH ENDS             |
| 21 | THAT YOU DESCRIBE, WE DID YOU KIND OF ANTICIPATED   |
| 22 | MY NEXT QUESTION. IN TERMS OF WHAT DR. TROUNSON IS  |
| 23 | TALKING ABOUT, HAVE WE SUFFICIENTLY ADDRESSED THAT  |
| 24 | ISSUE WITH THE STRATEGIC PARTNERSHIP? AND THEN ON   |
| 25 | THE OTHER HAND, WE DO EARLY TRANSLATIONAL, WE DO    |
|    |   |

| 1  | DISEASE TEAMS, WHICH ARE SPECIFICALLY DESIGNED TO    |
|----|--|
| 2  | CROSS THE VALLEY OF DEATH. ARE THEY SUGGESTING       |
| 3  | IS THERE A SUGGESTION HERE THAT, FOR INSTANCE, FROM  |
| 4  | A COMPANY POINT OF VIEW, IT MIGHT BE DERISKED IF     |
| 5  | THEY COULD GET GRANTS INSTEAD OF LOANS? I'M JUST     |
| 6  | USING THAT AS AN EXAMPLE. BUT DO WE NEED ANOTHER     |
| 7  | PROGRAM IN THAT DEVELOPMENT PIPELINE SPACE? IN       |
| 8  | OTHER WORDS, WHAT GAPS HAVE WE IDENTIFIED WITH THIS  |
| 9  | DERISK IDEA THAT WE HAVEN'T ALREADY ADDRESSED        |
| 10 | ESSENTIALLY?   |
| 11 | DR. TROUNSON: WELL, I THINK WITH RESPECT             |
| 12 | TO WHAT YOU JUST SAID, IT DID COME UP THAT THEY FELT |
| 13 | THAT MAYBE THEY SHOULD BE OFFERED THE OPPORTUNITY OF |
| 14 | GRANTS OR LOANS. AND PARTICULARLY THEY DIDN'T        |
| 15 | REALLY SEE WHAT THE MERIT OF THE LOANS WERE IN THE   |
| 16 | EARLY STAGES. THEY SAW IT'S MUCH MORE PREFERABLE TO  |
| 17 | THOSE ORGANIZATIONS TO TAKE A GRANT. I DID SAY,      |
| 18 | WELL, THERE'S OTHER ISSUES ASSOCIATED WITH THE IP    |
| 19 | WHICH THE LOANS MIGHT NOT HAVE.                      |
| 20 | SO IT'S A LITTLE MORE COMPLEX THAN SIMPLY            |
| 21 | GRANT OR LOAN. BUT THEY FELT STRONGLY THAT WE OUGHT  |
| 22 | TO FILL IN THAT SPACE; BUT IF WE COULD ALSO GET THE  |
| 23 | LARGER INDUSTRY INVOLVED EARLIER, WE'RE MORE LIKELY  |
| 24 | TO HAVE MULTIPLE PATHS TAKING THOSE THROUGH, LESS    |
| 25 | LIKELY TO COME AGROUND ON SOME ISSUE, FOR EXAMPLE,   |
|    |  |

| 1  | MANUFACTURING, BECAUSE THAT LARGER ENTITY WILL       |
|----|--|
| 2  | PROBABLY HAVE EXPERIENCE OR CONNECTIONS NETWORKED TO |
| 3  | CAPACITY.  |
| 4  | SO CAPACITY BEYOND THEIR OWN CAPACITY, BUT           |
| 5  | ALSO REASON TO CONTINUE STRONGLY TO PURSUE IN A      |
| 6  | PIPELINE FROM EXPERIENCED OPERATORS THAT WILL MAKE   |
| 7  | THE DISTANCE AND BE ALSO THOUGHTFUL ABOUT WHAT'S IN  |
| 8  | THE COMPETITION SPACE BECAUSE WHAT'S THE USE OF      |
| 9  | DEVELOPING SOMETHING UP TO PHASE I OR II IF A DRUG   |
| 10 | TRUMPS YOU AND YOU KNOW THAT'S IN FRONT OF YOU OR    |
| 11 | YOU HAVEN'T TAKEN THE TIME TO FIGURE OUT THERE'S A   |
| 12 | BIG TRUMP IN FRONT OF YOU? UNLESS YOU'VE GOT         |
| 13 | SOMETHING DIFFERENT TO THAT TRUMP, YOU'RE GOING TO   |
| 14 | BE NOT VERY COMPETITIVE. SO, YOU KNOW, A MORE        |
| 15 | DETAILED AND INFORMED LOOK AT HOW WE DO THAT WOULD   |
| 16 | DERISK FOR US, BUT ALSO DERISK FOR THE PROJECT.      |
| 17 | MS. BAUM: SO I HAVE JUST ONE LITTLE POINT            |
| 18 | THAT I JUST WANT TO MAKE ON DERISKING. AND THIS IS   |
| 19 | SOMETHING I FELT VERY STRONGLY ABOUT FROM THE        |
| 20 | BEGINNING. I THINK THAT THE STRATEGIC PARTNERSHIP    |
| 21 | FUNDING PROGRAM IS TERRIFIC. I'VE ALWAYS FELT THAT   |
| 22 | THE AMOUNT, THE 10 MILLION, WHICH CAN BE INCREASED,  |
| 23 | AND THE 30 MILLION FOR THE FULL PROGRAM IS NOT       |
| 24 | ENOUGH. SO IF I WAS GOING TO IDENTIFY A GAP, I       |
| 25 | WOULD SUGGEST THAT CERTAINLY THE 10 MILLION WOULD BE |
|    |  |

| 1  | INCREASED, IF NEEDED, SO THAT WHEN WE ARE ABLE TO    |
|----|--|
| 2  | ENGAGE A PHARMA WITH ONE OF OUR PROJECTS, THAT WE    |
| 3  | CAN ENGAGE THEM THROUGH PHASE I ALL THE WAY THROUGH  |
| 4  | PHASE II, IF NECESSARY, WITH THE CO-FUNDING ELEMENT, |
| 5  | BUT I THINK IT MIGHT NEED MORE THAN 10 MILLION.      |
| 6  | BUT THIS WAY IT WOULD ACCELERATE IT. WE              |
| 7  | WON'T HAVE TO COME BACK AND REEXAMINE IT. IF THE     |
| 8  | PROJECT MEETS ITS MILESTONES, THEN IT SHOULD BE GOOD |
| 9  | TO GO UNLESS WE DECIDE THAT FOR COMPETITIVE REASONS  |
| 10 | PERHAPS WE DON'T WANT TO CONTINUE WITH THIS PROJECT, |
| 11 | AND I'M SURE MOST LIKELY IF THERE'S COMPETITIVE      |
| 12 | REASONS, THE PHARMA WOULDN'T WANT TO CONTINUE AS     |
| 13 | WELL.  |
| 14 | MR. SHEEHY: IF I REMEMBER THE DISCUSSION,            |
| 15 | I THINK I WAS SUPPORTIVE CONCEPTUALLY. I THINK THAT  |
| 16 | THE CHAIRS OF THE INDUSTRY COMMITTEE WERE BEING A    |
| 17 | LITTLE MORE STEP BY STEP CONSCIOUS TO REALLY GET THE |
| 18 | PROGRAM UP. I THINK THERE IS SUPPORT FOR MAKING      |
| 19 | THAT A BIGGER POT OF MONEY. SO THANK YOU. THAT'S     |
| 20 | VERY HELPFUL.  |
| 21 | AND THEN COULD I JUST GO BACK TO THE                 |
| 22 | CLINICAL ADVISORY DEVELOPMENT GROUP SLIDE. SORRY.    |
| 23 | OKAY. AND I'M CHEATING A LITTLE BIT BECAUSE AND      |
| 24 | I JUST WANT TO SAY, AND IT'S GOING TO COME UP AGAIN, |
| 25 | BUT THIS IS ONE OF THE MOST PHENOMENAL PROCESSES     |

| 1  | I'VE SEEN SINCE I'VE BEEN ON THIS BOARD. I MEAN THE  |
|----|--|
| 2  | RIGOR, THE QUALITY OF THE INDIVIDUALS INVOLVED, THE  |
| 3  | WORK IS GRUELING. AND THE BENEFIT THAT IT PROVIDES   |
| 4  | TO OUR PROGRAM IS SOMETHING THAT, IN TERMS OF THE    |
| 5  | ANALYSIS, THE FEEDBACK, THE DIALOGUE, I JUST THOUGHT |
| 6  | IT WAS EXCEPTIONAL.                                  |
| 7  | BUT ONE OF THE THINGS I THOUGHT IS IS IT             |
| 8  | AN IDEA HERE THAT WE MIGHT START THINKING ABOUT      |
| 9  | DEVELOPING CORES? I MEAN JUST BECAUSE THAT WORD      |
| 10 | IT'S KIND OF IMPLIED IN HERE. IT'S KIND OF IMPLIED,  |
| 11 | BUT JUST TO GET TO A LITTLE MORE, AGAIN, GRANULARITY |
| 12 | BECAUSE I DO THINK SOME OF THESE THINGS, SOME CORE   |
| 13 | FACILITIES, BUT CORE THINGS WHERE PEOPLE CAN JUST    |
| 14 | KIND OF AND IT ALMOST SEEMS LIKE DE FACTO AT         |
| 15 | LEAST ON SOME OF THE CELL MANUFACTURING PROCESSES,   |
| 16 | WE ARE GETTING SOME CORES THAT ARE KIND OF EMERGING. |
| 17 | DR. FEIGAL: THIS CAME OUT. THIS ONE                  |
| 18 | SLIDE DOESN'T DO JUSTICE TO ACTUALLY A VERY          |
| 19 | EXTENSIVE AND RICH WEALTH OF INFORMATION AND         |
| 20 | COMMENTS THAT WE'VE GOTTEN FROM THIS GROUP. BUT      |
| 21 | THEY DID THERE SEEMED TO BE SOME KEY ISSUES THAT     |
| 22 | ARISE AMONG ALL THESE DIFFERENT TEAMS. IT COULD BE   |
| 23 | IN MANUFACTURING. IT COULD BE IN SOME OF THE         |
| 24 | PRECLINICAL ANIMAL MODELS. THERE WERE SOME VERY KEY  |
| 25 | ISSUES THAT WERE PROMINENT IN VARIOUS SCENARIOS, AND |
|    |  |

| 1  | ONE COULD BE A CORE WHERE PEOPLE COULD GO TO.        |
|----|--|
| 2  | FRANKLY, THAT MAY BE VERY COST EFFICIENT ALSO FOR    |
| 3  | CIRM IN THAT WE DON'T START THESE AD HOC THINGS ALL  |
| 4  | OVER THE PLACE. WE ACTUALLY HAVE CORES OF            |
| 5  | EXCELLENCE THAT PEOPLE COULD UTILIZE.                |
| 6  | BUT THE OTHER THING WAS ALSO THE KNOWLEDGE           |
| 7  | BASE, THAT THERE'S ACCESS TO EXPERTISE AS WELL. SO   |
| 8  | I THINK BOTH THOSE THINGS CAME ACROSS IN THEIR       |
| 9  | COMMENTS.  |
| 10 | MR. SHEEHY: I THINK THAT'S OUTSTANDING.              |
| 11 | THANK YOU. AND THANK YOU FOR YOUR PRESENTATION.      |
| 12 | DR. JUELSGAARD: ELLEN, IF I COULD JUST               |
| 13 | CHIME IN ON DECISION ANALYSIS JUST FOR A MOMENT      |
| 14 | BECAUSE IT'S SORT OF A BUZZ WORD. BUT I EFFECTIVELY  |
| 15 | THINK WHAT IT MEANS, IT REALLY APPLIES TO BOTH       |
| 16 | PORTFOLIO MANAGEMENT AND PRIORITIZATION, WHICH IS    |
| 17 | SOMETHING THAT'S COME UP SEVERAL TIMES DURING THE    |
| 18 | COURSE OF YOUR CONVERSATION. WHAT WE'RE GOING TO     |
| 19 | NEED TO DO IS TO DEVELOP A FRAMEWORK THAT ALLOWS FOR |
| 20 | PRIORITIZATION WITHIN A PORTFOLIO AND MANAGING A     |
| 21 | MANUFACTURER. AND THAT'S WHAT CREATING A FRAMEWORK   |
| 22 | FOR MAKING THOSE DECISIONS.                          |
| 23 | SO EVERY COMPANY THAT IS INVOLVED WITH A             |
| 24 | RANGE OF PRODUCTS INVESTMENT AND MANAGES THOSE BOTH  |
| 25 | ACROSS THAT PORTFOLIO AND ON A CASE-BY-CASE BASIS    |
|    |  |

| 1  | USES A SYSTEM FOR DOING THAT. SO THE COMPANY THAT I  |
|----|--|
| 2  | WAS AT WE USED WHAT WE CALLED A PTS SYSTEM OR        |
| 3  | PROBABILITY OF TECHNICAL SUCCESS. AND THERE WERE     |
| 4  | INPUTS FROM ALL OF THE AREAS THAT YOU NEEDED TO DEAL |
| 5  | WITH. SO NOT JUST THE DEVELOPMENT AREA, BUT ALSO     |
| 6  | THE REGULATORY AREA, THE MANUFACTURING AREA, ETC.,   |
| 7  | AND YOU ASCRIBE PROBABILITIES OF SUCCESS IN EACH OF  |
| 8  | THOSE AREAS WHICH ABROGATED INTO AN OVERALL          |
| 9  | PROBABILITY OF TECHNICAL SUCCESS ON A                |
| 10 | PRODUCT-BY-PRODUCT BASIS WHICH ALLOWED YOU TO        |
| 11 | COMPARE PRODUCTS ACROSS THE PORTFOLIO.               |
| 12 | AND IF WE'RE GOING TO GET INTO PORTFOLIO             |
| 13 | MANAGEMENT AND PRIORITIZATION, WHICH I BELIEVE WE    |
| 14 | SHOULD, WE NEED AS AN ORGANIZATION TO DEVELOP THAT   |
| 15 | IN TERMS OF THE FUNDING THAT WE PROVIDE AND THEN     |
| 16 | PROVIDE THAT FRAMEWORK TO PEOPLE WHO ARE MAKING      |
| 17 | RECOMMENDATIONS TO THE ICOC ON WHAT PROJECTS TO      |
| 18 | SUPPORT AND WHAT PROJECTS NOT TO SUPPORT IN THE      |
| 19 | FUTURE.  |
| 20 | DR. FEIGAL: I SHOULD SAY THE CLINICAL                |
| 21 | DEVELOPMENT ADVISORS ALSO SUGGESTED THAT KIND OF     |
| 22 | APPROACH WHERE WE'RE LOOKING AT IT IN A VERY         |
| 23 | SYSTEMATIC WAY.                                      |
| 24 | CHAIRMAN THOMAS: OTHER COMMENTS FROM                 |
| 25 | MEMBERS OF THE BOARD? WOULD NOTE, ELLEN, THAT A LOT  |
|    |  |

| 1  | OF THESE AS YOU GO ALONG, AND RECEIVING              |
|----|--|
| 2  | RECOMMENDATIONS AND FEEDBACK, THAT THERE ARE MANY OF |
| 3  | THE THINGS RECOMMENDED THAT WE'RE ALREADY LOOKING TO |
| 4  | IMPLEMENT EVEN TODAY, AND THAT THIS PROCESS OF       |
| 5  | DEVELOPING THE STRATEGIC PLAN IS A VERY VALUABLE     |
| 6  | UNDERTAKING THAT INFORMS THINGS AS WE GO ALONG, NOT  |
| 7  | JUST WHAT WE WILL DO AFTER THE STRATEGIC PLAN IS     |
| 8  | FINALLY ADOPTED.                                     |
| 9  | OTHER COMMENTS? THANK YOU VERY MUCH. WE              |
| 10 | HAVE COMMENTS FROM MEMBERS OF THE PUBLIC ON THE      |
| 11 | STRATEGIC PLAN PRESENTATION? I THINK WE'VE HAD LOTS  |
| 12 | OF COMMENTS FROM THE PUBLIC TO THIS POINT WHICH HAVE |
| 13 | BEEN FULLY INCORPORATED. THANK YOU VERY MUCH. THAT   |
| 14 | WAS AN EXCELLENT PRESENTATION.                       |
| 15 | NOW PROCEED TO AGENDA ITEM NO. 8,                    |
| 16 | CONSIDERATION OF THE INTELLECTUAL PROPERTY           |
| 17 | SUBCOMMITTEE MISSION STATEMENT. IS THAT GOING TO BE  |
| 18 | DONE, MR. JUELSGAARD, BY YOU OR BY ELONA ON BEHALF   |
| 19 | OF THE STAFF?  |
| 20 | DR. JUELSGAARD: I'M HAPPY TO DO IT.                  |
| 21 | CHAIRMAN THOMAS: WHY DON'T WE GO STRAIGHT            |
| 22 | TO THE SOURCE HERE. MR. JUELSGAARD.                  |
| 23 | DR. JUELSGAARD: SO AT A SEVERAL MONTHS               |
| 24 | AGO AT A MEETING OF THE INTELLECTUAL PROPERTY        |
| 25 | COMMITTEE, ONE OF THE ISSUES THAT CAME UP, BECAUSE,  |
|    |  |

| 1  | IF YOU RECALL, THE MISSION STATEMENT FOR THE         |
|----|--|
| 2  | INTELLECTUAL PROPERTY SUBCOMMITTEE GOT CREATED, IN   |
| 3  | ESSENCE, ON THE RUN AT THE FIRST MEETING OF THE      |
| 4  | ORGANIZATION THAT I WAS AT LAST SUMMER. AND          |
| 5  | SUBSEQUENT TO THAT, THE SUBCOMMITTEE SAT DOWN AND    |
| 6  | REALLY LOOKED AT THAT MISSION STATEMENT AND FELT IT  |
| 7  | COULD USE SOME REDESIGN. SO, IN ESSENCE, WHAT WE     |
| 8  | DID WAS WE COLLAPSED THERE WERE FIVE PARTS TO THE    |
| 9  | MISSION STATEMENT AT THAT POINT. WE COLLAPSED THOSE  |
| 10 | FIVE PARTS INTO THREE PARTS, WHICH ARE IN THE        |
| 11 | READING MATERIALS. I DON'T HAVE THESE MATERIALS IN   |
| 12 | FRONT OF ME.   |
| 13 | BUT ANYWAY, IN YOUR BINDERS ON THE BACK              |
| 14 | PAGE UNDER TAB 8 OR THE BACK OF THAT SINGLE PAGE     |
| 15 | UNDER TAB 8, YOU WILL SEE THE PROPOSED MISSION       |
| 16 | STATEMENT. AND WHAT WE DID WAS COLLAPSE THE FIVE     |
| 17 | POINTS OF THE MISSION STATEMENT THAT EXISTED LAST    |
| 18 | SUMMER INTO THE FIRST THREE AND THEN ADDED TWO       |
| 19 | ADDITIONAL POINTS WHICH REALLY RELATED TO ENGAGEMENT |
| 20 | WITH INDUSTRY. AND AS YOU WILL RECALL, AT THE LAST   |
| 21 | MEETING WE EXPANDED THE SCOPE OF THE MISSION OF THIS |
| 22 | SUBCOMMITTEE TO BE BOTH INTELLECTUAL PROPERTY AND    |
| 23 | INDUSTRY ENGAGEMENT SUBCOMMITTEE. SO IT HAS TWO      |
| 24 | DIFFERENT ASPECTS TO IT. AND THE LAST TWO PARTS OF   |
| 25 | THE MISSION STATEMENT REALLY GO TO OUR GOALS IN      |
|    |  |

|    | DAMMISTERS REPORTING SERVICE                         |
|----|--|
| 1  | TERMS OF ENGAGING WITH INDUSTRY.                     |
| 2  | SO THIS MISSION STATEMENT IS REALLY                  |
| 3  | DESIGNED TO UNDERPIN THE WORK OF THE IP AND INDUSTRY |
| 4  | ENGAGEMENT SUBCOMMITTEE. AND WE HAD INTENDED TO      |
| 5  | HAVE THAT APPROVED AT THE LAST MEETING, BUT TIME GOT |
| 6  | SHORT AS MANY OF YOU WILL RECALL. SO ARE THERE ANY   |
| 7  | QUESTIONS?   |
| 8  | CHAIRMAN THOMAS: THANK YOU, MR.                      |
| 9  | JUELSGAARD. ARE THERE ANY COMMENTS BY MEMBERS OF     |
| 10 | THE BOARD? ANY COMMENTS BY MEMBERS OF THE PUBLIC?    |
| 11 | HEARING NONE, DO I HEAR A MOTION TO APPROVE?         |
| 12 | DR. JUELSGAARD: SO MOVED.                            |
| 13 | CHAIRMAN TORRES: SECOND.                             |
| 14 | CHAIRMAN THOMAS: MOVED BY MR. JUELSGAARD,            |
| 15 | SECONDED BY SENATOR TORRES. ALL THOSE IN FAVOR       |
| 16 | PLEASE SAY AYE. OPPOSED? ABSTENTIONS? MOTION         |
| 17 | PASSED. THANK YOU.                                   |
| 18 | MR. HARRISON: WE NEED TO POLL THOSE                  |
| 19 | MEMBERS WHO ARE PARTICIPATING BY PHONE INDIVIDUALLY. |
| 20 | CHAIRMAN THOMAS: MARIA IS ABOUT TO DO                |
| 21 | THAT. STAY TUNED, THOSE MEMBERS ON THE PHONE.        |
| 22 | MS. BONNEVILLE: SAM HAWGOOD. PHIL PIZZO.             |
| 23 | DR. PIZZO: HERE, BUT I DON'T THINK YOU               |
| 24 | CAN HEAR ME.   |
| 25 | MS. BONNEVILLE: WE CAN HEAR YOU.                     |
|    | 60   |

68

| 1  | DR. PIZZO: OKAY. WELL, THEN, I SHOULD                |
|----|--|
| 2  | SAY A LITTLE WHILE AGO DON REED WANTED TO MAKE A     |
| 3  | COMMENT AND HE COULDN'T GET THROUGH. SO WHEN YOU     |
| 4  | COME WHEN YOU HAVE A MOMENT AFTER THIS, HE HAD A     |
| 5  | COMMENT TO MAKE ABOUT A PRIOR DISCUSSION.            |
| 6  | CHAIRMAN THOMAS: THANK YOU VERY MUCH.                |
| 7  | DON, CAN YOU HEAR US?                                |
| 8  | MR. REED: YES, I CAN HEAR YOU.                       |
| 9  | DR. PIZZO: NOW HE'S SITTING RIGHT NEXT TO            |
| 10 | ME. HE JUST COULDN'T BE HEARD EARLIER.               |
| 11 | CHAIRMAN THOMAS: PLEASE PROCEED.                     |
| 12 | MR. REED: THANK YOU. MARK TWAIN INVESTED             |
| 13 | HEAVILY IN THE TYPEWRITER, BUT LOST ALL HIS MONEY    |
| 14 | BECAUSE THERE WAS A SMALL TECHNICAL GLITCH WHICH WAS |
| 15 | NOT DISCOVERED TILL YEARS AFTER HIS DEATH. I WONDER  |
| 16 | IF IT'S POSSIBLE I'VE BEEN FOLLOWING THE ATTEMPT     |
| 17 | TO REEVALUATE THE GOALS. IT'S WONDERFUL. IT'S VERY   |
| 18 | EXHAUSTIVE. BUT I WONDER IF THERE'S A WAY TO REACH   |
| 19 | OUT TO HOSPITALS AND TO BIOMEDICAL AND MEDICAL       |
| 20 | EQUIPMENT COMPANIES IN CALIFORNIA. FOR INSTANCE, I   |
| 21 | FOUND A BEAUTIFUL BOOK WHICH HAS ALL OF THE BIOMED   |
| 22 | COMPANIES IN CALIFORNIA AND WASHINGTON. NEXT TIME    |
| 23 | I'M IN SAN FRANCISCO I'LL DROP IT OFF BECAUSE IT     |
| 24 | WOULD BE GREAT, IT SEEMS TO ME, IF THEY COULD AT     |
| 25 | LEAST HAVE AN E-MAIL SURVEY THAT THEY COULD FILL OUT |
|    | 60   |

| 1  | SO THEY CAN GIVE THEIR THOUGHTS BECAUSE THERE MIGHT |
|----|---|
| 2  | BE SOME VALUE THERE. THANK YOU.                     |
| 3  | CHAIRMAN THOMAS: THANK YOU. DR. FEIGAL,             |
| 4  | COULD YOU PERHAPS RESPOND TO THAT ON BEHALF OF      |
| 5  | STAFF?  |
| 6  | DR. FEIGAL: IT SOUNDS LIKE YOU'RE ASKING            |
| 7  | US TO ALSO GET INPUT FROM ADDITIONAL STAKEHOLDERS   |
| 8  | LIKE HOSPITALS OR THIRD-PARTY PAYERS. IS THAT PART  |
| 9  | OF WHAT YOU'RE ASKING?                              |
| 10 | MR. REED: YES. BIOMEDICAL COMPANIES.                |
| 11 | THERE'S A LOT OF LARGE AND SMALL. THERE'S THE       |
| 12 | HOSPITALS, BOARD OF DIRECTORS PERHAPS, BUT I JUST   |
| 13 | THINK THE MORE IT WOULD ALSO BE PART OF THE         |
| 14 | OUTREACH IN GENERAL TO LET ALL OF CALIFORNIA KNOW   |
| 15 | THE MAGNIFICENT WORK THAT'S GOING ON. THAT WOULD BE |
| 16 | MY THOUGHT.   |
| 17 | DR. FEIGAL: DON, NEXT TIME YOU DROP IT              |
| 18 | OFF, COME IN AND TALK TO ME, AND I CAN GO OVER IT   |
| 19 | WITH YOU IN MORE DETAIL.                            |
| 20 | MR. REED: THANK YOU.                                |
| 21 | CHAIRMAN THOMAS: THANK YOU, DR. FEIGAL.             |
| 22 | THANK YOU, DON. YES, MR. HARRISON.                  |
| 23 | MR. HARRISON: COULD WE GET DR. PIZZO'S              |
| 24 | VOTE ON THAT MOTION, SO WE CAN                      |
| 25 | DR. PIZZO: YES.                                     |
|    | 70  |
|    | · <del>·</del>                                      |

| 1  | MR. HARRISON: THANK YOU. FOR THE RECORD              |
|----|--|
| 2  | THE MOTION CARRIES.                                  |
| 3  | CHAIRMAN THOMAS: THANK YOU. ALWAYS GOOD              |
| 4  | TO HAVE JAMES RIDING HERD ON THESE THINGS.           |
| 5  | GOING ON TO ITEM NO. 9, WHICH IS                     |
| 6  | CONSIDERATION OF RESEARCH LEADERSHIP AWARD           |
| 7  | APPLICATION.   |
| 8  | DR. TROUNSON: DR. YAFFE.                             |
| 9  | CHAIRMAN THOMAS: DR. YAFFE WILL PRESENT              |
| 10 | ON THIS MATTER. YES, DR. STEWARD.                    |
| 11 | DR. STEWARD: I JUST WANT TO ANNOUNCE THAT            |
| 12 | I'M IN CONFLICT ON THIS, SO I'M ACTUALLY GOING TO    |
| 13 | LEAVE THE ROOM.                                      |
| 14 | CHAIRMAN THOMAS: THANK YOU. ANY OTHER                |
| 15 | CONFLICTS ON THE BOARD?                              |
| 16 | MR. HARRISON: JUST FOR THE RECORD, DR.               |
| 17 | STEWARD, YOU'RE FREE TO STAY. YOU'RE NOT REQUIRED    |
| 18 | TO LEAVE THE ROOM, BUT IT'S YOUR DECISION.           |
| 19 | DR. STEWARD: YEAH. THIS IS ACTUALLY A                |
| 20 | SITUATION WHERE I'M DIRECTLY COLLABORATING WITH THIS |
| 21 | PERSON, SO I FELT IT WOULD BE MORE APPROPRIATE TO    |
| 22 | USE SORT OF NIH PROTOCOL AND LEAVE THE ROOM.         |
| 23 | MR. HARRISON: THAT'S FINE. THANK YOU.                |
| 24 | DR. YAFFE: MR. CHAIRMAN, MEMBERS OF THE              |
| 25 | BOARD, MEMBERS OF THE PUBLIC, I BRING FOR YOUR       |
|    | 71   |
|    |  |

| 1  | CONSIDERATION RECOMMENDATIONS FROM THE GRANTS        |
|----|--|
| 2  | WORKING GROUP ON ITS MOST RECENT ROUND OF RESEARCH   |
| 3  | LEADERSHIP AWARDS. THIS IS AGENDA ITEM NO. 9.        |
| 4  | JUST AS A REMINDER, THE RESEARCH                     |
| 5  | LEADERSHIP AWARDS HAVE AS THEIR GOAL TO FACILITATE   |
| 6  | RECRUITMENT TO CALIFORNIA OF THE MOST PRODUCTIVE AND |
| 7  | PROMISING EARLY TO MIDCAREER SCIENTISTS IN STEM CELL |
| 8  | BIOLOGY AND REGENERATIVE MEDICINE, AND, ONCE WE      |
| 9  | RECRUIT THESE INDIVIDUALS, TO SUPPORT THEIR ROBUST   |
| 10 | AND INNOVATIVE RESEARCH PROGRAMS FOCUSED ON          |
| 11 | FUNDAMENTAL STUDIES OF THE PLURIPOTENT AND           |
| 12 | PROGENITOR STEM CELL BIOLOGY AND/OR TRANSLATIONAL    |
| 13 | STUDIES LEADING TO INNOVATIVE STEM CELL-BASED        |
| 14 | THERAPIES FOR DISEASE AND INJURY.                    |
| 15 | THE RESEARCH LEADERSHIP AWARDS PROGRAM IS            |
| 16 | OPEN TO NONPROFIT CALIFORNIA INSTITUTIONS. THE       |
| 17 | CANDIDATE OR PI, PRINCIPAL INVESTIGATOR, MUST HOLD A |
| 18 | POSITION OUTSIDE CALIFORNIA WHEN THE APPLICATION IS  |
| 19 | MADE AND PRIOR TO APPROVAL AND HAVE BEEN INDEPENDENT |
| 20 | FOR AT LEAST THREE YEARS. CANDIDATES MUST BE UNDER   |
| 21 | CONSIDERATION FOR RECRUITMENT TO A FULL-TIME         |
| 22 | POSITION. THE APPLICATION ACTUALLY COMES FROM THE    |
| 23 | INSTITUTION, AND INDIVIDUAL INSTITUTIONS MAY RECEIVE |
| 24 | ONLY ONE AWARD.                                      |
| 25 | YOU ORIGINALLY AUTHORIZED UP TO EIGHT                |
|    | 72   |

| 1        | AWARDS TO BE MADE. TO DATE TWO AWARDS HAVE BEEN   |
|----------|---|
| 2        | MADE, ONE TO DR. ROBERT WECHSLER-REYA AT  |
| 3        | SANFORD-BURNHAM INSTITUTE, THE SECOND TO DR. PETER  |
| 4        | COFFEY AT UNIVERSITY OF THE CALIFORNIA SANTA  |
| 5        | BARBARA.  |
| 6        | THESE AWARDS FEATURE RESEARCH SUPPORT FOR   |
| 7        | UP TO SIX YEARS AND THE STIPULATION THAT THE AWARDEE  |
| 8        | MUST COMMIT AT LEAST 75 PERCENT OF THEIR TIME TO  |
| 9        | STEM CELL AND REGENERATIVE MEDICINE RESEARCH.   |
| 10       | ADDITIONALLY, ELIGIBLE COSTS INCLUDE THE PI'S   |
| 11       | SALARY, LAB OPERATIONS, LAB RELOCATION, EQUIPMENT   |
| 12       | WHICH MUST BE MATCHED BY THE INSTITUTION, AND   |
| 13       | APPROPRIATE FACILITIES AND INDIRECT COSTS.  |
| 14       | THE RESEARCH LEADERSHIP AWARDS ARE  |
| 15       | REVIEWED BY THE GRANTS WORKING GROUP. THE CRITERIA  |
| 16       | FOR REVIEW INCLUDES THREE KEY AREAS. FIRST,   |
| 17       | RESEARCH VISION AND PLANS. THE REVIEWERS CONSIDER   |
| 18       | THE SIGNIFICANCE OF THE PROPOSED RESEARCH AND ITS   |
| 19       | INNOVATION BOTH IN TERMS OF THE FOCUS AND THE   |
| 20       | APPROACH. THEY ALSO CONSIDER THE PI'S PAST  |
| 21       | ACCOMPLISHMENTS AND POTENTIAL FOR FUTURE  |
| 22       |   |
|          | CONTRIBUTIONS. HERE THERE'S PARTICULAR  |
| 23       | CONTRIBUTIONS. HERE THERE'S PARTICULAR  CONSIDERATION FOR RESEARCH ACHIEVEMENTS, THE IMPACT |
| 23<br>24 |   |
|          | CONSIDERATION FOR RESEARCH ACHIEVEMENTS, THE IMPACT   |

| 1  | LEADERSHIP AND THE POTENTIAL FOR FUTURE LEADERSHIP,  |
|----|--|
| 2  | AND AN ASSESSMENT OF ACCOMPLISHMENTS AND POTENTIAL   |
| 3  | BY LEADERS IN THE FIELD, AND THIS IS THE             |
| 4  | CONSIDERATION OF LETTERS OF RECOMMENDATION.          |
| 5  | AND THE THIRD AREA FOR CONSIDERATION IS              |
| 6  | THE INSTITUTIONAL COMMITMENT AND ENVIRONMENT. HERE,  |
| 7  | WHAT IS THE INSTITUTION GOING TO PROVIDE? WHAT KIND  |
| 8  | OF IMPACT WILL THE CANDIDATE HAVE ON THE INSTITUTION |
| 9  | AND THE LOCAL ENVIRONMENT? AND HOW WILL THAT LOCAL   |
| 10 | ENVIRONMENT SUPPORT AND SYNERGIZE WITH THE           |
| 11 | ACTIVITIES OF THE CANDIDATE?                         |
| 12 | HERE OUR MOST RECENT ROUND OF RESEARCH               |
| 13 | LEADERSHIP AWARDS, AS MOST OF YOU KNOW, WE HAVE      |
| 14 | DEADLINES APPROXIMATELY EVERY THREE MONTHS FOR THIS  |
| 15 | AWARD. IT'S A ROTATING DEADLINE. IN THE LATEST       |
| 16 | REVIEW CYCLE, APPLICATION DEADLINE WAS SEPTEMBER     |
| 17 | 28TH. WE HELD A GRANTS WORKING GROUP REVIEW MEETING  |
| 18 | TELEPHONICALLY ON NOVEMBER 2D. AND HERE IS THE       |
| 19 | RECOMMENDATION FOR THIS APPLICATION. THE TITLE OF    |
| 20 | THE PROPOSAL IS "DEVELOPING A REGENERATION-BASED     |
| 21 | FUNCTIONAL RESTORATION TREATMENT FOR SPINAL CORD     |
| 22 | INJURY."   |
| 23 | REQUESTED FUNDS ARE APPROXIMATELY 5.6                |
| 24 | MILLION. THE GRANTS WORKING GROUP SCIENTIFIC         |
| 25 | REVIEWERS VOTED A SCORE OF 86 FOR THIS PROPOSAL, 86  |
|    | 7.4  |

| 1  | OUT OF 100. THE ENTIRE GRANTS WORKING GROUP,       |
|----|--|
| 2  | INCLUDING THE PATIENT ADVOCATE MEMBERS, VOTED TO   |
| 3  | RECOMMEND THIS FOR FUNDING.                        |
| 4  | AT THIS POINT, I DON'T KNOW IF MR. SHEEHY          |
| 5  | HAS ANY COMMENTS OR YOU HAVE ANY QUESTIONS FOR ME. |
| 6  | MR. SHESTACK: I JUST HAVE A QUESTION               |
| 7  | ABOUT THE MECHANISM. YOU ACCEPT APPLICATIONS FOR   |
| 8  | THIS AWARD EVERY THREE MONTHS?                     |
| 9  | DR. YAFFE: THAT'S CORRECT.                         |
| 10 | MR. SHESTACK: WHAT'S THE PHILOSOPHY                |
| 11 | AND YET WE'RE GOING TO DO EIGHT OVER THE ENTIRE    |
| 12 | TERM?  |
| 13 | DR. YAFFE: THE BOARD HAS AUTHORIZED                |
| 14 | EIGHT.   |
| 15 | MR. SHESTACK: AND WHAT IS THE PHILOSOPHY           |
| 16 | OF EVERY THREE MONTHS? HAVE THEY ALWAYS BEEN MY    |
| 17 | RECOLLECTION, THEY'VE ALWAYS BEEN CONSIDERED       |
| 18 | INDIVIDUALLY, NEVER SORT OF AS IF THEY WERE IN     |
| 19 | COMPETITION WITH EACH OTHER.                       |
| 20 | DR. YAFFE: WELL, WE HAVEN'T RECEIVED MORE          |
| 21 | THAN ONE APPLICATION IN ANY DEADLINE. SOME         |
| 22 | DEADLINES WE HAVEN'T RECEIVED ANY. THE PHILOSOPHY  |
| 23 | OF EVERY THERE MONTHS IS A KEY FEATURE OF THIS     |
| 24 | AWARD IS THE RECRUITMENT PROCESS. ACADEMIC         |
| 25 | RECRUITMENT, AS MANY OF YOU KNOW, IS A VERY        |
|    | 75   |

| 1  | DIFFICULT ENDEAVOR, INVOLVES A LOT OF BACK AND       |
|----|--|
| 2  | FORTH, IT INVOLVES COMPETING OFFERS, NEGOTIATION.    |
| 3  | WE JUST WANT TO TRY AND BE NIMBLE AND BE ABLE TO     |
| 4  | PROVIDE THIS AS A TOOL TO RECRUIT SOME OF THESE      |
| 5  | EMERGING STARS TO CALIFORNIA. AND THAT'S THE REASON  |
| 6  | WE HAVE EVERY THREE MONTHS.                          |
| 7  | IN THEORY, WE COULD HAVE A COMPETITION               |
| 8  | WHERE WE RECEIVE SEVERAL APPLICATIONS AT ONE         |
| 9  | DEADLINE. THAT HASN'T HAPPENED YET.                  |
| 10 | MR. SHESTACK: SO IT'S NOT REALLY A                   |
| 11 | COMPETITION. IT IS A RECRUITMENT TOOL.               |
| 12 | DR. YAFFE: IT'S A RECRUITMENT TOOL. IT'S             |
| 13 | A COMPETITION IN THE SENSE THAT THE GRANTS WORKING   |
| 14 | GROUP REVIEWS AND CONSIDERS IT, BUT THEY DON'T HAVE  |
| 15 | ANYTHING DIRECT TO COMPARE IT TO. THEY HAVE THEIR    |
| 16 | EXPERIENCE WITH RECRUITMENT.                         |
| 17 | MR. SHESTACK: I THINK IT'S AN EXCELLENT              |
| 18 | AWARD. I BRING IT UP BECAUSE THERE WILL BE ISSUES    |
| 19 | LATER IN THE DAY HAVING TO DO WITH OUR POLICY ABOUT  |
| 20 | BEING COMPETITIVE ON CERTAIN GRANTS AND PUTTING      |
| 21 | EVERYTHING UP TO COMPETITION RATHER THAN CONTRACTS,  |
| 22 | FOR INSTANCE. AND I JUST WANTED TO POINT OUT THAT    |
| 23 | THIS IS AN INSTANCE WHERE THIS IS NOT A COMPETITIVE  |
| 24 | GRANT. THIS IS SOMETHING WE'RE DOING TO CREATE       |
| 25 | RESOURCES FOR STEM CELL SCIENCE IN CALIFORNIA AND WE |
|    |  |

| 1  | FOUND A MECHANISM TO DO IT, WHICH IS THE GOAL. SO I   |
|----|---|
| 2  | JUST WANTED TO UNDERSTAND.                            |
| 3  | DR. YAFFE: ABSOLUTELY. WE MIGHT CONSIDER              |
| 4  | THIS COMPETITIVE AGAINST CRITERIA.                    |
| 5  | MR. SHESTACK: RIGHT. COMPETITIVE TOWARDS              |
| 6  | EXCELLENCE.   |
| 7  | DR. YAFFE: YES.                                       |
| 8  | MR. SHESTACK: OF COURSE. OKAY. THANK                  |
| 9  | YOU.  |
| 10 | DR. JUELSGAARD: I APOLOGIZE FOR MY LACK               |
| 11 | OF FAMILIARITY WITH THIS PROGRAM, BUT I JUST HAVE A   |
| 12 | COUPLE OF FINANCIALLY RELATED QUESTIONS. SO AS I      |
| 13 | UNDERSTAND IT, IN THIS PARTICULAR CASE WE'RE TALKING  |
| 14 | ABOUT \$5.6 MILLION OVER FIVE YEARS. SO IS THAT PAID  |
| 15 | OUT ON AN ANNUAL BASIS?                               |
| 16 | DR. YAFFE: WE MAKE PAYMENTS QUARTERLY.                |
| 17 | DR. JUELSGAARD: QUARTERLY. OKAY.                      |
| 18 | DR. YAFFE: ALTHOUGH THERE MAY BE SOME                 |
| 19 | UP-FRONT COSTS; FOR EXAMPLE, WE WILL SUPPLY UP TO \$1 |
| 20 | MILLION FOR EQUIPMENT WHICH HAS TO BE MATCHED BY THE  |
| 21 | INSTITUTION. IN THEORY THAT COULD COME ON DAY ONE     |
| 22 | OR IT COULD COME ON THE IT COULD COME TOWARDS THE     |
| 23 | END.  |
| 24 | DR. JUELSGAARD: AND THE OTHER QUESTION IS             |
| 25 | IS WHAT HAPPENS IN THE EVENT OF SOME UNTOWARD IF      |
|    | 77  |
|    | <i>, ,</i>  |

| 1  | THERE IS AN UNTOWARD EVENT, AN UNFORTUNATE DEATH OR  |
|----|--|
| 2  | THE INVESTIGATOR SUDDENLY DECIDES THAT THEY WANT TO  |
| 3  | GO BACK TO WHERE THEY CAME FROM BECAUSE THIS ISN'T   |
| 4  | REALLY TURNING OUT TO BE THE PLACE FOR THEM OR THEIR |
| 5  | FAMILY TO BE, DO WE STOP THE FUNDING AT THAT POINT?  |
| 6  | DR. YAFFE: ABSOLUTELY. SO, FIRST OF ALL,             |
| 7  | THESE AWARDS CANNOT MOVED EVEN WITHIN CALIFORNIA,    |
| 8  | CANNOT BE MOVED TO ANOTHER INSTITUTION BECAUSE WE    |
| 9  | DIDN'T WANT INSTITUTIONS COMPETING WITH EACH OTHER   |
| 10 | TO TRY AND STEAL SOMEONE. BUT SECOND, AS WITH ALL    |
| 11 | OUR AWARDS, THESE AWARDS ARE MONITORED ANNUALLY WITH |
| 12 | PROGRESS REPORT. WE WILL CUT THE AWARD OFF OR        |
| 13 | WELL, FIRST, WE'LL HAVE A DISCUSSION AND POTENTIALLY |
| 14 | COULD CUT THE AWARD OFF IF PROGRESS ISN'T            |
| 15 | SUFFICIENT, IF THE SCOPE CHANGED, IF THE DIRECTION   |
| 16 | CHANGED; AND CERTAINLY IF THE PERSON LEFT            |
| 17 | CALIFORNIA, THAT WOULD BE THE END OF THE AWARD.      |
| 18 | MR. JUELSGAARD: THANK YOU.                           |
| 19 | CHAIRMAN THOMAS: ANY OTHER COMMENTS BY               |
| 20 | MEMBERS OF THE BOARD? ANY COMMENTS BY MEMBERS OF     |
| 21 | THE PUBLIC?  |
| 22 | MR. REED: YES. THIS IS DON REED.                     |
| 23 | CHAIRMAN THOMAS: YES, DON.                           |
| 24 | MR. REED: YES. I'VE KNOWN THE INDIVIDUAL             |
| 25 | INVOLVED FOR A NUMBER OF YEARS. HE ALWAYS PROMISES   |
|    |  |

|    | DARRISTERS REPORTING SERVICE                     |
|----|--|
| 1  | LESS THAN HE CAN DELIVER. THIS IS A SUPERLATIVE  |
| 2  | HARDWORKING PERSON. THIS IS A CHAMPION OF THE    |
| 3  | FIELD. I URGE AN AYE VOTE. THANK YOU.            |
| 4  | CHAIRMAN THOMAS: THANK YOU, DON. ANY             |
| 5  | OTHER COMMENTS BY MEMBERS OF THE PUBLIC? HEARING |
| 6  | NONE, DO I HEAR A MOTION TO APPROVE?             |
| 7  | DR. PRIETO: SO MOVED.                            |
| 8  | CHAIRMAN THOMAS: SO MOVED BY DR. PRIETO.         |
| 9  | DO I HEAR A SECOND?                              |
| 10 | MS. GIBBONS: SECOND.                             |
| 11 | CHAIRMAN THOMAS: SECOND BY LEEZA GIBBONS.        |
| 12 | ALL THOSE IN FAVOR PLEASE SAY AYE. YES, JAMES.   |
| 13 | MR. HARRISON: WE NEED TO DO A ROLL CALL          |
| 14 | VOTE ON THIS MOTION.                             |
| 15 | CHAIRMAN THOMAS: ROLL CALL VOTE. OKAY.           |
| 16 | SORRY.   |
| 17 | MS. BONNEVILLE: ROBERT PRICE.                    |
| 18 | DR. PRICE: YES.                                  |
| 19 | MS. BONNEVILLE: FLOYD BLOOM. DAVID               |
| 20 | BRENNER. JACOB LEVIN FOR SUSAN BRYANT.           |
| 21 | DR. LEVIN: YES.                                  |
| 22 | MS. BONNEVILLE: MARCY FEIT.                      |
| 23 | MS. FEIT: YES.                                   |
| 24 | MS. BONNEVILLE: TED KRONTIRIS.                   |
| 25 | DR. KRONTIRIS: YES.                              |
|    | 79   |
|    | , 5  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

|    | Difficulty That Offin to Delit Told   |
|----|---------------------------------------|
| 1  | MS. BONNEVILLE: LEEZA GIBBONS.        |
| 2  | MS. GIBBONS: YES.                     |
| 3  | MS. BONNEVILLE: MICHAEL GOLDBERG. SAM |
| 4  | HAWGOOD.                              |
| 5  | DR. HAWGOOD: YES.                     |
| 6  | MS. BONNEVILLE: STEPHEN JUELSGAARD.   |
| 7  | DR. JUELSGAARD: YES.                  |
| 8  | MS. BONNEVILLE: TED LOVE. BERT LUBIN. |
| 9  | SHLOMO MELMED.                        |
| 10 | DR. MELMED: YES.                      |
| 11 | MS. BONNEVILLE: PHIL PIZZO.           |
| 12 | DR. PIZZO: YES.                       |
| 13 | MS. BONNEVILLE: KEN BURTIS.           |
| 14 | DR. BURTIS: YES.                      |
| 15 | MS. BONNEVILLE: FRANCISCO PRIETO.     |
| 16 | DR. PRIETO: AYE.                      |
| 17 | MS. BONNEVILLE: ELIZABETH FINI.       |
| 18 | DR. FINI: YES.                        |
| 19 | MS. BONNEVILLE: ROBERT QUINT.         |
| 20 | DR. QUINT: YES.                       |
| 21 | MS. BONNEVILLE: DUANE ROTH. JOAN      |
| 22 | SAMUELSON. DAVID SERRANO-SEWELL.      |
| 23 | MR. SERRANO-SEWELL: YES.              |
| 24 | MS. BONNEVILLE: JEFF SHEEHY.          |
| 25 | MR. SHEEHY: YES.                      |
|    | 80                                    |
|    | 00                                    |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | MS. BONNEVILLE: JONATHAN SHESTACK.                   |
|----|--|
| 2  | MR. SHESTACK: YES.                                   |
| 3  | MS. BONNEVILLE: JONATHAN THOMAS.                     |
| 4  | CHAIRMAN THOMAS: YES.                                |
| 5  | MS. BONNEVILLE: ART TORRES.                          |
| 6  | MR. TORRES: AYE.                                     |
| 7  | MS. BONNEVILLE: KRISTINA VUORI.                      |
| 8  | DR. VUORI: YES.                                      |
| 9  | MS. BONNEVILLE: JAMES ECONOMOU.                      |
| 10 | DR. ECONOMOU: YES.                                   |
| 11 | DR. YAFFE: WOULD YOU LIKE ME TO ANNOUNCE             |
| 12 | THE NAME OF THE INDIVIDUAL BECAUSE WE HAVEN'T        |
| 13 | REVEALED THAT IN PUBLIC YET; BUT NOW THAT THE        |
| 14 | AWARD'S BEEN MADE, THIS IS DR. ZHIGANG HE CURRENTLY  |
| 15 | FROM CHILDREN'S HOSPITAL IN BOSTON, HARVARD MEDICAL  |
| 16 | SCHOOL. HE'S BEING RECRUITED TO UNIVERSITY OF        |
| 17 | CALIFORNIA BERKELEY. AND WE HAVE EVERY INDICATION    |
| 18 | THAT THIS IS GOING TO BE A SUCCESSFUL RECRUITMENT.   |
| 19 | CHAIRMAN THOMAS: THANK YOU VERY MUCH.                |
| 20 | DR. TROUNSON: SO, CHAIR, JUST IN TERMS OF            |
| 21 | ENDORSEMENT FOR THE BOARD, I THINK HE'S AN           |
| 22 | EXCEPTIONAL PERSON. AND REALLY THERE ARE THREE       |
| 23 | EXCEPTIONAL PEOPLE NOW THAT WE'VE GOT UNDER THAT     |
| 24 | LEADERSHIP PROGRAM. THEY'RE ASTONISHINGLY GOOD.      |
| 25 | THEY REALLY ARE TOP PEOPLE IN THE FIELD, AND THEY'RE |
|    | 81   |
|    | 0.1  |

| 1  | ACTUALLY GOING TO DO SOMETHING VERY SPECIAL, ALL     |
|----|--|
| 2  | THREE OF THEM. IN PARTICULAR THIS LAST CANDIDATE IS  |
| 3  | JUST A SUPERB RESEARCHER. SO FROM ALL THE PEOPLE     |
| 4  | THAT I KNOW, HE'S REALLY ONE OF THOSE PEOPLE OF      |
| 5  | SUPERB EXCELLENCE, AND I THINK WE'VE DONE WELL TO BE |
| 6  | ABLE TO A ATTRACT HIM.                               |
| 7  | CHAIRMAN THOMAS: THANK YOU, DR. TROUNSON.            |
| 8  | I HAVE A QUESTION, MARIA. WE ARE, I AM HAPPY TO      |
| 9  | REPORT, AHEAD OF SCHEDULE.                           |
| 10 | MR. TORRES: HERE. HERE.                              |
| 11 | CHAIRMAN THOMAS: AND SO WE WERE AT A                 |
| 12 | POINT WHERE WE WERE GOING TO PROCEED TO THE          |
| 13 | MS. BONNEVILLE: LET'S TAKE A BRIEF BREAK             |
| 14 | AND THEN WE'LL COME BACK AND THEN CONTINUE TILL THE  |
| 15 | SPOTLIGHT.   |
| 16 | CHAIRMAN THOMAS: SO WE'RE GOING TO                   |
| 17 | PROCEED TO THE SPOTLIGHT PRESENTATION; BUT I THINK   |
| 18 | SINCE WE ARE AHEAD OF SCHEDULE, PERHAPS WE'LL DO A   |
| 19 | QUICK BREAK AND WE'LL RESUME. AND IF WE'RE READY TO  |
| 20 | GO WITH THAT, WE WILL. IF NOT, WE'LL PROCEED TO THE  |
| 21 | ACTION ITEMS ON THE AGENDA. FIVE-MINUTE BREAK        |
| 22 | PLEASE. EVERYBODY PLEASE COME BACK SHORTLY. THANK    |
| 23 | YOU.   |
| 24 | (A RECESS WAS TAKEN.)                                |
| 25 | CHAIRMAN THOMAS: WE'RE NOW GOING TO                  |
|    |  |

| 1  | PROCEED WE'RE GOING TO SKIP OVER THE SPOTLIGHT,      |
|----|--|
| 2  | WHICH WE'LL HAVE A LITTLE BIT LATER, AND PROCEED TO  |
| 3  | ITEM NO. 12, CONSIDERATION OF THE APPOINTMENT OF     |
| 4  | PATIENT ADVOCATE AND SCIENTIFIC MEMBERS OF THE       |
| 5  | GRANTS WORKING GROUP. DR. SAMBRANO.                  |
| 6  | DR. SAMBRANO: OKAY. THANK YOU VERY MUCH,             |
| 7  | MR. CHAIRMAN, MEMBERS OF THE BOARD, MEMBERS OF THE   |
| 8  | PUBLIC. SO TODAY WE'RE BRINGING FOR YOUR             |
| 9  | CONSIDERATION FIVE NOMINEES FOR GRANTS WORKING GROUP |
| 10 | MEMBERS, SCIENTIFIC MEMBERS, THAT ARE BRINGING KEY   |
| 11 | SCIENTIFIC, TRANSLATIONAL, AND PRODUCT DEVELOPMENT   |
| 12 | EXPERTISE IN AREAS SUCH AS SCNT, CANCER, SPINAL CORD |
| 13 | INJURY, AND NEUROLOGICAL DISEASE. THEIR BIOGRAPHIES  |
| 14 | ARE IN SECTION 12 OF YOUR NOTEBOOKS, AND I WILL JUST |
| 15 | STATE THE NAME OF THE SCIENTIFIC MEMBERS THAT WE ARE |
| 16 | NOMINATING.  |
| 17 | THEY INCLUDE DR. MICKIE BHATIA FROM                  |
| 18 | MCMASTER UNIVERSITY; DR. JOHN HAMBOR FROM THE CELL   |
| 19 | THERAPY GROUP; DR. SHOUKHRAT MITALIPOV FROM THE      |
| 20 | OREGON HEALTH AND SCIENCE UNIVERSITY; DR. MARK NOBLE |
| 21 | FROM THE UNIVERSITY OF ROCHESTER; AND DR. JACQUELINE |
| 22 | SAGEN FROM THE UNIVERSITY MIAMI. AND SO FOR THESE    |
| 23 | SCIENTIFIC MEMBERS WE'RE REQUESTING YOUR APPROVAL    |
| 24 | AND APPOINTMENT AS MEMBERS OF THE GRANTS WORKING     |
| 25 | GROUP.   |
|    |  |

| 1  | CHAIRMAN THOMAS: ARE THERE COMMENTS BY              |
|----|---|
| 2  | THE BOARD? COMMENTS BY MEMBERS OF THE PUBLIC?       |
| 3  | DR. STEWARD: SO MOVED.                              |
| 4  | CHAIRMAN THOMAS: SORRY, DR. STEWARD.                |
| 5  | HE'S MOVING APPROVAL.                               |
| 6  | DR. KRONTIRIS: SECOND.                              |
| 7  | CHAIRMAN THOMAS: SECOND BY DR. KRONTIRIS.           |
| 8  | DO WE HAVE ANY OTHER DISCUSSION? ALL THOSE IN FAVOR |
| 9  | PLEASE SAY AYE. OPPOSED? ABSTENTIONS? THANK YOU.    |
| 10 | DR. SAMBRANO: SO I THINK WE'RE ALSO GOING           |
| 11 | TO MOVE TO THE PATIENT ADVOCATE.                    |
| 12 | CHAIRMAN THOMAS: DR. PIZZO, WE NEED TO              |
| 13 | HAVE YOUR VOTE. I'M SORRY.                          |
| 14 | MS. BONNEVILLE: PHIL PIZZO. SAM HAWGOOD.            |
| 15 | DR. HAWGOOD: AYE.                                   |
| 16 | CHAIRMAN THOMAS: MORNING, SAM.                      |
| 17 | DR. HAWGOOD: MORNING.                               |
| 18 | CHAIRMAN THOMAS: OKAY. I WILL SAY, AS               |
| 19 | ALWAYS, WE'RE VERY, VERY FORTUNATE TO HAVE SUCH     |
| 20 | AUGUST MEMBERS ON THIS COMMITTEE. AND THANK YOU FOR |
| 21 | YOUR WORK, DR. SAMBRANO, IN MAKING THAT HAPPEN.     |
| 22 | PART 2 OF ITEM 12 WITH RESPECT TO THE               |
| 23 | PATIENT ADVOCATES OF THE GRANTS WORKING GROUP. CAN  |
| 24 | I HAVE A MOTION TO REAPPOINT THE FOLLOWING PATIENT  |
| 25 | ADVOCATES TO THE GRANTS WORKING GROUP: MARCY FEIT,  |
|    | 84  |
|    |   |

| 1  | FRANCISCO PRIETO, JOAN SAMUELSON, DAVID              |
|----|--|
| 2  | SERRANO-SEWELL, JEFF SHEEHY, JONATHAN SHESTACK, AND  |
| 3  | TO A APPOINT OS STEWARD AS A NEW PATIENT ADVOCATE    |
| 4  | MEMBER TO THE GRANTS WORKING GROUP, REPLACING SHERRY |
| 5  | LANSING, WHO I WILL COMMENT ON HER TERRIFIC          |
| 6  | CONTRIBUTION WHEN SHE COMES BACK IN THE ROOM.        |
| 7  | YES, JAMES.  |
| 8  | MR. HARRISON: CHAIR, MEMBERS WHO ARE                 |
| 9  | POTENTIAL APPOINTEES OR REAPPOINTEES SHOULD ABSTAIN  |
| 10 | FROM THIS DISCUSSION AND VOTE.                       |
| 11 | CHAIRMAN THOMAS: THANK YOU.                          |
| 12 | DR. PIZZO: HAPPY TO MOVE THIS.                       |
| 13 | CHAIRMAN THOMAS: THANK YOU. MOVED BY                 |
| 14 | DEAN PIZZO.  |
| 15 | DR. PIZZO: PART OF THE NEW STANFORD AND              |
| 16 | UCSF MERGER.   |
| 17 | CHAIRMAN THOMAS: WE'LL SAY SECONDED BY               |
| 18 | DEAN HAWGOOD AND SIMULTANEOUSLY BY SENATOR TORRES.   |
| 19 | CAN WE HAVE THOSE MEMBERS WHO ARE NOT THE SUBJECT    |
| 20 | MATTER OF THIS VOTE PLEASE, THOSE THAT APPROVE       |
| 21 | PLEASE SAY AYE. OPPOSED? ABSTENTIONS? UNANIMOUS.     |
| 22 | MR. HARRISON, YOU LOOK LIKE YOU'RE ABOUT TO SAY      |
| 23 | SOMETHING. NO. THANK YOU VERY MUCH FOR YOUR          |
| 24 | TREMENDOUS SERVICE, ONE AND ALL. THIS IS A MAJOR     |
| 25 | RESPONSIBILITY AND OBVIOUSLY AT THE ABSOLUTE CORE OF |
|    |  |

| 1  | THE GREAT WORK THAT WE DO HERE AT CIRM. SO THANK    |
|----|---|
| 2  | YOU TO EVERYBODY.                                   |
| 3  | MR. HARRISON: CHAIR, JUST TO BE CLEAR,              |
| 4  | THE RECORD SHOULD REFLECT THAT THE MEMBERS WHO ARE  |
| 5  | APPOINTEES DID NOT PARTICIPATE IN THAT VOICE VOTE.  |
| 6  | DR. PIZZO: JAMES, THIS IS PHIL. CAN YOU             |
| 7  | RESPOND TO THIS IF IT'S APPROPRIATE? DOES THIS MEAN |
| 8  | THAT SHERRY LANSING IS GOING OFF THE BOARD?         |
| 9  | CHAIRMAN THOMAS: NO. OFF THE GRANTS                 |
| 10 | WORKING GROUP.                                      |
| 11 | DR. PIZZO: OKAY. GREAT. I WAS HAVING A              |
| 12 | CHEST PAIN JUST THINKING ABOUT IT.                  |
| 13 | CHAIRMAN THOMAS: NO. NO. LET'S BE                   |
| 14 | VERY CLEAR ABOUT THAT.                              |
| 15 | DR. PIZZO: OKAY. GOOD. THANK YOU.                   |
| 16 | CHAIRMAN THOMAS: OKAY. NEXT WE'RE GOING             |
| 17 | TO ITEM NO. 13, WHICH IS CONSIDERATION OF           |
| 18 | APPOINTMENT AND/OR REAPPOINTMENT OF MEMBERS TO THE  |
| 19 | STANDARDS WORKING GROUP.                            |
| 20 | MS. BONNEVILLE: ACTUALLY WE NEED TO ASK             |
| 21 | SAM AND PHIL IF THEY COULD FOR THEIR VOTE FOR THE   |
| 22 | PREVIOUS.   |
| 23 | DR. PIZZO: YES.                                     |
| 24 | DR. HAWGOOD: YES.                                   |
| 25 | MS. BONNEVILLE: THANK YOU.                          |
|    | 86  |
|    |   |

| 1  | CHAIRMAN THOMAS: GEOFF LOMAX IS GOING TO             |
|----|--|
| 2  | PRESENT THIS ITEM NO. 13.                            |
| 3  | DR. LOMAX: MR. CHAIRMAN, MEMBERS OF THE              |
| 4  | BOARD, AND THE PUBLIC, THANK YOU. THIS ITEM          |
| 5  | ACTUALLY INVOLVES REAPPOINTMENT OF EXISTING MEMBERS  |
| 6  | TO THE STANDARDS WORKING GROUP. AND TO REMIND        |
| 7  | EVERYONE, THE STANDARDS WORKING GROUP IS COMPRISED   |
| 8  | OF SCIENTISTS, MEDICAL ETHICISTS, AND PATIENT        |
| 9  | ADVOCATE MEMBERS OF THE BOARD. AND WHAT I WILL       |
| 10 | PRESENT IS A PROPOSAL FOR REAPPOINTMENT OF MEMBERS   |
| 11 | TO THE SCIENTIFIC AND MEDICAL ETHICS PART OF THE     |
| 12 | BOARD.   |
| 13 | IF YOU'RE NOT AWARE, SEVEN OF OUR MEMBERS            |
| 14 | HAVE SERVED SIX-YEAR TERMS, AND THAT'S REMARKABLE TO |
| 15 | THINK WE'VE HAD 19 MEETINGS OVER THOSE SIX YEARS.    |
| 16 | AND I THINK WE'VE DONE A LOT OF GREAT WORK IN THE    |
| 17 | WORKING GROUP. TIME FLIES.                           |
| 18 | OF THOSE SEVEN MEMBERS, TWO HAVE INDICATED           |
| 19 | THE DESIRE NOT TO BE REAPPOINTED. ONE IS DR. KEVIN   |
| 20 | EGGAN. HE FELT HIS LABORATORY RESPONSIBILITIES WERE  |
| 21 | TOO MUCH AND THE TRAVEL WAS CHALLENGING. AND DR.     |
| 22 | JANET ROWLEY, WHO I MUST SAY IT'S BEEN A HIGHLIGHT   |
| 23 | OF MY CAREER TO BE ABLE TO WORK WITH DR. ROWLEY.     |
| 24 | OUTSTANDING SCIENTIST. AND AT THIS POINT IN HER      |
| 25 | CAREER SHE FEELS IT'S TIME TO WIND DOWN SOME         |
|    | 87   |

| 1                    | RESPONSIBILITIES, AND SHE WAS VERY GRATEFUL FOR THE   |
|----------------------|---|
| 2                    | OPPORTUNITY TO WORK WITH CIRM, BUT WOULD AT THIS  |
| 3                    | TIME LIKE TO DISCONTINUE PARTICIPATION IN THE   |
| 4                    | WORKING GROUP.  |
| 5                    | THAT LEAVES FIVE MEMBERS ELIGIBLE FOR   |
| 6                    | REAPPOINTMENT, AND EACH OF THOSE FIVE MEMBERS HAS   |
| 7                    | INDICATED A DESIRE TO CONTINUE SERVICE WITH THE   |
| 8                    | WORKING GROUP. AND WE'RE PLEASED ABOUT THAT.  |
| 9                    | JUST TO BE AWARE, THE REAPPOINTMENTS MUST   |
| 10                   | BE STAGGERED BECAUSE THEY'RE NOW IN THEIR SECOND  |
| 11                   | TERM. SO WHAT WE'LL BE PROPOSING IS REAPPOINTMENTS  |
| 12                   | TO THESE FIVE MEMBERS FOR EITHER A TERM OF TWO,   |
| 13                   | FOUR, OR SIX YEARS.   |
| 14                   | WHAT I'VE DONE, I DON'T KNOW IF YOU CAN   |
| 15                   | SEE, THERE'S SORT OF BLUE AND BLACK. THE LITTLE   |
| 16                   | BLUE DOTS ARE REFERENCE TO MEMBERS WHO WOULD BE ON  |
| 17                   | THE MEDICAL ETHICS SIDE AND THE BLACK DOTS ARE  |
| 18                   |   |
|                      | SCIENTIFIC MEMBERS. WHAT WE WOULD PROPOSE IS  |
| 19                   | SCIENTIFIC MEMBERS. WHAT WE WOULD PROPOSE IS  TWO-YEAR TERMS TO DR. ROBERT TAYLOR AND DR. ANN   |
| 19<br>20             |   |
|                      | TWO-YEAR TERMS TO DR. ROBERT TAYLOR AND DR. ANN   |
| 20                   | TWO-YEAR TERMS TO DR. ROBERT TAYLOR AND DR. ANN KIESSLING, FOUR-YEAR TERMS TO DR. KENNETH OLDEN AND   |
| 20<br>21             | TWO-YEAR TERMS TO DR. ROBERT TAYLOR AND DR. ANN KIESSLING, FOUR-YEAR TERMS TO DR. KENNETH OLDEN AND TED PETERS, AND SIX-YEAR TERM TO DR. BERNARD LO,  |
| 20<br>21<br>22       | TWO-YEAR TERMS TO DR. ROBERT TAYLOR AND DR. ANN KIESSLING, FOUR-YEAR TERMS TO DR. KENNETH OLDEN AND TED PETERS, AND SIX-YEAR TERM TO DR. BERNARD LO, WHO'S CURRENTLY THE CO-CHAIR OF THE STANDARDS                |
| 20<br>21<br>22<br>23 | TWO-YEAR TERMS TO DR. ROBERT TAYLOR AND DR. ANN KIESSLING, FOUR-YEAR TERMS TO DR. KENNETH OLDEN AND TED PETERS, AND SIX-YEAR TERM TO DR. BERNARD LO, WHO'S CURRENTLY THE CO-CHAIR OF THE STANDARDS WORKING GROUP. |

| 1  | MR. SHEEHY: SO MOVED.                                |
|----|--|
| 2  | CHAIRMAN THOMAS: MOVED BY MR. SHEEHY.                |
| 3  | MR. TORRES: SECOND.                                  |
| 4  | CHAIRMAN THOMAS: SECONDED BY SENATOR                 |
| 5  | TORRES. ANY DISCUSSION BY THE BOARD?                 |
| 6  | MR. SHEEHY: I JUST WANT TO SAY I WISH                |
| 7  | SHERRY WAS HERE BECAUSE SHE'S DONE SUCH A GREAT JOB  |
| 8  | CO-CHAIRING THIS COMMITTEE. THIS HAS BEEN AN         |
| 9  | EXTRAORDINARY EXPERIENCE AS WE'VE GONE THROUGH THIS. |
| 10 | AND ALL OF THESE INDIVIDUALS WHO HAVE BEEN           |
| 11 | REAPPOINTED, THEIR CONTRIBUTIONS HAVE BEEN ENORMOUS. |
| 12 | SO I'M DELIGHTED THAT THEY'RE WILLING TO CONTINUE TO |
| 13 | HELP US WITH OUR WORK.                               |
| 14 | CHAIRMAN THOMAS: OTHER COMMENTS BY                   |
| 15 | MEMBERS OF THE BOARD? COMMENTS BY MEMBERS OF THE     |
| 16 | PUBLIC? HEARING NONE, IT'S BEEN MOVED AND SECONDED.  |
| 17 | ALL THOSE IN FAVOR PLEASE SAY AYE. OPPOSED?          |
| 18 | ABSTENTIONS?   |
| 19 | DEAN PIZZO.  |
| 20 | MS. BONNEVILLE: SAM HAWGOOD.                         |
| 21 | CHAIRMAN THOMAS: MAY HAVE LOST THEM.                 |
| 22 | THAT MOTION IS APPROVED.                             |
| 23 | GETTING TO THE PATIENT ADVOCATE MEMBERS OF           |
| 24 | THE STANDARDS WORKING GROUP, CAN I HAVE A MOTION TO  |
| 25 | REAPPOINT THE FOLLOWING PATIENT ADVOCATES TO THAT    |
|    | 89   |

| 1  | GROUP: MARCY FEIT, SHERRY LANSING, FRANCISCO         |
|----|--|
| 2  | PRIETO, JEFF SHEEHY, AND JONATHAN SHESTACK.          |
| 3  | MR. TORRES: SO MOVED.                                |
| 4  | CHAIRMAN THOMAS: MOVED BY SENATOR TORRES.            |
| 5  | MS. GIBBONS: SECOND.                                 |
| 6  | CHAIRMAN THOMAS: SECONDED BY LEEZA                   |
| 7  | GIBBONS. AGAIN, THOSE AFFECTED NEED TO ABSTAIN FROM  |
| 8  | VOTING.  |
| 9  | BEFORE WE VOTE, THE COMMENTS MADE BY MR.             |
| 10 | SHEEHY WITH RESPECT TO THE PREVIOUS CANDIDATES APPLY |
| 11 | EQUALLY TO ALL OF THE PATIENT ADVOCATES. VERY, VERY  |
| 12 | IMPORTANT UNDERTAKING THAT ALL OF YOU MAKE. SO       |
| 13 | THANK YOU VERY MUCH.                                 |
| 14 | ALL THOSE IN FAVOR PLEASE SAY AYE.                   |
| 15 | OPPOSED? ABSTENTIONS? DEAN PIZZO.                    |
| 16 | DR. PIZZO: AYE.                                      |
| 17 | CHAIRMAN THOMAS: DEAN HAWGOOD.                       |
| 18 | DR. HAWGOOD: AYE.                                    |
| 19 | CHAIRMAN THOMAS: THANK YOU VERY MUCH.                |
| 20 | MOTION PASSES. THANK YOU AGAIN, ONE AND ALL, FOR     |
| 21 | YOUR DEDICATED AND CRITICAL WORK.                    |
| 22 | NOW GOING ON TO ITEM 14, CONSIDERATION OF            |
| 23 | AMENDMENTS TO THE GRANTS ADMINISTRATION POLICY.      |
| 24 | BEFORE WE GET TO THAT, THE LAST, BUT NOT LEAST,      |
| 25 | COMMENT ON THE STANDARDS WORKING GROUP IS A VERY     |
|    | 90   |
|    | · · · · · · · · · · · · · · · · · · ·                |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| LARGE THANK YOU TO GEOFF LOMAX FOR ALL THAT YOU DO  |
|---|
| AND HAVE DONE AND WILL DO IN CONNECTION WITH THAT   |
| EFFORT. THANK YOU VERY MUCH.                        |
| MR. SWEEDLER.                                       |
| MR. SWEEDLER: GOOD MORNING. THIS IS ITEM            |
| 14 IN YOUR BINDERS. YOU HAVE A BRIEF INTRODUCTORY   |
| MEMO FROM OUR VERY CAPABLE GRANTS MANAGEMENT        |
| OFFICER, AMY LEWIS. AND ATTACHED TO THAT IS THE     |
| CURRENT VERSION OF THE PROPOSED AMENDMENTS. THIS IS |
| AN INFORMATIONAL ITEM TO LET YOU KNOW THAT WE ARE   |
| PREPARING TO COMMENCE THE FORMAL ADMINISTRATIVE     |
| PROCESS FOR AMENDING REGULATIONS, IN THIS CASE THE  |
| GRANTS ADMINISTRATION POLICY, WHICH PROVIDES ALL OF |
| THE DETAILED RULES THAT SAY WHAT CAN AND CANNOT BE  |
| DONE WITH CIRM GRANT FUNDS. EVERY GRANTS AGENCY HAS |
| SOMETHING LIKE THIS.                                |
| OUR GRANTEES ARE VERY DILIGENT ABOUT                |
| TRYING TO COMPLY WITH OUR POLICIES, AND THAT DOES   |
| TEND TO LEAD TO QUESTIONS ABOUT WHAT IS AND IS NOT  |
| ALLOWED. AND SO OUR GRANTS MANAGEMENT OFFICE HAS    |
| IDENTIFIED SITUATIONS WHERE THERE'S SOME CONFUSION  |
| IN THE FIELD OR WE COULD CLEAR THINGS UP AND MAKE   |
| THINGS EASIER BY STREAMLINING OR CLARIFYING         |
| REGULATIONS. THEY'VE ALSO IDENTIFIED A NUMBER OF    |
| SITUATIONS IN WHICH A RULE THAT MAY HAVE BEEN WELL  |
| 91  |
|   |

| 1  | INTENTIONED HAS TURNED OUT TO CREATE ADMINISTRATIVE  |
|----|--|
| 2  | HASSLES WITH NO CORRESPONDING BENEFIT TO OUR         |
| 3  | MISSION. AND SO THEY'VE PROPOSED STREAMLINING SOME   |
| 4  | OF THOSE AS WELL.                                    |
| 5  | AND THEN THERE'S JUST A MATTER OF DEFINING           |
| 6  | SOME TERMS AND THINGS LIKE THAT. UNDER THE           |
| 7  | RULEMAKING PROCESS, WHAT WILL HAPPEN IS WE WILL      |
| 8  | PUBLISH THESE PROPOSALS. WE'LL PUBLISH THEM IN A     |
| 9  | FORMAL STATE REGISTER. WE'LL SEND THEM TO OUR        |
| 10 | GRANTEES AND INTERESTED STAKEHOLDERS AND GIVE PEOPLE |
| 11 | 45 DAYS TO SUBMIT ANY WRITTEN COMMENTS THAT THEY     |
| 12 | HAVE. WE WILL RESPOND TO THOSE, GIVE PUBLIC NOTICE   |
| 13 | OF ANY OTHER SIGNIFICANT CHANGES THAT ARE BEING      |
| 14 | CONSIDERED, AND THEN ALL OF THAT, INCLUDING AN       |
| 15 | INDICATION OF WHAT KIND OF FEEDBACK WE'VE GOTTEN,    |
| 16 | WILL COME BACK TO THE BOARD WHO HAVE THE FINAL SAY   |
| 17 | OVER WHETHER OR NOT TO PROCEED WITH THE AMENDMENTS.  |
| 18 | WE'VE HAD THE GRANTS ADMINISTRATION POLICY           |
| 19 | IN PLACE REALLY SINCE THE BEGINNING. WE'VE HAD ONE   |
| 20 | MAJOR ROUND OF REVISIONS. THESE ARE FAIRLY MINOR,    |
| 21 | JUST REALLY HOUSEKEEPING TO KEEP EVERYTHING MOVING   |
| 22 | ALONG. I THINK THE ONE AREA WHERE WE REALLY DELVE    |
| 23 | INTO IN THIS THAT'S SOMEWHAT NEW FOR US IS THAT WHEN |
| 24 | THESE REGULATIONS WERE PREPARED, OUR AWARD SIZES     |
| 25 | THE AWARDS WERE GENERALLY UNDER A MILLION DOLLARS.   |
|    |  |

| AND WE'RE NOW ADMINISTERING MUCH LARGER RESEARCH     |
|--|
| PROGRAMS, AND SO SOME OF THOSE RULES AND PERCENTAGES |
| JUST DIDN'T SCALE UP PROPERLY. SO WE'VE CALIBRATED   |
| SOME OF THAT A BIT.                                  |
| I'M HAPPY TO RESPOND TO ANY QUESTIONS YOU            |
| HAVE. AND IF YOU HAVE QUESTIONS ABOUT THE SPECIFICS  |
| OF THE REGULATIONS, I'M HAPPY TO RESPOND TO THOSE    |
| NOW OR AT ANY TIME IN THE FUTURE AS WE'RE HEADING    |
| TOWARDS THIS SPRING, WHICH IS WHEN WE WOULD COME     |
| BACK TO YOU FOR FINAL APPROVAL. OUR GOAL IS TO HAVE  |
| THIS ROUND OF AMENDMENTS FULLY IN PLACE BY THE TIME  |
| OUR NEXT SETS OF LARGE AWARDS ARE GOING OUT, WHICH,  |
| AS YOU'VE HEARD, WILL BE EARLY TRANSLATIONAL AND     |
| DISEASE TEAM THERAPY DEVELOPMENT. ARE THERE ANY      |
| QUESTIONS?   |
| DR. VUORI: I HAVE A VERY BIG AND VERY                |
| PRACTICAL QUESTION ON PAGE 34 REGARDING THE AWARD    |
| TRANSFERS. THE AWARD IS BEING TRANSFERRED TO         |
| ANOTHER INSTITUTION WHEN THE GRANTEE LEAVES, THAT    |
| CIRM DOES NOT HAVE AUTHORITY TO INCREASE THE AWARD   |
| AMOUNT WITHOUT THE BOARD APPROVAL.                   |
| MR. SWEEDLER: YES.                                   |
| DR. VUORI: I WAS CURIOUS HOW YOU HANDLE              |
| GRANT TRANSFERS WHERE THE INDIRECT RATE IS DIFFERENT |
| BETWEEN THE TWO ORGANIZATIONS.                       |
| 93   |
|  |

| 1  | MR. SWEEDLER: SO WE'VE ALWAYS TREATED THE            |
|----|--|
| 2  | BOARD APPROVED AMOUNT ON AN AWARD AS THE CEILING FOR |
| 3  | THE AMOUNT OF FUNDS THAT WE'RE AUTHORIZED TO         |
| 4  | DISBURSE UNDER AN AWARD. SO WHERE THERE IS A         |
| 5  | TRANSFER TO ANOTHER INSTITUTION WITH HIGHER FACILITY |
| 6  | RATES, THE DIRECT RESEARCH COSTS WOULD NEED TO BE    |
| 7  | ADJUSTED DOWNWARD SO THAT THE FINAL TOTAL DOES NOT   |
| 8  | EXCEED THE BOARD AUTHORIZED AMOUNT.                  |
| 9  | CHAIRMAN THOMAS: DR. LEVIN.                          |
| 10 | DR. LEVIN: SO I APPLAUD THESE EFFORTS. I             |
| 11 | THINK WHERE WE'VE BEEN A GROWING AGENCY FROM THE     |
| 12 | BEGINNING AND A LOT OF SHIFTING REGULATIONS, I'M NOT |
| 13 | SURE IF THE CHANGES LISTED IN HERE ARE THE SUM TOTAL |
| 14 | OF ALL THE CHANGES. BUT IF SO, I WOULD ASK THAT YOU  |
| 15 | IN PARTICULAR LOOK AT WAYS TO CLARIFY THE COST       |
| 16 | STRUCTURE OF AN ALLOWABLE COST IN INDIRECT COST      |
| 17 | BECAUSE THIS IS STILL AN ISSUE, I KNOW, ON MY        |
| 18 | CAMPUS, AT LEAST OF ENORMOUS CONFUSION, BECAUSE      |
| 19 | THERE'S DIFFERENCES IN TERMINOLOGY BETWEEN THE WAY   |
| 20 | THE NIH, FOR EXAMPLE, CLASSIFIES FACILITIES AND      |
| 21 | ADMINISTRATIVE COSTS VERSUS INDIRECT COSTS.          |
| 22 | THE NONPROFIT GAP I SEE STILL LISTS THE              |
| 23 | INDIRECT RATE AS 25 PERCENT, BUT ALL THE RFA'S LIST  |
| 24 | IT AS 20 PERCENT. I THINK THAT IT'S NOT QUITE CLEAR  |
| 25 | HOW PASS-THROUGHS TO SUBCONTRACTORS, WHAT INDIRECT   |
|    |  |

| 1  | COSTS. SO JUST TO GET EVERYTHING IN LINE WITH THE    |
|----|--|
| 2  | WAY TERMINOLOGY IS USED ON CAMPUSES AND IN DIFFERENT |
| 3  | INSTITUTIONS COULD BE REALLY BENEFICIAL TO PEOPLE.   |
| 4  | MR. SWEEDLER: WE'VE TRIED TO DO THAT AS              |
| 5  | MUCH AS POSSIBLE. PROP 71 HAS ITS OWN TERMINOLOGY,   |
| 6  | AND SO WE HAVE TO USE DIFFERENT NAMES FOR SOME       |
| 7  | THINGS. BUT THIS HAS BEEN BASED ON A LOT OF          |
| 8  | INTERACTIVE DISCUSSION BETWEEN OUR GRANTS MANAGEMENT |
| 9  | OFFICE AND THE SPONSORED RESEARCH OFFICES AT GRANTEE |
| 10 | INSTITUTIONS. AND EITHER AT IRVINE OR ANY OTHERS, I  |
| 11 | STRONGLY ENCOURAGE WE'LL BE MAKING SURE THEY KNOW    |
| 12 | ABOUT THESE PROPOSED CHANGES, BUT I'D REALLY         |
| 13 | ENCOURAGE THEM TO COME FORWARD WITH ANY OTHER THINGS |
| 14 | THAT THEY THINK THAT WE'RE MISSING THAT COULD HELP   |
| 15 | CLARIFY THIS.  |
| 16 | DR. LEVIN: IS THERE A CENTRAL POINT OF               |
| 17 | CONTACT THAT'S BEST TO GO WITH?                      |
| 18 | MR. SWEEDLER: ACTUALLY THEY ALL HAVE                 |
| 19 | THEIR ASSIGNED GRANTS MANAGEMENT OFFICER, AND THAT'S |
| 20 | PROBABLY THAT'S SOMEONE WHO KNOWS THEIR GRANTS       |
| 21 | AND WILL KNOW EXACTLY WHAT THEY'RE TALKING ABOUT.    |
| 22 | BUT MY CONTACT INFORMATION IS ALSO AT THE END OF THE |
| 23 | MEMO, AND I'D BE HAPPY TO HEAR FROM PEOPLE AS WELL.  |
| 24 | DR. LEVIN: OKAY. THANK YOU.                          |
| 25 | CHAIRMAN THOMAS: OTHER COMMENT BY MEMBERS            |
|    |  |

| 1  | OF THE BOARD? I WOULD NOTE, MR. SWEEDLER, THAT THIS  |
|----|--|
| 2  | IS A REFLECTION OF A LOT OF WORK BY A NUMBER OF      |
| 3  | PEOPLE. THIS IS A GOOD EXAMPLE OF HOW CIRM           |
| 4  | CONTINUES TO ADAPT AND EVOLVE AS TIME GOES BY TO     |
| 5  | INCORPORATE THE BEST PRACTICES WITH RESPECT TO OUR   |
| 6  | GRANT PROGRAM. AND I'D LIKE TO THANK YOU ON BEHALF   |
| 7  | OF EVERYBODY ELSE WHO WORKED ON THIS.                |
| 8  | MR. SWEEDLER: WE HAVE A SMALL AND VERY               |
| 9  | HARDWORKING GRANTS MANAGEMENT OFFICE THAT DOES       |
| 10 | INCREDIBLE WORK, AND I'M ALWAYS IMPRESSED THAT       |
| 11 | BEYOND THEIR DAILY WORKLOAD, THEY'RE ABLE TO TAKE ON |
| 12 | PROJECTS LIKE THIS TO MAKE THINGS BETTER. SO THAT'S  |
| 13 | WHERE THE CREDIT GOES.                               |
| 14 | CHAIRMAN THOMAS: THANKS FOR MAKING THAT              |
| 15 | POINT. APPRECIATE THAT.                              |
| 16 | DO I HEAR A MOTION TO WAIT. PUBLIC                   |
| 17 | COMMENT? NO MOTION.                                  |
| 18 | MR. SWEEDLER: IT'S AN INFORMATIONAL ITEM.            |
| 19 | CHAIRMAN THOMAS: IT'S STRICTLY                       |
| 20 | INFORMATIONAL. OKAY. THANK YOU.                      |
| 21 | OKAY. LET'S SEE. ONLY GOT ABOUT 12                   |
| 22 | MINUTES UNTIL, DOWN TO THE MINUTE ON THIS, 12        |
| 23 | MINUTES UNTIL WE'RE GOING TO BREAK TO GRAB SOME      |
| 24 | LUNCH WHILE THE SPOTLIGHT WE'RE GOING TO SKIP TO     |
| 25 | ITEM 19, WHICH SHOULD BE VERY QUICK, CONSIDERATION   |
|    |  |

|    | DARRISTERS REPORTING SERVICE                         |
|----|--|
| 1  | SHOULD WE COME BACK IN HERE IMMEDIATELY, OR WHAT     |
| 2  | WOULD YOU RECOMMEND?                                 |
| 3  | MS. BONNEVILLE: IT'S GOING TO START AT               |
| 4  | NOON EXACTLY. THEY NEED TO SET UP AT 11:45.          |
| 5  | CHAIRMAN THOMAS: OKAY. MARIA                         |
| 6  | MS. BONNEVILLE: YOU HAVE ABOUT 15                    |
| 7  | MINUTES, TEN MINUTES.                                |
| 8  | CHAIRMAN THOMAS: WELL, THERE'S A                     |
| 9  | CLAMORING TO TAKE UP SOMETHING SINCE WE'RE ON SUCH A |
| 10 | ROLL.  |
| 11 | MS. BONNEVILLE: OKAY. GREAT.                         |
| 12 | CHAIRMAN THOMAS: SO WE CAN CERTAINLY DO              |
| 13 | ITEM 18 FOR SURE. NO. CAN'T DO ITEM 18.              |
| 14 | MS. BONNEVILLE: ONLY IF OS IS READY TO DO            |
| 15 | IT. IT'S THE JOHN SLADEK.                            |
| 16 | MR. TORRES: OH, YEAH, SURE. GREAT.                   |
| 17 | MS. BONNEVILLE: IT'S NOT IN THE BINDER.              |
| 18 | THAT'S THE ONE WE HAVE OS FOR AFTER LUNCH. THAT'S    |
| 19 | WHY I RECOMMENDED DOING IT AFTER.                    |
| 20 | CHAIRMAN THOMAS: SO YOU WANT TO PUT THAT             |
| 21 | AFTER LUNCH?   |
| 22 | MS. BONNEVILLE: YES, PLEASE.                         |
| 23 | MR. TORRES: HE NEEDS NO PREPPING.                    |
| 24 | DR. STEWARD: I NEED NO PREPPING.                     |
| 25 | MS. BONNEVILLE: OKAY. GREAT. THEN WE'RE              |
|    |  |
|    | 98   |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | GOOD.  |
|----|--|
| 2  | DR. STEWARD: THE WONDERFUL DOCUMENT THAT             |
| 3  | JAMES PUT TOGETHER I WON'T BE ABLE TO READ THE       |
| 4  | WONDERFUL DOCUMENT THAT JAMES PUT TOGETHER THAT      |
| 5  | REALLY DESCRIBES ALL OF JOHN'S CONTRIBUTIONS. SO     |
| 6  | THIS IS A MOTION TO WHAT'S THE RIGHT WORD,           |
| 7  | JAMES? TO COMMEND DR. JOHN SLADEK FOR HIS YEARS      |
| 8  | OF SERVICE ON THE GRANTS WORKING GROUP. I THINK      |
| 9  | PROBABLY ALMOST ALL OF US KNOW JOHN. HE HAS BEEN AN  |
| 10 | IMPORTANT MEMBER OF THE REVIEW TEAM FOR CIRM REALLY  |
| 11 | SINCE THE VERY BEGINNING. HE SERVED AS THE FIRST     |
| 12 | ADMINISTRATIVE CHAIR OF THE GRANTS WORKING GROUP.    |
| 13 | AND I, FOR ONE, AND I THINK JEFF MAY WANT TO WEIGH   |
| 14 | IN ON THIS AS WELL, FEEL THAT HE WAS REALLY UNIQUE   |
| 15 | AND REMARKABLE IN THE WAY THAT HE LOOKED TO THE      |
| 16 | PATIENT ADVOCATES ON THE GROUP TO REALLY HELP GUIDE  |
| 17 | THE CONSIDERATION OF THESE GRANTS.                   |
| 18 | HE REALLY MOVED THE CAUSE OF TRANSLATION             |
| 19 | IN A WAY THAT I THINK IS ENTIRELY UNIQUE FOR SOMEONE |
| 20 | WHO SPENT HIS LIFE IN BASIC SCIENCE, BUT SOMEONE WHO |
| 21 | HAS ALSO BEEN DOING RESEARCH THAT'S DIRECTLY RELATED |
| 22 | TO TRANSLATIONAL MEDICINE. SO, AGAIN, JAMES HAD A    |
| 23 | LOT OF WHEREASES IN A BEAUTIFUL DOCUMENT, AND IT WAS |
| 24 | GREAT, BUT THE GIST OF IT IS THAT WE, THE BOARD,     |
| 25 | WANTED TO THANK AND COMMEND JOHN SLADEK FOR HIS      |

| 1  | YEARS OF SERVICE ON THE GRANTS WORKING GROUP AND     |
|----|--|
| 2  | ESPECIALLY HIS YEARS OF SERVICE AS THE FIRST         |
| 3  | ADMINISTRATIVE CHAIR.                                |
| 4  | CHAIRMAN THOMAS: MR. HARRISON.                       |
| 5  | MR. HARRISON: CHAIR, I WOULD JUST ADD                |
| 6  | THAT THE RESOLUTION WAS POSTED ON THE WEBSITE ALONG  |
| 7  | WITH THE AGENDA MATERIALS, AND IT WAS E-MAILED TO    |
| 8  | ALL OF YOU. JUST DIDN'T MAKE ITS WAY INTO THE        |
| 9  | BINDER.  |
| 10 | CHAIRMAN THOMAS: THANK YOU VERY MUCH.                |
| 11 | NOW, IS THIS SOMETHING THAT REQUIRES IT DOES.        |
| 12 | OKAY. SO ANY DISCUSSION BY MEMBERS OF THE BOARD?     |
| 13 | MR. SHEEHY.  |
| 14 | MR. SHEEHY: WELL, DO WE HAVE A MOTION ON             |
| 15 | THE FLOOR?   |
| 16 | DR. STEWARD: I WOULD LIKE TO MAKE THE                |
| 17 | MOTION TO APPROVE.                                   |
| 18 | MR. SHEEHY: I'D LIKE TO SECOND IT. AND               |
| 19 | I'D JUST LIKE TO SAY FOR DR. SLADEK, WHAT HE REALLY  |
| 20 | UNDERSTOOD AND REALLY EXEMPLIFIED IS THE VALUE OF    |
| 21 | PARTNERSHIPS BETWEEN PATIENT ADVOCATES AND           |
| 22 | SCIENTISTS IN MOVING SCIENTIFIC RESEARCH FORWARD.    |
| 23 | IN MY YEARS AS AN HIV ACTIVIST AND ALSO ON THIS      |
| 24 | BOARD, I THINK A LOT OF TIMES THAT'S LOST TO SOME OF |
| 25 | THE SCIENTIFIC COMMUNITY, AND THEY JUST BELIEVE THE  |
|    | 100  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | MONEY MAGICALLY APPEARS. THEY SEND IN GRANT          |
|----|--|
| 2  | APPLICATIONS AND THE NIH HAS MONEY, CIRM HAS MONEY   |
| 3  | WITHOUT RECOGNIZING THAT IT'S THE PASSION AND THE    |
| 4  | COMMITMENT OF THE PATIENT ADVOCATES.                 |
| 5  | I DON'T KNOW ANYONE I KNOW I DON'T                   |
| 6  | THINK I KNOW A SINGLE PATIENT ADVOCATE THAT'S MADE A |
| 7  | WORTHWHILE CAREER OUT OF PATIENT ADVOCACY. MOST      |
| 8  | PATIENT ADVOCATES ARE STRUGGLING TO DEAL WITH THEIR  |
| 9  | DISEASES OR DEAL WITH THEIR FAMILIES, AND IT'S       |
| 10 | REALLY A GREAT PERSONAL SACRIFICE AND PERSONAL COST  |
| 11 | THAT PATIENT ADVOCATES MAKE THEIR CONTRIBUTIONS.     |
| 12 | AND WHEN THEY HAVE TO FIGHT THE SCIENTIFIC COMMUNITY |
| 13 | TO HAVE THEIR VOICES HEARD, WHEN THEY'RE NOT TREATED |
| 14 | AS EQUALS IN THE PROCESS, WHEN THEY'RE DIMINISHED AS |
| 15 | INDIVIDUALS AND AS HUMAN BEINGS, IT JUST MAKES THE   |
| 16 | WHOLE PROCESS SO MUCH MORE DIFFICULT.                |
| 17 | AND DR. SLADEK WAS TRULY EXEMPLARY IN                |
| 18 | UNDERSTANDING THAT THIS PARTNERSHIP BENEFITS         |
| 19 | EVERYBODY AND MAKES SURE THAT THE RESOURCES ARE      |
| 20 | THERE TO DO THE RESEARCH AND MAKE SURE THAT THERE    |
| 21 | ARE PATIENTS THAT ARE THERE WHEN YOU GO INTO YOUR    |
| 22 | CLINICAL TRIALS SO THAT THE SCIENCE MOVES FASTER.    |
| 23 | AND I THINK WE WILL SORELY MISS HIM.                 |
| 24 | CHAIRMAN THOMAS: THANK YOU, MR. SHEEHY.              |
| 25 | ANY OTHER COMMENT BY MEMBERS OF THE BOARD? COMMENT   |
|    | 101  |
|    | <b>↓</b> ♥↓  |

|    | -  |
|----|--|
| 1  | BY MEMBERS OF THE PUBLIC? YES, DR. TROUNSON.         |
| 2  | DR. TROUNSON: ON BEHALF OF ALL THE STAFF,            |
| 3  | I WANT TO THANK JOHN FOR HIS FRIENDSHIP AND HIS      |
| 4  | SUPPORT OVER THE YEARS. AND IT'S BEEN HAPPENING      |
| 5  | LONG BEFORE I CAME TO THE INSTITUTE. HE WAS          |
| 6  | INVOLVED, I THINK, FROM THE VERY BEGINNING, AND SO A |
| 7  | LOT OF US HAVE KNOWN HIM FOR A VERY LONG TIME. AND   |
| 8  | WE WISH HIM WELL AND THANK HIM FOR EVERYTHING HE DID |
| 9  | FOR US. FOR THE GRANTS WORKING GROUP, FOR THE TEAM   |
| 10 | HERE, AND THE TEAM PAST, BECAUSE HIS ADVICE WAS VERY |
| 11 | HELPFUL AND HE'S A VERY SOUND AND LIKABLE            |
| 12 | INDIVIDUAL, AND WE REALLY DO WISH HIM THE BEST AND   |
| 13 | HOPE TO SEE HIM ON OCCASIONS IN THE FUTURE.          |
| 14 | CHAIRMAN THOMAS: THANK YOU, DR. TROUNSON.            |
| 15 | ANY OTHER COMMENTS? MOVE THEN TO THE VOTE. ALL       |
| 16 | THOSE IN FAVOR PLEASE SAY AYE. OPPOSED?              |
| 17 | ABSTENTIONS?   |
| 18 | MARIA.   |
| 19 | MS. BONNEVILLE: SAM HAWGOOD.                         |
| 20 | DR. HAWGOOD: AYE.                                    |
| 21 | MS. BONNEVILLE: PHIL PIZZO.                          |
| 22 | DR. PIZZO: AYE.                                      |
| 23 | CHAIRMAN THOMAS: THANK YOU, GENTLEMEN.               |
| 24 | THE MOTION IS APPROVED.                              |
| 25 | BEFORE WE BREAK FOR LUNCH, I WANT TO GO              |
|    | 102  |
|    |  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1              | BACK TO ONE ITEM, WHICH WAS THE REAPPOINTMENT OF THE   |
|----------------|--|
| 2              | PATIENT ADVOCATES TO THE GRANTS WORKING GROUP. WE  |
| 3              | NOTED THAT DR. STEWARD IS GOING TO TAKE SHERRY'S   |
| 4              | PLACE IN THAT GROUP, AND I DID NOT WANT THE  |
| 5              | OPPORTUNITY TO PASS WITHOUT THANKING SHERRY FOR HER  |
| 6              | EXTRAORDINARY EFFORTS WITH RESPECT TO THAT GROUP AS  |
| 7              | WELL AS, OF COURSE, EVERYTHING ELSE THAT SHE DOES  |
| 8              | FOR US.  |
| 9              | YOU SHOULD KNOW, SHERRY, THAT DEAN PIZZO   |
| 10             | ON HEARING THAT YOU WERE BEING REPLACED ALMOST   |
| 11             | PASSED OUT BECAUSE HE THOUGHT THAT MEANT YOU WERE  |
| 12             | LEAVING THE BOARD. AND WE IMMEDIATELY AND  |
| 13             | ENTHUSIASTICALLY INFORMED HIM THAT WAS NOT THE CASE.   |
| 14             | MS. LANSING: I'M SORRY. I WAS ACTUALLY   |
| 15             | OUTSIDE DOING CIRM BUSINESS. SO I WASN'T THERE   |
| 16             | WAS ANOTHER MEETING THAT YOU WANTED ME TO HAVE   |
| 17             | SIMULTANEOUS WITH THIS BECAUSE I WAS RECUSED. I  |
| 18             | JUST WANT TO SAY HOW VERY, VERY MUCH I DID ENJOY   |
| 19             | SERVING ON THE GRANTS COMMITTEE, BUT OS HAS WANTED   |
| 20             |  |
| 20             | TO DO IT FOR QUITE A WHILE AND I KNOW WILL BE  |
| 21             | TO DO IT FOR QUITE A WHILE AND I KNOW WILL BE EXTRAORDINARY AT DOING IT. AND I REALLY BELIEVE  |
|                |  |
| 21             | EXTRAORDINARY AT DOING IT. AND I REALLY BELIEVE  |
| 21<br>22       | EXTRAORDINARY AT DOING IT. AND I REALLY BELIEVE THAT WE SHOULD ROTATE AND THAT I WAS TAKING A  |
| 21<br>22<br>23 | EXTRAORDINARY AT DOING IT. AND I REALLY BELIEVE THAT WE SHOULD ROTATE AND THAT I WAS TAKING A POSITION THAT WILL BE EXTRAORDINARILY WELL SERVED BY |

| 1                    | SO I THINK IT'S A WONDERFUL, WONDERFUL  |
|----------------------|---|
| 2                    | SOLUTION. AND I JUST WANT TO SAY IT WAS AN HONOR TO   |
| 3                    | SERVE ON THAT COMMITTEE. AND PHIL, I LOVE WORKING   |
| 4                    | WITH YOU AND THERE'S GOING TO BE MANY, MANY   |
| 5                    | OPPORTUNITIES FOR US TO BE ON COMMITTEES AGAIN  |
| 6                    | TOGETHER. BUT AGAIN, IN THE SPIRIT OF EVERYBODY   |
| 7                    | HAVING THE OPPORTUNITY TO SERVE ON VARIOUS  |
| 8                    | COMMITTEES, I CAN THINK OF NOBODY BETTER THAN OS.   |
| 9                    | AND SO I'M HONORED TO HAVE SERVED AND I'M HONORED   |
| 10                   | THAT YOU'RE REPLACING ME. SO THANK YOU.   |
| 11                   | CHAIRMAN THOMAS: THANK YOU. LET'S HAVE A  |
| 12                   | ROUND OF APPLAUSE FOR SHERRY.   |
| 13                   | (APPLAUSE.)   |
| 14                   | CHAIRMAN THOMAS: MR. SHEEHY.  |
| 15                   | MR. SHEEHY: WHILE WE'RE APPLAUDING HER  |
| 16                   | FOR THE SERVICE THAT SHE'S MAKING, WE DID AND WE  |
| 17                   | WEREN'T SINCE I'M ON THE STANDARDS WORKING GROUP,   |
| 18                   | SINCE WE'VE ALREADY APPROVED THAT, I REALLY THINK   |
| 19                   | WE'VE GOT TO NOTE HER LEADERSHIP AS THE CO-CHAIR OF   |
| 20                   | THAT COMMITTEE. WHEN WE FIRST STARTED THIS  |
|                      | IIIAI COMMITTEE. WHEN WE FIRST STARTED THIS   |
| 21                   | ENTERPRISE, THE ETHICAL ISSUES WERE ENORMOUS AND THE  |
|                      |   |
| 22                   | ENTERPRISE, THE ETHICAL ISSUES WERE ENORMOUS AND THE  |
| 21<br>22<br>23<br>24 | ENTERPRISE, THE ETHICAL ISSUES WERE ENORMOUS AND THE ETHICAL CHALLENGES. AND I REALLY THOUGHT IF THERE  |
| 22<br>23             | ENTERPRISE, THE ETHICAL ISSUES WERE ENORMOUS AND THE ETHICAL CHALLENGES. AND I REALLY THOUGHT IF THERE WAS ANYWHERE THEY'RE GOING THIS THING MIGHT BLOW |

| 1  | HAS JUST BEEN PHENOMENAL. I MEAN WE HAVE HAD NO      |
|----|--|
| 2  | NOISE AT ALL. IT'S JUST BEEN I THINK EVERYBODY,      |
| 3  | EVEN PEOPLE WHO WERE NOT SUPPORTING OUR MISSION AND  |
| 4  | NOT SUPPORTING SOME OF THE THINGS WE WERE DOING, ALL |
| 5  | FELT THAT THEIR VOICES WERE HEARD. THEY WERE ABLE    |
| 6  | TO OFFER INPUT.                                      |
| 7  | AND THE MANAGEMENT OF THAT PROCESS HAS               |
| 8  | BEEN ONE OF THE MOST SPECTACULAR THINGS THAT I'VE    |
| 9  | SEEN ON THIS BOARD. SO THANK YOU, SHERRY.            |
| 10 | MS. LANSING: WELL, THANK YOU, JEFF,                  |
| 11 | BECAUSE YOU'VE BEEN SUCH AN INCREDIBLE, INCREDIBLE   |
| 12 | PIECE OF THIS. AND IT'S ALWAYS SUCH A PLEASURE.      |
| 13 | OUR COMMITTEE, THE STANDARDS WORKING COMMITTEE, AND  |
| 14 | I GIVE ALL THE CREDIT TO BERNIE BECAUSE HE'S JUST A  |
| 15 | GENIUS AND THE CALMING PRESENCE, BUT OUR COMMITTEE   |
| 16 | IS ACTUALLY A COMMITTEE THAT HAS DINNER TOGETHER,    |
| 17 | THAT HAS LUNCH TOGETHER. WE HAVE A LOT OF PLEASURE   |
| 18 | AND FUN WHEN WE DO IT.                               |
| 19 | AND SO, JEFF, THANK YOU FOR THOSE                    |
| 20 | INCREDIBLY KIND WORDS. I LOVE SERVING ON THAT        |
| 21 | COMMITTEE AND I LOVE WORKING WITH EVERY SINGLE       |
| 22 | PERSON WHOSE NAME YOU SEE LISTED. AND I'M GOING TO   |
| 23 | MISS THE TWO THAT ARE LEAVING, BUT THEY'RE ONLY      |
| 24 | LEAVING BECAUSE OF OTHER COMMITMENTS THAT THEY HAVE  |
| 25 | IN THEIR LIVES. AND THANK YOU FOR EVERYTHING YOU DO  |
|    |  |

| 1  | AND THE OTHER MEMBERS OF THE COMMITTEE, ALL OF WHOM |
|----|---|
| 2  | ARE LISTED, AND IT'S JUST AND HONOR. SO THANK YOU.  |
| 3  | MS. FEIT: DURING THOSE ROUGH TIMES,                 |
| 4  | THOUGH, SHERRY'S WORDS ALWAYS STAYED WITH ME. AND   |
| 5  | SHE WOULD REMIND US, REMEMBER, THIS IS A WORK IN    |
| 6  | PROGRESS. WE'RE NEVER GOING TO BE DONE. IT'S A      |
| 7  | WORK IN PROGRESS. SO THANK YOU FOR THOSE WORDS,     |
| 8  | SHERRY, BECAUSE I THINK THE WHOLE WORK OF THE       |
| 9  | INSTITUTE HAS BEEN A WORK IN PROGRESS. AND IT KEEPS |
| 10 | COMING UP IN MY MIND. SO THANK YOU FOR THAT         |
| 11 | INSPIRATION.  |
| 12 | MS. LANSING: YOU'RE TOO KIND. THANK YOU             |
| 13 | FOR EVERYTHING YOU DO, AND REALLY IT'S JUST AN      |
| 14 | HONOR. AND YOU SEE ALL THE COMMITTEE MEMBERS. AND,  |
| 15 | MARCY, THANK YOU FOR EVERYTHING AND ALL OF YOU. AND |
| 16 | NOW IT'S ALMOST TIME FOR LUNCH. ALL THESE NICE      |
| 17 | WORDS ARE KEEPING YOU FROM YOUR LUNCH.              |
| 18 | CHAIRMAN THOMAS: THANK YOU. AND THAT'S              |
| 19 | AN EXCELLENT WAY TO PROCEED TO GO GET OUR LUNCHES.  |
| 20 | WE WERE GOING TO GO TO 11:45 AND WE ENDED THIS LAST |
| 21 | AGENDA ITEM, AS YOU CAN SEE, RIGHT AT 11:45. SO     |
| 22 | EVERYBODY WOULD PLEASE MARIA, WHERE ARE THEY        |
| 23 | GOING TO GET THEIR LUNCH?                           |
| 24 | MS. BONNEVILLE: WHERE BREAKFAST WAS THIS            |
| 25 | MORNING, SO RIGHT ACROSS THE WAY.                   |
|    |   |

106

| 1  | CHAIRMAN THOMAS: AND WE'LL RECONVENE.                |
|----|--|
| 2  | YOU CAN BRING YOUR LUNCHES BACK. WE'LL RECONVENE AT  |
| 3  | NOON. SO PLEASE EVERYBODY KEEP TRACK OF TIME AND     |
| 4  | WE'LL SEE YOU IN A FEW MINUTES. THANK YOU.           |
| 5  | (A RECESS WAS TAKEN.)                                |
| 6  | CHAIRMAN THOMAS: OKAY. AFTER THAT MOST               |
| 7  | INTERESTING PRESENTATION AND THE JAZZ INTERLUDE. BY  |
| 8  | THE WAY, CD'S ARE OFFERED OUTSIDE THE DOOR WHEN YOU  |
| 9  | CONCLUDE THE MEETING. WE NOW RESUME OUR AGENDA       |
| 10 | MS. LANSING: CAN I JUST SAY ONE THING?               |
| 11 | SO I JUST WANT TO SAY, AND I'VE HAD THIS OFF-LINE    |
| 12 | CONVERSATION WITH J.T. ABOUT THIS, AND I JUST WANT   |
| 13 | TO SAY THAT WHEN WE HEAR SOMETHING LIKE THIS, IT WAS |
| 14 | SO INSPIRATIONAL AND SO POSITIVE ABOUT THE USE OF    |
| 15 | STEM CELL, AND JUST THANK YOU FOR BRINGING IT TO US. |
| 16 | BUT EVERY DAY YOU READ CRITICISMS ABOUT THE, QUOTE,  |
| 17 | LACK OF PROMISE OF STEM CELL. AND I JUST THINK THAT  |
| 18 | I DON'T CARE WHETHER WE FUNDED SOMETHING OR WHETHER  |
| 19 | WE DIDN'T FUND SOMETHING. THAT'S REALLY NOT          |
| 20 | IMPORTANT BECAUSE WE'RE TAKING THE NEXT STEP BECAUSE |
| 21 | WE ARE FUNDING DIFFERENT THINGS.                     |
| 22 | I JUST THINK ALL OF THIS SHOULD BE ON OUR            |
| 23 | WEBSITE. I THINK WE SHOULD PARTICIPATE IN            |
| 24 | CO-COMMUNICATIONS WITH THE HOSPITAL THAT DID IT.     |
| 25 | AND I DON'T CARE IF THEY'RE IN STATE OR OUT OF THE   |
|    | 107  |
|    | 101  |

| 1  | STATE. I REALLY DON'T THINK IT MAKES ANY             |
|----|--|
| 2  | DIFFERENCE. WE'RE TRYING TO GET OUR MESSAGE ACROSS   |
| 3  | TO THE VOTERS AND TO THE PATIENT ADVOCATES AND TO    |
| 4  | THE PEOPLE WHO WRITE EDITORIALS. SO I JUST URGE US   |
| 5  | IN OUR COMMUNICATION STRATEGY TO EVERY MONTH HAVE AN |
| 6  | UPDATE ON WHAT'S GOING ON. J.T., YOU CAN LEAD IT.    |
| 7  | ALAN, YOU CAN LEAD IT, WHATEVER IT IS, OR A PATIENT  |
| 8  | OR DOCTOR, I CAN'T CARE, BUT I DIDN'T KNOW ABOUT     |
| 9  | THIS. AND I'M ON THE BOARD. AND I CONSIDER MYSELF    |
| 10 | AS A PATIENT ADVOCATE A WELL-INFORMED PERSON.        |
| 11 | SO WHEN I THINK ABOUT THE MILLIONS OF                |
| 12 | PEOPLE THAT DON'T KNOW ABOUT THIS AND I THINK ABOUT  |
| 13 | THE ARTICLES THAT I READ MOST RECENTLY, ONE IN THE   |
| 14 | L.A. TIMES, I THINK YOU COULDN'T WRITE THAT ARTICLE  |
| 15 | IF YOU KNEW THIS WAS GOING ON.                       |
| 16 | SO I JUST URGE US TO DEVELOP A                       |
| 17 | COMMUNICATION STRATEGY. I KNOW THIS IS GOING TO BE   |
| 18 | ON OUR WEBSITE, BUT TO REALLY BE AGGRESSIVE IN       |
| 19 | PURSUING WHAT'S GOING ON IN EARLY STAGES. AND WE'RE  |
| 20 | NOT HYPING. WE'RE STATING THE FACTS.                 |
| 21 | CHAIRMAN THOMAS: THANK YOU, SHERRY. VERY             |
| 22 | WELL SAID. AND THANK YOU, SHLOMO, AGAIN FOR          |
| 23 | PROVIDING FOR THAT MOST INTERESTING LUNCH            |
| 24 | PRESENTATION.  |
| 25 | OKAY. WE ARE NOW ON TO ITEM NO. 15,                  |
|    | 108  |

TOS

| 1  | CONSIDERATION OF BRIDGE FUNDING COMPONENT FOR THE    |
|----|--|
| 2  | OPPORTUNITY FUND. DR. OLSON.                         |
| 3  | DR. OLSON: MR. CHAIRMAN, MEMBERS OF THE              |
| 4  | BOARD, MEMBERS OF THE PUBLIC, I'D LIKE TO SPEAK TO   |
| 5  | YOU TODAY ABOUT THE CONSIDERATION OF A BRIDGING      |
| 6  | FUNDING PROGRAM. FIRST, I DO WANT TO THANK WE        |
| 7  | HAD A DISCUSSION LAST NIGHT AT THE SCIENCE           |
| 8  | SUBCOMMITTEE MEETING, AND I WANT TO THANK THE        |
| 9  | SUBCOMMITTEE FOR THEIR CONSIDERED COMMENTS. IT WAS   |
| 10 | HELPFUL.   |
| 11 | SO WHAT I'D LIKE TO REMIND YOU OF, THAT              |
| 12 | THE BRIDGING FUND IS A COMPONENT OF THE OPPORTUNITY  |
| 13 | FUNDING STRATEGY. THE OBJECTIVES OF THE OPPORTUNITY  |
| 14 | FUNDING STRATEGY ARE TO ACCELERATE THE DEVELOPMENT   |
| 15 | OF STEM CELL THERAPIES AND AS PART OF THE            |
| 16 | ACCELERATION OF THE STEM CELL THERAPIES. THE         |
| 17 | EXTERNAL REVIEW PANEL, IN FACT, ENCOURAGED US TO     |
| 18 | PAVE A PATH FROM FUNDAMENTAL TO TRANSLATIONAL        |
| 19 | RESEARCH, TRANSLATIONAL MEDICINE, PRODUCT            |
| 20 | DEVELOPMENT, AND HEALTHCARE DELIVERY, AND TO         |
| 21 | TRANSITION TO A MORE PROACTIVE STRATEGY FOR FUNDING. |
| 22 | THESE ARE ALL OBJECTIVES THAT WE THINK ARE MANIFEST  |
| 23 | IN THIS BRIDGING FUND.                               |
| 24 | SO THE GOAL OF THE BRINGING FUND IS TO               |
| 25 | PROVIDE SUPPLEMENTAL FUNDING FOR THE MOST PROMISING  |
|    | 109  |

| 1  | EXISTING CIRM-FUNDED PROJECTS THAT ARE IN            |
|----|--|
| 2  | TRANSLATION OR DEVELOPMENT. IT IS TO ENABLE          |
| 3  | CONTINUATION OF APPROVED ACTIVITIES WITHOUT          |
| 4  | INTERRUPTION UNTIL THE NEXT APPLICABLE GRANTS        |
| 5  | WORKING GROUP REVIEW AND ICOC DECISION OR RECEIPT OF |
| 6  | OTHER FUNDING.                                       |
| 7  | LET ME GIVE YOU AN EXAMPLE OF ONE TYPE OF            |
| 8  | SITUATION THAT MIGHT ARISE THAT COULD QUALIFY FOR    |
| 9  | OPPORTUNITY FUNDING. IF A TEAM WERE, SAY, WHO HAD    |
| 10 | AS AN OBJECTIVE AN APPROVABLE IND FILING, TO FILE    |
| 11 | THAT IND, BUT IF THE FDA DECIDED THERE WAS ONE MORE  |
| 12 | STUDY THEY NEEDED TO DO, BUT THEY HAD EXHAUSTED ALL  |
| 13 | THEIR FUNDING, THAT WOULD BE AN OBVIOUS CANDIDATE    |
| 14 | FOR APPLYING FOR AN OPPORTUNITY FUND.                |
| 15 | IF A PROJECT HAD IDENTIFIED A DEVELOPMENT            |
| 16 | CANDIDATE AND WAS READY AND HAD HOPED TO APPLY FOR A |
| 17 | DISEASE TEAM AWARD, BUT WAS READY TO START SOME      |
| 18 | ACTIVITIES ON MAKING A MASTER CELL BANK IN ORDER TO  |
| 19 | BE READY TO GO WITHOUT LOSS OF TIME INTO THE         |
| 20 | IND-ENABLING, START CONSIDERING PRODUCTION, THAT     |
| 21 | MIGHT BE ANOTHER ACTIVITY THAT WOULD QUALIFY.        |
| 22 | SO THE OUTCOME OF THESE KINDS OF AN                  |
| 23 | OPPORTUNITY FUNDING STRATEGY OF THIS TO EXISTING     |
| 24 | AWARDS WOULD BE TO MOVE KEY PROJECTS FASTER INTO     |
| 25 | AND/OR THROUGH DEVELOPMENT.                          |
|    | 110  |

| 1  | WE'RE PROPOSING A BRIDGING FUND OF \$12               |
|----|---|
| 2  | MILLION. THE MAXIMUM BRIDGING FUNDING WOULD BE UP     |
| 3  | TO THREE MILLION PER AWARD FOR UP TO 12 MONTHS WITH   |
| 4  | THE POSSIBILITY OF A SIX-MONTH EXTENSION. THERE       |
| 5  | WOULD BE A MAXIMUM OF ONE BRIDGING FUNDING PER        |
| 6  | AWARD. THE SUPPLEMENTAL FUNDING, WHETHER IT BE THE    |
| 7  | TYPE OF FUNDING A GRANT OR A LOAN, WOULD BE THE SAME  |
| 8  | AS THAT OF THE AWARD TO BE SUPPLEMENTED. AND IT       |
| 9  | COULD BE CONSIDERED AS AN ADVANCE IF FURTHER CIRM     |
| 10 | FUNDING.  |
| 11 | SO, AGAIN, FOR AN EXAMPLE, IF YOU HAD A               |
| 12 | PROJECT THAT WAS APPLYING TO DISEASE TEAM FUNDING     |
| 13 | AND THEY'D ALREADY RECEIVED A BRIDGING FUNDING AWARD  |
| 14 | OF \$3 MILLION AND THEY WERE APPLYING FOR THE         |
| 15 | MAXIMUM WAS, SAY, 20 MILLION, ONE COULD CONSIDER      |
| 16 | GIVING THEM A \$17 MILLION AWARD AND LOOKING AT THAT  |
| 17 | AS AN ADVANCE ON THE FUNDING.                         |
| 18 | WE WOULD ALSO TIMELY NOTIFY THE ICOC UPON             |
| 19 | SUPPLEMENTAL FUNDING ALLOCATION. UPON DISBURSEMENT    |
| 20 | OF THE ENTIRE FUND, THE \$12 MILLION, WE WOULD REPORT |
| 21 | TO THE ICOC ON THE EFFECTIVENESS OF THE PROGRAM.      |
| 22 | DID IT ACTUALLY SAVE PEOPLE TIME? DID IT ACCELERATE   |
| 23 | PROGRAMS?   |
| 24 | AND FINALLY, WE WOULD ASK THAT THE FUND BE            |
| 25 | SUBJECT TO REPLENISHMENT BY THE ICOC.                 |

| 1  | ELIGIBILITY FOR THE FUND WOULD BE ACTIVE             |
|----|--|
| 2  | CIRM TRANSLATIONAL AND DEVELOPMENT PROJECTS THAT HAD |
| 3  | BEEN PREVIOUSLY REVIEWED BY THE GRANTS WORKING GROUP |
| 4  | AND FUNDED BY THIS BOARD. IT WOULD INCLUDE EARLY     |
| 5  | TRANSLATIONAL PROJECTS TARGETING A DEVELOPMENT       |
| 6  | CANDIDATE. IT WOULD INCLUDE DISEASE TEAM PROJECTS,   |
| 7  | AND IT WOULD INCLUDE CLINICAL DEVELOPMENT PROJECTS.  |
| 8  | FUNDING CANNOT, HOWEVER, BE USED FOR                 |
| 9  | PATIENT ENROLLMENT AND TREATMENT IN A CLINICAL TRIAL |
| 10 | THAT WAS NOT WITHIN THE SCOPE OF THE PRIOR GRANT     |
| 11 | AWARD. SO NO NEW CLINICAL TRIALS.                    |
| 12 | IMPLEMENTATION, I WOULD JUST LIKE TO                 |
| 13 | OUTLINE TO YOU HOW WE WOULD LOOK AT THIS. THERE      |
| 14 | WOULD BE A GRANTEE REQUEST AND A SCIENCE OFFICE      |
| 15 | RECOMMENDATION REQUIRED TO INITIATE THE PROCESS FOR  |
| 16 | SUPPLEMENTAL BRIDGING FUNDING. THAT RECOMMENDATION   |
| 17 | FROM THE SCIENCE OFFICE WOULD BE BASED ON            |
| 18 | SIGNIFICANCE ON WHAT WE KNEW ABOUT THE CURRENT       |
| 19 | PERFORMANCE OF THE PROJECT. SO SIGNIFICANCE TO THE   |
| 20 | MISSION OF CIRM, COMPETITIVENESS, PROJECT            |
| 21 | PERFORMANCE, AND TIMING TO THE NEXT RFA OR RECEIPT   |
| 22 | OF OTHER FUNDING. SO IF THERE'S IF SOMEONE'S         |
| 23 | ALREADY APPLIED AND THERE'S A DECISION EXPECTED      |
| 24 | WITHIN FOUR TO FIVE MONTHS, MAYBE IT WOULD BE A      |
| 25 | SMALLER AWARD, BUT THAT MIGHT GIVE US PAUSE.         |
|    | 112  |

| 1  | THE GRANTEE WOULD SUBMIT A PROJECT PLAN              |
|----|--|
| 2  | INCLUDING MILESTONES AND TIMELINE AND A DETAILED     |
| 3  | SUPPLEMENTAL BUDGET AND JUSTIFICATION AS WELL AS     |
| 4  | THEIR FORWARD FUNDING STRATEGY. IF THE FORWARD       |
| 5  | FUNDING STRATEGY WERE TO INCLUDE CIRM FUNDING AS AN  |
| 6  | OPTION, THE APPLICANT WOULD BE REQUIRED TO SUBMIT TO |
| 7  | THE NEXT APPLICABLE RFA COMPETITION. THERE WOULD BE  |
| 8  | INTERNAL STAFF REVIEW WITH EXTERNAL EXPERT           |
| 9  | CONSULTANTS, AND THE PRESIDENT WOULD MAKE THE        |
| 10 | DECISION ON SUPPLEMENTAL BRINGING FUNDING BASED ON   |
| 11 | ADVICE FROM STAFF AND FROM EXTERNAL EXPERT           |
| 12 | CONSULTANTS.   |
| 13 | SO I WOULD LIKE TO REQUEST ICOC APPROVAL             |
| 14 | FOR A BRIDGING FUND OF \$12 MILLION UNDER THE        |
| 15 | CONDITIONS OR UNDER THE TERMS BROADLY OUTLINED IN    |
| 16 | THIS DISCUSSION. AND I'M HAPPY TO ENTERTAIN          |
| 17 | QUESTIONS. THANK YOU.                                |
| 18 | CHAIRMAN THOMAS: ARE THERE FIRST OF                  |
| 19 | ALL, DO WE A MOTION TO APPROVE?                      |
| 20 | MR. TORRES: SO MOVED.                                |
| 21 | MS. GIBBONS: SECOND.                                 |
| 22 | CHAIRMAN THOMAS: MOVED AND SECONDED BY               |
| 23 | SENATOR TORRES AND LEEZA GIBBONS. DO WE HAVE         |
| 24 | DISCUSSION BY THE BOARD?                             |
| 25 | DR. PIZZO: CAN YOU GIVE A LITTLE BIT MORE            |
|    |  |

113

| 1  | CONTEXT OR BACKGROUND ON WHAT CAME UP LAST NIGHT AT   |
|----|---|
| 2  | THE DISCUSSION?                                       |
| 3  | DR. OLSON: WHAT I CAN DO IS CITE THE                  |
| 4  | SPECIFIC POINTS THAT WERE ADDED THAT REFLECT THE      |
| 5  | DISCUSSION LAST NIGHT. ONE OF THEM WAS ONLY ONE       |
| 6  | BRIDGING FUNDING PER AWARD. ONE OF THEM IS THAT       |
| 7  | WHEN YOU TALK ABOUT THE SUPPLEMENTAL FUNDING, COULD   |
| 8  | IT BE CONSIDERED AS AN ADVANCE ON FURTHER CIRM        |
| 9  | FUNDING? ONE OF THEM WAS RATHER THAN WAIT TO NOTIFY   |
| 10 | THE ICOC ON AT LEAST AN ANNUAL BASIS OR UPON USE OF   |
| 11 | ALL THE FUNDS, THAT WE DO TIMELY NOTIFICATION WHEN    |
| 12 | AN ACTUAL DISBURSEMENT IS MADE. ANOTHER ONE OF        |
| 13 | THEM, WHEN THE \$12 MILLION WAS UP, WAS REPORT TO THE |
| 14 | BOARD ON THE PROGRAM EFFECTIVENESS. WE HAD THAT       |
| 15 | METRIC, BUT IT WAS VERY CLEAR THAT DO IT WHEN THE     |
| 16 | PROGRAM WAS OVER OR BEFORE REPLENISHMENT, THAT THERE  |
| 17 | WOULD BE A REPORT ON THE METRICS OF WHAT IT           |
| 18 | ACHIEVED.   |
| 19 | ANOTHER COMMENT NOT CAPTURED HERE, MADE BY            |
| 20 | MR. SHEEHY, WAS THE FACT THAT IF A TEAM REQUESTED     |
| 21 | BRIDGING FUNDING, BUT IT WAS NOT THE RECOMMENDATION   |
| 22 | OF THE SCIENCE OFFICE TO PROCEED WITH IT, THEN THAT   |
| 23 | THAT TEAM WOULD NOT BE PREJUDICED IN ANY WAY IN THE   |
| 24 | GRANTS WORKING GROUP COMPETITION IN A FUTURE          |
| 25 | COMPETITION. AND I THINK THAT'S VERY EASILY DONE      |
|    | 114   |
|    | <u> </u>  |

| 1  | BECAUSE THIS WOULD BE WITHIN AN INTERNAL MATTER AND |
|----|---|
| 2  | WOULD NOT BE COMMUNICATED TO THE GRANTS WORKING     |
| 3  | GROUP THAT WE DIDN'T DO THAT.                       |
| 4  | ANOTHER ONE WAS I BELIEVE THAT ACTUALLY             |
| 5  | HIGHLIGHTS I BELIEVE THAT HIGHLIGHTS THE POINTS     |
| 6  | THAT WERE RAISED BY THE SCIENTIFIC SUBCOMMITTEE.    |
| 7  | DR. PIZZO: THANK YOU.                               |
| 8  | CHAIRMAN THOMAS: DR. ECONOMOU.                      |
| 9  | DR. ECONOMOU: WOULD YOU GO BACK TO THAT             |
| 10 | PREVIOUS SLIDE, NEXT ONE BEFORE THAT, BEFORE THAT   |
| 11 | THEN. THE ONE THAT TALKS ABOUT THE SCIENTIFIC PEER  |
| 12 | REVIEW PROCESS TO DECIDE IF THESE ADDITIONAL        |
| 13 | DISBURSEMENTS ARE GOING TO BE MADE. THERE WAS A     |
| 14 | CONDITIONAL LANGUAGE THERE AS APPROPRIATE AND WHO   |
| 15 | MAKES THE DECISION. IS THAT I OBVIOUSLY WASN'T      |
| 16 | AT THE MEETING LAST NIGHT, BUT THIS IS A RECURRING  |
| 17 | THEME OF SCIENTIFIC PEER REVIEW AT EACH STAGE WHERE |
| 18 | SUBSTANTIAL DISBURSEMENT OF CIRM FUNDS ARE BEING    |
| 19 | MADE. SO IS THIS WILL THIS BE SENT BACK TO THE      |
| 20 | SCIENTIFIC PEER REVIEW COMMITTEE?                   |
| 21 | DR. OLSON: THIS WOULD BE A DECISION BY              |
| 22 | THE PRESIDENT. BUT THEN AS TO THE THAT'S WHY        |
| 23 | IT'S CALLED SUPPLEMENTAL FUNDING TO AN EXISTING     |
| 24 | AWARD THAT HAS ALREADY BEEN PEER REVIEWED AND       |
| 25 | APPROVED BY THE BOARD. SO THE DECISION ON           |
|    |   |

| 1  | SUPPLEMENTAL FUNDING WOULD BE AN INTERNAL DECISION   |
|----|--|
| 2  | WITH EXTERNAL CONSULTANTS WITHIN THE REQUIREMENT     |
| 3  | THAT IF THEY'VE APPLIED FOR SUPPLEMENTAL IF          |
| 4  | THEY'RE GOING FOR CIRM FUNDING, THAT THEY HAVE TO GO |
| 5  | TO THE NEXT APPLICABLE GRANTS WORKING GROUP REVIEW.  |
| 6  | DR. MELMED: I THINK THIS IS A GREAT                  |
| 7  | PROGRAM. I JUST HAVE ONE CONCERN ABOUT THE           |
| 8  | IMPLEMENTATION. AND ACCORDINGLY, I WANT TO PROPOSE   |
| 9  | A FRIENDLY AMENDMENT. I MENTIONED PART OF THIS LAST  |
| 10 | NIGHT AT THE DISCUSSION. LIKE JIM, I'M A LITTLE BIT  |
| 11 | CONCERNED ABOUT THE PATIENT ADVOCATES OF THE PEER    |
| 12 | REVIEW PROCESS. AND I'M ALSO CONCERNED ABOUT THE     |
| 13 | FACT THAT WE MAY BE PUTTING THE PRESIDENT IN THE     |
| 14 | UNTENABLE POSITION, BECAUSE HE'S GOING TO BE OPEN TO |
| 15 | ALL SORTS OF CRITICISMS BOTH POSITIVE AND NEGATIVE,  |
| 16 | BY MAKING A DECISION ON SUPPLEMENTAL FUNDING WITHOUT |
| 17 | COMING TO THE BOARD.                                 |
| 18 | SO MY FRIENDLY AMENDMENT, MR. CHAIRMAN,              |
| 19 | WOULD BE THAT WE ACCEPT THIS THE LANGUAGE AS         |
| 20 | PROPOSED EXCEPT FOR THE IMPLEMENTATION. FOR THE      |
| 21 | IMPLEMENTATION I WOULD RECOMMEND THAT THIS BOARD,    |
| 22 | BASED ON PEER REVIEW INPUT, ACTUALLY MAKES THE       |
| 23 | DECISION ON FUNDING.                                 |
| 24 | DR. OLSON: I WOULD POINT OUT THAT IN MANY            |
| 25 | INSTANCES WHAT WE'RE TALKING ABOUT IS SOMETHING THAT |
|    |  |

| 1  | THE SCIENCE OFFICE DEALS WITH ROUTINELY, WHICH IS    |
|----|--|
| 2  | CHANGE OF SCOPE ACTIVITIES. WITHIN THE OBJECTIVES    |
| 3  | OF THE PROGRAM, THAT WE MAKE ROUTINELY DECISIONS ON  |
| 4  | CHANGE OF SCOPE ACTIVITIES. AND SO THE ONLY          |
| 5  | DIFFERENCE HERE WOULD BE VIEWED AS THAT IT HAS       |
| 6  | ASSOCIATED WITH IT FUNDING. AND I THINK THAT'S PART  |
| 7  | OF THE POINT OF THIS IS SORT OF A TIMELINESS. IT'S   |
| 8  | A QUESTION OF HOW OFTEN WE CAN DO AN APPROPRIATE     |
| 9  | PEER REVIEW IS WHAT IT REALLY COMES DOWN TO.         |
| 10 | DR. MELMED: I THINK WE'RE GIVING THE                 |
| 11 | OFFICE THE OPPORTUNITY TO MAKE AN ARBITRARY DECISION |
| 12 | IN THEIR BEST JUDGMENT ON UP TO \$3 MILLION FOR AN   |
| 13 | INVESTIGATOR. THERE MAY HAVE BEEN A YEAR OR TWO      |
| 14 | YEARS GAP SINCE THAT WAS PEER REVIEWED. AND I WOULD  |
| 15 | FEEL UNCOMFORTABLE IF THIS BOARD DOESN'T MAKE THAT   |
| 16 | DECISION. THAT'S A LOT OF MONEY TO GIVE TO AN        |
| 17 | INVESTIGATOR. AND I WOULD, AGAIN, SUGGEST THAT THE   |
| 18 | PRESIDENT WOULDN'T WANT TO BE IN THAT POSITION TO    |
| 19 | MAKE HIS OR HER OWN DECISION ON THAT. THIS HAS TO    |
| 20 | BE A BOARD DECISION BASED UPON WHAT WE ARE BASED     |
| 21 | UPON PEER REVIEW EVIDENCE THAT WE'RE GIVEN EITHER TO |
| 22 | SUPPORT OR NOT TO SUPPORT THE APPLICATION. I THINK   |
| 23 | GIVEN THE SIZE OF THE FUND, NOT HAVING THIS GO       |
| 24 | THROUGH A PEER REVIEW PROCESS, EVEN IF IT'S RAPID,   |
| 25 | WOULD NOT BE WISE FOR US.                            |
|    |  |

| DR. PIZZO: I AGREE WITH THAT STATEMENT              |
|---|
| WHOLEHEARTEDLY, AND I WAS GOING TO MAKE A VERY      |
| SIMILAR ONE. SO I SUPPORT THAT.                     |
| CHAIRMAN THOMAS: OKAY. THERE'S AN                   |
| AMENDMENT TO THE MOTION. DEAN PIZZO, DO I TAKE THAT |
| AS A SECOND?  |
| DR. PIZZO: ABSOLUTELY.                              |
| CHAIRMAN THOMAS: OKAY. MARCY.                       |
| MS. FEIT: I WAS IN THE MEETING LAST                 |
| NIGHT, AND THIS DISCUSSION DID COME UP. BOARD       |
| MEMBER SAMUELSON BROUGHT THIS VERY DISCUSSION UP    |
| ABOUT HOW WOULD WE KNOW IF THERE'S BEEN A CHANGE OR |
| IF THIS IS NEW WORK. AND WITHOUT THE PEER REVIEW,   |
| WE WOULD NOT BE ABLE TO JUDGE THAT. SO WE DID       |
| DISCUSS THAT LAST NIGHT, BUT I WOULD AGREE WITH THE |
| CURRENT AMENDMENT GOING FORWARD.                    |
| CHAIRMAN THOMAS: IF I HEAR THIS                     |
| CORRECTLY, I THINK THE IDEA, DR. MELMED, IS TO HAVE |
| IN PLACE A PROCEDURE FOR RAPID PEER REVIEW SO WE    |
| MEET THE GOAL OF MAKING A TIMELY DECISION HERE THAT |
| GETS THIS FUNDING OUT.                              |
| DR. MELMED: YES. BUT THIS BOARD ACTUALLY            |
| MAKES THAT DECISION.                                |
| CHAIRMAN THOMAS: YES.                               |
| DR. OLSON: THE GRANTS WORKING GROUP                 |
| 118   |
|   |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | CANNOT MAKE A FUNDING DECISION.                      |
|----|--|
| 2  | CHAIRMAN THOMAS: THANK YOU.                          |
| 3  | DR. KRONTIRIS: WE'RE TALKING ABOUT BOARD             |
| 4  | APPROVAL OF THE FUNDING, NOT PEER REVIEW OF THE      |
| 5  | REQUEST, EXTERNAL PEER REVIEW OF THE REQUEST.        |
| 6  | CHAIRMAN THOMAS: WE'RE TALKING ABOUT                 |
| 7  | BOTH. LET ME TURN IT, DR. MELMED.                    |
| 8  | DR. KRONTIRIS: THAT DOESN'T SEEM TO BE               |
| 9  | THE AMENDMENT.                                       |
| 10 | DR. MELMED: WHAT I RECOMMENDED WAS THAT              |
| 11 | THIS BOARD MAKE THE DECISION BASED UPON PEER REVIEW  |
| 12 | RESULTS WHICH THE PRESIDENT WOULD BRING TO US.       |
| 13 | DR. KRONTIRIS: SO YOU'RE ADDING BOTH                 |
| 14 | CONDITIONS.  |
| 15 | MR. SHEEHY: IT SOUNDS LIKE THAT WHAT                 |
| 16 | HE'S YOU'RE TALKING ABOUT KIND OF A ROLLING PEER     |
| 17 | REVIEW LIKE WE DO FOR THE LEADERSHIP AWARDS THAT WE  |
| 18 | APPROVED TODAY. THOSE ARE REVIEWED AS OFTEN AS       |
| 19 | QUARTERLY. OR WHAT WE WERE TALKING ABOUT, THE        |
| 20 | SECOND ITEM THAT WE'RE GOING TO GET, THAT ALSO HAS A |
| 21 | ROLLING PEER REVIEW PROCESS. AND I BELIEVE THE       |
| 22 | STRATEGIC OPPORTUNITIES, THE OTHER ELEMENT OF THE    |
| 23 | OPPORTUNITY FUND THAT WE APPROVED ALSO HAD A ROLLING |
| 24 | PEER REVIEW WHERE GRANTS WORKING GROUP COULD BE      |
| 25 | CALLED IN A FAIRLY SHORT FASHION, AND THEN THOSE     |
|    | 119  |
|    | <b>_</b>   |

| 1  | RECOMMENDATIONS WOULD COME TO THE BOARD AT THE NEXT  |
|----|--|
| 2  | IMMEDIATE BOARD MEETING. IS THAT KIND OF             |
| 3  | DR. MELMED: YES. AND ALSO, JUST LOOKING              |
| 4  | AT THE LAST BULLET THERE, I THINK THAT WE'RE OPENING |
| 5  | OURSELVES UP TO A LOT OF VULNERABILITY TO THE PUBLIC |
| 6  | IF WE ACCEPT THAT LAST BULLET BECAUSE THIS BOARD IS  |
| 7  | CHARGED WITH FIDUCIARY RESPONSIBILITY. AND TO HAND   |
| 8  | OUT A \$3 MILLION BRIDGE FUND WITHOUT GOING THROUGH  |
| 9  | THIS BOARD I THINK WOULD NOT BE WISE.                |
| 10 | CHAIRMAN THOMAS: DR. VUORI.                          |
| 11 | DR. VUORI: SO TO FOLLOW UP THIS SAME                 |
| 12 | QUESTION, NIH ROUTINELY AWARDS SUPPLEMENTAL FUNDS TO |
| 13 | EXISTING GRANTS WITHOUT PEER REVIEW. THE AMOUNTS     |
| 14 | TYPICALLY PROBABLY DON'T AMOUNT TO QUITE THIS        |
| 15 | NUMBER. SO IS THE CONCERN STILL BOTH? IN OTHER       |
| 16 | WORDS, CIRM SHOULD NOT HAVE A MECHANISM OF ANY SORT  |
| 17 | OF DISBURSING FUNDS WITHOUT PEER REVIEW, OR IS THE   |
| 18 | CONCERN HERE THE AMOUNT OF MONEY OR IS IT BOTH?      |
| 19 | DR. PIZZO: IT'S BOTH. IF I CAN SPEAK                 |
| 20 | WHENEVER I GET A CHANCE.                             |
| 21 | CHAIRMAN THOMAS: YES, PLEASE PROCEED,                |
| 22 | DEAN PIZZO.  |
| 23 | DR. PIZZO: THANKS. I THINK EVEN IN OUR               |
| 24 | OWN INSTITUTIONS WHERE WE AWARD BRIDGE FUNDING FOR   |
| 25 | FACULTY AT MUCH SMALLER AMOUNTS OF MONEY, MOST OF    |
|    | 120  |
|    | 120  |

| 1  | US, I'M SURE, HAVE SOME KIND OF PEER REVIEW PROCESS  |
|----|--|
| 2  | OR REVIEW PROCESS. I THINK WE ALL BENEFIT FROM THAT  |
| 3  | KIND OF BROAD INPUT ABOUT WHERE WE SHOULD PUT OUR    |
| 4  | INVESTMENTS. BUT WHEN YOU'RE TALKING ABOUT           |
| 5  | MULTIPLES OF THAT TO THE TUNE OF \$3 MILLION, THAT'S |
| 6  | AN INCREDIBLE AMOUNT OF MONEY. AND I THINK IT'S      |
| 7  | REALLY INCUMBENT ON US TO BE SURE THAT WE'RE USING   |
| 8  | WHAT I THINK IS A VERY GOOD IDEA FOR                 |
| 9  | WELL-ARTICULATED REASONS IN THE MOST RESPONSIBLE WAY |
| 10 | TO PROTECT THE INSTITUTION AND THE STAFF OF IT.      |
| 11 | SO FOR THAT REASON, REGARDLESS OF WHAT THE           |
| 12 | NIH DOES, I THINK THIS IS SOMETHING THAT WE SHOULD   |
| 13 | DO. SO I VERY MUCH SUPPORT THIS PROPOSAL, THE        |
| 14 | AMENDMENT TO THE PROPOSAL.                           |
| 15 | DR. JUELSGAARD: LET ME DRAW A DIFFERENT              |
| 16 | DISTINCTION JUST TO GET A SENSE OF THIS. SO I WAS    |
| 17 | TALKING TO JAMES HARRISON ABOUT THIS LAST NIGHT      |
| 18 | BECAUSE PROP 71 LAYS OUT A FRAMEWORK FOR SPENDING    |
| 19 | MONEY AND WHO HAS THAT RESPONSIBILITY. SO IN MY      |
| 20 | SIMPLISTIC VIEW OF THE WORLD, THERE ARE TWO KINDS OF |
| 21 | PROPOSALS THAT MIGHT COME FOR THIS BRIDGE FUNDING.   |
| 22 | ONE IS SIMPLY TO FINISH THE WORK THAT THE            |
| 23 | ORIGINAL PROJECT CALLED FOR, BUT THERE WAS AN        |
| 24 | UNDERESTIMATE OF THE AMOUNT OF MONEY THAT IT WAS     |
| 25 | GOING TO TAKE OR SOMETHING HAPPENED ALONG THE WAY.   |

| 1  | YOUR EXAMPLE OF COMPLETING, LET'S SAY, AN IND        |
|----|--|
| 2  | PROJECT BECAUSE THE FDA WANTED ADDITIONAL WORK TO BE |
| 3  | DONE, AND REALLY THE GOAL OF THE PROGRAM WAS TO COME |
| 4  | TO AN IND. SO FROM MY POINT OF VIEW, THAT'S KIND OF  |
| 5  | WITHIN THE FRAMEWORK OF WHAT WAS ALREADY APPROVED.   |
| 6  | IT'S JUST THAT WHAT'S GOING TO BE REQUIRED IS A      |
| 7  | LITTLE DIFFERENT THAN WHAT PEOPLE EXPECTED. SO       |
| 8  | THERE'S NOT REALLY PROJECT CREEP. IT'S JUST GETTING  |
| 9  | THE PROJECT DONE.                                    |
| 10 | THE OTHER IS WHAT I CALL PROJECT CREEP               |
| 11 | WHERE YOU'VE ESSENTIALLY FINISHED THE PROJECT, AND   |
| 12 | NOW BEFORE YOU APPLY FOR MORE FUNDING, YOU KIND OF   |
| 13 | WANT TO MOVE ALONG AND DO MORE WORK WHICH REALLY     |
| 14 | WASN'T PART OF WHAT WAS APPROVED TO BEGIN WITH. AND  |
| 15 | THERE I THINK THERE ARE SOME POTENTIAL ISSUES UNDER  |
| 16 | PROP 71 ABOUT THE ABILITY TO DO THAT WITHOUT HAVING  |
| 17 | THIS COMMITTEE AGREE WITH SPENDING THE ADDITIONAL    |
| 18 | FUNDS.   |
| 19 | BUT AS TO THAT FIRST ISSUE, THE ONE OF               |
| 20 | JUST GETTING THE PROJECT DONE BECAUSE IT'S GOING TO  |
| 21 | TAKE A LITTLE MORE MONEY, IS THERE A SENSE THAT WE   |
| 22 | NEED PEER REVIEW AND BOARD APPROVAL FOR THAT?        |
| 23 | DR. ECONOMOU: SO, STEVE, I THINK THAT WE             |
| 24 | DO. SO AS SOMEONE WHO CONDUCTED THE FIRST GENE       |
| 25 | THERAPY TRIAL ON THE WEST COAST AND RAN OUT OF MONEY |
|    |  |

| 1  | IN THE MIDDLE OF THE TRIAL AND HAD TO FIND MORE      |
|----|--|
| 2  | MONEY, AND AS SOMEONE WHO CONTINUES TO CONDUCT       |
| 3  | COMPLEX CELL- AND GENE-BASED THERAPIES, IT'S EASY TO |
| 4  | RUN OUT OF MONEY. AND THE NIH DOESN'T PROVIDE A      |
| 5  | CONVENIENT MECHANISM OTHER THAN RECOMPETING FOR A    |
| 6  | GRANT IN ORDER TO GET ADDITIONAL FUNDS. THIS IS A    |
| 7  | TERRIFIC IDEA. BUT YOU MIGHT RUN OUT OF MONEY AND    |
| 8  | IT MIGHT GO TO PEER REVIEW AND THEY'D SAY, YOU KNOW, |
| 9  | SOMETHING THEY'RE NOT REALLY MAKING THE KIND OF      |
| LO | PROGRESS THAT THEY SHOULD BE MAKING, OR THEY SHOULD  |
| L1 | HAVE A COURSE CORRECTION OR THEY SHOULD COME BACK    |
| L2 | WITH A NEW APPLICATION. SO THAT A STREAMLINED PEER   |
| L3 | REVIEWED MECHANISM BY SCIENTIFIC EXPERTS GETS AROUND |
| L4 | THIS RECURRING CONTROVERSY WE HAVE ABOUT             |
| L5 | DISBURSEMENT OF STATE TAXPAYERS' MONEY TO CONDUCT    |
| L6 | SCIENCE WITHOUT THAT KIND OF PEER REVIEW.            |
| L7 | DR. OLSON: MAY I JUST MAKE A COMMENT                 |
| L8 | HERE? I MEAN SO THE EXAMPLE THAT YOU CITED, I        |
| L9 | REMIND YOU AGAIN YOU HAVE A HIGHLY QUALIFIED STAFF   |
| 20 | WHO HAS ACTUALLY CONSIDERABLE EXPERIENCE IN DRUG     |
| 21 | DEVELOPMENT OR IN BASIC SCIENCE WHO DOES MAKE WHO    |
| 22 | MONITORS THESE PROJECTS, MAKES DECISIONS ABOUT IN    |
| 23 | SCOPE, CHANGES OF SCOPE ACTIVITIES, AND SUCH.        |
| 24 | SO I APPRECIATE THE COMMENT MADE BY MR.              |
| 25 | JUELSGAARD. I UNDERSTAND THE DISTINCTION WHICH IS    |
|    |  |

| 1  | WHY I HAD SUGGESTED THE NOTION OF CONTINUATION OF    |
|----|--|
| 2  | APPROVED ACTIVITIES. BUT I DOUBT VERY MUCH THAT THE  |
| 3  | GRANTS WORKING GROUP AND THIS BOARD WANTS TO BE      |
| 4  | INVOLVED IN CHANGE OF SCOPE ACTIVITIES.              |
| 5  | MS. GIBBONS: AS A MATTER OF JUST                     |
| 6  | PRAGMATICS, HOW DOES THIS ENCUMBER, OR DOES IT, THE  |
| 7  | SWIFTNESS AND THE DESIGN THAT'S BEHIND THIS KIND OF  |
| 8  | BRIDGE THING? IS IT ANTITHETICAL TO THE WHOLE        |
| 9  | CONCEPT?   |
| 10 | DR. OLSON: THIS IS DESIGNED TO                       |
| 11 | INCREASE OR TO DECREASE THE TIME REQUIRED.           |
| 12 | MS. GIBBONS: I MEAN THE AMENDMENT. I                 |
| 13 | MEAN HAVE IT GOING BACK TO PEER REVIEW.              |
| 14 | DR. OLSON: THE AMENDMENT BASICALLY, AS I             |
| 15 | UNDERSTAND THE AMENDMENT, THE AMENDMENT ASSUMES A    |
| 16 | GRANTS WORKING GROUP REVIEW AND A BOARD MEETING. SO  |
| 17 | MINIMALLY FROM THE TIME OF ANY GRANTS WORKING GROUP  |
| 18 | REVIEW TO A BOARD MEETING, IT'S TYPICALLY A MONTH OR |
| 19 | TWO. AND THEN ASSEMBLING A GRANTS WORKING GROUP      |
| 20 | REVIEW DEPENDING ON AT THE MOMENT WE HAVE AD HOC,    |
| 21 | MAYBE NOT AD HOC, BUT, YES, IN SOME SENSES AD HOC    |
| 22 | GRANTS WORKING GROUP ROLLING REVIEWS ONLY IN THE     |
| 23 | CASE OF THE LEADERSHIP AWARDS. THIS BOARD THROUGH    |
| 24 | MEANS OF THE STRATEGIC PARTNERSHIP PROGRAM AS WELL   |
| 25 | AS THE PROGRAM THAT ELLEN IS GOING TO PRESENT TO YOU |
|    |  |

| 1  | SUBSEQUENT TO THIS ON THE EXTERNAL INNOVATION        |
|----|--|
| 2  | PROGRAM IS CALLING FOR POTENTIALLY TWO ADDITIONAL    |
| 3  | SORT OF WELL, TWO OR FOUR, DEPENDING ON HOW YOU      |
| 4  | LOOK AT THEM, DEPENDING ON WHETHER WE CAN HAVE       |
| 5  | ENOUGH OVERLAP IN THE TYPES OF AWARDS WE RECEIVE     |
| 6  | THAT WE COULD DO AD HOC GRANT REVIEWS. THESE WORK    |
| 7  | USUALLY ONLY WHEN YOU HAVE SMALL NUMBERS OF PROJECTS |
| 8  | OF COMPARABLE SCOPE.                                 |
| 9  | SO UNDER THE STRATEGIC PARTNERSHIP, I                |
| 10 | RECALL THAT IT WAS BROADENED TO INCLUDE IF WE HAD A  |
| 11 | PARTNERSHIP AT A VERY EARLY STAGE. IT WOULD BE VERY  |
| 12 | DIFFICULT TO GET A PANEL TO REVIEW AN EARLY STAGE    |
| 13 | PARTNERSHIP PROGRAM AT THE SAME TIME AS THEY         |
| 14 | REVIEWED A CLINICAL PARTNERSHIP PROGRAM. IT'S A      |
| 15 | DIFFERENT EXPERTISE. IT'S A DIFFERENT SET OF         |
| 16 | REQUIREMENTS. SO THESE ARE THINGS WE'RE WORKING      |
| 17 | OUT, AND I WOULD PROBABLY, IN THINKING ABOUT THIS,   |
| 18 | IF WE HAD AN AD HOC REVIEW, I WOULD TRY AND THINK OF |
| 19 | A WAY THAT WE COULD COMPRESS SOME OF THESE MULTIPLE  |
| 20 | AD HOC REVIEWS DOWN INTO FEWER THAN FOUR TO SIX.     |
| 21 | AND THAT WOULD BE HOW WE WOULD HAVE TO DO IT.        |
| 22 | WE WOULD HOPE THAT WE WOULD HAVE                     |
| 23 | COMPARABLE PROJECTS FROM THESE DIFFERENT TYPE OF     |
| 24 | INITIATIVES THAT PERHAPS COULD ALLOW THEM TO BE      |
| 25 | REVIEWED TOGETHER, BUT I THINK IT WOULD DEFINITELY   |
|    |  |

| 1  | BE SOMEWHAT SLOWER. HOW MUCH SLOWER I CAN'T          |
|----|--|
| 2  | CHAIRMAN THOMAS: DR. STEWARD.                        |
| 3  | DR. STEWARD: THANK YOU. I'M SORRY I WAS              |
| 4  | NOT ABLE TO ATTEND THE SCIENCE SUBCOMMITTEE LAST     |
| 5  | NIGHT. I WAS TRAVELING, AND SO I DID MISS OUT ON     |
| 6  | SOME OF THE DISCUSSION. I DO WANT TO SPEAK IN        |
| 7  | SUPPORT OF THE AMENDMENT. AND THE REASON IS THAT     |
| 8  | THE ONLY, I THINK, RATIONALE FOR TRYING TO DO IT IN  |
| 9  | THE WAY THAT IT'S OUTLINED IN THE PROPOSAL IS IF     |
| 10 | THERE WAS SOME NEED FOR SPEED. AND I WOULD SAY IT    |
| 11 | IS REALLY VERY RARELY THE CASE. DR. ECONOMOU         |
| 12 | POINTED OUT THAT PROJECTS LIKE THIS DO SOMETIMES RUN |
| 13 | OUT OF MONEY. BUT IF YOU'RE A RESPONSIBLE MANAGER    |
| 14 | OF A PROJECT, YOU KNOW WHEN YOU'RE GOING TO RUN OUT  |
| 15 | OF MONEY A LONG TIME BEFORE YOU DO. AND IF YOU       |
| 16 | DON'T KNOW THAT, YOU'RE IRRESPONSIBLE.               |
| 17 | SO I THINK THERE'S GOING TO BE PLENTY OF             |
| 18 | TIME FOR PEOPLE TO COME IN, PLENTY OF TIME FOR THE   |
| 19 | PROPOSALS TO BE MADE, PLENTY OF TIME FOR THEM TO BE  |
| 20 | REVIEWED BY THE SCIENTIFIC PEERS, AND TO BE REVIEWED |
| 21 | BY THIS BOARD. AND I DO THINK IT'S OUR               |
| 22 | RESPONSIBILITY TO REVIEW THIS MAGNITUDE.             |
| 23 | DR. OLSON: MAY I JUST MAKE ONE COMMENT TO            |
| 24 | THAT? I JUST YOU KNOW, WE TALK ABOUT SUPPORTING      |
| 25 | INDUSTRY. AND I WOULD SAY A LOT OF TIMES THESE ARE   |
|    | 126  |
|    | ± L U  |

| 1  | THE KINDS OF PROJECTS THAT YOU KNOW, INDUSTRY        |
|----|--|
| 2  | SOMETIMES CAN'T AFFORD TO WAIT THE MONTHS. I MEAN    |
| 3  | ACADEMIA, PERHAPS THEY DON'T I'M SURE THEY FEEL      |
| 4  | URGENCY, BUT A COMPANY'S LIFE CAN DEPEND ON THESE    |
| 5  | THINGS. THEY CAN SO I DO THINK THAT THERE IS         |
| 6  | A IT'S IMPORTANT WHEN PEOPLE ARE INVESTING MONEY     |
| 7  | IN THEIR THERAPIES TO BE ABLE TO MOVE FORWARD IN A   |
| 8  | TIMELY FASHION.                                      |
| 9  | DR. STEWARD: AGAIN, IF I COULD JUST ADD.             |
| 10 | IF IT WAS A COMPANY THAT DIDN'T KNOW THEY WERE       |
| 11 | RUNNING OUT OF MONEY, I WOULD FIND THAT EVEN         |
| 12 | MORE   |
| 13 | DR. OLSON: WE'VE TALKED ABOUT THE VALLEY             |
| 14 | OF DEATH. WE'VE THAT'S A VERY, VERY REAL VALLEY.     |
| 15 | I MEAN THAT IS REALLY PARTICULARLY FOR THESE VERY    |
| 16 | TECHNOLOGICALLY INNOVATIVE THERAPIES, THIS IS A VERY |
| 17 | REAL ISSUE ON GETTING FUNDING. IT IS NOT SO THE      |
| 18 | VALLEY IS LARGER FOR TECHNOLOGICALLY INNOVATIVE      |
| 19 | THINGS. WE TALKED ABOUT DISRISKING THIS MORNING.     |
| 20 | DERISKING IS LIKELY TO BE TO HAVE TO GO FURTHER.     |
| 21 | THEY WILL WANT TO SEE MORE. AND THIS IS A CHALLENGE  |
| 22 | FOR, I THINK, MANY PEOPLE UNDER THESE MANY           |
| 23 | ORGANIZATIONS UNDER THESE CIRCUMSTANCES.             |
| 24 | CHAIRMAN THOMAS: GO TO SHERRY THEN DR.               |
| 25 | FEIGAL THEN MR. SHEEHY.                              |
|    |  |

| 1  | MS. LANSING: WELL, I THINK WHAT I'M                  |
|----|--|
| 2  | HEARING FROM THE BOARD IS A DESIRE FOR THE           |
| 3  | AMENDMENT. SO WHAT I'M REALLY TRYING TO DO IS        |
| 4  | FIGURE OUT A WAY THAT WE CAN SATISFY BOTH. SO IF     |
| 5  | THE AMENDMENT ITSELF WOULD ONLY THE ONLY PROBLEM     |
| 6  | WOULD BE IN THE TIME SENSITIVE SITUATION, AND THAT   |
| 7  | WOULD BE NOT THAT OFTEN.                             |
| 8  | DR. OLSON: IT'S A ROLLING RFA AND                    |
| 9  | FIGURING OUT HOW TO CONSOLIDATE THE ROLLING RFA.     |
| 10 | SORRY. A ROLLING GRANTS WORKING GROUP REVIEW.        |
| 11 | MS. LANSING: SO I CAN IMAGINE THAT THERE             |
| 12 | IS A WAY TO CALL I ASK YOU THIS, JAMES A WAY         |
| 13 | TO CALL AN EMERGENCY TELECONFERENCE TO DEAL WITH A   |
| 14 | SPECIFIC ISSUE LIKE THAT, IS THERE NOT? I WOULD      |
| 15 | LIKE TO ASK YOU THAT.                                |
| 16 | MR. HARRISON: YES. FIRST OF ALL,                     |
| 17 | BAGLEY-KEENE DOESN'T APPLY TO THE GRANTS WORKING     |
| 18 | GROUP. SO OBVIOUSLY IT'S DIFFICULT TO FIND TIME FOR  |
| 19 | ALL THE SCIENTISTS TO PARTICIPATE, BUT THAT COULD BE |
| 20 | DONE WITHOUT REGARD TO THE TIME LIMIT. AND THE       |
| 21 | BOARD COULD MEET TELEPHONICALLY, IF NECESSARY, WITH  |
| 22 | TEN DAYS NOTICE.                                     |
| 23 | MS. LANSING: SO I WOULD THEN LIKE TO                 |
| 24 | PROPOSE AN AMENDMENT TO THE FRIENDLY AMENDMENT,      |
| 25 | WHICH GIVES US IN THE INSTANCE WHERE WE HAVE A VERY  |
|    | 128  |

| 1  | TIME SENSITIVE THING, I WOULD LIKE TO ASK JAMES TO   |
|----|--|
| 2  | COME UP WITH THE PROPER WORDING THAT IS MINDFUL OF   |
| 3  | BAGLEY-KEENE WHERE WE CAN HAVE A TELEPHONIC MEETING  |
| 4  | TO ADDRESS THE ISSUE IN ENOUGH TIME TO               |
| 5  | DR. OLSON: TIMELY DECISION. IS THAT WHAT             |
| 6  | YOU'RE PROPOSING?                                    |
| 7  | MS. LANSING: YES.                                    |
| 8  | DR. OLSON: THANK YOU.                                |
| 9  | CHAIRMAN THOMAS: LET'S SEE. WE HAVE A                |
| 10 | FRIENDLY AMENDMENT TO THE FRIENDLY AMENDMENT. FIRST  |
| 11 | OF ALL, DO WE HAVE A SECOND FOR THE FRIENDLY         |
| 12 | AMENDMENT?   |
| 13 | MR. TORRES: SECOND.                                  |
| 14 | CHAIRMAN THOMAS: YES. SENATOR TORRES.                |
| 15 | DR. FEIGAL HAS HAD HER HAND UP DUTIFULLY FOR ABOUT   |
| 16 | FIVE MINUTES HERE.                                   |
| 17 | DR. FEIGAL: I JUST WANT TO BRING UP AN               |
| 18 | ISSUE, AND IT'S A BIGGER ISSUE, AND THAT'S ACTUALLY  |
| 19 | IS THE BOARD POTENTIALLY RECEPTIVE TO HAVE RIGOROUS  |
| 20 | PEER REVIEW, BUT TO HAVE SOME FLEXIBILITY BEYOND THE |
| 21 | GRANTS WORKING GROUP? THAT'S A BIG QUESTION, BUT I   |
| 22 | THINK BECAUSE WE'RE BEING ASKED TO BE LESS           |
| 23 | BUREAUCRATIC, LESS MORE FLEXIBLE, MORE               |
| 24 | TRANSPARENT TO PEOPLE WHO ARE TRYING TO FIGURE OUT   |
| 25 | HOW TO NAVIGATE OUR SYSTEM.                          |
|    |  |

| 1  | AND ONE OF THE THINGS WE'RE SUGGESTING IS           |
|----|---|
| 2  | COULD WE HAVE, STILL BE QUALITY, HAVE EXCELLENT     |
| 3  | OUTSIDE EXPERTS COME IN TO REVIEW THIS, BUT NOT     |
| 4  | HAVING TO CONSTITUTE THERE'S A VERY, VERY           |
| 5  | SPECIFIC TYPE OF PEOPLE WHO HAVE TO BE ON A GRANTS  |
| 6  | REVIEW GROUP, AND IT'S VERY A CERTAIN NUMBER, A     |
| 7  | CERTAIN X OF THIS, Y OF THAT, AND IT WORKS VERY     |
| 8  | WELL, BUT IT'S NOT VERY TIMELY. AND ALL I'M         |
| 9  | SUGGESTING IS WOULD THE BOARD ENTERTAIN IF WE HAVE  |
| 10 | AN EXPERT PANEL COME IN THAT IS COMING IN ONLY FOR  |
| 11 | THINGS LIKE THIS TYPE OF PROCESS OR SOMETHING THAT  |
| 12 | REQUIRES TIMELINESS. IT'S JUST A QUESTION.          |
| 13 | CHAIRMAN THOMAS: LET'S ASK MR. HARRISON.            |
| 14 | UNDER PROP 71 IS THAT ALLOWABLE?                    |
| 15 | MR. SHEEHY: COULD I RESPOND TO THAT?                |
| 16 | CHAIRMAN THOMAS: MR. SHEEHY.                        |
| 17 | MR. SHEEHY: ALL YOU'RE REALLY DOING IS              |
| 18 | TALKING ABOUT NOT INCLUDING THE PATIENT ADVOCATES.  |
| 19 | SO I GUESS I'M TROUBLED BY THAT BECAUSE THE ONLY    |
| 20 | REQUIREMENT IN PROP 71 IS THAT YOU HAVE 15          |
| 21 | SCIENTISTS. SO ASSEMBLING A GROUP OF SO THE ONLY    |
| 22 | CRITERIA THAT'S APPLIED TO THE SCIENTISTS IS THAT   |
| 23 | THEY BE SCIENTISTS. THE ONLY PEOPLE THE ONLY        |
| 24 | OTHER CRITERIA FOR MEMBERSHIP ON THE GRANTS WORKING |
| 25 | GROUP IS THAT YOU'RE A PATIENT ADVOCATE.            |
|    |   |

| 1  | AND THEN I DID WANT TO MAKE ANOTHER                  |
|----|--|
| 2  | COMMENT. I ORIGINALLY SUPPORTED THIS CONCEPT, BUT I  |
| 3  | DO SUPPORT BOTH THE AMENDMENT AND THE FRIENDLY       |
| 4  | THE FRIENDLY AMENDMENT AND THEN THE ADDITION TO THE  |
| 5  | FRIENDLY, FRIENDLY AMENDMENT.                        |
| 6  | CHAIRMAN THOMAS: EXTRA FRIENDLY.                     |
| 7  | MR. SHEEHY: EXTRA FRIENDLY. AND THE                  |
| 8  | POINT I THINK WE'RE REALLY GOING TO IS THE           |
| 9  | CONSTRUCTION OF A NIMBLE, COMMITTED GROUP OF         |
| 10 | INDIVIDUALS FOR THE GRANTS WORKING GROUP, THIS IS    |
| 11 | SCIENTISTS, WHO WILL BE ABLE TO CONVENE ON A FAIRLY  |
| 12 | QUICK BASIS THAT SEEM TO BE CONCENTRATED MORE        |
| 13 | TOWARDS THE TRANSLATIONAL, CLINICAL PART OF THE      |
| 14 | SPECTRUM BECAUSE IT SOUNDS LIKE FOR WHAT WE'RE GOING |
| 15 | TO APPROVE NEXT, WHAT WE'VE ALREADY APPROVED FOR THE |
| 16 | STRATEGIC OPPORTUNITY FUND, TO A LARGE DEGREE WHAT   |
| 17 | WE SEE WITH THE RESEARCH LEADERSHIP AWARD, WHICH ARE |
| 18 | VERY SENIOR PEOPLE, WE COULD GET A GROUP OF PEOPLE   |
| 19 | THAT WOULD BE WILLING TO CONVENE FOR A ONE- OR       |
| 20 | TWO-HOUR MEETING FAIRLY QUICKLY THAT WOULD BE        |
| 21 | TELEPHONIC, BUT IT SEEMS LIKE WE'RE HAVING THIS      |
| 22 | NEED, AS WE'RE TALKING ABOUT THESE ROLLING RFA'S, TO |
| 23 | HAVE A FAIRLY CORE SET OF PEOPLE.                    |
| 24 | AND I DO NOTICE THAT SOME OF THE KEY                 |
| 25 | ANALYSES THAT WE'RE ASKING FOR, ESPECIALLY THE       |
|    | 131  |
|    |  |

| 1  | REGULATORY ISSUES, WE'RE SEEING, AT LEAST FROM WHAT  |
|----|--|
| 2  | I'VE SEEN THROUGH THE CLINICAL DEVELOPMENT GROUP,    |
| 3  | THROUGH THE LATEST REVIEWS, WE DO HAVE KIND OF A     |
| 4  | CORE OF REGULATORY SPECIALISTS WHO HAVE BEEN WILLING |
| 5  | TO PARTICIPATE FAIRLY OFTEN ON A FAIRLY REGULAR      |
| 6  | BASIS. SO IT SEEMS TO ME WE OUGHT MAYBE THE WAY      |
| 7  | TO GO IS TO ACTUALLY CONSTRUCT THIS GROUP AND HAVE   |
| 8  | ENOUGH PEOPLE THAT WE CAN KIND OF PULL IT TOGETHER   |
| 9  | FAIRLY QUICKLY.                                      |
| 10 | CHAIRMAN THOMAS: IS THAT SORT OF A HYBRID            |
| 11 | SUGGESTION TO WHAT DR. FEIGAL WAS JUST SAYING?       |
| 12 | YOU'D HAVE SOME MEMBERS WHO CURRENTLY AREN'T MEMBERS |
| 13 | OF THE GRANTS WORKING GROUP THAT YOU COULD ADD TO    |
| 14 | THE POOL.  |
| 15 | MR. SHEEHY: WE COULD ADD THEM ANY TIME.              |
| 16 | DR. OLSON: WE ALWAYS CAN.                            |
| 17 | MR. SHEEHY: WE'VE BEEN ADDING PEOPLE,                |
| 18 | ALTERNATES, THE NAMES ARE SUBMITTED. I DON'T         |
| 19 | BELIEVE WE'VE EVER REJECTED A SUGGESTION FOR         |
| 20 | MEMBERSHIP ON THE GRANTS WORKING GROUP.              |
| 21 | CHAIRMAN THOMAS: DR. TROUNSON.                       |
| 22 | DR. TROUNSON: I'M TRYING TO ASSIMILATE               |
| 23 | ALL OF THESE. SO WE HAVE PROPOSALS FOR RECURRING     |
| 24 | NEED FOR THE PROGRAM OF PARTNERSHIPS, AND WE WILL    |
| 25 | HAVE A NEED IN THE NEXT ONE FOR SEVERAL LET ME       |
|    | 122  |

| 1  | SAY I THINK IT'S KIND OF EITHER TWO TO FOUR TIMES,   |
|----|--|
| 2  | PROBABLY FOUR TIMES A YEAR BY THE SOUND OF IT. AND   |
| 3  | WE'RE TRYING TO ADDRESS THE STRONG CRITIQUE OF THE   |
| 4  | EXTERNAL PANEL THAT THEY'RE NOT RESPONSIVE ENOUGH TO |
| 5  | INDUSTRY TO BE SEEN AS HELPFUL.                      |
| 6  | SO THE QUESTION, I THINK, IS, AND ONE OF             |
| 7  | THE HUGE DEMANDS, OF COURSE, IS GOING TO BE ON THE   |
| 8  | PATIENT ADVOCATES BECAUSE WE ADD THAT UP, YOU'RE     |
| 9  | GOING TO START TO HAVE EVEN A LOT MORE TIME. BUT     |
| 10 | GIVEN THAT, AND WE HAVEN'T TRIED TO FIND OUT WHERE   |
| 11 | THAT BREAKS, BUT CAN WE COPE WITH THIS REVOLVING     |
| 12 | REVIEW WITH SPECIALISTS, WE HAVE TO HAVE SPECIALISTS |
| 13 | BECAUSE THEY'LL BE VARIABLE IN THEIR NATURE, SO      |
| 14 | WE'LL HAVE TO HAVE SPECIALISTS TO HELP, SO CAN WE    |
| 15 | KEEP WITH THIS BRIDGES PROGRAM WITHIN THAT? THAT'S   |
| 16 | THE QUESTION. THAT'S THE REAL QUESTION TO US, IF     |
| 17 | YOU CAN INCLUDE IN THESE ROLLING REVIEWS THESE       |
| 18 | BRIDGES REQUESTS.                                    |
| 19 | AND I THINK THEY WOULD HAVE TO BE FOUR               |
| 20 | TIMES A YEAR, AND I THINK THERE ARE COMPANIES THAT   |
| 21 | REALLY HAVE YOU HAVE TO BE RESPONSIVE TO             |
| 22 | COMPANIES AND TO ACADEMIA. ACADEMIA IS NOT TOTALLY   |
| 23 | FLUSH WITH FUNDS EITHER. SO WHAT YOU DON'T WANT IS   |
| 24 | A GAP WHERE YOU LOSE CRITICAL PEOPLE OUT OF ANY      |
| 25 | PROJECT IF YOU'RE CARRYING IT FORWARD. SO WE'RE      |

| 1  | TRYING TO ADDRESS THAT.                              |
|----|--|
| 2  | SO THE QUESTION, I THINK, IS CAN WE                  |
| 3  | ACCOMMODATE THIS BRIDGING PROGRAM IN THESE           |
| 4  | ADDITIONAL FOUR, LET'S SAY FOUR, REVIEWS IN A YEAR?  |
| 5  | I THINK THAT'S WHAT I'M HEARING.                     |
| 6  | CHAIRMAN THOMAS: YES. DR. STEWARD.                   |
| 7  | DR. STEWARD: SO I THINK THIS IS AN                   |
| 8  | INTERESTING QUESTION. AND I GUESS MY RECOMMENDATION  |
| 9  | WOULD BE LET'S TRY IT. AND IF IT DOESN'T WORK, WE    |
| 10 | CAN ALWAYS RETHINK THIS. AS SHERRY SAYS, IT'S A      |
| 11 | WORK IN PROGRESS. SO IF WE FIND THAT WE ARE NOT      |
| 12 | ABLE TO BE RESPONSIVE IN THE WAY THAT IS BEING       |
| 13 | PROPOSED HERE WITH SCIENTIFIC REVIEW AND WITH REVIEW |
| 14 | BY THE BOARD, FINE. THEN WE CAN GO BACK AND RECAST   |
| 15 | IT AGAIN.  |
| 16 | DR. TROUNSON: SO THERE WILL BE A COUPLE              |
| 17 | OF QUESTIONS WE SHOULD AT LEAST ASK ON THAT, AND     |
| 18 | IT'S REALLY THESE ARE GOOD QUESTIONS TO ASK YOU,     |
| 19 | OS, AND YOU, JEFF. DO YOU THINK IT WOULD BE          |
| 20 | SATISFACTORY IF WE CAN SOLVE THE ISSUES ON THE       |
| 21 | TELEPHONIC REVIEW? SOMETIMES THAT DOESN'T WORK VERY  |
| 22 | WELL. SOMETIMES IT WORKS OKAY. BUT, YOU KNOW, IF     |
| 23 | WE COULD SOLVE IT, COULD IT BE DONE IN THAT SCHEME?  |
| 24 | IT SOUNDS LIKE IT SOUNDS TO ME IF YOU'RE GOING TO    |
| 25 | HAVE THREE OF THEM, THE THREE, YOU MIGHT HAVE TO     |
|    | 124  |

| 1  | HAVE A DAY OR MIGHT HAVE IT THE BEST PART OF FOUR    |
|----|--|
| 2  | HOURS, I'M THINKING. I'M TRYING TO GUESS AT          |
| 3  | LEAST FOUR TIMES A YEAR. BUT COULD YOU HAVE AT       |
| 4  | LEAST SOME OF THE REVIEW PANEL ON TELEPHONIC BECAUSE |
| 5  | WE HAVEN'T NORMALLY HAD THAT? WE'VE HAD              |
| 6  | SPECIALISTS; BUT WHEN IT COMES TO MARKS AND          |
| 7  | ALLOCATING MARKS, WE ONLY HAD THE PEOPLE IN THE ROOM |
| 8  | DO IT.   |
| 9  | SO I THINK THERE ARE A FEW QUESTIONS                 |
| 10 | THERE. IF WE'RE GOING TO INCORPORATE THIS EFFICIENT  |
| 11 | AND EFFECTIVELY, AS LEEZA ASKED, AND I THINK THAT'S  |
| 12 | REALLY THE CORE TO THIS QUESTION. BE RESPONSIVE, BE  |
| 13 | ABLE TO DO IT, AND THEN STILL RETAIN ALL THE         |
| 14 | ELEMENTS OF GRANTS REVIEW. I THINK IF WE CAN DO      |
| 15 | THAT AND WE CAN HAVE AT LEAST SOME OF THE PEOPLE     |
| 16 | TELEPHONICALLY, AND THAT MIGHT EVEN INCLUDE THE      |
| 17 | PATIENT ADVOCATES PERHAPS BECAUSE IT'S GOING TO BE   |
| 18 | PRETTY DEMANDING IF YOU LOOK AT THE CURRENT PROGRAM. |
| 19 | IT'S A HECK OF A LOT OF TIME WE'RE GOING TO DRAG OUT |
| 20 | OF YOU IN THE NEXT SIX TO EIGHT MONTHS, ENORMOUS     |
| 21 | AMOUNTS OF TIME. SO I'M SENSITIVE TO THAT BECAUSE    |
| 22 | YOU'VE GOT JOBS. SO IF WE COULD DO THAT, I THINK WE  |
| 23 | COULD SOLVE THIS ISSUE OR AT LEAST TRY IT, AS YOU    |
| 24 | SAY. GIVE IT A SHOT AND SEE IF IT WOULD WORK.        |
| 25 | MR. SHEEHY: JUST ON THE PATIENT ADVOCATE             |
|    |  |

| 1  | WORKLOAD, I'M SORRY, NOT TO JUMP IN FRONT OF YOU,    |
|----|--|
| 2  | DR. PRICE, BUT COMPARED TO WHEN WE WERE IN START-UP  |
| 3  | PHASE, WE HAVE REALLY KIND OF DOWN MODULATED A LOT.  |
| 4  | SO THE BURDEN HASN'T REACHED EVEN PERHAPS TWO-THIRDS |
| 5  | OF WHAT IT WAS WHEN WE WERE STARTING.                |
| 6  | CHAIRMAN THOMAS: I WOULD WANT TO MAKE A              |
| 7  | POINT OF INCLUDING THE PATIENT ADVOCATES IN THIS FOR |
| 8  | ALL THE REASONS MR. SHEEHY SUGGESTED.                |
| 9  | DR. PRICE: IS THERE ANYTHING THAT                    |
| 10 | PREVENTS THE APPOINTMENT OF A SUBCOMMITTEE OF THE    |
| 11 | WORKING GROUP, LET'S SAY FOUR PEOPLE, AND WE CAN     |
| 12 | STIPULATE SOME NUMBER THAT WILL HAVE TO BE PATIENT   |
| 13 | ADVOCATES, TO DO IT ON A REAL-TIME BASIS? A          |
| 14 | QUESTION COMES IN, YOU IMMEDIATELY CONVENE THAT      |
| 15 | COMMITTEE, YOU SOLVE THE PROBLEM OF THE TIME DELAY,  |
| 16 | YOU DON'T HAVE TO WAIT AROUND FOR QUARTERLY          |
| 17 | MEETINGS, YOU DON'T HAVE TO CONVENE 20 PEOPLE? PEER  |
| 18 | REVIEW DOESN'T NEED 20 PEOPLE.                       |
| 19 | CHAIRMAN THOMAS: THAT SOUNDS LIKE AN                 |
| 20 | EXCELLENT  |
| 21 | DR. OLSON: IT DOES WHEN IT'S BROAD.                  |
| 22 | CHAIRMAN THOMAS: SUGGESTION, WHICH                   |
| 23 | WOULD BE THE EXTRA FRIENDLY AMENDMENT TO THE         |
| 24 | FRIENDLY AMENDMENT.                                  |
| 25 | DR. TROUNSON: CHAIR, I DON'T THINK THIS              |
|    | 136  |
|    | 130  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | IS POSSIBLE. I DEFER TO                               |
|----|---|
| 2  | CHAIRMAN THOMAS: MR. HARRISON, WHAT ARE               |
| 3  | YOUR THOUGHTS ON THAT?                                |
| 4  | MR. HARRISON: THE CHALLENGE IS THAT PROP              |
| 5  | 71 REQUIRES 15 MEMBERS PRESENT DURING PEER REVIEW.    |
| 6  | AS STEVE JUELSGAARD LAID OUT, THERE ARE DIFFERENCES   |
| 7  | IN THE TYPES OF PROGRAMS THAT ARE POTENTIALLY WITHIN  |
| 8  | THE SCOPE OF THIS BRIDGING FUNDING PROGRAM. WITH      |
| 9  | RESPECT TO THOSE REQUESTS FOR ADDITIONAL FUNDS FOR    |
| 10 | ACTIVITIES THAT ARE CONSISTENT WITH THE SCOPE OF THE  |
| 11 | ORIGINAL AWARD, THE TRUNCATED PEER REVIEW SYSTEM IS   |
| 12 | PLAUSIBLE BECAUSE, IN MY VIEW, PEER REVIEW WOULDN'T   |
| 13 | NECESSARILY BE REQUIRED FOR THAT IN THE FIRST PLACE.  |
| 14 | WITH RESPECT TO ACTIVITIES THAT ARE BEYOND            |
| 15 | THE SCOPE, A NEW PHASE OF THE RESEARCH, THAT WOULD    |
| 16 | REQUIRE A GRANTS WORKING GROUP REVIEW, AND THAT BY    |
| 17 | STATUTE REQUIRES 15 SCIENTIFIC MEMBERS.               |
| 18 | DR. PRICE: SO OUR LAWYER CAN MAKE THAT                |
| 19 | JUDGMENT.   |
| 20 | CHAIRMAN THOMAS: OKAY. MR. SHESTACK, THE              |
| 21 | OBJECT OF THIS REALLY THOUGH IS BRIDGE FUNDING OR     |
| 22 | SORT OF EMERGENCY FUNDING IF SOMETHING HAS BEEN PEER  |
| 23 | REVIEWED, IS AN EXPENSIVE STUDY THAT'S GOING WELL,    |
| 24 | AND NOW TIMING HAS NOT WORKED OUT. AND IT'S \$12      |
| 25 | MILLION, NOT PER YEAR, \$12 MILLION TO BE REPLENISHED |
|    | 137   |

| 1  | AS SOON AS YOU GO THROUGH IT. BUT YOU'RE NOT         |
|----|--|
| 2  | TELLING US HOW OFTEN YOU WOULD IMAGINE YOU WOULD GO  |
| 3  | THROUGH IT. IT'S IMPORTANT. EVERYBODY HAS            |
| 4  | DIFFERENT BEEFS WITH THIS WHOLE THING. I ACTUALLY    |
| 5  | FEEL LIKE I WOULDN'T CARE PERSONALLY IF STAFF WAS    |
| 6  | GIVEN THE COMPLETE PREROGATIVE ON IT; BUT IF THE     |
| 7  | AMOUNT OF MONEY WAS SIGNIFICANTLY LESS THAN \$3      |
| 8  | MILLION, THAT IS A LOT OF MONEY FOR A DECISION TO BE |
| 9  | MADE WHERE THE PUBLIC IS GOING TO HANG US OUT TO DRY |
| 10 | FOR IT.  |
| 11 | BUT I'M JUST SAYING SHE'S RIGHT. AT                  |
| 12 | NIH PEOPLE GET BRIDGE GRANTS WHEN THEY NEED BRIDGE   |
| 13 | GRANTS ONCE IN A WHILE AND SUPPLEMENTAL FUNDING.     |
| 14 | AND IT HAPPENS. I'M NOT I'M JUST WONDERING IF        |
| 15 | ONE WANTS TO RECONSIDER THE WHOLE THING IF IT'S JUST |
| 16 | A LITTLE ISN'T AS AGGRESSIVE AT EACH BITE SO THAT    |
| 17 | WE DON'T HAVE TO SET UP SO MUCH INFRASTRUCTURE. IF   |
| 18 | YOU'RE ACTUALLY LOOKING AT WHETHER YOU'RE BETRAYING  |
| 19 | PATIENT ADVOCACY, I DON'T WANT TO. I'D LIKE PATIENT  |
| 20 | ADVOCATES TO BE INVOLVED IN IT. I JUST WOULD         |
| 21 | LIKE I THINK THAT THE PEOPLE WHO ACTUALLY HAVE AN    |
| 22 | IDEA HOPEFULLY OVER WHETHER A TEAM IS DOING THEIR    |
| 23 | JOB AND GETTING RESULTS IS ACTUALLY GOING TO BE OUR  |
| 24 | PROGRAM STAFF AND NOT OUR OUTSIDE REVIEWERS. THEY    |
| 25 | ARE GOING TO BE BEST ABLE TO JUDGE THE PROJECT       |
|    | 100  |

| 1  | BEFOREHAND, IS IT A BETTER IDEA THAN ANY OTHER       |
|----|--|
| 2  | PROJECT. BUT IF IT'S ACTUALLY BEING PRODUCTIVE,      |
| 3  | WHO'S GOING TO KNOW IT BETTER THAN OUR STAFF? SO I   |
| 4  | JUST WANTED AN AMENDMENT TO AN AMENDMENT TO AN       |
| 5  | AMENDMENT, JUST ANOTHER POINT OF VIEW.               |
| 6  | CHAIRMAN THOMAS: DR. MELMED.                         |
| 7  | DR. MELMED: ACTUALLY WHEN I INITIALLY                |
| 8  | MADE THE AMENDMENT, I DIDN'T SPECIFY WHAT KIND OF    |
| 9  | PEER REVIEW. WHAT I SAID WAS THAT THIS AMENDMENT     |
| 10 | ORIGINALLY WAS THAT THIS BOARD SHOULD MAKE THE       |
| 11 | DECISION BASED ON STAFF BRINGING US PEER REVIEW.     |
| 12 | HOW THEY DO THE PEER REVIEW, AS LONG AS IT'S         |
| 13 | ACCORDING TO THE LAW, THAT'S UP TO THEM. THAT'S WHY  |
| 14 | WE HAVE A GOOD STAFF. LET THEM DECIDE ON THE PEER    |
| 15 | REVIEW PROCESS, BUT IT HAS TO BE PEER REVIEWED AND   |
| 16 | BROUGHT TO US FOR OUR DECISION. THOSE ARE THE TWO    |
| 17 | POINTS IN THE AMENDMENT.                             |
| 18 | AND JUST A COMMENT OR A QUESTION MAYBE TO            |
| 19 | ALAN. I DON'T UNDERSTAND WHAT'S SO URGENT ABOUT      |
| 20 | BRIDGE FUNDING. WHO NEEDS AN ANSWER WITHIN 12        |
| 21 | WEEKS? AND WE'RE NOT GOING TO GET A \$3 MILLION      |
| 22 | BRIDGE FUND THAT I DIDN'T THINK OF SIX MONTHS AGO.   |
| 23 | TO ME IT SOUNDS INCONCEIVABLE THAT SOMEBODY WHO'S    |
| 24 | ACTIVELY INVOLVED IN RUNNING A LAB, I DON'T KNOW WHY |
| 25 | WE NEED THIS BURNING PLATFORM. AND IF IT TAKES SIX   |
|    | 139  |
|    | T 3 3  |

| 1  | MONTHS TO MAKE A DECISION ON BRIDGE FUNDING, IF IT'S |
|----|--|
| 2  | DONE PROPERLY WITH GOOD PEER REVIEW AND THIS BOARD'S |
| 3  | DELIBERATION, I DON'T SEE THE PROBLEM. THIS IS A     |
| 4  | GREAT PROGRAM. IT'S JUST THE IMPLEMENTATION.         |
| 5  | THERE'S NOT THAT BURNING PLATFORM.                   |
| 6  | MR. TORRES: CALL FOR THE QUESTION.                   |
| 7  | DR. TROUNSON: JUST MAYBE IN ANSWER TO                |
| 8  | THAT, WE'VE ACTUALLY SEEN SOME OF THESE PROJECTS,    |
| 9  | FOR EXAMPLE, MOVE QUICKLY AND WANT TO GO TO THE NEXT |
| LO | STAGE. SO THAT'S                                     |
| L1 | DR. MELMED: THEN APPLY.                              |
| L2 | DR. TROUNSON: YEAH, BUT SOMETIMES THEY               |
| L3 | HAVE TO WAIT SOMETIMES THEY HAVE TO WAIT SIX, 12,    |
| L4 | 18 MONTHS BEFORE THE NEXT FUNDING COMES IN. AND      |
| L5 | MAYBE AT SOME INSTITUTIONS THEY CAN HANDLE THAT, BUT |
| L6 | COMPANIES CAN'T. AND SO WHAT HAPPENS IS THE COMPANY  |
| L7 | BASICALLY GOES OUT OR THE KEY STAFF OF THE COMPANY   |
| L8 | GOES OUT OR WHATEVER. AND SO IF WE HAD A PROGRAM     |
| L9 | AND IT WAS UP TO PACE, IS DOING GREAT, AND IN SCOPE, |
| 20 | WHY NOT MAKE SURE THAT THEY GET TO THE NEXT          |
| 21 | OPPORTUNITY BECAUSE OTHERWISE WE'VE JUST WASTED THE  |
| 22 | MONEY? I DON'T FEEL GOOD ABOUT THAT MYSELF. THESE    |
| 23 | ARE GOOD OUTCOMES. AND THERE ARE UNFORTUNATELY SOME  |
| 24 | UNIVERSITIES AND SOME INSTITUTIONS THAT DON'T REALLY |
| 25 | HAVE THE POCKETS TO ENABLE TEAMS TO GO THAT          |
|    |  |

| 1  | ADDITIONAL DISTANCE AND THEN BE PAID BACK IN SOME    |
|----|--|
| 2  | OTHER WAY.   |
| 3  | SO THERE ARE CIRCUMSTANCES THAT WE'VE SEEN           |
| 4  | WHERE THIS IS A HORROR STRETCH FOR SOME PLACES. WE   |
| 5  | DON'T WANT TO CREATE MORE EXAMPLES OF WHAT HAPPENED  |
| 6  | WITH GERON ESSENTIALLY.                              |
| 7  | CHAIRMAN THOMAS: THE QUESTION HAS BEEN               |
| 8  | CALLED HERE. APPLYING ALL OF HIS LEGAL ACUMEN AND    |
| 9  | LINGUISTIC TALENTS TO TRY TO UNTWIST WHAT THE        |
| 10 | CURRENT STATUS OF ALL MOTIONS IS, MR. HARRISON.      |
| 11 | MR. HARRISON: SO THERE ARE CURRENTLY                 |
| 12 | THREE MOTIONS ON THE TABLE. TWO WERE FRAMED AS       |
| 13 | FRIENDLY AMENDMENTS. THE BOARD IS GOVERNED BY        |
| 14 | ROBERT'S RULES OF ORDER. IT'S ADOPTED ONE            |
| 15 | EXCEPTION, WHICH IS TO FOREGO A VOTE ON FRIENDLY     |
| 16 | AMENDMENTS IF THE MAKERS OF THE MOTION AGREE WITH    |
| 17 | THE AMENDMENT.                                       |
| 18 | SO THE FIRST QUESTION IS TO DR. MELMED AND           |
| 19 | DR. PIZZO. MEMBERS LANSING AND TORRES OFFERED AN     |
| 20 | AMENDMENT TO YOUR AMENDMENT. SO LET ME FIRST REPEAT  |
| 21 | WHAT I BELIEVE YOUR MOTION IS, WHICH IS TO APPROVE   |
| 22 | THE BRIDGING FUNDING PROGRAM AS PROPOSED EXCEPT THAT |
| 23 | WITH RESPECT TO IMPLEMENTATION, THE BOARD WOULD MAKE |
| 24 | THE FUNDING DECISION WITH PEER REVIEW INPUT.         |
| 25 | THE AMENDMENT OFFERED BY MEMBERS LANSING             |
|    | 141  |
|    | <u>+ '+</u>  |

| 1          | AND TORRES WOULD BE TO APPROVE THE BRIDGING FUNDING  |
|------------|--|
| 2          | PROGRAM AS PROPOSED EXCEPT THAT WITH RESPECT TO      |
| 3          | IMPLEMENTATION, THE BOARD WOULD MAKE THE FUNDING     |
| 4          | DECISION THROUGH A TELEPHONIC MEETING, IF NECESSARY, |
| 5          | TO ADDRESS ANY TIME CONCERNS WITH PEER REVIEW INPUT. |
| 6          | SO DR. MELMED AND DR. PIZZO, DO YOU ACCEPT           |
| 7          | THE FRIENDLY AMENDMENT FROM MEMBERS TORRES AND       |
| 8          | LANSING?   |
| 9          | DR. MELMED: IS THAT A TELEPHONE MEETING              |
| 10         | OF THIS BOARD?                                       |
| 11         | MR. HARRISON: IT WOULD BE A TELEPHONIC               |
| 12         | MEETING OF THIS BOARD, IF NECESSARY, TO ADDRESS THE  |
| 13         | TIME CONCERNS.                                       |
| <b>1</b> 4 | DR. MELMED: I ABSTAIN. I JUST CAN'T SEE              |
| 15         | THAT HAPPENING.                                      |
| 16         | DR. PIZZO: YEAH.                                     |
| 17         | DR. MELMED: I JUST CAN'T SEE IT HAPPENING            |
| 18         | PRACTICALLY, THAT 19 PEOPLE ARE ON THE TELEPHONE AND |
| 19         | READ A DOCUMENT AND ARGUE.                           |
| 20         | DR. PIZZO: I AGREE. I'M SENSITIVE TO                 |
| 21         | THIS ISSUE OF TIME AS WE'RE HEARING. BUT I JUST      |
| 22         | FOR I JUST HAVE A HARD TIME IMAGINING, IN            |
| 23         | FAIRNESS, THAT THERE IS THAT LEVEL OF URGENCY THAT   |
| 24         | CAN'T WAIT A DEFINED LIMITED AMOUNT OF TIME FOR A    |
| 25         | THOUGHTFUL REVIEW. IT JUST SEEMS REALISTIC TO ME,    |
|            | 1/12   |

| 1  | AND I'VE BEEN INVOLVED IN BOTH WORKING WITH INDUSTRY |
|----|--|
| 2  | AS WELL AS WITH ACADEMIA. I JUST DON'T SEE THAT      |
| 3  | PEOPLE ARE GOING UNDER. NONE OF US HAVE ENDLESS      |
| 4  | MONEY, BUT THE REALITY IS WE'RE TALKING ABOUT        |
| 5  | MONTHS, NOT YEARS.                                   |
| 6  | MR. HARRISON: CAN I MAKE ONE SUGGESTION,             |
| 7  | THAT THE CHAIR CURRENTLY HAS THE POWER UNDER THE     |
| 8  | BOARD'S BYLAWS TO CALL A TELEPHONIC MEETING IF HE    |
| 9  | DEEMS IT TO BE IN THE BEST INTEREST OF THE           |
| 10 | INSTITUTE. IF THAT ADDRESSES MEMBER LANSING AND      |
| 11 | MEMBER TORRES' CONCERN, THEN PERHAPS WE COULD MOVE   |
| 12 | TO THE MAIN AMENDMENT.                               |
| 13 | MS. LANSING: I JUST WANT TO CLARIFY THIS.            |
| 14 | I THINK THAT WE'RE ALL SAYING THE SAME THING. AND I  |
| 15 | GUESS YOU CAN EITHER MAKE IT A FRIENDLY AMENDMENT OR |
| 16 | NOT MAKE IT A FRIENDLY AMENDMENT, BUT I WOULD JUST   |
| 17 | SAY AT THE DISCRETION OF THE CHAIR, THE CHAIR CAN    |
| 18 | CALL FOR AN EMERGENCY TELEPHONIC MEETING IF AND ONLY |
| 19 | IF IT IS DEEMED THAT THERE IS A TIME SENSITIVE       |
| 20 | ISSUE. IT MAY NEVER HAPPEN. I AGREE WITH YOU. BUT    |
| 21 | I THINK IF WE I'M JUST TRYING TO BE THE PERSON       |
| 22 | THAT GETS EVERYBODY'S NEEDS SETTLED. AND SINCE       |
| 23 | YOU'VE BOTH BEEN SAYING THAT, PERHAPS SOME PEOPLE    |
| 24 | DON'T UNDERSTAND THAT, BUT IF THERE IS SUCH A        |
| 25 | SITUATION, WE HAVE A MECHANISM TO DEAL WITH IT SO WE |
|    | 142  |

| 1  | WOULD NEVER LOSE THE ABILITY TO DO THAT.             |
|----|--|
| 2  | DR. PIZZO: SO YOU'RE MAKING THAT KIND OF             |
| 3  | A DEFAULT. I THINK SHERRY'S COMMENT IS HELPFUL.      |
| 4  | YOU'RE MAKING THAT NOT THE DEFAULT OPTION, BUT AN    |
| 5  | EXCEPTION.   |
| 6  | MS. LANSING: YES.                                    |
| 7  | DR. PIZZO: THE DEFAULT OUGHT TO BE THAT              |
| 8  | WE HAVE A REGULAR REVIEW, BUT IF THERE'S URGENCY     |
| 9  | DEEMED, THEN THIS WOULD BE THE WAY TO APPROACH THAT. |
| 10 | CHAIRMAN THOMAS: WE'RE GETTING A NOD OF              |
| 11 | APPROVAL FROM DR. MELMED AND AN OVERT EXPRESSION OF  |
| 12 | APPROVAL FROM DR. PIZZO. THEREFORE, IT SOUNDS        |
| 13 | DR. PIZZO: I WAS NODDING AS WELL.                    |
| 14 | CHAIRMAN THOMAS: HE'S NODDING AS WELL.               |
| 15 | VERY GOOD. OKAY.                                     |
| 16 | MS. LANSING: SO RESTATE IT BECAUSE WE'RE             |
| 17 | NOT ACCEPTING IT AS IS. WE'RE MAKING SURE THAT       |
| 18 | WE'VE GOT IT.  |
| 19 | MR. HARRISON: RIGHT. SO AS RESTATED, THE             |
| 20 | AMENDMENT TO THE AMENDMENT WOULD READ APPROVE        |
| 21 | BRINGING FUNDING PROGRAM AS PROPOSED EXCEPT THAT     |
| 22 | WITH RESPECT TO IMPLEMENTATION, THE BOARD WOULD MAKE |
| 23 | THE FUNDING DECISION THROUGH A TELEPHONIC MEETING IF |
| 24 | THE CHAIR DETERMINES THAT IT'S NECESSARY TO DO SO TO |
| 25 | ADDRESS ANY TIMING CONCERNS WITH PEER REVIEW INPUT.  |
|    |  |

| 1  | CHAIRMAN THOMAS: THANK YOU, MR. HARRISON.            |
|----|--|
| 2  | YOUR ABILITY TO RESTATE THESE THINGS IS A MARVEL TO  |
| 3  | US ALL.  |
| 4  | MR. HARRISON: SO THE NEXT STAGE IS THAT              |
| 5  | NOW THAT THE MAKERS OF THE FIRST AMENDMENT HAVE      |
| 6  | ACCEPTED THE FRIENDLY AMENDMENT TO THEIR AMENDMENT,  |
| 7  | THE QUESTION GOES TO THE MAKERS OF THE ORIGINAL      |
| 8  | MOTION, MEMBERS TORRES AND GIBBONS, WHETHER THEY ARE |
| 9  | WILLING TO ACCEPT THE MELMED-PIZZO AMENDMENT AS      |
| 10 | MODIFIED BY THE LANSING-TORRES AMENDMENT.            |
| 11 | MR. TORRES: LET ME THINK ABOUT IT. OF                |
| 12 | COURSE.  |
| 13 | MS. GIBBONS: I NEED TO SEE A FLOWCHART.              |
| 14 | THAT'S GREAT. GREAT.                                 |
| 15 | DR. STEWARD: I'M SORRY, JAMES. CAN I                 |
| 16 | JUST CLARIFY. THE WAY YOU SAID IT WAS THAT THE ICOC  |
| 17 | WOULD ONLY HAVE A TELEPHONIC MEETING, WHICH WOULD    |
| 18 | IMPLY THAT WE'RE NOT GOING TO HAVE A MEETING AT ALL  |
| 19 | TO DISCUSS. WHAT YOU REALLY MEAN IS THAT AT THE END  |
| 20 | OF THE DAY, THERE'S GOING TO BE ICOC CONSIDERATION,  |
| 21 | AND IT WOULD BE TELEPHONIC IF IT WAS DEEMED TO BE AN |
| 22 | EMERGENCY.   |
| 23 | MR. HARRISON: CORRECT. THE BOARD MAKES               |
| 24 | THE FUNDING DECISION THROUGH A TELEPHONIC MEETING IF |
| 25 | THE CHAIR DETERMINES THAT A TELEPHONIC MEETING IS    |
|    |  |

|    | BARRISTERS' REPORTING SERVICE                       |
|----|---|
| 1  | NECESSARY.  |
| 2  | DR. MELMED: OTHERWISE AT A REGULAR                  |
| 3  | MEETING.  |
| 4  | MS. LANSING: THAT'S CORRECT. MOTION? DO             |
| 5  | WE HAVE A SECOND?                                   |
| 6  | CHAIRMAN THOMAS: WE'RE GOOD. WE'RE GOOD.            |
| 7  | ALL RIGHT. ALL THOSE IN FAVOR OF THE ENTIRE PACKAGE |
| 8  | PLEASE SAY AYE.                                     |
| 9  | DR. MELMED: AS AMENDED.                             |
| 10 | MR. SHESTACK: I'M AGAINST. I THINK IT'S,            |
| 11 | LIKE, BADLY CRAFTED AND SHOULD BE REDONE. IT'S      |
| 12 | REALLY LIKE YOU'RE JUST GOING TO ASK SO LET ME      |
| 13 | BE ON THE RECORD AS BEING AGAINST.                  |
| 14 | CHAIRMAN THOMAS: THAT'S TOTALLY FAIR,               |
| 15 | MR. SHESTACK. ARE THERE OTHERS THAT ARE OPPOSED?    |
| 16 | DR. PRICE: DOES THIS MOTION ON THE FLOOR            |
| 17 | REQUIRE A MEETING OF THE FULL GRANTS WORKING GROUP  |
| 18 | AS IT'S WRITTEN?                                    |
| 19 | MR. HARRISON: IT DOES NOT.                          |
| 20 | CHAIRMAN THOMAS: OKAY. ARE THERE ANY                |
| 21 | ABSTENTIONS TO THE MOTION? YES, MR. HARRISON.       |
| 22 | MR. HARRISON: DR. PIZZO AND DR. HAWGOOD             |
| 23 | SHOULD BE POLLED.                                   |
| 24 | MS. BONNEVILLE: DR. PIZZO.                          |
| 25 | DR. PIZZO: YES.                                     |
|    | 146   |
|    | 170   |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | MS. BONNEVILLE: DR. HAWGOOD.                         |
|----|--|
| 2  | DR. HAWGOOD: YES.                                    |
| 3  | CHAIRMAN THOMAS: OKAY. THANK YOU. THE                |
| 4  | OMNIBUS PACKAGE IS APPROVED AS AMENDED.              |
| 5  | NOW, GOING ON TO WHAT I BELIEVE WILL BE A            |
| 6  | MUCH SHORTER DISCUSSION, CONSIDERATION OF EXTERNAL   |
| 7  | INNOVATION COMPONENT OF THE OPPORTUNITY FUND. DR.    |
| 8  | FEIGAL.  |
| 9  | DR. FEIGAL: THAT'S A REALLY HARD ACT TO              |
| 10 | FOLLOW. SO THIS IS ONE OF THE THREE COMPONENTS OF    |
| 11 | THE OPPORTUNITY FUND THAT YOU FIRST HEARD ABOUT IN   |
| 12 | JUNE. AND THE OBJECTIVES, ONCE AGAIN, FOR THE WHOLE  |
| 13 | OPPORTUNITY FUND PACKAGE IS TO ACCELERATE            |
| 14 | DEVELOPMENT OF STEM CELL THERAPY AND TO IMPLEMENT    |
| 15 | RECOMMENDATIONS OF THE EXTERNAL REVIEW PANEL TO PAVE |
| 16 | A PATH FROM FUNDAMENTAL TO TRANSLATIONAL RESEARCH TO |
| 17 | TRANSLATIONAL MEDICINE, PRODUCT DEVELOPMENT, AND     |
| 18 | HEALTHCARE DELIVERY, AND TO ADOPT A MORE POROUS      |
| 19 | OPPORTUNITY MODEL RATHER THAN AN INTERNAL PIPELINE   |
| 20 | MODEL TO KEEP CALIFORNIA AS THE HUB OF CLINICAL      |
| 21 | PROOF OF CONCEPT IN REGENERATIVE MEDICINE.           |
| 22 | THE OBJECTIVES OF THIS SPECIFIC INITIATIVE           |
| 23 | ARE TO SUPPLEMENT CIRM'S EXISTING RFA'S WITH A       |
| 24 | FUNDING MECHANISM THAT I SHOULD ADD UTILIZES THE     |
| 25 | FULL GRANTS WORKING GROUP MECHANISM AND PROCESS THAT |
|    |  |

| 1  | WOULD ALLOW CIRM TO MORE PROACTIVELY AND QUICKLY    |
|----|---|
| 2  | SUPPORT COLLABORATIONS OF CALIFORNIA SCIENTISTS IN  |
| 3  | CUTTING-EDGE, HIGH IMPACT RESEARCH PROJECTS WITH    |
| 4  | THEIR MOST ADVANCED COLLEAGUES WHEREVER THEY EXIST  |
| 5  | AROUND THE GLOBE.                                   |
| 6  | THIS WOULD ENABLE TIMELY FUNDING OF EITHER          |
| 7  | NEW OR WHAT WE CALL BOLT-ON, THAT IS TO SAY, THEY   |
| 8  | COULD ATTACH A NEW COLLABORATION TO AN EXISTING,    |
| 9  | ONGOING PROJECT AS A COLLABORATION. THESE PROJECTS  |
| LO | COULD SUBSTANTIALLY ENHANCE INNOVATIVE AND CRITICAL |
| L1 | ASPECTS OF TECHNOLOGY AND CRITICAL ASPECTS OF       |
| L2 | TECHNOLOGY AND EXPERTISE INTO THE CALIFORNIA-BASED  |
| L3 | CIRM PROGRAMS, WITH THE OUTCOME BEING TO ACCELERATE |
| L4 | THE MOVEMENT OF HIGH QUALITY, HIGH IMPACT STUDIES   |
| L5 | TOWARDS CLINICAL APPLICATION.                       |
| L6 | THE FUNDING PROPOSED IS A TOTAL OF 15               |
| L7 | MILLION. WE'RE PROPOSING THE MAXIMUM AWARD AMOUNT   |
| L8 | PER 12 MONTHS OF APPROXIMATELY 500,000, AND THAT    |
| L9 | DURATION BEYOND THAT 12-MONTH PERIOD WITH A MAXIMUM |
| 20 | OF 24 MONTHS WITH THE FUNDING CAN BE CONSIDERED AT  |
| 21 | THE TIME OF APPLICATION AND REVIEW.                 |
| 22 | DID YOU HAVE A QUESTION? OKAY. FUNDING              |
| 23 | WOULD BE MADE IN FULL COMPLIANCE WITH PROP 71 AND   |
| 24 | OUR REGULATIONS. THE FUNDING AND LET ME ADD AS A    |
| 25 | PREAMBLE, WE DISCUSSED THIS AT THE SCIENCE          |
|    |   |

| 1  | SUBCOMMITTEE LAST NIGHT. AND REALLY I THINK THE      |
|----|--|
| 2  | RECOMMENDATION WAS TO BE EXPLICIT ABOUT WHO WOULD    |
| 3  | PAY FOR WHAT. SO I MODIFIED THE SLIDES TO MAKE       |
| 4  | THAT, I HOPE, MORE EXPLICITLY CLEAR. SO THE FUNDING  |
| 5  | WOULD BE MADE IN FULL COMPLIANCE WITH PROP 71 AND    |
| 6  | OUR REGULATIONS. SO THE FUNDING COULD PROVIDE A      |
| 7  | STIPEND FOR TRAVEL, PARTIAL SALARY SUPPORT,          |
| 8  | ACCOMMODATIONS, AND RESEARCH EXPENSES OF THE         |
| 9  | EXTERNAL RESEARCHER WHO'S WORKING IN CALIFORNIA WITH |
| 10 | THAT CALIFORNIA COMPONENT OF THE RESEARCH. FUNDING   |
| 11 | FOR THE CALIFORNIA RESEARCHERS THAT HAVE TO ACTUALLY |
| 12 | ACCESS THAT UNIQUE EXPERTISE OR RESOURCE DIRECTLY AT |
| 13 | THAT EXTERNAL SITE WOULD BE DONE IN FULL COMPLIANCE  |
| 14 | WITH PROP 71 AND OUR REGULATIONS, AND ANY COMPONENT  |
| 15 | OF THE COLLABORATIVE RESEARCH THAT WAS PERFORMED     |
| 16 | OUTSIDE OF CALIFORNIA WOULD BE PAID BY SOME OTHER    |
| 17 | FUNDER. IT WOULDN'T BE PAID BY CIRM.                 |
| 18 | SO I HOPE THAT MADE IT EXPLICIT IN TERMS             |
| 19 | OF WHO'S FUNDING WHAT.                               |
| 20 | THE ELIGIBILITY WOULD BE THAT THE                    |
| 21 | PROPOSALS MUST INCLUDE COLLABORATION BETWEEN THE     |
| 22 | CIRM INVESTIGATOR AND A COLLABORATOR THAT IS         |
| 23 | EXTERNAL TO CALIFORNIA. THE PROPOSALS WOULD HAVE TO  |
| 24 | MEET ALL THREE CRITERIA. IT WOULD HAVE TO WARRANT    |
| 25 | PARTICULARLY SPEEDY FUNDING THAT COULDN'T BE         |
|    |  |

| 1  | ADDRESSED QUICKLY ENOUGH THROUGH OUR STANDARD        |
|----|--|
| 2  | REGULAR RFA'S. IT WOULD HAVE TO BE A PROPOSAL THAT   |
| 3  | WOULD HAVE SIGNIFICANT IMPACT OR SIGNIFICANT         |
| 4  | POTENTIAL FOR HIGH IMPACT ON THE FIELD, AND THE      |
| 5  | EXTERNAL COMPONENT WOULD HAVE TO EITHER BE ACTIVELY  |
| 6  | FUNDED OR THERE'S A COMMITMENT TO FUND BY SOME OTHER |
| 7  | FUNDER OUTSIDE OF CALIFORNIA, BUT THAT THAT          |
| 8  | COLLABORATION WOULD BENEFIT FROM THE PARTICULAR      |
| 9  | EXPERTISE THAT WAS RESIDENT IN CALIFORNIA.           |
| 10 | THE AREA OF THE EMPHASIS THAT WE'RE                  |
| 11 | PROPOSING FOR THIS PROGRAM WOULD BE ON TRANSLATIONAL |
| 12 | PROGRAMS, TO ACCELERATE PROGRESS TOWARDS CLINICAL    |
| 13 | APPLICATION. AND THIS COULD INCLUDE EARLY AND        |
| 14 | APPLIED RESEARCH ON CUTTING-EDGE TECHNOLOGIES THAT   |
| 15 | ARE UNIQUELY AVAILABLE OUTSIDE OF CALIFORNIA, BUT    |
| 16 | THAT WOULD BE ESSENTIAL FOR ACCELERATING PROGRESS ON |
| 17 | THE CALIFORNIA COMPONENT OF THE RESEARCH, THE        |
| 18 | TRANSFER OF UNIQUE METHODS OR TECHNIQUES THAT A CIRM |
| 19 | GRANTEE NEEDS TO COMPLETE THEIR RESEARCH, OR IT      |
| 20 | COULD BE A PRECLINICAL/CLINICAL DEVELOPMENT STAGE    |
| 21 | PROGRAM THAT NEEDS THAT PRELIMINARY DATA TO SUPPORT  |
| 22 | SUBMISSION OF A MORE COMPREHENSIVE PROGRAM IN AN     |
| 23 | EMERGING FIELD THAT IS CRITICAL TO ADVANCING STEM    |
| 24 | CELL SCIENCE INTO THERAPIES.                         |
| 25 | THE APPLICATION WOULD ALSO NEED TO                   |
|    | 150  |

| 1  | PROACTIVELY INCLUDE A PLAN FOR ADDRESSING IP AND     |
|----|--|
| 2  | THAT OUR CIRM IP REGULATIONS WOULD APPLY. AND THIS   |
| 3  | WOULD BE AN INITIATIVE THAT WOULD BE APPLICABLE TO   |
| 4  | BOTH FOR-PROFIT AND NONPROFIT ENTITIES. THEY WOULD   |
| 5  | BOTH BE ELIGIBLE TO APPLY.                           |
| 6  | HOW WOULD THIS EXTERNAL INNOVATION                   |
| 7  | OPPORTUNITY BE IDENTIFIED? WELL, PRESUMABLY THROUGH  |
| 8  | AN INVENTORY OF THE RESEARCH LANDSCAPE. ONE OF THE   |
| 9  | THINGS WE TALKED ABOUT EARLIER DURING THE STRATEGIC  |
| 10 | PLAN DISCUSSION IS HAVE SOME SORT OF A CAPACITY      |
| 11 | CAPABILITY MAP OF OUR COLLABORATING FUNDING PARTNERS |
| 12 | TO FIGURE OUT WHERE THE PARTICULAR EXPERTISE IN      |
| 13 | PROGRAMS WERE. THE OTHER IS THROUGH THE TRADITIONAL  |
| 14 | WAY WITH CONFERENCES, PUBLICATIONS, NETWORKING AT    |
| 15 | THE GROUND LEVEL WITH THE INVESTIGATORS.             |
| 16 | AN EXAMPLE OF A POTENTIAL PROJECT COULD BE           |
| 17 | THE RECENT COLLABORATION THAT WE HAVE WITH THE       |
| 18 | NATIONAL INSTITUTES OF HEALTH WHERE THERE COULD BE   |
| 19 | ACCESS TO VERY UNIQUE ENVIRONMENTAL SOURCES OR       |
| 20 | EXPERTISE AT THE CLINICAL CENTER. FOR EXAMPLE, A     |
| 21 | CALIFORNIA RESEARCHER COULD HAVE THE OPPORTUNITY TO  |
| 22 | CONDUCT STUDIES WITH A CLINICAL CENTER INVESTIGATOR  |
| 23 | AT THE NIH IN COHORTS OF PATIENTS WITH RARE AND      |
| 24 | NEGLECTED DISEASES, TO OBTAIN TISSUE SAMPLES THAT    |
| 25 | MAY BE USED TO GENERATE IPS LINES, TO WORK ON        |
|    | 151  |

| 1  | TRANSLATIONAL PROJECTS LEADING TO THE CLINIC IN      |
|----|--|
| 2  | PARKINSON'S DISEASE WITH DERIVATION OF CELL LINES,   |
| 3  | TO WORK ON POTENTIAL STUDIES IN HIV/AIDS WITH        |
| 4  | LINKING OF NIH'S INTRAMURAL RESEARCH SCIENTISTS      |
| 5  | WORKING ON THEIR CXCR 4 PROGRAMS WITH CALIFORNIA'S   |
| 6  | CCR5 WORLD-LEADING TRANSLATIONAL PROGRAMS.           |
| 7  | IT COULD ALSO PROVIDE CALIFORNIA                     |
| 8  | INVESTIGATORS WITH ACCESS TO CLINICAL INVESTIGATOR   |
| 9  | TRAINING, TO VISITING FELLOWSHIP PROGRAMS, TO        |
| 10 | SPECIAL EQUIPMENT OR FACILITIES SUCH AS NONINVASIVE  |
| 11 | IMAGING TECHNOLOGIES FOR TRACKING CELL FATE, WHICH   |
| 12 | IS A VERY PROBLEMATIC AREA OF CELL THERAPY RIGHT     |
| 13 | NOW. IT COULD ALSO ALLOW THEM ACCESS TO THE          |
| 14 | NATIONAL GENOMICS CENTER SO THAT THEY COULD UTILIZE  |
| 15 | THEIR SAMPLES AND ASSAYS IN HIGH THROUGHPUT          |
| 16 | SCREENINGS.  |
| 17 | THE STRUCTURE THAT'S BEING PROPOSED IS               |
| 18 | THAT THE EXTERNAL INNOVATION INITIATIVE IS A PROGRAM |
| 19 | ANNOUNCEMENT WITH A ROLLING SUBMISSION, AND WITH     |
| 20 | REVIEW BY THE GRANTS WORKING GROUP UP TO TWO TIMES   |
| 21 | PER YEAR IF AN APPLICABLE GRANT WORKING GROUP REVIEW |
| 22 | IS NOT OTHERWISE TIMELY SCHEDULED WITH               |
| 23 | RECOMMENDATIONS TO THE ICOC FOR FINAL DECISIONS.     |
| 24 | I'M HAPPY TO ENTERTAIN ANY QUESTIONS AT              |
| 25 | THIS POINT.  |
|    |  |

| 1  | CHAIRMAN THOMAS: FIRST OF ALL, DO WE HAVE           |
|----|---|
| 2  | A MOTION TO APPROVE THIS EXTERNAL INNOVATION        |
| 3  | INITIATIVE?   |
| 4  | MR. TORRES: SO MOVED.                               |
| 5  | MS. SAMUELSON: AND I'LL SECOND IT.                  |
| 6  | CHAIRMAN THOMAS: I THINK WE HAD ACTUALLY            |
| 7  | SENATOR TORRES AND MS. SAMUELSON, BUT THANK YOU. DO |
| 8  | YOU WANT TO HAVE A COMMENT?                         |
| 9  | MR. SHEEHY: WE HAD A VERY ROBUST                    |
| 10 | DISCUSSION LAST NIGHT AT THE SCIENCE SUBCOMMITTEE,  |
| 11 | AND THE COMMITTEE WAS VERY FAVORABLE TOWARDS THIS   |
| 12 | PROPOSAL.   |
| 13 | MR. TORRES: CALL FOR THE VOTE.                      |
| 14 | CHAIRMAN THOMAS: WE HAVE HAD A CALL FOR             |
| 15 | THE VOTE. SO DO WE HAVE ANY PUBLIC COMMENT, BY THE  |
| 16 | WAY, BEFORE WE VOTE? MR. HARRISON.                  |
| 17 | MS. SAMUELSON: I'D LIKE TO SAY ONE THING            |
| 18 | ABOUT WHY I LOVE THIS. I LOVE THIS PROPOSAL BECAUSE |
| 19 | I THINK IT'S EXACTLY THE THING WE SHOULD BE DOING   |
| 20 | NOW. I THINK THERE HAVE BEEN TIMES OVER THE LIFE OF |
| 21 | THE ICOC AND ITS GRANTS WORKING GROUP ASSISTANCE    |
| 22 | THAT OUR RIGOR HAS BEEN SO EXTREME, THAT WE MIGHT   |
| 23 | HAVE BEEN A BIT CONSERVATIVE IN LETTING SOME IDEAS  |
| 24 | GO THAT WERE GREAT ONES, BUT THAT WERE SO NEW THAT  |
| 25 | THERE WASN'T DATA OUT THERE TO GIVE US THE          |
|    | 153   |

| 1  | CONFIDENCE THAT THINGS WOULD SUCCEED. AND I THINK    |
|----|--|
| 2  | IT'S TIME TO CHANGE THAT, AND I THINK WE'RE ABLE TO  |
| 3  | DO IT ON THE PLATFORM OF OUR CLEAR RIGOROUS PEER     |
| 4  | REVIEW PROCESS, WHICH I THINK THE GRANTS WORKING     |
| 5  | GROUP AND THE ICOC ARE DULY PROUD OF AND SHOULD BE.  |
| 6  | BUT THIS GIVES US A WAY TO BEGIN TO MOVE AS          |
| 7  | AGGRESSIVELY AS WE POSSIBLY CAN, NOT THAT WE HAVEN'T |
| 8  | IN THE PAST, BUT I THINK TAKING THIS EXTRA APPROACH. |
| 9  | CHAIRMAN THOMAS: THANK YOU, JOAN. I                  |
| 10 | BELIEVE WE NOW HAVE THE MOTION UP FOR APPROVAL. ALL  |
| 11 | THOSE IN FAVOR PLEASE SAY AYE. OPPOSED? DR.          |
| 12 | ECONOMOU, IS THAT AN OPPOSED OR IS THAT A VALIDATION |
| 13 | SIGNAL? YES. VERY IMPORTANT. DEAN PIZZO.             |
| 14 | DR. PIZZO: YES.                                      |
| 15 | CHAIRMAN THOMAS: DEAN HAWGOOD.                       |
| 16 | DR. HAWGOOD: YES.                                    |
| 17 | CHAIRMAN THOMAS: DO WE HAVE WE HAD NO                |
| 18 | OBJECTIONS. JUST ONE PARKING VALIDATION. ANY         |
| 19 | ABSTENTIONS? MOTION CARRIES. THANK YOU.              |
| 20 | DR. TROUNSON: SO JUST AS A FINAL                     |
| 21 | ALTERNATIVE, THERE'S THE THREE COMPONENT PARTS OF    |
| 22 | THE OPPORTUNITY FUND, AND THAT REALLY IS OUR PRIMARY |
| 23 | RESPONSE TO THE EXTERNAL PANEL. THERE ARE A FEW      |
| 24 | OTHER ISSUES, MINOR ONES REALLY, ADDRESSING THEIR    |
| 25 | RECOMMENDATIONS THAT WE WILL STILL ENACT, BUT        |
|    | 1 5 4  |

| 1  | THEY'RE REALLY IN-HOUSE, MOSTLY IN-HOUSE ACTIVITIES. |
|----|--|
| 2  | SO I WANT TO THANK THE BOARD FOR HELPING US GET      |
| 3  | THROUGH THIS PROCESS BECAUSE I NOW THINK WE'RE       |
| 4  | ADDRESSING THE PRIMARY RECOMMENDATIONS OUT OF THE    |
| 5  | 2010 EXTERNAL PANEL. AND IT'S BEEN AN IMPORTANT      |
| 6  | PROCESS TO GET RIGHT, AND I WANT TO THANK THE        |
| 7  | SUBCOMMITTEES AND ALL THE INDIVIDUALS THAT HELPED IN |
| 8  | THIS PROCESS BECAUSE IT SEEMS TO HAVE BEEN A         |
| 9  | LONG-WINDED PROCESS, BUT I THINK IT'S BEEN A VERY    |
| 10 | VALUABLE AND CONSTRUCTIVE PROCESS. AND I WANT TO     |
| 11 | THANK EACH AND EVERYBODY THAT PUT A LOT OF EFFORT,   |
| 12 | THE STAFF, EXTERNAL SCIENTISTS HAVE HELPED, BOARD    |
| 13 | MEMBERS WHO HAVE COME AND GIVEN US REALLY GOOD       |
| 14 | SENSIBLE CRITIQUE, AND I THINK WE'VE GOT POWERFUL    |
| 15 | OUTCOMES.  |
| 16 | AND AS JOAN SAMUELSON SAID, I THINK NOW              |
| 17 | WE'RE IN A POSITION TO DELIVER ON SOME REALLY KEY    |
| 18 | OPPORTUNITIES. AND I HOPE IT'S IN A WAY WHICH WILL   |
| 19 | MAKE US EVEN STRONGER THAN WE CURRENTLY ARE. SO I    |
| 20 | WANT TO THANK YOU AND THE BOARD FOR HELPING US       |
| 21 | COMPLETE THAT PROCESS.                               |
| 22 | CHAIRMAN THOMAS: WELL SAID AND VERY GOOD             |
| 23 | WORK BY ALL. THANK YOU.                              |
| 24 | OUR LAST ITEM IS CONSIDERATION OF THE HPSC           |
| 25 | CONCEPT PROPOSAL. UTA.                               |
|    |  |

| 1  | DR. GRIESHAMMER: MR. CHAIRMAN, MEMBERS OF            |
|----|--|
| 2  | THE BOARD, AND PUBLIC, SO I'M HERE TO BRING TO YOU   |
| 3  | FOR YOUR CONSIDERATION THE CONCEPT PROPOSAL FOR      |
| 4  | HUMAN INDUCED PLURIPOTENT STEM CELL INITIATIVE,      |
| 5  | AGENDA ITEM NO. 17.                                  |
| 6  | AS DR. FEIGAL ACTUALLY PRESENTED TO YOU              |
| 7  | EARLIER THIS YEAR, CIRM IS PROPOSING A COMPREHENSIVE |
| 8  | IPS CELL INITIATIVE. SO THE GOAL OF THIS INITIATIVE  |
| 9  | IS TO FUND GENERATION OF A COMPREHENSIVE RESOURCE OF |
| 10 | DISEASE-SPECIFIC INDUCED PLURIPOTENT STEM CELL       |
| 11 | LINES. THE CREATION OF THIS RESOURCE, AS INDICATED   |
| 12 | HERE, INVOLVES THREE MAIN ACTIVITIES. IT STARTS      |
| 13 | WITH THE COLLECTION OF TISSUE SAMPLES FROM PATIENTS  |
| 14 | AND MOVES ON TO THE DERIVATION OF THE IPS CELL LINES |
| 15 | FROM THE COLLECTED SAMPLES AND ENDS WITH THE BANKING |
| 16 | AND DISTRIBUTION OF ALL OF THESE IPS CELL LINES TO   |
| 17 | THE RESEARCH COMMUNITY.                              |
| 18 | ONCE THIS RESOURCE IS CREATED, IT CAN THEN           |
| 19 | BE USED BY RESEARCHERS WORLDWIDE BOTH FOR DISEASE    |
| 20 | MODELING AND TARGET DISCOVERY IN THE DISEASES THAT   |
| 21 | WERE TARGETED AND BANKED IN THIS BANK AS WELL AS BY  |
| 22 | DRUG DEVELOPERS TO DISCOVER NEW DRUGS AND DEVELOP    |
| 23 | THEM.  |
| 24 | SO DR. FEIGAL PRESENTED THIS INITIATIVE A            |
| 25 | FEW MONTHS AGO TO YOU, AND STEP ONE ACTUALLY OF THIS |
|    | 150  |

| 1  | INITIATIVE HAS ALREADY BEEN APPROVED AND IS ONGOING. |
|----|--|
| 2  | AND THE PRESIDENT REFERRED TO IT EARLIER IN HIS      |
| 3  | REPORT. AND THAT IS THAT CIRM HAS ESTABLISHED A      |
| 4  | COLLABORATION WITH THE NATIONAL INSTITUTE OF         |
| 5  | NEUROLOGICAL DISORDERS AND STROKE AT THE NIH         |
| 6  | CREATING AN IPS CELL RESOURCE FOR NEURODEGENERATIVE  |
| 7  | DISEASES. CIRM BECAME A MEMBER OF THIS               |
| 8  | PUBLIC/PRIVATE PARTNERSHIP AND IS CURRENTLY          |
| 9  | CO-FUNDING IPS CELL LINE DERIVATION AND BANKING OF A |
| LO | CONSORTIUM THAT INCLUDES THE DISEASES HUNTINGTON'S   |
| L1 | DISEASE, PARKINSON'S DISEASE, AND ALS.               |
| L2 | SO WHAT I WILL DO NOW IS BRING TO YOU STEP           |
| L3 | TWO OF THIS INITIATIVE, WHICH IS THE CONCEPT FOR AN  |
| L4 | IPS CELL FOR THE SECOND STEP OF THE IPS CELL         |
| L5 | INITIATIVE, WHICH IS TO COVER ADDITIONAL DISEASES.   |
| L6 | SO AS I MENTIONED JUST A MOMENT AGO, THE             |
| L7 | CREATION OF THIS COMPREHENSIVE RESOURCE REQUIRES     |
| L8 | THREE STEPS, WHICH I HAVE ILLUSTRATED HERE FOR YOU   |
| L9 | AGAIN. AND SINCE THESE THREE ACTIVITIES REALLY       |
| 20 | REQUIRE VERY SPECIFIC EXPERTISE AND SKILLS, THESE    |
| 21 | THREE ACTIVITIES WILL BE FUNDED UNDER THREE          |
| 22 | INDEPENDENT RFA'S TO BE EACH EXECUTED MOST           |
| 23 | EFFECTIVELY.   |
| 24 | SO RFA 1202 WILL BE FUNDING THE COLLECTION           |
| 25 | OF TISSUE SAMPLES FROM PATIENTS, AND THIS INITIATIVE |
|    |  |

| 1  | WILL COST UP TO \$4 MILLION. RFA 1203 WILL BE       |
|----|---|
| 2  | DEDICATED TO FUNDING A CORE IPS CELL DERIVATION     |
| 3  | AWARD WHICH WILL COST UP TO \$16 MILLION. AND THEN  |
| 4  | FINALLY, THE RFA 1204 WILL FUND THE HUMAN           |
| 5  | PLURIPOTENT STEM CELL BANK FOR COST OF UP TO \$10   |
| 6  | MILLION.  |
| 7  | SO IN THE NEXT THREE SLIDES, I'M JUST               |
| 8  | GOING TO COVER A FEW MORE DETAILS FOR EACH OF THESE |
| 9  | THREE RFA'S THAT I JUST TOLD YOU ABOUT. SO RFA      |
| 10 | 1202, WHICH IS THE TISSUE WHICH WILL FUND TISSUE    |
| 11 | COLLECTION AWARDS, IS REALLY THE GOAL OF THE        |
| 12 | INDIVIDUAL AWARDS THAT WILL BE FUNDED HERE IS TO    |
| 13 | IDENTIFY PATIENT COHORTS FOR THE DISEASES BROUGHT   |
| 14 | FORWARD AND TO COLLECT INDEED THE TISSUE SAMPLES    |
| 15 | THAT THEN WILL BE MOVED ON TO THE NEXT STEP.        |
| 16 | AND THE FOCUS OF THIS RFA WILL BE TO GO             |
| 17 | AFTER DISEASES THAT ARE PREVALENT AND GENETICALLY   |
| 18 | COMPLEX. AND TO JUST GIVE YOU A VERY BRIEF CONTEXT  |
| 19 | FOR THIS DECISION I'M COVERING, THESE DISEASES, I   |
| 20 | SHOULD SAY, ARE VERY PREVALENT, GENETICALLY COMPLEX |
| 21 | DISEASES AND INCLUDE DISEASES SUCH AS ALZHEIMER'S   |
| 22 | DISEASE, AUTISM SPECTRUM DISORDERS, AND TYPE II     |
| 23 | DIABETES. AND THE LIST OF PRIORITIES THAT WE        |
| 24 | ENVISION FOR THIS RFA IS LISTED IN THE CONCEPT      |
| 25 | PROPOSAL IN YOUR BINDERS.                           |
|    | 158   |
|    |   |

| 1  | BUT LIKE I SAID, FOR THE CONTEXT HERE, I            |
|----|---|
| 2  | WANT TO POINT OUT THAT THE FIELD HAS REALLY MOVED   |
| 3  | FORWARD AND GIVEN US PROOF OF CONCEPT THAT          |
| 4  | DISEASE-IN-A-DISH MODELING CAN ACTUALLY LEAD TO A   |
| 5  | VALID RECAPITULATION OF PHENOTYPES IN A DISH USING  |
| 6  | THE DERIVATION FROM PATIENTS THAT SUFFER FROM       |
| 7  | DISEASES THAT ARE CAUSED BY A SINGLE GENE MUTATION. |
| 8  | AND THERE'S LOTS OF ACTIVITY THROUGHOUT THE WORLD   |
| 9  | REALLY IN CREATING SUCH DISEASE MODELS, INCLUDING   |
| 10 | CURRENTLY CIRM FUNDING.                             |
| 11 | HAVING REACHED THE PROOF OF CONCEPT FOR             |
| 12 | THE IDEA OF DISEASE-IN-A-DISH MODELING BASED ON IPS |
| 13 | CELL LINES, WE NOW WOULD LIKE TO MOVE THE FIELD     |
| 14 | FURTHER AND FUND IN A COMPREHENSIVE WAY THE         |
| 15 | COLLECTION OF TISSUE SAMPLES AND IPS CELL LINE      |
| 16 | DERIVATION FOR VERY PREVALENT AND GENETICALLY       |
| 17 | COMPLEX DISEASES. AND TO ACHIEVE THIS GOAL, WE      |
| 18 | ENVISION TO FUND THREE TO TEN TWO-YEAR AWARDS, AND  |
| 19 | THE AWARD SIZE ACTUALLY THAT WILL BE ULTIMATELY     |
| 20 | GIVEN TO A PRINCIPAL INVESTIGATOR WHO'S SUCCESSFUL  |
| 21 | IN THIS COMPETITION WILL DEPEND ON THE NUMBER OF    |
| 22 | SAMPLES OR NUMBER OF INDIVIDUALS THAT ARE INCLUDED  |
| 23 | IN COLLECTING FROM PATIENTS IN THEIR PROPOSAL.      |
| 24 | THIS RFA WILL BE OPEN TO PRINCIPAL                  |
| 25 | INVESTIGATORS AT BOTH NONPROFIT AND FOR-PROFIT      |
|    |   |

| 1  | INSTITUTIONS, AND THE TOTAL COST OF THIS RFA WILL BE |
|----|--|
| 2  | UP TO \$4 MILLION AND SHOULD FUND APPROXIMATELY THE  |
| 3  | SAMPLE COLLECTION FROM APPROXIMATELY 1200            |
| 4  | INDIVIDUALS.   |
| 5  | NOW, RFA 1203 WILL FUND THE EXECUTION OF             |
| 6  | THE SECOND STEP IN THIS PROCESS, THE IPS CELL LINE   |
| 7  | DERIVATIONS. WHAT IS NOW VERY IMPORTANT ABOUT THIS   |
| 8  | PROPOSAL FOR THIS RFA IS THAT WE ENVISION THAT THE   |
| 9  | CELL LINE DERIVATIONS WILL BE PERFORMED BY A SINGLE  |
| 10 | ENTITY THAT WILL BE USING A SINGLE METHOD TO DERIVE  |
| 11 | ALL THE PROPOSED IPS CELL LINES USING THE TISSUES    |
| 12 | COLLECTED UNDER RFA 1202. THE IMPORTANCE HERE IS     |
| 13 | THAT USING A SINGLE METHOD UNDER STANDARD OPERATING  |
| 14 | PROCEDURES SHOULD REDUCE THE AMOUNT OF EXPERIMENTAL  |
| 15 | VARIABILITY THAT WOULD BE INTRODUCED IF VARIOUS      |
| 16 | METHODS WERE USED AND THEREBY ENABLE OR MAKE IT MORE |
| 17 | LIKELY THAT DISEASE PHENOTYPES IN A DISH WILL        |
| 18 | ACTUALLY BE DISCOVERABLE.                            |
| 19 | SO WE ENVISION FOR THIS RFA A SINGLE                 |
| 20 | THREE-YEAR AWARD GIVEN TO A SINGLE ENTITY. THE       |
| 21 | COMPETITION WILL BE OPEN TO NONPROFIT AND FOR-PROFIT |
| 22 | ORGANIZATIONS AND WILL COST A TOTAL OF UP TO \$16    |
| 23 | MILLION FOR THE DERIVATION OF IPS CELL LINES FROM    |
| 24 | THE APPROXIMATELY 1200 INDIVIDUALS FUNDED UNDER RFA  |
| 25 | 1202.  |
|    |  |

| 1  | AND FINALLY, THE THIRD RFA IS RFA 1204 TO            |
|----|--|
| 2  | FUND THE CIRM HUMAN PLURIPOTENT STEM CELL BANK. THE  |
| 3  | RESOURCE THAT I'M DESCRIBING IS ONLY GOING TO BE     |
| 4  | EFFECTIVE IN DELIVERING HOPEFULLY ULTIMATELY         |
| 5  | ANALYSIS OF NEW DISEASE MECHANISMS OR DRUG DISCOVERY |
| 6  | IF THESE CELL LINES ARE READILY AVAILABLE TO         |
| 7  | RESEARCHERS WORLDWIDE. AND THIS KIND OF              |
| 8  | DISTRIBUTION IS BEST EXECUTED BY DEDICATED AND       |
| 9  | PROFESSIONAL CELL BANKS.                             |
| 10 | SO WE PROPOSE TO INDEED FUND A SINGLE BANK           |
| 11 | TO BANK AND DISTRIBUTE THESE IPS CELL LINES THAT     |
| 12 | WERE GENERATED UNDER RFA'S 1202 AND 1203. WE ALSO    |
| 13 | PROPOSE THAT ADDITIONAL HUMAN PLURIPOTENT STEM CELL  |
| 14 | LINES WILL BE BANKED IN THIS RFA, AND THESE WOULD BE |
| 15 | CELL LINES THAT ARE ALREADY BEING DERIVED IN         |
| 16 | CALIFORNIA TO A LARGE EXTENT ALREADY WITH CIRM       |
| 17 | FUNDING. THEY WOULD INCLUDE DISEASE-SPECIFIC HUMAN   |
| 18 | INDUCED PLURIPOTENT STEM CELL LINES AS WELL AS HUMAN |
| 19 | EMBRYONIC STEM CELL LINES.                           |
| 20 | HERE AGAIN, WE ENVISION A SINGLE                     |
| 21 | THREE-YEAR AWARD; THAT IS, THE COMPETITION WOULD BE  |
| 22 | OPEN TO NONPROFIT AND FOR-PROFIT ORGANIZATIONS. THE  |
| 23 | TOTAL COST FOR THIS RFA WOULD BE \$10 MILLION AND    |
| 24 | SHOULD ALLOW THE BANKING OF IPS CELL LINES DERIVED   |
| 25 | FROM UP TO 1500 INDIVIDUALS PLUS THE HUMAN EMBRYONIC |
|    |  |

| 1        | STEM CELL LINES.   |
|----------|--|
| 2        | THE PROVISIONAL TIMETABLE FOR THIS RFA IS  |
| 3        | SHOWN HERE. WE ARE PLANNING TO RELEASE THESE THREE   |
| 4        | RFA'S IN MAY NEXT YEAR WITH GRANTS WORKING GROUP   |
| 5        | REVIEW OF THE APPLICATIONS IN NOVEMBER AND THEN  |
| 6        | BRING THE RESULTS OF THAT REVIEW FOR YOUR  |
| 7        | CONSIDERATION EARLY 2013.  |
| 8        | AND SO MY FINAL SLIDE IS INDEED TO REQUEST   |
| 9        | THE APPROVAL FOR A TOTAL OF \$30 MILLION FOR THE   |
| 10       | THREE RFA'S I'VE DESCRIBED, AND THE COST BREAKDOWN   |
| 11       | FOR EACH OF THEM IS SHOWN HERE AGAIN. I'LL BE HAPPY  |
| 12       | TO ANSWER ANY QUESTIONS.   |
| 13       | CHAIRMAN THOMAS: DR. MELMED.   |
| 14       | DR. MELMED: THESE ARE GREAT PROPOSALS AND  |
| 15       | I CONGRATULATE YOU FOR CONSTRUCTING THEM AS YOU DID.   |
| 16       | I JUST HAVE A FACTUAL QUESTION, ALTHOUGH AWARD ONE   |
| 17       | PERHAPS IS MOOT FOR THE SECOND TWO. WHEN YOU TALK  |
| 18       | ABOUT THE NUMBERS OF PATIENTS, WHICH ARE   |
| 19       | CONSIDERABLE, 1500, THESE ARE BIG, BIG NUMBERS, ARE  |
| 20       | WE ASKING FOR THOSE TOTAL NUMBERS TO BE ASSUMED BY   |
| 21       | THE ENTIRE REA OR BY THE PROPOSAL 2. SO WELDE ASKING   |
|          | THE ENTIRE RFA OR BY THE PROPOSAL? SO WE'RE ASKING   |
| 22       | FOR EACH PROPOSAL TO HAVE THAT 14 OR 1500, OR IS THE   |
| 22<br>23 |  |
|          | FOR EACH PROPOSAL TO HAVE THAT 14 OR 1500, OR IS THE   |
| 23       | FOR EACH PROPOSAL TO HAVE THAT 14 OR 1500, OR IS THE ENTIRE RFA GOING TO DELIVER TO CIRM 1400? |

| 1  | 1202 IS WHERE COMPETITION WILL OCCUR AMONGST         |
|----|--|
| 2  | PROPOSALS COMING FORWARD, AND EACH PROPOSAL WILL BE  |
| 3  | TARGETING A SPECIFIC DISEASE. AND ACTUALLY THE       |
| 4  | CRUX AND SO EACH OF THESE PROPOSALS WILL ACTUALLY    |
| 5  | BE ASKED TO JUSTIFY THE NUMBER OF PATIENTS THEY      |
| 6  | THINK IS NECESSARY TO ADEQUATELY REPRESENT THE       |
| 7  | DISEASE. AND SO THIS COULD VARY DEPENDING ON THE     |
| 8  | DISEASE.   |
| 9  | DR. MELMED: RIGHT. YOU'RE SPECIFYING THE             |
| 10 | NUMBER WHICH IS A BIG NUMBER. SO WE'RE GOING TO      |
| 11 | EXCLUDE 99 PERCENT OF APPLICANTS THAT WAY, OR ARE WE |
| 12 | ASKING FOR THE WHOLE RFA TO HAVE                     |
| 13 | DR. GRIESHAMMER: SO THE WHOLE RFA 1202,              |
| 14 | WE ANTICIPATE TO GET TO ABOUT 1200 PATIENTS DIVIDED  |
| 15 | AMONGST THREE TO TEN DISEASES. NOW, RFA 1203 AND     |
| 16 | 1204 ARE INDEED EXPECTED BY A SINGLE ENTITY TO DO    |
| 17 | THE DERIVING OF ALL 1200.                            |
| 18 | DR. MELMED: AND HAS STAFF DONE THEIR                 |
| 19 | RESEARCH? ARE THERE SUCH LABS THAT CAN DELIVER 1500  |
| 20 | SUCH NUMBERS?  |
| 21 | DR. TROUNSON: A QUICK OUTCOME. THERE ARE             |
| 22 | AT LEAST FOUR COMMERCIAL ENTITIES WHO COULD DO THAT. |
| 23 | I DON'T KNOW ABOUT THE NONPROFIT OR WHETHER YOU      |
| 24 | COULD DO IT HERE. I KNOW THERE ARE FOUR.             |
| 25 | DR. MELMED: I DOUBT THERE ARE NONPROFITS             |
|    | 163  |

| 1  | WHO COULD TO THAT. SO IT'S EXCLUDING THE             |
|----|--|
| 2  | NONPROFITS.  |
| 3  | DR. TROUNSON: YEAH. AND I THINK FIRMLY,              |
| 4  | SHLOMO, THAT THAT WOULD BE MOST COST-EFFECTIVE ALSO  |
| 5  | IF WE CAN GET IT INTO ONE UNIT THAT'S VERY           |
| 6  | EFFECTIVE, VERY EFFICIENT.                           |
| 7  | DR. MELMED: I'M NOT ARGUING WITH THE                 |
| 8  | MERITS. I'M JUST SAYING AS LONG AS THIS BOARD        |
| 9  | UNDERSTANDS WE'RE BASICALLY                          |
| 10 | DR. TROUNSON: FOUR. AT LEAST FOUR.                   |
| 11 | DR. MELMED: THE TWO RFA'S, THE TWO LAST              |
| 12 | ONES, WE'RE EXCLUDING NONPROFITS BECAUSE THE REALITY |
| 13 | IS THAT THOSE NUMBERS WILL NOT BE DELIVERED UNLESS   |
| 14 | BURNHAM HAS THAT CAPACITY.                           |
| 15 | DR. VUORI: TOTALLY DIFFERENT QUESTION.               |
| 16 | DR. GRIESHAMMER: ACTUALLY IF I CAN                   |
| 17 | RESPOND TO ONE MORE THING THAT'S RELATED TO THIS,    |
| 18 | WHICH IS ACTUALLY SOME OF THE MAJOR CELL BANKING     |
| 19 | FACILITIES ARE ACTUALLY NONPROFIT. THEY'RE           |
| 20 | COMMERCIAL, BUT NONPROFIT JUST FOR YOUR INFORMATION. |
| 21 | DR. MELMED: TO LIVE WITH THESE                       |
| 22 | NUMBERS.   |
| 23 | DR. GRIESHAMMER: BUT THEY WOULD HAVE TO              |
| 24 | MOVE TO CALIFORNIA.                                  |
| 25 | CHAIRMAN THOMAS: MR. SHEEHY HAD HIS HAND             |
|    |  |

164

| UP FIRST AND THEN DR. VUORI AND THEN MR. SHESTACK,  |
|---|
| YES.  |
| MR. SHEEHY: YOU DIDN'T HAVE IT ON YOUR              |
| SLIDE, BUT I LOOKED AT THE DISEASE TARGETS. AND WE  |
| HAVE ALZHEIMER'S AND AUTISM ON THERE, WHICH ARE     |
| MAJOR PUBLIC HEALTH CRISES FOR THE STATE OF         |
| CALIFORNIA LOOMING, AND THE PATHOGENESIS OF BOTH OF |
| THOSE DISEASES ARE NOT WELL UNDERSTOOD. AND THAT    |
| HAS BEEN THE BIGGEST BARRIER TOWARDS DEVELOPING ANY |
| EFFECTIVE THERAPIES FOR THOSE DISEASES. AND AT      |
| FIRST I THOUGHT PERHAPS WE SHOULD GIVE THEM A       |
| PRIORITY, BUT ACTUALLY I WANT US TO HAVE A FAIR     |
| SCIENTIFIC COMPETITION AND PROPOSALS BE JUDGED ON   |
| THEIR MERITS.                                       |
| BUT I THINK THAT I WOULD LIKE IN                    |
| APPROVING THIS, I'D LIKE TO HAVE AN AMENDMENT WHERE |
| WE WON'T STOP UNTIL WE GET A PROPOSAL THAT'S        |
| SCIENTIFICALLY MERITORIOUS FOR THE DERIVATION OF AN |
| IPS MODEL SUFFICIENTLY ROBUST IN ALZHEIMER'S AND    |
| AUTISM EVEN IF WE HAVE TO REPEAT PARTS OF THIS RFA  |
| UNTIL WE GET IT.                                    |
| I THINK WE OWE THAT TO THE PEOPLE OF                |
| CALIFORNIA FOR FAMILIES WHO ARE SUFFERING WITH      |
| ALZHEIMER'S, FOR FAMILIES THAT ARE SUFFERING WITH   |
| AUTISM. WE'RE IN A UNIQUE POSITION TO PUT OUR       |
| 165   |
|   |

| 1  | RESOURCES AND OUR EXPERTISE IN STEM CELL SCIENCE TO  |
|----|--|
| 2  | TRY TO GET A LEG UP ON THESE DISEASES. AND IF        |
| 3  | THERE'S ONE PLACE WHERE I THINK WE OWE THE VOTERS, I |
| 4  | THINK IT'S AT LEAST WITH THESE TWO CONDITIONS WHICH  |
| 5  | ARE AFFECTING SO MANY FAMILIES.                      |
| 6  | AGAIN, I'M NOT SUGGESTING WE DON'T FUND              |
| 7  | SCIENTIFICALLY MERITORIOUS PROPOSALS. BUT IF WE      |
| 8  | DON'T GET GOOD PROPOSALS IN THIS ROUND THAT GET      |
| 9  | FUNDED, THEN WE REPEAT UNTIL AT LEAST FOR THOSE TWO  |
| 10 | CONDITIONS WHICH AFFECT SO MANY PEOPLE IN THIS STATE |
| 11 | AND FOR WHICH THERE IS NO GOOD IDEA OF WHAT'S        |
| 12 | CAUSING THOSE DISEASES WHICH DOESN'T GIVE ANY SORT   |
| 13 | OF PATHWAY FOR THERAPY, I THINK WE HAVE TO MAKE THAT |
| 14 | COMMITMENT.  |
| 15 | CHAIRMAN THOMAS: LET'S SEE. DR. VUORI                |
| 16 | LOOKS LIKE SHE'S YIELDING THE FLOOR TO SHERRY FOR A  |
| 17 | RESPONSE TO THAT COMMENT.                            |
| 18 | MS. LANSING: JEFF, I SO RARELY DISAGREE              |
| 19 | WITH YOU, BUT I JUST WANT TO EXPLAIN JUST A          |
| 20 | DIFFERENT THING. I THINK IT'S VERY DANGEROUS FOR     |
| 21 | ANY OF US ON THIS BOARD TO SINGLE OUT ONE DISEASE.   |
| 22 | I MEAN CANCER STRIKES ONE OUT OF TWO PEOPLE, ONE OUT |
| 23 | OF THREE. YOU CAN GO ON WITH THE STATISTICS AND IT   |
| 24 | AFFECTS SO MANY MILLIONS OF PEOPLE, AND I WOULD NOT  |
| 25 | SAY YOU HAVE TO KEEP GOING TILL YOU GET A CANCER     |
|    |  |

| 1  | THING. I THINK WHAT YOU WOULD AGREE WITH IS A        |
|----|--|
| 2  | DISCOVERY IN ONE AREA OF SCIENCE WE OFTEN KNOW LEADS |
| 3  | TO A DISCOVERY. YOU'RE WORKING ON SOMETHING FOR      |
| 4  | ALZHEIMER'S AND SUDDENLY IT LEADS TO SOMETHING THAT  |
| 5  | HELPS CANCER PATIENTS.                               |
| 6  | I THINK WE OWE IT TO THE CITIZENS OF                 |
| 7  | CALIFORNIA TO REPRESENT ALL DISEASES AND TO DO THE   |
| 8  | BEST SCIENCE. I'VE SEEN THIS TIME AND TIME AGAIN.    |
| 9  | YOU KNOW, YOU'RE WORKING ON SOMETHING AND IT LEADS   |
| 10 | TO A BREAKTHROUGH. CONSTANTLY I'M READING THEY       |
| 11 | THOUGHT THIS DRUG WAS FOR CANCER, BUT IT TURNS OUT   |
| 12 | TO BE FOR AUTISM OR WHATEVER IT IS. THEY'RE          |
| 13 | HORRIBLE DISEASES, AND I THINK EVERY DISEASE AROUND  |
| 14 | THIS TABLE AND EVERYTHING THAT WE REPRESENT IS       |
| 15 | HORRIBLE. AND I JUST THINK IT'S A SLIPPERY AND       |
| 16 | SLIDING SLOPE TO JUST SINGLE OUT ONE DISEASE OR TWO  |
| 17 | DISEASES. I THINK WE SHOULD TAKE THE BEST SCIENCE.   |
| 18 | AS HORRIBLE AS I THINK THOSE DISEASES ARE, I WANT TO |
| 19 | BE CLEAR ABOUT THAT.                                 |
| 20 | CHAIRMAN THOMAS: I THINK DR. VUORI.                  |
| 21 | DR. VUORI: UNFORTUNATELY I HAVE THREE                |
| 22 | SEPARATE QUESTIONS. SO MAYBE I'LL JUST LAY THEM OUT  |
| 23 | AND HOPEFULLY SOMEBODY CAN PROVIDE SOME ANSWERS.     |
| 24 | SO FIRST QUESTION RELATES TO THE TISSUE              |
| 25 | ACQUISITION. IS CIRM PLANNING TO PROVIDE A UNIFORM   |
|    | 167  |

| 1  | CONSENT FORM THAT SHOULD BE UTILIZED IN THIS         |
|----|--|
| 2  | PROCESS?   |
| 3  | DR. TROUNSON: YES.                                   |
| 4  | DR. VUORI: SECOND QUESTION RELATES TO THE            |
| 5  | CORE IPSC DERIVATION. YOU MENTIONED THAT YOU'RE      |
| 6  | LIKELY TO GIVE ONLY ONE AWARD. THE TECHNOLOGY, HOW   |
| 7  | WE GENERATE THOSE INDUCE PLURIPOTENT STEMS IS VERY   |
| 8  | RAPIDLY EVOLVING. IT'S VERY UNCLEAR PROBABLY TO      |
| 9  | MANY OF THE SCIENTISTS WHAT MIGHT BE THE BEST WAYS   |
| 10 | OF GOING ABOUT DOING THAT. I'M JUST WONDERING IF     |
| 11 | THERE SHOULD BE MAYBE A LITTLE BIT MORE FLEXIBILITY  |
| 12 | IN THE WAY THAT THIS MIGHT BE VERY ADVANTAGEOUS FOR  |
| 13 | THE FUTURE TO HAVE CELLS DERIVED BY                  |
| 14 | DR. KRONTIRIS: AND 30 MILLION RIDES ON               |
| 15 | IT.  |
| 16 | DR. VUORI: FEW DIFFERENT WAYS. FOR                   |
| 17 | EXAMPLE, JUST THE MERE USE OF MIC AND MAYBE          |
| 18 | REALIZING AFTERWARDS THAT THAT WAS NOT A GREAT IDEA  |
| 19 | FOR IN VIVO STUDIES MIGHT BE AN ISSUE.               |
| 20 | AND MY THIRD QUESTION IS THAT SHOULD IT              |
| 21 | HAPPEN, UNFORTUNATELY, THAT THIS BANK IN THE END OF  |
| 22 | THIS PRODUCTION LINE, LET'S SAY, WOULD BE NONPROFIT, |
| 23 | FOR-PROFIT, BUT SOMEHOW GOES OUT OF BUSINESS, IS     |
| 24 | THERE A FALLBACK MECHANISM WHERE THIS BANK, WHICH IS |
| 25 | OBVIOUSLY ENORMOUSLY VALUABLE, IS A PROPERTY OF CIRM |
|    | 168  |

| 1  | OR STATE OF CALIFORNIA OR HOW IS THIS CONSIDERED?   |
|----|---|
| 2  | DR. TROUNSON: SO JUST IN ANSWER TO YOUR             |
| 3  | FIRST QUESTION, I THINK WE'RE GOING TO KEEP TISSUE, |
| 4  | THE ORIGINAL TISSUE SO THAT AND IN THE EVALUATION   |
| 5  | OF THE AWARDS, WE WILL GO WITH WHAT THE REVIEWERS   |
| 6  | THINK IS REALLY THE BEST METHOD, BUT WE KEEP TISSUE |
| 7  | IN CASE THERE IS ANOTHER METHOD OR IF YOU WANT TO   |
| 8  | USE THOSE TISSUES FOR CONTROL. SO THAT WOULD BE     |
| 9  | BUILT IN. AND SO I THINK WE STILL RETAIN THE OPTION |
| 10 | FOR THAT TO REDERIVE THOSE SAMPLES RATHER THAN      |
| 11 | NECESSARILY GO BACK TO THE PATIENT.                 |
| 12 | AND I THINK WE WILL BE ASKING FOR A                 |
| 13 | SUSTAINABILITY MEASURE FROM OUR APPLICANTS. WE      |
| 14 | CAN'T GO LONGER THAN A CERTAIN AMOUNT OF TIME, OF   |
| 15 | COURSE, BUT WE THOUGHT WE'D PUT IT IN FOR THREE     |
| 16 | YEARS. WE'LL ASK WHAT THEIR BUSINESS PLAN IS.       |
| 17 | WE'LL SEEK FOR A SUSTAINABILITY PROPOSAL FROM THEM. |
| 18 | AND IF WE NEED TO KEEP FUNDING PARTICULARLY FOR     |
| 19 | ACCESS FOR OUR CALIFORNIAN SCIENTISTS AND BIOTECH   |
| 20 | COMPANIES, THEN WE SHOULD PROBABLY DO THAT AS WELL  |
| 21 | LATER ON. BUT WE THOUGHT THAT WE'D TRY AND SEE IF   |
| 22 | WE COULD GET A SUSTAINABILITY MEASURE FROM WHOMEVER |
| 23 | WAS GOING TO DO THE BANKING.                        |
| 24 | CHAIRMAN THOMAS: YES, MR. SHESTACK.                 |
| 25 | MR. SHESTACK: THANKS. I HAVE SOME A                 |
|    | 169   |
|    | 1   |

| 1  | LOT OF COMMENTS AND QUESTIONS ON THIS. AND            |
|----|---|
| 2  | UNFORTUNATELY I DIDN'T ACTUALLY SEE IT UNTIL          |
| 3  | YESTERDAY. AND I WOULD HAVE TO SAY THAT SINCE PART    |
| 4  | OF THIS PROPOSAL HAS TO DO WITH FUNDING A BANK THAT   |
| 5  | HAS TO DO WITH AUTISM PATIENTS, FOR INSTANCE, AND     |
| 6  | THE ONLY PERSON IN THE STATE WHO ACTUALLY DID AN      |
| 7  | AUTISM GENE BANK WAS ME, SOMEONE MIGHT HAVE           |
| 8  | CONSULTED WITH A BOARD MEMBER WHO'S A PATIENT         |
| 9  | ADVOCATE AND SAY WHAT IS THE FEASIBILITY, WHAT IS     |
| 10 | NOT. FOR INSTANCE, RECRUITING IS A BIG PROBLEM, BUT   |
| 11 | IN ALZHEIMER'S, AUTISM, AND DIABETES, THERE ARE HUGE  |
| 12 | POPULATIONS THAT HAVE BEEN RECRUITED, CONSENTED.      |
| 13 | THERE ARE MORE LIVE CELL LINES. YOU WILL HAVE TO      |
| 14 | RECONTACT THEM AND RECONSENT BECAUSE YOU WILL BE      |
| 15 | TAKING A FIBROBLAST, YOU'LL BE TAKING A BUCCAL SMEAR  |
| 16 | AND NASAL. I DON'T KNOW WHAT YOUR CELL IS. BUT        |
| 17 | THEY EXIST.   |
| 18 | AND THEY HAVE BEEN IN AUTISM WE SPEND                 |
| 19 | \$6,000 PER FAMILY PHENOTYPING THEM WITH ADOS AND ADI |
| 20 | AND NEUROLOGICAL VISITS FOR THE ENTIRE FAMILY. AND    |
| 21 | THIS EXISTS AND MAKES A GIANT DIFFERENCE IN HOW MUCH  |
| 22 | RECRUITMENT WOULD COST. AND I THINK THE EQUIVALENT    |
| 23 | EXISTS IN ALZHEIMER'S AND DIABETES. I JUST HAPPEN     |
| 24 | TO KNOW THAT OF A THOUSAND FAMILIES IN THE AUTISM     |
| 25 | BANK, 250 OF THEM ARE IN SOUTHERN CALIFORNIA.         |
|    |   |

| 1  | SO IT'S SIGNIFICANT BECAUSE THAT'S WHERE            |
|----|---|
| 2  | IT STARTED. SO I JUST WISH THAT THINGS LIKE THAT    |
| 3  | HAD BEEN I WOULD VIEW THIS AS WORK IN PROGRESS,     |
| 4  | BUT I WISH THAT SOME OF THESE THINGS HAD BEEN       |
| 5  | THOUGHT ABOUT AS THIS WAS BEING DISCUSSED.          |
| 6  | ALSO, LIKE, WHAT IS THE MECHANISM OF                |
| 7  | COMPETITION BETWEEN THE DISEASES? I APPRECIATE BOTH |
| 8  | WHAT JEFF AND SHERRY SAID. THE OBJECT OF THIS IS TO |
| 9  | PICK SOME DISEASES BEYOND THAT THAT WE HOPE WILL BE |
| 10 | SUCCESSFUL. WE CAN'T FORCE IT. BUT THE OBJECT IS    |
| 11 | PICK SOME TARGETS. HAVE SOME FOCUS. I UNDERSTAND.   |
| 12 | BUT DOES THAT MEAN THAT THERE'S TEN AWARDS, BUT     |
| 13 | THERE'S SEVEN DISEASES?                             |
| 14 | WHAT ARE THE ACTUAL AND THE TEAMS, WHAT             |
| 15 | ARE THEY COMPETING ON? SEEMS LIKE WHAT THEY'RE      |
| 16 | COMPETING ON TO ME IS WHO IS BEST DEFINING THE      |
| 17 | PHENOTYPE THAT THEY WANT TO MAKE CELL LINES OF.     |
| 18 | THAT'S WHAT YOU'RE ASKING THEM. SO IF THAT'S WHAT   |
| 19 | YOU'RE ASKING, YOU COULD ASK THEM TODAY AND THEY    |
| 20 | COULD TELL YOU BY TUESDAY. THEY KNOW. THERE ARE     |
| 21 | TEAMS WHO KNOW WHAT JUST WAITING FOR EIGHT YEARS    |
| 22 | FOR A PROPOSAL LIKE THIS. THEY HAVE IT'S A          |
| 23 | FISHING EXPEDITION. THEY KNOW WHERE THEY REALLY     |
| 24 | BELIEVE WHERE THE BEST FISHING HOLE IS, AND YET YOU |
| 25 | HAVE DESIGNED WE'VE DESIGNED SOMETHING HERE         |
|    | 171   |

| 1  | THAT'S LIKE A YEAR UNTIL THIS GETS OUT, THEN TWO     |
|----|--|
| 2  | YEARS TO RECRUIT, AND THEN THREE YEARS FOR           |
| 3  | DERIVATION.  |
| 4  | SO IN THE WORST-CASE SCENARIO, THE FIRST             |
| 5  | HPSC CELL LINES MIGHT NOT BE AVAILABLE TO THE PUBLIC |
| 6  | FOR SIX YEARS. I KNOW THAT'S NOT THE INTENTION, BUT  |
| 7  | THAT IS A WORST-CASE SCENARIO IN HOW THIS IS         |
| 8  | DEVISED. THERE'S THINGS THAT ARE BUILT IN THAT MAKE  |
| 9  | IT GO SLOWLY. WHY DO YOU WANT TO HAVE A COMPETITION  |
| LO | FOR WHO DOES DERIVATION WHEN THE TECHNOLOGY IS       |
| L1 | CHANGING ALL THE TIME? AND AT THE MOMENT YOU'RE      |
| L2 | READY TO STRIKE, YOU SHOULD DO THAT AS A CONTRACT.   |
| L3 | SAME WITH A BANK. IT SHOULD BE A CONTRACT. SO CIRM   |
| L4 | OWNS IT. YOU SHOULD NEVER BE, LIKE, AT THE WHIM OF   |
| L5 | SOMEBODY WHO YOU'VE GIVEN A GRANT TO, WHICH IS A     |
| L6 | COMPANY. IT SHOULD BE A CONTRACT SO IT'S YOURS.      |
| L7 | I JUST THINK THERE'S LOTS OF THINGS THAT             |
| L8 | NEED TO BE THOUGHT THROUGH A LITTLE BIT MORE. AND    |
| L9 | EVEN THE TARGETS. I THINK LIKE CEREBRAL PALSY, WE    |
| 20 | HAD A BIG THING ON IT. PEOPLE HAVE A GOOD IDEA WHAT  |
| 21 | THE LESION IS. IT'S PROBABLY NOT THE BEST DISEASE    |
| 22 | TO BE IN THIS ONE. IT SHOULD BE IN A DIFFERENT KIND  |
| 23 | OF RFA. MAYBE SOMETHING ELSE IS A MORE               |
| 24 | HETEROGENEOUS GENETIC DISEASE THAT SHOULD BE IN      |
| 25 | HERE. THERE'S A LOT OF THIS IS A GREAT IDEA.         |
|    | 172  |

| I'VE BEEN ON THIS BOARD FOR EIGHT YEARS WAITING FOR  |
|--|
| A PROPOSAL LIKE THIS. SO IT IS SORT OF UPSETTING TO  |
| ME THAT IT WASN'T SORT OF MORE THOUGHT OUT AND ALSO  |
| THAT IT DOESN'T HAVE MORE URGENCY, LIKE THIS IS A    |
| BAD TIMELINE REALLY. THERE'S BUILT IN A LOT OF       |
| PLACES FOR IT TO SLIP, AND THERE ARE PEOPLE WHO HAVE |
| BEEN WAITING A LONG TIME.                            |
| I'M ON THIS BOARD BECAUSE I FELT FOR EIGHT           |
| YEARS I COULD SAY I DON'T HAVE A DOG IN THIS FIGHT.  |
| I TRY AND REPRESENT A MENTAL HEALTH COMMUNITY. I'M   |
| NOT GOING TO PUSH FOR AN AUTISM THING UNTIL THERE'S  |
| SOMETHING WORTH PUSHING FOR, AND THIS ISN'T EVEN IT  |
| YET. THIS IS, LIKE, THE THING THAT IS JUST           |
| DISCOVERY SCIENCE. IT IS A PUBLIC HEALTH CRISIS.     |
| IT IS EIGHT YEARS. IF YOU ARE GOING TO DO THIS       |
| PROPOSAL, MAKE IT GO FASTER AND MAKE IT SMARTER SO   |
| IT JUST TAKES ADVANTAGE OF WHAT THE COMMUNITY HAS    |
| FOR US. THAT'S ALL.                                  |
| SO AS YOU GO FORWARD PLANNING IT, PLEASE             |
| GO TO THE COMMUNITY MORE ACTIVELY AND GET THEIR      |
| INPUT AND THINK ABOUT ALSO HOW TO MAKE IT GO FASTER. |
| DR. TROUNSON: SO, JON, JUST IN SLIGHT                |
| DEFENSE, WE DID HAVE A WORKSHOP.                     |
| MR. SHESTACK: I'M SORRY.                             |
| DR. TROUNSON: WE DID HAVE A WORKSHOP ON              |
| 173  |
|  |

| 1  | THIS, ON IPS CELL DERIVATION. SO WE'VE BEEN         |
|----|---|
| 2  | ACTUALLY ACTIVELY TRYING TO GET THIS MOVING. AND I  |
| 3  | AGREE. WHAT ARE THE TIMELINES? THEY'RE NOT GOOD     |
| 4  | ENOUGH. YOU'RE RIGHT. BUT WE HAVE TO GO THROUGH     |
| 5  | THE PROCESS THAT'S REQUIRED OF US. WE CAN'T JUST    |
| 6  | GIVE OUT A CONTRACT. WE HAVE TO ALLOW PEOPLE TO BID |
| 7  | FOR THE OPPORTUNITY. THAT'S REQUIRED UNDER          |
| 8  | MR. SHESTACK: BUT IS ACTUALLY IS EVERY              |
| 9  | SINGLE THING THAT CIRM DOES HAVE TO BE COMPETITIVE? |
| 10 | CAN'T YOU DO I MEAN THE NIH HAS CONTRACTS ALL THE   |
| 11 | TIME, PARTICULARLY ON THINGS LIKE BANKING. THEY PUT |
| 12 | THE COMPETITIVE BIDDING. COMPETITIVE BIDDING IS     |
| 13 | DIFFERENT THAN A GRANTING PROCESS.                  |
| 14 | DR. OLSON: IF I CAN ANSWER THAT. I JUST             |
| 15 | WANTED TO COMMENT THAT IN ORDER TO USE RESEARCH     |
| 16 | FUNDING, WE HAVE TO GO THROUGH A COMPETITIVE GRANTS |
| 17 | WORKING GROUP REVIEW. EVEN IF WE WERE USING         |
| 18 | ADMINISTRATIVE FUNDS UNDER A CONTRACT, IT WOULD     |
| 19 | STILL BE A COMPETITIVE PROCESS. BUT A CONTRACT      |
| 20 | WOULD BE ADMINISTRATIVE FUNDS. SO THE 6 PERCENT OR  |
| 21 | THE 3 PERCENT.                                      |
| 22 | MR. SHESTACK: IT SEEMS LIKE IT WOULD BE A           |
| 23 | FASTER PROCESS.                                     |
| 24 | DR. TROUNSON: I TOTALLY UNDERSTAND, JON.            |
|    |   |
| 25 | BUT WE'VE GOT IT ON AS FAST A TRACK AS WE CAN UNDER |

| 1  | WHAT WE'RE ALLOWED TO DO. WE WILL TRY TO KEEP IT     |
|----|--|
| 2  | MOVING FAST. I PROMISE YOU THAT. WE WILL DO OUR      |
| 3  | BEST TO QUICKEN IT UP. I DON'T WANT TO SEE SIX       |
| 4  | YEARS FOR THIS, THAT'S FOR SURE. SO THAT'S WHY I'M   |
| 5  | HOPING THAT WE CAN GET SOME VERY EFFICIENT           |
| 6  | DERIVATION CAPACITY THERE AND GET IT DONE QUICKLY.   |
| 7  | THERE ARE SOME ENTITIES THAT ARE DOING THIS IN A     |
| 8  | VERY EFFICIENT WAY ALREADY NOW.                      |
| 9  | MR. SHESTACK: OKAY. THAT'S THE                       |
| 10 | DERIVATION.  |
| 11 | DR. TROUNSON: THAT'S ONE ASPECT. THAT'S              |
| 12 | ONE OF THE BIGGER COMPONENTS. I THINK YOU'RE RIGHT.  |
| 13 | WE NEED TO TALK TO YOU ABOUT AUTISM, AND WE NEED TO  |
| 14 | GET THOSE CLINICAL SPECIALISTS I THINK WHO KNOW THE  |
| 15 | POPULATIONS.   |
| 16 | MR. SHESTACK: ALZHEIMER'S AND DIABETES               |
| 17 | TOO ARE LIKE REALLY MATURE, BANKED, PHENOTYPED,      |
| 18 | CONSENTED POPULATIONS. IF YOU WANTED TO BE UP AND    |
| 19 | RUNNING IN TERMS OF ANY GROUP IN CALIFORNIA, YOU     |
| 20 | WOULD SAY THIS IS THE LANDSCAPE. WE KNOW WHERE THE   |
| 21 | PATIENTS ARE. WE CAN GET THEM. THAT WILL JUST TELL   |
| 22 | YOU WHAT OUR BEST IDEA IS. IT JUST HAPPENS TO BE A   |
| 23 | DIFFERENT KIND OF PROPOSAL THAN I WOULD PROPOSE THAT |
| 24 | CAN MOVE MUCH FASTER.                                |
| 25 | DR. GRIESHAMMER: IF I CAN MAKE A COMMENT             |
|    |  |

| 1  | JUST ON THIS DISCUSSION. SO I VERY MUCH APPRECIATE   |
|----|--|
| 2  | YOUR INPUT ON THE EXISTENCE OF THESE RESOURCES. AND  |
| 3  | I TALKED EARLIER TO JEFF SHEEHY WHO ALSO SUGGESTED   |
| 4  | THAT PATIENT ADVOCATES COULD BE REALLY INSTRUMENTAL  |
| 5  | IN PATIENT RECRUITMENT IN SOME CASES. BUT WHAT       |
| 6  | YOU'RE SAYING IS RESOURCES ALREADY EXIST THAT COULD  |
| 7  | BE REALLY HELPFUL, AND SO THERE WOULD BE NOTHING     |
| 8  | WRONG, AND AS A MATTER OF FACT WE SHOULD PROBABLY    |
| 9  | CALL THIS OUT IN THE SPECIFIC RFA, FOR THE           |
| 10 | APPLICANTS TO COME IN AND SAY I AM WORKING WITH THE  |
| 11 | RESOURCE THAT ALREADY EXISTS WHERE 300 OR 500        |
| 12 | PATIENTS HAVE BEEN ALREADY FULLY PHENOTYPED.         |
| 13 | MR. SHESTACK: AND THAT RESOURCE WILL WORK            |
| 14 | WITH EVERY APPLICANT. IT'S NOT GOING TO BE           |
| 15 | DR. GRIESHAMMER: EXACTLY. SO I THINK                 |
| 16 | THAT WOULD BE  |
| 17 | MR. SHESTACK: THEY WILL SUPPORT ANY                  |
| 18 | APPLICANT, AND THEY'RE NOT NECESSARILY               |
| 19 | CALIFORNIA-BASED RESOURCES ANYMORE EITHER, BUT THEY  |
| 20 | ARE RESOURCES.                                       |
| 21 | DR. GRIESHAMMER: SO I THINK WE CAN                   |
| 22 | DEFINITELY ENCOURAGE THAT, AND IT WOULD BE SPEAKING  |
| 23 | TOWARDS SPEED OF GETTING ALL THE INFORMATION THAT WE |
| 24 | NEED QUICKLY AND NOT REPEATING EFFORTS.              |
| 25 | MR. SHESTACK: AM I NOT UNDERSTANDING?                |
|    |  |

176

| 1  | WHAT IS THE MECHANISM OF TWO 1202 RFA 1202?          |
|----|--|
| 2  | PEOPLE ARE WHAT IS IT THAT THEY ARE THEY'RE          |
| 3  | SUBMITTING A PHENOTYPE; IS THAT RIGHT?               |
| 4  | DR. GRIESHAMMER: WELL, THE WAY WE                    |
| 5  | ENVISION THIS IS THAT THE COMPETITION WOULD BE, AS   |
| 6  | USUAL, BASED, OF COURSE, ON ADDRESSING THE REVIEW    |
| 7  | CRITERIA WHICH WE WILL STIPULATE, AND WHAT REALLY    |
| 8  | WILL BE IMPORTANT IN APPLICANTS MAKING OR CONVINCING |
| 9  | REVIEWERS IS THAT THE PATIENT POPULATION AND THE     |
| 10 | PHENOTYPES THEY'VE CHOSEN TO PURSUE HAVE A CERTAIN   |
| 11 | LIKELIHOOD OR GREAT LIKELIHOOD OF INDEED LEADING     |
| 12 | ULTIMATELY, ONCE THE RESOURCE HAS BEEN MADE, LIKE    |
| 13 | YOU SAY, THE MAKING OF THE RESOURCE IS RELATIVELY    |
| 14 | STRAIGHTFORWARD, BUT ONCE IT HAS BEEN MADE, HAS A    |
| 15 | REASONABLE CHANCE OF PROVIDING A TOOL REALLY EITHER  |
| 16 | FOR MECHANISM DISCOVERY OR FOR DRUG SCREENING. AND   |
| 17 | SO THAT WOULD BE VERY DIFFERENT FOR DIFFERENT        |
| 18 | PHENOTYPES.  |
| 19 | IT WOULD, FOR INSTANCE, DEPEND ON THE                |
| 20 | VARIABILITY THAT IS SEEN AMONGST PATIENTS AND        |
| 21 | WHETHER THAT VARIABILITY WOULD OCCLUDE DISCOVERING   |
| 22 | CERTAIN DISEASE PHENOTYPES IN ADDITION, SO FORTH.    |
| 23 | SO WE WILL HAVE TO ASK OUR REVIEWERS TO ASSESS       |
| 24 | WHETHER THERE IS A LIKELIHOOD TO COME UP WITH A GOOD |
| 25 | TOOL IN THE END. SO IT WOULD BE PART OF THE          |
|    | 177  |

| 1  | COMPETITION.   |
|----|--|
| 2  | MR. SHESTACK: BUT YOU MIGHT HAVE SEVERAL             |
| 3  | ACADEMIC INSTITUTIONS MIGHT HAVE A DIFFERENT SET OF  |
| 4  | CRITERIA THEY USE IN THEIR PHENOTYPE OF THEIR        |
| 5  | PROPOSAL.  |
| 6  | DR. GRIESHAMMER: ABSOLUTELY, YEAH.                   |
| 7  | UH-HUH.  |
| 8  | MR. SHESTACK: AND THE BIGGEST TIME                   |
| 9  | QUESTION IS GOING TO BE EDUCATING YOUR REVIEWERS     |
| 10 | NOT YOUR APPLICANTS KNOW WHAT THEY WOULD LIKE TO     |
| 11 | EXPLORE ALREADY.                                     |
| 12 | DR. GRIESHAMMER: IF I CAN ALSO MAKE A                |
| 13 | QUICK COMMENT ACTUALLY ON THE TIMELINE, WHICH WE ALL |
| 14 | SEEM TO AGREE IS INDEED RATHER A LONG TIMELINE;      |
| 15 | HOWEVER, ONE THING I DO WANT TO POINT OUT IS THAT    |
| 16 | THE BANK THAT THE DERIVATION, FOR INSTANCE, WILL     |
| 17 | NOT WAIT FOR TWO YEARS UNTIL THE TISSUE COLLECTION   |
| 18 | IS DONE, BUT IT WILL ALL HAPPEN AT THE SAME TIME.    |
| 19 | SO AS SOON AS TISSUE COLLECTION STARTS, HOPEFULLY    |
| 20 | THE DERIVATION ENTITY IS READY TO GO, AND ALL OF     |
| 21 | THIS MIGHT NOT BE COMPLETELY IN PARALLEL, CLEARLY    |
| 22 | TISSUES WILL HAVE TO BE COLLECTED, BUT SOME MIGHT    |
| 23 | ALREADY BE COLLECTED, AND SO THINGS CAN START IN     |
| 24 | PARALLEL RIGHT AWAY.                                 |
| 25 | CHAIRMAN THOMAS: JOAN.                               |
|    |  |

178

| 1  | MS. SAMUELSON: I HAVE WHAT I THINK I'M              |
|----|---|
| 2  | NOT SURE IF IT'S AN AMENDMENT IN SUPPORT OF JEFF'S  |
| 3  | AMENDMENT OR AN AMENDMENT TO THAT OR JUST HELPFUL   |
| 4  | COMMENTS, I HOPE. BUT IT'S PARTLY THE LAWYER IN ME  |
| 5  | THINKS I HAVE A COUPLE OF GOOD DRAFTING SOLUTIONS.  |
| 6  | AND THE PARKINSON'S PATIENT IN ME HAS GONE INTO     |
| 7  | FULL-ON DYSKINESIA JUST TO SHOW HOW USEFUL FUNDING  |
| 8  | IN THIS AREA CAN BE. I THINK THE FIRST THING IS     |
| 9  | THAT WE SHOULD CONSULT WITH THE COMPANY CALLED      |
| 10 | 23ANDME, WHICH IS SET UP BY SERGEY BRIN AND HIS     |
| 11 | WIFE, SERGEY BEING ONE OF THE FOUNDERS OF GOOGLE,   |
| 12 | AND HE HOLDS ONE OF THE MOST RESEARCHED PARKINSON'S |
| 13 | GENES, AND HIS MOTHER HAS FULL-ON PARKINSON'S.      |
| 14 | AND I THINK WE COULD COUNT ON GOOGLE TO DO          |
| 15 | THINGS WELL, AND SO THEY COULD HELP US DECIDE WHAT  |
| 16 | ELSE WE NEEDED, WHETHER THEY'RE DOING THIS IN A WAY |
| 17 | THAT SATISFIES OUR NEEDS OR SIMPLY DO A             |
| 18 | COLLABORATION.                                      |
| 19 | AND THEN IN TERMS OF SOLVING THE                    |
| 20 | COMPETITION BETWEEN THE DISORDERS, I WOULD THINK WE |
| 21 | COULD JUST USE LANGUAGE LIKE THAT IT SHOULD BE      |
| 22 | URGENT AND SORRY. JUST A SECOND URGENT              |
| 23 | AND WELL, LET ME GIVE YOU THE EXAMPLES. SORRY.      |
| 24 | THAT IT WOULD SAY SUCH AS, FOR EXAMPLE, AUTISM AND  |
| 25 | ALZHEIMER'S WHICH HAVE DEMONSTRATED THEIR URGENCY,  |
|    | 170   |

| 1  | AND AUTISM IS EPIDEMIC. SO I THINK THEY SATISFY IT.  |
|----|--|
| 2  | AND MANY OTHER DISORDERS WILL. AND HAS DEMONSTRATED  |
| 3  | INNOVATIVE IDEAS THAT COULD REACH BREAKTHROUGHS WITH |
| 4  | THE PROACTIVITY THAT THE EAP ASKS FOR.               |
| 5  | AND ALZHEIMER'S, AS I UNDERSTAND IT, I               |
| 6  | DON'T KNOW IF IT WAS THE ALZHEIMER'S ASSOCIATION     |
| 7  | FUNDING OR SOME OTHER PROJECT, BUT I UNDERSTAND THEY |
| 8  | REQUIRED COLLABORATION OF ALL THE SCIENTISTS WHO     |
| 9  | WERE GOING TO BE FUNDED ON A GLOBAL BASIS, I THINK,  |
| 10 | AND THAT THEY REACHED SOME BREAKTHROUGHS WITH        |
| 11 | REMARKABLE SPEED. I THINK WE SHOULD EXPLORE          |
| 12 | SOMETHING LIKE THAT, AND THAT COULD BE JUST AN       |
| 13 | EXAMPLE OF THE KINDS OF INNOVATION THAT THIS BANKING |
| 14 | SHOULD EMBRACE. AND THAT'S IT. THANK YOU.            |
| 15 | DR. GRIESHAMMER: CAN I MAKE ONE COMMENT.             |
| 16 | I WOULD LIKE TO MAKE COMMENT TO THE FIRST COMMENT    |
| 17 | YOU MADE, WHICH IS INVOKING THE 23ANDME CORPORATION. |
| 18 | SO I DO WANT TO POINT OUT THAT CIRM ALSO HAS SOON    |
| 19 | WILL COME TO YOU WITH A GENOMICS INITIATIVE. SO WE   |
| 20 | DO REALIZE THAT WHEN YOU START TACKLING GENETICALLY  |
| 21 | COMPLEX DISEASES, AS WE'RE PROPOSING TO DO HERE,     |
| 22 | THAT MODERN AND FAST IMPROVING GENOMICS TECHNOLOGY   |
| 23 | COULD HAVE A HUGE IMPACT ON HELPING THE GENETICS     |
| 24 | SIDE, SO TO SPEAK, OF THE DISEASE DISCOVERY THAT CAN |
| 25 | HOPEFULLY OCCUR BY STUDYING THE ACTUAL               |
|    | 180  |

| 1  | MANIFESTATIONS OF THE DISEASE IN THE DISH AND       |
|----|---|
| 2  | COUPLING IT WITH GENOMICS ANALYSES OF THE SAME      |
| 3  | PATIENTS.   |
| 4  | AND SO THERE IS A VISION, THEN, TO                  |
| 5  | ENCOURAGE COLLABORATION BETWEEN THE GENOMICS        |
| 6  | INITIATIVE AND THIS IPS CELL BANKING INITIATIVE TO  |
| 7  | REALLY VERY WELL SUPPORT THE RESOURCE ULTIMATELY.   |
| 8  | SO I APPRECIATE THAT COMMENT.                       |
| 9  | CHAIRMAN THOMAS: SENATOR TORRES.                    |
| 10 | MR. TORRES: I WOULD LIKE TO MOVE THE                |
| 11 | PROPOSAL.   |
| 12 | CHAIRMAN THOMAS: IS THERE A SECOND?                 |
| 13 | MS. LANSING: I'LL SECOND IT.                        |
| 14 | CHAIRMAN THOMAS: I THINK WHAT HAS BEEN              |
| 15 | MOVED IS THE ORIGINAL IDEA HERE. SO NO AMENDMENTS.  |
| 16 | MR. SHEEHY: I'M JUST MAKING A COMMENT. I            |
| 17 | THINK A LOT OF IT IF I DON'T KNOW. WHAT DO          |
| 18 | YOU THINK   |
| 19 | MR. SHESTACK: I DON'T THINK THAT THAT               |
| 20 | AMENDMENT IS ACTUALLY NECESSARY OR ADVISABLE. IT'S  |
| 21 | JUST AS ONE IS I'M JUST SAYING IN FRONT OF THE      |
| 22 | GROUP AND FOR THE RECORD THIS IS, I'M ASSUMING, A   |
| 23 | WORK IN PROGRESS. AND AS YOU REFINE IT, IT WILL GET |
| 24 | A LITTLE BIT DIFFERENT AND BETTER. AND AS YOU PICK  |
| 25 | YOUR AND AS YOU GIVE THE BRIEF TO YOUR REVIEWERS,   |
|    | 101   |

| 1  | THEY MUST UNDERSTAND THAT YOU UNDERSTAND THAT THE    |
|----|--|
| 2  | LIKELIHOOD IS THAT MOST OF THE APPLICANTS WHO        |
| 3  | SUCCESSFULLY APPLY WILL THEN NOT SUCCEED, THAT BY    |
| 4  | NATURE YOU WERE TRYING TO DO DISEASE ON A DISH FOR   |
| 5  | MULTIPLE GENETIC DISEASES, THAT THERE IS NOT GOING   |
| 6  | TO BE AN APPARENT ANSWER, THAT IT IS DISCOVERY       |
| 7  | SCIENCE.   |
| 8  | BUT THE PROBLEM SOMETIMES IS WITH SOME OF            |
| 9  | THESE DISORDERS IS YOU GET REVIEWERS WHO SAY, WELL,  |
| 10 | YOU CAN'T REALLY WE CAN'T FIND THE ANSWER TO         |
| 11 | THIS, SO FORGET IT. AND YOU CAN FIND PART OF THE     |
| 12 | ANSWER. AND IT'S JUST BRIEFING PEOPLE TO UNDERSTAND  |
| 13 | THAT THAT'S WHAT THE NATURE OF THIS \$30 MILLION OUT |
| 14 | OF \$3 BILLION ENTERPRISE IS.                        |
| 15 | DR. TROUNSON: YOU ARE ABSOLUTELY CORRECT,            |
| 16 | JON. THIS AREA, YOU WOULDN'T HAVE PREDICTED SOME OF  |
| 17 | THE OUTCOMES IF YOU HAD STARTED THIS THREE OR FOUR   |
| 18 | YEARS AGO IN ANY OF THE MENTAL HEALTH SPECTRUM.      |
| 19 | YOU'RE RIGHT. YOU'RE RIGHT.                          |
| 20 | MR. SHESTACK: I'M APPRECIATIVE. I DON'T              |
| 21 | FEEL THE NEED OF THAT AMENDMENT. I JUST FEEL WE      |
| 22 | SHOULD GET IT RIGHT. THAT'S ALL.                     |
| 23 | CHAIRMAN THOMAS: JOAN.                               |
| 24 | MS. SAMUELSON: I THINK TO SPEND THE                  |
| 25 | PEOPLE'S MONEY WELL, WE SHOULD TRY TO CURE THAT AS   |
|    | 100  |

182

| 1  | SOON AS POSSIBLE. WE'RE NOT FUNDING AN EXPERIMENT.  |
|----|---|
| 2  | IT'S BEEN REPLICATED PRACTICALLY IDENTICALLY IN 16  |
| 3  | OTHER COUNTRIES WITHOUT THEM HAVING ANY SHARED      |
| 4  | AWARENESS AND SHARED USE OF DATA AND OF CONCEPTS. I |
| 5  | THINK IT'S TIME FOR THAT.                           |
| 6  | CHAIRMAN THOMAS: I WOULD COMPLETELY AGREE           |
| 7  | WITH THAT. ARE THERE OTHER COMMENTS BY THE BOARD?   |
| 8  | MS. GIBBONS: J.T., I JUST THINK THAT THIS           |
| 9  | IS A GREAT DISCUSSION AND A VERY EXCITING           |
| 10 | INITIATIVE, AND I'M REALLY COMFORTABLE THE WAY WE   |
| 11 | DID CALL OUT THE PRIORITY LIST OF THESE COMPLEX AND |
| 12 | PREVALENT DISEASES THAT WILL BE GIVEN, I THINK,     |
| 13 | JEFF, ENOUGH OF A PUSH THROUGH AND A REALLY GREAT   |
| 14 | SHOT AND EXCLUDE THE ONES THAT WE'RE ALREADY        |
| 15 | INVOLVED WITH IN DEVELOPING LINES WITH OUR EARLIER  |
| 16 | COLLABORATION. SO I AGREE WITH ART. MAYBE IT'S      |
| 17 | TIME TO VOTE.                                       |
| 18 | CHAIRMAN THOMAS: ANY OTHER COMMENTS? ANY            |
| 19 | PUBLIC COMMENT ON THE MOTION?                       |
| 20 | MS. LANSING: I GUESS I JUST WANT TO SAY             |
| 21 | PUBLICLY, JUST SO THE RECORD SHOWS, AND THEN I CALL |
| 22 | THE VOTE AND I KNOW I'M TYING UP, ALL DISEASES ARE  |
| 23 | URGENT. I THINK THAT WE MUST REALLY MAKE THAT       |
| 24 | CLEAR. I WOULD NOT WANT THAT MAN WHO NEEDS A HEART  |
| 25 | TRANSPLANT TO THINK THAT WE CARE LESS ABOUT HIM.    |
|    |   |

| 1  | EVERY DISEASE THAT WE ARE REPRESENTING IS URGENT,    |
|----|--|
| 2  | AND I THINK WE ALL STAND HERE AND SAY THAT FOR THE   |
| 3  | PUBLIC RECORD. AND WE WILL DO OUR BEST TO GIVE THE   |
| 4  | PRIORITY TO THE GREATEST SCIENCE AND NOT TO REPEAT   |
| 5  | SOMETHING, AS JOAN SAID, THAT'S BEEN DONE BEFORE,    |
| 6  | BUT WE REPRESENT ALL THE CITIZENS, AND EVERY DISEASE |
| 7  | THAT WE REPRESENT IS HORRIBLE.                       |
| 8  | MR. SHEEHY: JUST TO RESPOND BECAUSE I                |
| 9  | WASN'T SUGGESTING                                    |
| 10 | MS. LANSING: I DIDN'T THINK YOU WERE                 |
| 11 | SAYING THAT.   |
| 12 | MR. SHEEHY: I'M NOT SINGLING OUT. BUT                |
| 13 | THIS IS A PARTICULAR TOOL THAT SEEMED, AT LEAST FOR  |
| 14 | THESE TWO DISEASES, COULD BE THAT WE SHOULD BE       |
| 15 | MINDFUL THAT OTHER DISEASES, BUT FOR THESE TWO       |
| 16 | DISEASES, THIS PARTICULAR TOOL COULD BE EXTREMELY    |
| 17 | USEFUL.  |
| 18 | MS. LANSING: I'M NOT EVEN QUESTIONING                |
| 19 | THAT. I JUST WANT THE RECORD TO SHOW THAT WE CARE    |
| 20 | ABOUT EVERYBODY. I KNOW THAT. I AGREE.               |
| 21 | MR. SHESTACK: ONCE IN A WHILE WE HAVE A              |
| 22 | CHANCE TO DISCUSS THIS. I WANT TO MAKE SURE YOU      |
| 23 | UNDERSTAND. STRATEGICALLY I JUST ALWAYS FELT FOR A   |
| 24 | LONG TIME THAT CIRM SHOULD PICK TARGETS. IT CAN BE   |
| 25 | ONE TARGET AFTER ANOTHER, BUT I THINK ACTUALLY FOCUS |
|    |  |

|    | BINNISTENS REPORTING SERVICE                         |
|----|--|
| 1  | SOMETIMES WHEN YOU'RE CALLING FOR PROPOSALS WILL GET |
| 2  | YOU BETTER PROPOSALS. AND IT'S NOT A QUESTION OF     |
| 3  | ONE DISEASE OVER ANOTHER. IT'S JUST ACHIEVE ONE      |
| 4  | THING, THEN THE NEXT ONE, THEN THE NEXT RATHER THAN  |
| 5  | HAVE IT JUST BE ALL WHATEVER COMES OVER THE TRANSOM. |
| 6  | MS. LANSING: AND AGAIN, I'M NOT BEING                |
| 7  | COMBATIVE AT ALL.                                    |
| 8  | MR. SHESTACK: I UNDERSTAND.                          |
| 9  | MS. LANSING: I JUST WANT THE RECORD TO               |
| 10 | SHOW THAT WE CARE ABOUT EVERYBODY.                   |
| 11 | MR. TORRES: CALL FOR THE QUESTION.                   |
| 12 | CHAIRMAN THOMAS: OKAY.                               |
| 13 | MS. SAMUELSON: AND IT'S IMPORTANT THAT IT            |
| 14 | BE URGENT AND MAYBE SOMETHING LIKE MALE PATTERN      |
| 15 | BALDING IS NOT. I DON'T KNOW. BUT MAYBE THERE'S      |
| 16 | SOMETHING.   |
| 17 | CHAIRMAN THOMAS: ALL THOSE IN FAVOR                  |
| 18 | PLEASE SAY AYE. OPPOSED? ABSTENTIONS? DEAN PIZZO.    |
| 19 | DR. PIZZO: AYE.                                      |
| 20 | CHAIRMAN THOMAS: DEAN HAWGOOD.                       |
| 21 | DR. HAWGOOD: AYE.                                    |
| 22 | CHAIRMAN THOMAS: MOTION CARRIES.                     |
| 23 | SO THAT CONCLUDES OUR AGENDA. I WOULD                |
| 24 | JUST THANK YOU, MR. SENATOR. I WOULD JUST LIKE       |
| 25 | TO SAY, HAVING OBSERVED ALL OF THE WONDERFUL         |
|    | 185  |
|    | 103  |

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

| 1  | PROGRAMS THAT WE'VE APPROVED TODAY, THE HIGHLY       |
|----|--|
| 2  | PROFESSIONAL PRESENTATIONS ON ALL OF THOSE,          |
| 3  | INCLUDING THE STRATEGIC PLAN PROGRESS REPORT, DR.    |
| 4  | FEIGAL, HAVING SEEN THE PRESENTATION AT TODAY'S      |
| 5  | SPOTLIGHT ON DISEASE, I THINK WE AT CIRM ARE WELL    |
| 6  | POSITIONED GOING INTO THE NEW YEAR FOR BIGGER AND    |
| 7  | BETTER THINGS AS IS THE FIELD OF STEM CELL RESEARCH. |
| 8  | AND I WOULD LIKE TO WISH EVERYBODY THE HAPPIEST OF   |
| 9  | HOLIDAYS. AND WE WILL SEE EVERYBODY AT OUR BOARD     |
| 10 | MEETING IN JANUARY. THANK YOU.                       |
| 11 | (APPLAUSE.)  |
| 12 | (THE MEETING WAS THEN CONCLUDED AT 3                 |
| 13 | P.M.)  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |
|    | 186  |

### 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

HARVEY MORSE AUDITORIUM CEDARS-SINAI MEDICAL CENTER 8700 BEVERLY BOULEVARD LOS ANGELES, CALIFORNIA ON DECEMBER 8, 2011

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

BETH C. DRAIN, CSR 7152 BARRISTER'S REPORTING SERVICE 1072 BRISTOL STREET SUITE 100 COSTA MESA, CALIFORNIA (714) 444-4100