

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

LOCATION: 1001 BROADWAY  
OAKLAND, CALIFORNIA

DATE: DECEMBER 13, 2016  
9 A.M.

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

BRS FILE NO.: 99103

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OAKLAND, CALIFORNIA; TUESDAY, DECEMBER 13, 2016

9 A.M.

CHAIRMAN THOMAS: SO GOOD MORNING, EVERYBODY. WOULD LIKE TO WELCOME YOU TO THE DECEMBER 2016 REGULAR MEETING OF THE ICOC AND THE APPLICATION REVIEW SUBCOMMITTEE. WE ARE BROADCASTING TO YOU LIVE FROM BEAUTIFUL DOWNTOWN OAKLAND. IF YOU WOULD, MARIA, PLEASE DO THE PLEDGE OF ALLEGIANCE. THANK YOU.

(THE PLEDGE OF ALLEGIANCE.)

CHAIRMAN THOMAS: SO BEFORE WE BEGIN, I JUST WANTED TO NOTE WE'RE HAVING A LITTLE BIT OF MICROPHONE TECHNICAL DIFFICULTIES HERE. SO IF EVERYBODY, WHEN THEY SPEAK, COULD SPEAK LOUDLY AND CLEARLY SO THAT THOSE ON THE PHONE WILL BE ABLE TO HEAR YOU, IT WILL BE MUCH APPRECIATED.

MARIA, COULD YOU PLEASE CALL THE ROLL.

MS. BONNEVILLE: LARS BERGLUND.

DR. BERGLUND: HERE.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: HERE.

MS. BONNEVILLE: JACK DIXON.

DR. DIXON: HERE.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

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DR. DULIEGE: HERE.

MS. BONNEVILLE: HOWARD FEDEROFF.

DR. FEDEROFF: HERE.

MS. BONNEVILLE: LEON FINE.

DR. FINE: HERE.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: HERE.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: HERE.

MS. BONNEVILLE: JUDY GASSON.

DR. GASSON: HERE.

MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: HERE.

MS. BONNEVILLE: STEPHEN JUELSGAARD.

SHERRY LANSING.

MS. LANSING: HERE.

MS. BONNEVILLE: BERT LUBIN. LAUREN

MILLER.

MS. MILLER: HERE.

MS. BONNEVILLE: LLOYD MINOR.

DR. MINOR: HERE.

MS. BONNEVILLE: LEON FINE.

DR. FINE: HERE.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: HERE.

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MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: HERE.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: HERE.

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: HERE.

MS. BONNEVILLE: AL ROWLETT. JEFF SHEEHY.

MR. SHEEHY: HERE.

MS. BONNEVILLE: OSWALD STEWARD. JONATHAN  
THOMAS.

CHAIRMAN THOMAS: HERE.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: HERE.

MS. BONNEVILLE: KRISTINA VUORI.

DR. VUORI: HERE.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: HERE.

MS. BONNEVILLE: BRUCE WINTRAUB.

DR. WINTRAUB: HERE.

CHAIRMAN THOMAS: THANK YOU VERY MUCH,  
MARIA. LET THE RECORD SHOW MR. JUELSGAARD IS IN THE  
HOUSE.

SO WE'LL BEGIN, AS ALWAYS, WITH THE  
CHAIR'S REPORT. TO BEGIN WITH, THERE HAVE OBVIOUSLY  
BEEN SOME MAJOR DEVELOPMENTS ON THE FEDERAL FRONT

SINCE WE LAST MET. AND, WELL, AS ALWAYS, WHEN YOU'RE CHANGING BETWEEN ADMINISTRATIONS, YOU ARE SORT OF HEADING INTO A BIT OF UNCHARTED TERRITORY. ON THE ONE HAND, WITH THE ELECTION, YOU HAVE SOMEBODY WHO IS YET TO BE NAMED TO BE RUNNING NIH. YOU HAVE A NEW SECRETARY OF HHS, AND WE ARE SORT OF AWAITING GUIDANCE FEDERALLY AS TO HOW THE ADMINISTRATION IS GOING TO VIEW, IN GENERAL, THE TOPIC OF REGENERATIVE MEDICINE. AT THE SAME TIME, VERY RECENTLY, AS YOU KNOW, WE HAD THE PASSAGE OF THE 21ST CENTURY CURES ACT, WHICH IS A MAJOR DEAL WHICH LOOKS TO PROVIDE FUNDING FOR MANY DIFFERENT CONDITIONS, INCLUDING REGENERATIVE MEDICINE, WE'RE HAPPY TO SAY.

I'D LIKE TO POINT OUT THAT DR. MILLS WAS PART OF A BIPARTISAN COMMITTEE THAT WORKED VERY HARD ON THAT LEGISLATION, AND HIS INFLUENCE CAN BE SEEN IN THE FINAL PRODUCT AS IT PERTAINS PARTICULARLY TO ACCELERATED REGULATORY APPROVAL AND THE TOPIC OF REGENERATIVE MEDICINE IN GENERAL. SO THAT WAS A BIG DEAL TO GET PASSED. IT'S BEEN A COUPLE YEARS IN THE MAKING, AND WE WILL BE VERY INTERESTED TO SEE HOW THAT PLAYS OUT OVER TIME.

ON THE STATE POLITICAL FRONT, WE HAD SEVERAL MEETINGS OF NOTE. SENATOR TORRES AND I AND

MARIA AND RANDY HOSTED THE CONTROLLER AND HER CHIEF OF STAFF AT CIRM HEADQUARTERS TO GIVE HER AN UPDATE ON EXACTLY WHERE THINGS STAND.

SOMEBODY IS ON THE PHONE, IF YOU COULD MUTE PLEASE. THERE'S A LOT OF BACKGROUND NOISE THERE. THANK YOU.

HAD A VERY PLEASANT AND INFORMATIVE EXCHANGE WITH HER. AND I CAN SAFELY SAY SHE'S A VERY ARDENT SUPPORTER.

MARIA AND I WENT AND MET WITH SENIOR MEMBERS OF THE GOVERNOR'S STAFF UP IN SACRAMENTO TO GIVE THEM AN UPDATE ON WHERE THINGS STAND AT CIRM, AND THAT MEETING WENT SIMILARLY WITH THE THREE MEMBERS OF THE SENIOR STAFF BEING VERY IMPRESSED WITH WHAT CIRM IS DOING AND HAS BEEN ABLE TO ACCOMPLISH.

AT A MORE FORMAL LEVEL, THE STATE CONTROLLER CONVENED THE CITIZENS FINANCIAL ACCOUNTABILITY OVERSIGHT COMMITTEE, CFAOC, WHICH IS AN ANNUAL MEETING WHEREIN THE CONTROLLER ASKS FOR REPORTS ON ALL THE FINANCIAL MATTERS OF THE AGENCY. AND IN RECENT YEARS THAT HAS EXTENDED TO GET INTO DISCUSSIONS OF THE PROJECTS AND THE DIFFERENT PROGRAMS AND EVERYTHING ELSE. THIS GAVE DR. MILLS A CHANCE TO REALLY GO AND WAX ELOQUENT ABOUT ALL THE

GREAT THINGS THAT WE'RE DOING. AND THAT MEETING WAS, AS IT HAS BEEN IN RECENT YEARS, VERY POSITIVE. AND EVERYBODY SHOULD KNOW THAT THE STATE CONTROLLER MADE ALL SORTS OF NICE COMMENTS ABOUT CIRM AND WHAT WE'RE DOING AND THE PROGRAMS AND OUR PROCESS AND OUR FINANCIAL ISSUES AND EVERYTHING ELSE. IT WAS A VERY, VERY ENCOURAGING MEETING AND I THINK IS SORT OF A SUMMARY STATEMENT TO EVERYBODY ON THE BOARD. IN GENERAL, WITH RESPECT TO SACRAMENTO, WE HAVE THE BEST RELATIONS THAT WE'VE EVER HAD UP THERE. THIS IS VERY LARGELY DUE TO SENATOR TORRES WHO TIRELESSLY KEEPS EVERYBODY COMPLETELY UP TO SPEED AND, AS I'VE SAID IN THE PAST CHAIRMAN'S REPORTS, SOMEHOW MANAGES TO LITERALLY KNOW EVERY PERSON IN THE CITY. SO THAT WHEN YOU GO TO MEETINGS WITH SENATOR TORRES, IT TAKES ABOUT AN HOUR AND A HALF TO GET FROM THE PARKING LOT TO THE CAPITOL. SENATOR, HOW YOU DOING? HOW'S IT GOING? ANYWAY. SO HE'S BEEN -- DONE A REMARKABLE JOB REPRESENTING US UP THERE.

SO OVER THE LAST THREE MONTHS, WE'VE HAD THE PLEASURE OF REPRESENTING CIRM AT A NUMBER OF MEETINGS AND CONFERENCES. I'LL JUST MENTION A FEW OF THOSE BECAUSE THERE'S A FEW INSTRUCTIVE POINTS TO BE GLEANED OUT OF THAT. WE HAD OUR ANNUAL STEM CELL MEETING ON THE MESA HELD EVERY OCTOBER DOWN IN LA

JOLLA. THIS IS LARGELY A CHANCE FOR STEM CELL COMPANIES TO MEET WITH POTENTIAL INVESTORS AND TO NETWORK WITH EACH OTHER TO BUILD FUTURE COLLABORATION. AND IT'S A MEETING WHERE YOU SORT OF GET TO GAUGE THE GENERAL LEVEL OF ENTHUSIASM FOR THE FIELD OF REGENERATIVE MEDICINE BASED ON THE VARIOUS PANELS AND TALKS THAT YOU HEAR AND THE SIDEBAR MEETINGS.

AS IS THE CASE NOW EVERY YEAR, THE LEVEL OF ENTHUSIASM FOR THE FIELD CONTINUES TO INCREASE DRAMATICALLY. I'M NOT GOING TO SAY A WHOLE LOT MORE THAN THAT BECAUSE WE'LL SPEND SOME TIME AT THE NEXT IN-PERSON BOARD MEETING ON THAT SUBJECT AS IT IS DISCUSSED AT THE UPCOMING JP MORGAN CONFERENCE WHERE YOU LITERALLY GET A STATE OF THE UNION PRESENTATION BY THE ALLIANCE FOR REGENERATIVE MEDICINE. IT'S ALWAYS A VERY INTERESTING ONE TO HEAR.

WE HAD THE PLEASURE OF ATTENDING A WONDERFUL DAY-LONG STEM CELL SYMPOSIUM AT THE CITY OF HOPE. I SEE DR. CHIU IN THE AUDIENCE OUT THERE, WHO, OF COURSE, IS SO PROMINENT IN HER WORK AT THE CITY OF HOPE. THEY HAD AN ALL-STAR LINE UP OF SPEAKERS, VERY IMPRESSIVE, TALKING ABOUT WORK THAT THEY'RE DOING IN THE RESEARCH AT VARIOUS STAGES DEALING WITH A NUMBER OF INDICATIONS. THE SPEECHES

WERE GREAT TO HEAR.

BUT OF EQUAL INTEREST WAS THE AUDIENCE, WHICH WAS LARGELY MADE UP OF STUDENTS, AND THERE ARE MANY OF THEM THERE. AND THESE ARE VERY INTERESTING PEOPLE TO TALK TO BECAUSE THEY ARE SORT OF THE FUTURE OF THE FIELD AS IT'S DEVELOPING HERE IN CALIFORNIA. AND JUST GAUGING BY THEIR LEVEL OF INTEREST AND ENTHUSIASM IN THE SPACE, THEY ARE SORT OF INDICATIVE OF STUDENTS STATEWIDE THAT WE'VE BEEN ABLE TO DEAL WITH THROUGH VARIOUS PROGRAMS AND ARE VERY ENCOURAGING AND GIVE US ALL GREAT HOPE THAT THE FUTURE OF THE REGENERATIVE MEDICINE INDUSTRY WILL BE IN GOOD HANDS.

THERE WAS THE ANNUAL MILKEN INSTITUTE PARTNERING FOR CURES CONFERENCE IN NEW YORK IN EARLY NOVEMBER. THAT'S SOMETHING THAT BRINGS TOGETHER SCIENTISTS, DISEASE FOUNDATIONS, PATIENT ADVOCATES, AND INVESTORS, AGAIN, A MAJOR NETWORKING MEETING NOT TARGETED AT ANY ONE PARTICULAR INDICATION OR MEANS OF TREATMENT. SO THIS WASN'T A REGENERATIVE MEDICINE MEETING, BUT THE TOPIC GOT LOTS OF PLAY. AND, AS ALWAYS, WHEN WE'RE AT SOMETHING THAT IS OUT-OF-STATE, YOU HEAR ABOUT HOW CIRM CONTINUES TO BE THE ENVY OF EVERYWHERE ELSE BECAUSE OF THE GREAT WISDOM OF THE VOTERS AND OUR GOOD FORTUNE IN HAVING

THE FUNDING THAT WE HAVE TO PUT TOWARDS WHAT WE'RE DOING.

THERE WAS ANOTHER NOW ANNUAL EVENT CALLED THE WORLD AFFAIRS FORUM WHICH WAS HELD IN THE PRESIDIO A FEW WEEKS AGO WHICH IS REALLY A MEETING OF U.S. AND JAPANESE STEM CELL SCIENTISTS THAT COME TOGETHER TO NOT ONLY REPORT ON THE STATE OF THEIR WORK, BUT TO SEEK FURTHER WAYS IN WHICH WE CAN COLLABORATE IN THE VARIOUS AREAS OF INTEREST. I HAD A VERY NICE SIDEBAR MEETING AT THAT FORUM WITH SHINYA YAMANAKA, WHO IS OBVIOUSLY THE PERSON OF GREATEST INTEREST AT THIS MEETING. HE GAVE A VERY NICE TALK. WE SPOKE ABOUT WHAT HE'S DOING AND HIS IMPACT TO THE FIELD. AND I INVITED HIM -- AS YOU MAY KNOW, HE SPLITS HIS TIME BETWEEN THE UNIVERSITY OF KYOTO AND THE GLADSTONE INSTITUTE. SO I INVITED HIM TO COME TO CIRM HEADQUARTERS TO MEET WITH OUR TEAM AND TO TALK ABOUT THE LATEST THINGS THAT HE'S WORKING ON AND WHERE HE SEES THE FIELD GOING AND EVERYTHING ELSE. AND HE WAS DELIGHTED TO GET THAT INVITATION, AND WE WILL PROCEED TO SET THAT UP. AND THAT'S SOMETHING THAT WE'LL COORDINATE WITH THE BOARD AS WELL BECAUSE, IF THERE ARE BOARD MEMBERS WHO WOULD LIKE TO COME MEET WITH HIM, WE'D LOVE TO HAVE THAT. SO LET'S SORT OF STAY TUNED ON THAT.

LAST WEEK WAS THE WORLD STEM CELL SUMMIT IN WEST PALM BEACH. REPORT TO YOU THAT IN EARLY TO MID-DECEMBER WEST PALM BEACH WAS 85 AND HUMID. NOT MY IDEA OF CHRISTMAS WEATHER, BUT MARIA, WHO, OF COURSE, LOVES THAT SORT OF THING, THOUGHT THAT THIS WAS OUTSTANDING. CIRM WAS WELL REPRESENTED, DR. MILLS, KEVIN MCCORMACK, DR. JORGENSON, AND AMANDA. WE MET WITH MANY DIFFERENT PEOPLE. THIS IS THE MEETING THAT'S SORT OF THE MORE LAYMAN'S SCIENCE CONFERENCE, IF YOU WILL, WHERE LOTS OF PATIENTS, PATIENT ADVOCATES WHO COME TO HEAR SORT OF WHAT'S GOING ON, AND YOU REALLY GET A CHANCE TO MEET WITH THE PEOPLE THAT THIS IS, AFTER ALL, ALL ABOUT. AND RANDY AND I BOTH DID PANELS OF ONE SORT OR ANOTHER.

RANDY ALSO INTRODUCED ONE OF THE AWARD RECIPIENTS AT THE ANNUAL GALA THAT THEY HAVE WHOSE SON WAS A FORMER PATIENT OF HIS AT OSIRUS. AND I WILL TELL YOU THAT HIS INTRODUCTION WAS SO MOVING AND SO POIGNANT AND SO HEARTFELT, AND IT WAS DIFFICULT FOR HIM TO GIVE, AND THERE WERE NO DRY EYES IN THE HOUSE. I JUST WANT EVERYBODY TO KNOW THAT HE WAS FANTASTIC IN THIS AND MADE EVERYBODY IN THE ROOM PROUD OF WHAT HE DID, WHAT WE DO, OF WHAT IT MEANS TO HELP PATIENTS. IT WAS JUST TERRIFIC. SO, RANDY, WANTED TO MAKE THAT POINT. THANK YOU.

I WANT TO GIVE A BRIEF UPDATE ON ATP3. WE HAVE BEEN TALKING TO MANY, MANY PARTIES OVER THE PAST MONTHS. I'VE HAD A NUMBER OF INTERESTED PARTIES, A NUMBER OF APPLICANTS TO THE PROGRAM. WE HAVE HAD A LOT OF BACK AND FORTH WITH THE APPLICANTS, AND AT THIS POINT THERE ARE STILL ISSUES THAT WE HAVE NOT BEEN ABLE TO IRON OUT AND CRITERIA THAT THE APPLICATIONS HAVE NOT YET BEEN ABLE TO MEET TO CONFORM TO OUR ELIGIBILITY REQUIREMENTS. SO WE ARE AT THIS POINT NOT GOING TO GO TO THE GRANTS WORKING GROUP WITH WHAT WE HAVE. WE WANT TO MAKE SURE WE HAVE THIS DONE RIGHT. AND SO WE ARE EVALUATING THE ISSUES THAT HAVE SORT OF ARISEN IN THE COURSE OF DISCUSSIONS ON THESE APPLICATIONS AND EVALUATING WHAT WE'RE GOING TO DO GOING FORWARD WITH RESPECT TO POTENTIALLY EXTENDING THE RFA AND TO PERHAPS ADJUSTING SOME CRITERIA, WHICH WOULD OBVIOUSLY ENTAIL A FULL AND ROBUST DISCUSSION FOR MATERIAL TERMS AT THE SCIENCE SUBCOMMITTEE IN ADVANCE OF ANY SORT OF EXTENSION. SO WE WANT TO MAKE SURE, AS I SAY, DO THIS RIGHT THE FIRST TIME. THIS IS A BIG PROGRAM. SO THAT'S WHERE WE ARE AT THIS POINT.

LASTLY, I WANTED TO TELL THE BOARD, IN ADDITION TO WHAT WE ALL DO HERE, WE HAVE SOME

INTERESTING OPPORTUNITIES TO HELP THAT COME UP FROM TIME TO TIME. AND I WANT TO JUST BRIEFLY TELL YOU ABOUT ONE. I WAS BACK AT MY LAW SCHOOL REUNION IN OCTOBER. AND IN THE COURSE OF A PANEL DISCUSSION HAPPENED TO MENTION SOMETHING YOU WILL BE HEARING MORE ABOUT LATER TODAY WHICH IS DON KOHN'S'S WORK AT UCLA ON SEVERE COMBINED IMMUNODEFICIENCY OR SCID, BUBBLE BABY DISEASE. AND I DESCRIBED SORT OF WHAT HE HAD DONE AND SORT OF EVIDENCE OF SOME OF THE REALLY COOL STUFF THAT OUR SCIENTISTS ARE DOING IN CALIFORNIA.

ONE OF MY CLASSMATES CAME UP TO ME AFTER THAT AND SAID WE HAVE A GRANDSON THAT HAS SOMETHING CALLED XLA, WHICH LONG FORM IS X-LINKED AGAMMAGLOBULINEMIA AND IS A CONDITION WHERE YOU HAVE VERY FEW B CELLS, WHICH ARE SPECIALIZED WHITE BLOOD CELLS THAT FIGHT INFECTION, AND IS A VERY DEBILITATING GENETIC CHILDHOOD DISEASE. AND SHE ASKED ME, "WHAT YOU JUST SAID ABOUT THAT WORK THAT YOUR DOCTOR IS DOING, I WONDER IF THERE'S ANY POTENTIAL APPLICABILITY TO THAT TECHNOLOGY TO OUR GRANDSON'S CONDITION." SO I SAID, "WELL, I DON'T KNOW, BUT I DO KNOW THAT THERE'S NOBODY BETTER IN THE WORLD TO ASK THAT QUESTION OF THAN DR. KOHN."

AND SO I CALLED DON AND I DESCRIBED THE

SITUATION, AND I TEED UP A CALL BETWEEN DON AND THE FAMILY WHICH WAS QUITE A LENGTHY EXPLORATION OF WHAT HE DOES AND THE PARTICULAR DETAILS OF THE CHILD'S CONDITION. AND THE FAMILY, AS A RESULT OF THAT CALL, WAS INTERESTED IN DR. KOHN. AND I SHOULD NOTE, BY THE WAY, THIS IS A FAMILY OF SOME MEANS WHO HAD NEVER REALLY THOUGHT ABOUT SPONSORING RESEARCH; BUT UPON HEARING THAT THAT SORT OF THING IS POSSIBLE, WANTED TO HEAR ABOUT THIS.

AND SO DR. KOHN SUBMITTED A PROPOSAL FOR WORK ON XLA. JUST SO HAPPENS HE HAD A POST-DOC IN HIS LAB, RECENTLY ARRIVED, WHO HAD AN INTEREST IN THE SUBJECT, AND SO HE HAS SUBMITTED THAT PROPOSAL WHICH HE WOULD OVERSEE THAT WORK. AND IT'S CURRENTLY BEING REVIEWED AND CONSIDERED BY THE FAMILY. SO MAY END UP HERE THROUGH THIS WHOLE EXCHANGE WITH YET ANOTHER RARE CHILDHOOD DISEASE BEING WORKED ON IN THAT MOST SUCCESSFUL LAB.

SO I SORT OF ENCOURAGE PEOPLE TO KEEP THEIR EARS OPEN. THERE ARE WAYS TO MAKE THINGS HAPPEN THAT CAN COME AT YOU VIRTUALLY FROM ANY DIRECTION. SO I THOUGHT THE BOARD WOULD WANT TO KNOW ABOUT THAT.

SO THAT CONCLUDES THE CHAIRMAN'S REPORT. WE'RE NOW GOING TO GO INTO -- WE'RE GOING TO SORT OF

DO A LITTLE, AS IS OUR WONT, AGENDA SHUFFLE HERE.

AND WE'RE GOING --

MR. SHEEHY: J.T., COULD I ASK A QUESTION PLEASE?

CHAIRMAN THOMAS: YES.

MR. SHEEHY: SO I JUST NOTICED IN YOUR LETTER FOR RENOMINATION YOU MENTIONED CHAIRMAN EMERITUS BOB KLEIN HAS PLANS TO GO BACK TO THE BALLOT. COULD YOU KIND OF -- MAYBE YOU WANT TO TALK -- MAYBE WE COULD AGENDA THIS FOR A FUTURE MEETING, BUT I THINK -- WHAT DOES THAT MEAN? WHAT IS HE TALKING ABOUT? BECAUSE OBVIOUSLY THAT'S OF HUGE INTEREST TO THE AGENCY.

CHAIRMAN THOMAS: SURE. SO, BRIEFLY, AT THE WORLD AFFAIRS FORUM, BOB WAS ONE OF THE SPEAKERS. AND IN HIS PRESENTATION HE INDICATED THAT HE WAS PLANNING TO PURSUE PUTTING A BALLOT MEASURE TO RE-UP, IF YOU WILL, CIRM ON THE NOVEMBER 2018 BALLOT. AND THIS IS OBVIOUSLY A DISCUSSION THAT'S WELL IN ADVANCE OF THE BALLOT MEASURE ITSELF, BUT IT GIVES AN INDICATION AS TO HIS VERY SIGNIFICANT LEVEL OF INTEREST OF DOING EVERYTHING HE POSSIBLY CAN TO MAKE SURE THAT, WHEN CIRM RUNS OUT OF FUNDS IN 2020, AS WE'RE CURRENTLY SCHEDULED TO DO, THAT WE GIVE THE BEST SHOT POSSIBLE TO GET ADDITIONAL FUNDING TO

CARRY ON CIRM'S RESPONSIBILITIES AND RESEARCH GOING FORWARD. SO THERE'S NOT A LOT MORE DETAIL, MR. SHEEHY, ON THAT, BUT THAT IS WHAT HE HAS SAID AT THIS POINT PUBLICLY.

MR. SHEEHY: SO NOW THAT HE'S PUBLICLY ANNOUNCED THAT, AT THE NEXT MEETING COULD WE HAVE A CONVERSATION BECAUSE, FOR NO OTHER REASON, OF COURSE, I THINK I WOULD BE VERY SUPPORTIVE OF THE CONTINUATION OF THE AGENCY, BUT AS A BOARD MEMBER, WE PROBABLY SHOULD KNOW WHERE OUR LINES ARE IN TERMS OF LAW AND WHAT WE CAN DO AS A PUBLIC OFFICIAL IN TERMS OF THE SUPPORT.

CHAIRMAN THOMAS: ABSOLUTELY.

MR. SHEEHY: JUST SO WE GET OUR BOUNDARIES SET.

CHAIRMAN THOMAS: YES. THANK YOU. WE WILL DO THAT. THANK YOU.

ANY OTHER COMMENTS ON THE CHAIRMAN'S REPORT? OKAY.

SO LET'S MOVE ON TO ITEM NO. 11, WHICH IS CONSIDERATION OF THE APPLICATIONS SUBMITTED IN RESPONSE TO CLIN2, PARTNERING OPPORTUNITIES FOR CLINICAL TRIAL STAGE PROJECTS. I'M GOING TO TURN OVER FOR SOME INTRODUCTORY COMMENTS ON THE TOPIC TO DR. SAMBRANO.

DR. SAMBRANO: GOOD MORNING. I'M GIL SAMBRANO, DIRECTOR OF PORTFOLIO DEVELOPMENT AND REVIEW AT CIRM. I'M GOING TO BE PRESENTING AN OVERVIEW --

CHAIRMAN THOMAS: GIL, COULD YOU SPEAK UP A BIT?

DR. SAMBRANO: ABSOLUTELY. YES. GOOD MORNING. I'M BRING FOR YOUR CONSIDERATION TWO APPLICATIONS THAT ARE RESPONDING TO OUR CLINICAL PROGRAM. AND AS SHOWN ON THE SLIDES THAT WERE DISTRIBUTED AND THAT WE'RE SHOWING UP ON THE SCREEN, OUR CLINICAL STAGE PROGRAMS SUPPORT PROJECTS THAT SPAN FROM IND ENABLING THROUGH PHASE III CLINICAL TRIALS. THESE TWO APPLICATIONS ARE RESPONDING TO THE CLIN2 PROGRAM THAT SUPPORTS THE CONDUCT OF A CLINICAL TRIAL.

A REMINDER OF OUR SCORING SYSTEM FOR OUR APPLICATIONS. WE USE A SYSTEM WHERE THE GRANTS WORKING GROUP SCORES APPLICATIONS AS A 1, 2, OR A 3. A 1 MEANING THAT THEY FEEL THE APPLICATION HAS EXCEPTIONAL MERIT AND WARRANTS FUNDING. A SCORE OF 2 MEANS IT NEEDS IMPROVEMENT AND CAN BE RESUBMITTED TO ADDRESS THE AREAS OF CONCERN. A SCORE OF 3 MEANS THAT IT'S SUFFICIENTLY FLAWED THAT THEY WOULD NOT RECOMMEND FUNDING AND THAT THE APPLICANT SHOULD

RETHINK AND RECONSIDER THE PROJECT AND COULD BE SUBMITTED SIX MONTHS OR LATER.

SO THE FIRST APPLICATION IS CLIN2-09698, AND THIS IS A CLINICAL TRIAL OF A CELL THERAPY FOR RETINITIS PIGMENTOSA. THE THERAPY IS AN ALLOGENEIC HUMAN RETINAL PROGENITOR CELL PRODUCT THAT WOULD BE FOR THE TREATMENT OF RETINITIS PIGMENTOSA. THEIR GOAL IS TO COMPLETE A PHASE IIB CLINICAL TRIAL TO TEST THE EFFICACY OF THIS CELL THERAPY TREATMENT IN PATIENTS WITH RETINITIS PIGMENTOSA.

A SUMMARY OF JUST SOME OF THE MAJOR APPROACHED ACTIVITIES TO ENROLL PATIENTS INTO THIS TRIAL. THEY HAVE APPROXIMATELY 60 THAT THEY INTEND TO ENROLL, CONDUCT A PATIENT FOLLOW-UP WITH THESE PATIENTS, AND COLLECT ALL THE CLINICAL OUTCOME MEASURES TO HOPEFULLY SUPPORT EFFICACY OF THIS PRODUCT.

THEY REQUEST \$8.3 MILLION IN TERMS OF CIRM FUNDS, AND THEN THEY ARE PROVIDING AN ADDITIONAL 5.5 MILLION IN CO-FUNDING TO THIS PROJECT.

NOW, WITH THE REVIEW OF EACH OF THESE PROPOSALS, WE CONDUCT OURSELVES A BUDGET REVIEW OF ANY APPLICATIONS THAT COME TO US BEFORE THEY GO TO THE GWG FOR THE PEER SCIENTIFIC REVIEW. AND JUST AS AN INDICATOR AND SO YOU KNOW THAT WE CONDUCTED IT

AND THAT IT WAS PASSED ON. THIS RECEIVED A PASS FROM US, SO THAT MEANS THAT AT LEAST FROM A GLOBAL PERSPECTIVE THE COSTS INDICATED IN THE APPLICATION ARE REASONABLE AND APPROPRIATE FOR WHAT IS PROPOSED.

THE GWG CONDUCTED ITS SCIENTIFIC REVIEW AND FOUND THIS TO BE A MERITORIOUS PROJECT, GIVING IT A SCORE OF 1 WITH 11 MEMBERS OF THE GWG GIVING IT A SCORE OF 1, FOUR OF THEM GIVING IT A SCORE OF 2, AND NONE WITH A SCORE OF 3.

WE ALSO WANT TO ENSURE THAT THE PROCESS OF THE PEER REVIEW IS CONDUCTED IN AN APPROPRIATE AND FAIR MANNER. NOT ONLY DO WE TAKE A VOTE AT THE END OF EACH REVIEW FROM THE GWG MEMBERS AND PATIENT ADVOCATE MEMBERS TO ENSURE THIS, AND IN THIS CASE IT WAS FOUND TO BE UNANIMOUSLY FAIR AND APPROPRIATE, WE ALSO TAKE A LOOK AT THE PROCESS AND THE OUTCOMES, AND IN THIS CASE WE CONCUR WITH THE GWG RECOMMENDATION AND RECOMMEND AN AWARD AMOUNT OF THE 8.295 MILLION. AND I PUT A LITTLE ASTERISK ON THE AMOUNT JUST AS A REMINDER THAT THIS IS AN AWARD AMOUNT THAT YOU WOULD BE APPROVING THAT WOULD BE A NOT TO EXCEED AMOUNT, AND IT COULD BE REDUCED CONTINGENT ON CIRM'S ASSESSMENT OF ALLOWABLE COSTS AND ACTIVITIES.

SO FOR DISCUSSION, DR. PRIETO.

DR. PRIETO: CAN I ENTERTAIN A MOTION TO APPROVE THE RECOMMENDATION OF THE GWG? I'M REQUESTING A MOTION. SO I'LL CONSIDER YOU THE MAKER, AND THE SECOND NEEDS TO BE A MEMBER WHO'S NOT IN CONFLICT.

MR. TORRES: SECOND.

DR. PRIETO: THANK YOU. DISCUSSION FROM MEMBERS OF THE BOARD? COMMENTS FROM THE PUBLIC? DO WE NEED TO CALL THE ROLL FOR THIS GRANT? OKAY. IF YOU WOULD PLEASE.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: AYE.

MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: YES.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: KATHY LAPORTE. LAUREN MILLER.

MS. MILLER: YES.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: YES.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: AYE.

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: YES.

MS. BONNEVILLE: AL ROWLETT. JONATHAN  
THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: AYE.

MS. BONNEVILLE: MOTION CARRIES.

DR. DULIEGE: CAN I JUST MAKE A COMMENT?  
YOU KNOW, I HAD NO QUESTIONS ABOUT THE APPLICATION  
WHICH IS WHY I DIDN'T MAKE A COMMENT, BUT I JUST  
WANT TO CONGRATULATE THE CIRM ON THIS ONE. IT'S  
FANTASTIC TO START SEEING CLINICAL TRIALS COME  
THROUGH IN A FIELD WHERE THEY HAVE BEEN WAITING FOR  
THIS SO MUCH, LIKE MANY OTHERS, IS EXTREMELY  
EXCITING. SO WE'RE DELIGHTED TO SEE MORE CLINICAL  
APPLICATIONS COMING AND COMING TO THAT. SO MAYBE AS  
A WAY TO EDUCATE US, FOR TWO MINUTES, CAN YOU TELL  
US, GRANTED THE APPLICATION IS SUPPORTED, A LITTLE  
BIT WHICH STAGE AND WHAT WILL BE THE NEXT STEP AFTER  
THAT, SOME OF THE KEY ASPECTS OF IT? BUT, AGAIN, I  
HAVE NO QUESTION ABOUT THE FACT THAT IT SHOULD BE  
SUPPORTED.

DR. SAMBRANO: SO THIS IS A PROPOSAL THAT COMES FROM A GROUP THAT WE'VE SUPPORTED IN THE PAST. SO WE'VE ACTUALLY SUPPORTED THEIR IND-ENABLING AND PHASE I TRIAL TO GET TO THIS STAGE. SO THEY HAVE AND WILL COMPLETE THAT FIRST TRIAL IN JANUARY 2017, SO THAT IS COMING UP VERY SOON, AND THIS WOULD SEGUE INTO THEIR PHASE IIB TRIAL TO BEGIN TO REALLY TEST THE EFFICACY OF THIS RETINAL PROGENITOR PRODUCT. AND THEY HAVE ADVANCED THROUGH BOTH THE IND-ENABLING AND CLINICAL TRIAL QUITE RAPIDLY, SO THEY ARE ON TIME. AND SO WE EXPECT THEM TO BEGIN ENROLLING PATIENTS PRETTY QUICKLY.

DR. DULIEGE: EXCELLENT.

DR. SAMBRANO: SHOULD I MOVE ON TO THE NEXT APPLICATION AT THIS POINT? OKAY.

SO THE NEXT APPLICATION FOR CONSIDERATION IS CLIN2-09439, WHICH IS A CLINICAL TRIAL TO PREVENT IMMUNE REJECTION OF KIDNEY TRANSPLANTS. AND SO THIS THERAPY IS COMBINED HEMATOPOIETIC STEM CELLS AND T-CELLS THAT ARE DERIVED FROM ORGAN TRANSPLANT DONORS, IN THIS CASE KIDNEY TRANSPLANT DONORS. AND THE INDICATION IS FOR THOSE THAT ARE RECEIVING A KIDNEY TRANSPLANT.

THEIR GOAL IS TO COMPLETE A PHASE I CLINICAL TRIAL TO ASSESS THE SAFETY AND PRELIMINARY

EFFICACY OF THIS TREATMENT. AND SOME OF THE MAJOR PROPOSED ACTIVITIES INCLUDE MANUFACTURING THE DONOR CELL PRODUCT, ASSESSING THE CLINICAL SAFETY OF THE DONOR CELL INJECTION, AND ASSESSING THE ABILITY ULTIMATELY TO WITHDRAW IMMUNOSUPPRESSIVE DRUGS FROM THESE KIDNEY TRANSPLANT PATIENTS.

THE FUNDS REQUESTED FROM CIRM ARE 6.65 MILLION. THERE IS NO COFUNDING INDICATED BY THE APPLICANT, BUT I WILL TELL YOU, THOUGH, THAT THIS SPECIFIC TRIAL IS ALSO BEING FUNDED BY THE NIH. SO ALTHOUGH THEY DIDN'T INDICATE IT, A PORTION OF THE TRIAL, ABOUT A THIRD, IS BEING FUNDED ALREADY BY NIH.

THE APPLICATION PASSED OUR BUDGET REVIEW, AND THE SCIENTIFIC PANEL, THE GWG, GAVE IT A SCORE OF 1 UNANIMOUSLY, THE MEMBERS GIVING IT A SCORE OF 1 AND NO MEMBERS SCORING A 2 OR A 3. THE TEAM ALSO RECOMMENDS AND CONCURS WITH THE GWG ON THIS RECOMMENDATION FOR AN AWARD AMOUNT OF 6.65 MILLION.

MR. SHEEHY.

MR. SHEEHY: THANK YOU, DR. SAMBRANO.

SO COULD I GET A MOTION TO ACCEPT THE GWG RECOMMENDATION?

DR. PRIETO: SO MOVED.

MR. SHEEHY: MOVED BY DR. PRIETO. CAN I

GET A SECOND PLEASE?

DR. DULIEGE: I CAN SECOND.

MR. SHEEHY: THANK YOU, DR. DULIEGE.

ANY COMMITTEE COMMENT? QUESTION? ANY  
PUBLIC COMMENT? DON REED. THANK YOU.

MR. REED: THERE'S NO ARGUING WITH SCORES  
LIKE THAT. BOTH OF THESE PROJECTS SEEM SUPERB AND  
DESERVEDLY.

BUT AS WE GO THROUGH THE MONEY, I THINK WE  
SHOULD REALLY THINK STRONGLY THAT THERE WILL  
PROBABLY BE NO HELP IN WASHINGTON OR THERE MAY NOT  
BE HELP IN WASHINGTON FOR EMBRYONIC STEM CELL  
RESEARCH. AND WHEN WE BEGAN, WE TOOK BASICALLY AN  
OATH THAT WE WOULD LOOK STRONGLY AT AND GIVE  
PREFERENCE TO THAT WHICH IS NOT LIKELY TO BE FUNDED  
BY THE NIH IN WASHINGTON. SO AS WE GO THROUGH OUR  
LITTLE BIT OF MONEY LEFT, I'D LIKE YOU TO PLEASE  
THINK CAREFULLY ABOUT EMBRYONIC STEM CELL RESEARCH  
BECAUSE IF WE DON'T DO IT, IT PROBABLY WILL NOT GET  
DONE. THANK YOU.

MR. SHEEHY: THANK YOU, DON.

ANY ADDITIONAL PUBLIC? SO, MS.  
BONNEVILLE, COULD YOU CALL THE ROLL PLEASE.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: AYE.

BETH C. DRAIN, CA CSR NO. 7152

MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: YES.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: SHERRY LANSING. KATHY  
LAPORTE.

MS. LAPORTE: YES.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: YES.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: YES.

MS. BONNEVILLE: JOE PANETTA. JOE.  
FRANCISCO PRIETO.

DR. PRIETO: AYE.

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: YES.

MS. BONNEVILLE: AL ROWLETT. JEFF SHEEHY.

MR. SHEEHY: YES.

MS. BONNEVILLE: OS STEWARD.

DR. STEWARD: YES.

MS. BONNEVILLE: JONATHAN THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: YES.

MS. BONNEVILLE: MOTION CARRIES.

CHAIRMAN THOMAS: OKAY. THANK YOU, DR. SAMBRANO. THANK YOU, MR. SHEEHY. THANK YOU, DR. PRIETO. WE'RE GOING -- AS I MENTIONED, WE HAVE A BIT OF TECHNICAL DIFFICULTY ON MICS. I'M TOLD WE ARE NOW GOING TO TAKE A TEN-MINUTE BREAK AT WHICH POINT AFTERWARDS THOSE WHO ARE ON THE PHONE ARE GOING TO NEED TO CALL BACK IN. SO WE WILL RECONVENE, IT IS NOW COMING UP ON TEN MINUTES TO TEN, WE WILL RECONVENE JUST BEFORE 10 O'CLOCK. THANK YOU.

(A RECESS WAS TAKEN.)

CHAIRMAN THOMAS: PLEASE TAKE YOUR SEATS. OKAY. HOPEFULLY WE'VE GOT EVERYBODY BACK ON THE PHONE. WE'VE GOT TECHNICAL DIFFICULTIES BEHIND US, AND WE ARE READY TO PROCEED.

WE'RE NOW GOING TO TURN TO DR. MILLS FOR A DISCUSSION ABOUT THE STRATEGIC PLAN AND AN UPDATE THEREON. DR. MILLS.

DR. MILLS: THANK YOU, BOARD, CHAIRMAN THOMAS, VICE CHAIRMAN TORRES. I APPRECIATE THE OPPORTUNITY TO COME AND SPEAK TO YOU TODAY, AND I HOPE THIS IS A SPECIAL BOARD MEETING FOR ALL OF US. I'M A LITTLE NERVOUS, AND THAT WILL BE EVIDENT IN

JUST --

CHAIRMAN THOMAS: COULD YOU GET THE MIC A  
LITTLE --

DR. MILLS: I COULD. I'M AFRAID OF IT, TO  
BE HONEST, BECAUSE IT TENDS TO PICK UP MY VOICE.  
AND IF I COULD HIDE, I WOULD. NO.

SO LET'S GET INTO THE PRESENTATION TODAY.  
SO LAST YEAR, IF YOU GUYS WILL RECALL, JUST ABOUT  
THIS TIME WE SET OFF ON A VERY AMBITIOUS PLAN TO  
SIGNIFICANTLY IMPACT REGENERATIVE MEDICINE BY USING  
CIRM'S REMAINING RESOURCES. WE DID THAT WITH THE  
ADOPTION AND THE UNANIMOUS ADOPTION OF OUR STRATEGIC  
PLAN. AND SO WHAT I'D LIKE TO DO TODAY IS PRESENT  
TO YOU OBJECTIVELY THE RESULTS OF HOW OUR FIRST YEAR  
UNDER THAT STRATEGIC PLAN HAVE GONE. AND  
SPECIFICALLY WHAT'S GONE WELL, WHAT ARE THE THINGS  
THAT WE HAVE CHANGED, AND WHAT DO WE HAVE LEFT TO  
DO.

AS ALWAYS, YOU GUYS KNOW, I START OFF WITH  
THE MISSION. AND THIS IS VERY IMPORTANT IN MY MIND  
BECAUSE IT CREATES ALIGNMENT. AND WHEN WE HAVE  
ALIGNMENT, THINGS WORK BETTER. SO OUR MISSION, THIS  
IS OUR UNMOVABLE TRUE NORTH, IS TO ACCELERATE STEM  
CELL TREATMENTS TO PATIENTS WITH UNMET MEDICAL  
NEEDS. SO IF WE FOLLOW THIS, WE KNOW WE'RE DOING

THE RIGHT THING. SO THAT'S WHY I START WITH IT.

JUST LOOKING ACROSS BRIEFLY, AND I KNOW THE BOARD IS MORE FAMILIAR WITH THIS, BUT FOR OTHERS WHO MAY NOT BE, THE DIFFERENT ACTIVITIES THAT CIRM DOES. SO CIRM IS A LARGE ORGANIZATION, EXCEEDINGLY LARGE ORGANIZATION. I ACTUALLY HAD THE PLEASURE YESTERDAY OF BEING ON A TELECONFERENCE WITH BIOFLORIDA WHERE THEY'RE EXPLORING DOING A SIMILAR TYPE OF PROGRAM IN THE STATE OF FLORIDA. I GUESS THAT WOULD BE CALLED FIRM. BUT ON A SCALE THEY CAN'T COMPREHEND WHAT CIRM HAS BEEN ABLE TO ACCOMPLISH AND THE RESOURCES WE HAVE AVAILABLE TO US.

SO WE DO EVERYTHING FROM INFRASTRUCTURE, BUILD BUILDINGS. WE HAVE 12 MAJOR FACILITIES, WE HAVE THREE ALPHA CLINICS, WE HAVE AN IPS CELL BANK, GENOMIC CENTER. WE HAVE ALL THESE DIFFERENT INFRASTRUCTURE PROGRAMS. ON THE OTHER END OF THAT SPECTRUM, WE HAVE EDUCATIONAL PROGRAMS. WE TRAIN EVERYTHING FROM HIGH SCHOOL STUDENTS TO POST-DOC IN STEM CELL TECHNIQUES. AND IN THE MIDDLE WE HAVE OUR CORE: OUR DISCOVERY, TRANSLATIONAL, AND CLINICAL PROGRAMS, WHICH MAKE UP THE HEART OR THE ENGINE OF WHAT CIRM DOES.

AND IF WE LOOK AT THAT ENGINE, ONE OF THE

THINGS YOU CAN TELL ABOUT ENGINES THAT'S IMPORTANT IS ALIGNMENT IS CRITICAL. SO WHEN I KEEP COMING BACK TO THE WORD "ALIGNMENT" AND ALIGNMENT AROUND THE MISSION, IT'S BECAUSE ENGINES DON'T WORK THAT AREN'T PROPERLY ALIGNED. SO WE ARE BUILDING THIS, I SAY, BEAUTIFUL ENGINE THAT IS ABLE TO TAKE STEM CELL IDEAS AND TRANSLATE THEM AND TRANSFORM THEM --

(INTERRUPTION IN PROCEEDINGS.)

DR. MILLS: SO IT IS SO SHOCKING BECAUSE I'VE NEVER BEEN TOLD EVER, I THINK, TO SPEAK UP. SHUT UP ALL THE TIME. SPEAK UP, NOT SO MUCH. BUT IF IT'S NOT LOUD ENOUGH, I WILL. I CAN HEAR MYSELF ECHOING, SO IT'S KIND OF CONFUSING ME. BUT ANYWAY.

POINT OF THIS SLIDE IS WE'RE CREATING THIS BEAUTIFUL ENGINE, AND THIS BEAUTIFUL ENGINE IS STARTING TO WORK RIGHT NOW. AND IT'S ALL STARTING TO COME IN CONCERT BECAUSE ALL OF THE PIECES ARE WORKING TOGETHER. THEY'RE WORKING IN ALIGNMENT FOR THE SAME PURPOSE, FOR ACCELERATING IDEAS INTO CURES. AND SO IF CIRM IS SUCCESSFUL, JUST BOTTOM LINE TERMINOLOGY, IF CIRM IS SUCCESSFUL, WE WILL INCREASE THE VOLUME, WE WILL INCREASE THE SPEED, AND WE WILL INCREASE THE QUALITY OF THE PROGRAMS THAT GO THROUGH THIS PROGRAM COMPARED TO IF CIRM DIDN'T EXIST. AND THAT'S REALLY IMPORTANT IN MY MIND FOR US TO BE ABLE

TO DEMONSTRATE FROM A VALUE PROPOSITION STANDPOINT.

I WANT TO TALK MORE ABOUT BUDGET IN WHAT'S CALLED THE BUDGET PRESENTATION COMING UP. BUT JUST TO GIVE YOU AN IDEA OF FINANCIALLY WHAT WE GOT DONE THIS YEAR, WE MADE \$262 MILLION IN NEW AWARDS, WE HAD \$30 MILLION IN AWARD REDUCTIONS, FOR A NET \$232 MILLION. THAT IS A VERY SIGNIFICANT INCREASE IN AWARD ACTIVITY. IN FACT, IT'S ALMOST DOUBLE.

INTERNALLY IS IT HARD TO HEAR ME? OKAY. BECAUSE I DON'T WANT TO YELL AT YOU BECAUSE THAT WOULD SEEM DISRESPECTFUL, AND I DON'T WANT TO BE THAT.

OKAY. SO WE'VE MADE THIS FINANCIAL PROGRESS THIS YEAR, BUT I WANT TO SHOW YOU AGAINST, AND VERY SPECIFICALLY -- I'M GOING TO WAIT. OKAY.

WE'RE TRYING TO FIX, FOR THOSE ON THE PHONE, WE'RE TRYING TO FIX THE ISSUE.

CHAIRMAN THOMAS: CAN YOU GUYS HEAR ME? THEY CAN'T HEAR ME EITHER.

DR. MILLS: IS IT ME BECAUSE IF IT'S ME, IT USUALLY IS.

CHAIRMAN THOMAS: IT'S JUST IT'S THE --

DR. MILLS: SO THIS YEAR, 2016, AGAIN, BEING OUR FIRST YEAR PERFORMING AGAINST OUR STRATEGIC PLAN, WE HAD LAID OUT SOME VERY SPECIFIC

MEASURABLE GOALS. IF YOU GUYS WILL RECALL FROM THE STRATEGIC PLAN, WE HAD WHAT WE CALLED THE BIG SIX, THE SIX MAJOR GOALS THAT WE WERE TRYING TO ACCOMPLISH BETWEEN NOW AND 2020. AND I'D LIKE TO REPORT TO YOU ON HOW WE'RE DOING AGAINST EACH OF THOSE BIG SIX. AND ONE OF THE REASONS I WANT TO REPORT TO YOU ON THAT IS IT'S ESSENTIAL THAT WE BECOME THE GOVERNMENT AGENCY THAT ACTUALLY DOES WHAT WE SAY WE'RE GOING TO DO.

SO AT THE FRONT END OF THIS ENGINE, WE HAVE NEW CLINICAL DEVELOPMENT CANDIDATES. SO GREAT IDEAS, THINGS THAT ARE DISCOVERED. OUR GOAL FOR THIS YEAR WAS TO DISCOVER TEN NEW POTENTIAL CANDIDATES THAT COULD GO INTO DEVELOPMENT. WE'VE ACTUALLY DONE 16 ALREADY THIS YEAR, AND WE'RE NOT DONE.

THE SECOND GOAL CENTERED AROUND PROGRESSION EVENTS, AND SO OVERALL WE WANTED TO IMPROVE PROGRESSION EVENTS BY 50 PERCENT. WE WANTED TO HAVE AT LEAST 16 THIS YEAR. WE GOT EXACTLY 16 THIS YEAR, WHICH REPRESENTS AN IMPROVEMENT. IF WE WERE TRYING TO GET TO 50 PERCENT, THIS IS 33 PERCENT, SO A VERY SIGNIFICANT IMPROVEMENT. PROGRESSION EVENTS, BY THE WAY, ARE GOOD AND INTERESTING GOALS BECAUSE PROGRESSION EVENTS MEASURE

THE QUALITY AND THE FUNCTIONALITY OF OUR PROGRAMS. SO A PROGRESSION EVENT IS WHEN SOMETHING GOES FROM ONE STAGE OF CIRM, LET'S SAY DISCOVERY, AND ACTUALLY ABLE TO MAKE THE PROGRESSION TO A SECOND STAGE OF CIRM, LET'S SAY TRANSLATION, THAT REQUIRES AN EXTERNAL INDEPENDENT VERIFICATION AND REVIEW THAT THE PROGRAM DID WHAT IT SAID IT WAS GOING TO DO IN ITS ORIGINAL FORM AND IS WORTH REINVESTING. SO WE REALLY LIKE WHEN WE GET PROGRESSION EVENTS.

WE WANTED TO IMPLEMENT A NEW REGULATORY STRATEGY FOR CELL THERAPIES THAT WAS MORE EFFICIENT, AND WE USED THE TERM "LEVEL" WHERE WE LEVEL THE PLAYING FIELD. I'M VERY PLEASED, AND J.T. FORESHADOWED THIS, I'M VERY PLEASED TO SAY THAT THE 21ST CENTURY CURES ACT WAS MODIFIED SIGNIFICANTLY BECAUSE OF CIRM'S INVOLVEMENT AND PASSED THE HOUSE 392 TO 26, PASSED THE SENATE 94 TO 5, WAS IN OBAMA'S RADIO ADDRESS LAST SUNDAY ENCOURAGING THE PASSAGE OF THE BILL SO HE COULD SIGN IT, AND WAS ENDORSED BY THE FOOD AND DRUG ADMINISTRATION.

AND THE REASON I BRING ALL OF THAT UP IS THAT'S A LOT OF BIPARTISAN SUPPORT, AND IT'S A LOT OF AGENCY SUPPORT. AND WHAT NEEDED TO HAPPEN WAS WE NEEDED TO RAISE THE ISSUE, AND WE NEEDED TO MAKE SOME NOISE AND SAY SOMETHING NEEDED TO GET DONE.

AND WE DID THAT. AND I KNOW THERE WERE CERTAINLY OUTSIDE OF THIS ROOM PEOPLE THAT QUESTIONED WHETHER OR NOT IT WAS A GOOD IDEA TO EVEN CHALLENGE THE NOTION THAT WE COULD HAVE A BETTER BILL IN THE FORM OF A REGULATORY PARADIGM.

WELL, I ACTUALLY HAD THE PLEASURE OF MEETING WITH THE FDA COMMISSIONER, DR. CALIFF. AND WHAT I CAN TELL YOU IS WHAT YOU WOULD PROBABLY EXPECT OUT OF SOMEBODY AT THAT CALIBER. THEY ARE PROFESSIONALS COMMITTED TO BETTER, AS WE ARE COMMITTED TO BETTER. AND THEY VERY MUCH APPRECIATED THE INFORMATION, AND THEY TOOK IT INTO CONSIDERATION. AND AT THE END OF THE DAY, WE WERE ABLE TO MAKE SIGNIFICANT PROGRESS AND ACTUALLY INTRODUCE A NEW REGULATORY PARADIGM SPECIFICALLY FOR CELL THERAPIES.

AND I SPECIFICALLY WANT TO THANK ART AND J.T. FOR YOUR SUPPORT ON THIS, AND PARTICULARLY YOU, SENATOR, FOR ALL THE WORK YOU DID BEHIND THE SCENES; AND, J.T., ALL THE COVER YOU PROVIDED ME WHEN PEOPLE WERE QUESTIONING WHETHER IT WAS A GOOD IDEA TO DO. BUT WHEN YOU HAVE THAT KIND OF APPROVAL WHERE BOTH SIDES OF A VERY DIVIDED HOUSE AND SENATE AND THE PRESIDENT AND THE FDA THINK THIS IS A GOOD IDEA, THEN I THINK WE'VE MADE SOME PROGRESS.

GOING ON TO THE NEXT GOAL, OR TRANSLATIONAL TIME. SO OUR TRANSLATIONAL TIME RIGHT NOW, THIS IS THE TIME IT TAKES FOR WHEN WE DISCOVER SOMETHING NEW IN CELL THERAPY AS A NEW ENTITY TO THE TIME WE CAN ACTUALLY BRING IT TO CLINICAL TRIALS. THAT CURRENTLY TAKES EIGHT YEARS FOR A STEM CELL PRODUCT. WHY IS THAT A PROBLEM? BECAUSE IF IT'S NOT A CELL THERAPY, IT TAKES 3.2 YEARS TO MAKE THE EXACT SAME JOURNEY. SO WE SET OUT A GOAL IN THE STRATEGIC PLAN TO CUT THAT TIME IN HALF. WE WANT TO CUT IT DOWN TO FOUR, AND FOUR YEARS IS VERY REAL. THAT'S A VERY REAL AMOUNT OF TIME.

AND THIS YEAR, AS PART OF THAT GOAL, WE WANTED TO IMPLEMENT AND OPEN OUR TRANSLATING AND ACCELERATING CENTERS, AND WE WERE ABLE TO DO BOTH OF THOSE. AND I'VE SEEN THEM. THEY ARE REAL, PHYSICAL ACTIVITIES THAT WORK ON SPEEDING UP THE TRANSLATION PROCESS.

NEXT, AS PART OF 50 NEW CLINICAL TRIALS THIS YEAR, WE WANTED TO HAVE 10, ONE-FIFTH OF IT. WE WANTED TO GET ONE-FIFTH OF THE GOAL DONE. WE GOT TEN DONE. AND I'LL TELL YOU -- AND I WANT TO ACKNOWLEDGE RIGHT NOW THE THERAPEUTICS TEAM AND DR. MILLAN WHO RUNS THE THERAPEUTIC TEAM -- AT HALFWAY THROUGH THE YEAR, THEY HAD TWO. AND IN THE LAST SIX

MONTHS AND, FRANKLY, IN THE LAST THREE MONTHS, THEY WERE ABLE TO GO FROM TWO ALL THE WAY UP TO MEETING THE GOAL OF TEN. AND THEY DID IT WITH THE HELP OF THE REVIEW TEAM, WHICH DID SOME MAGIC TO MAKE SOME REVIEWS TAKE PLACE. BUT THIS HAS BEEN A PHENOMENAL ACCOMPLISHMENT FOR THIS ORGANIZATION.

AND THEN, LASTLY, TAKING OUR PROGRAMS AND GETTING THEM PARTNERED AND TURNING THEM INTO WHAT WILL BE COMMERCIAL SUCCESSES SO WE CAN TREAT, NOT JUST INDIVIDUALS, BUT WE CAN ACTUALLY TREAT POPULATIONS OF PEOPLE. IN ORDER TO DO THAT, WE NEED TO HAVE THESE PARTNERED. WE SET OUT A GOAL FOR OURSELVES THIS YEAR OF THREE. WE HAVE TWO ALREADY DONE, BUT WE'RE NOT DONE YET. AND NEIL IS WORKING ON THIS -- I SAW HIM EARLIER -- IS WORKING ON THIS AND HE'S CLOSE TO A THIRD, AND SO HOPEFULLY IN THE NEXT 15 OR 16 DAYS HE'LL BE ABLE TO GET THAT LAST ONE DONE.

SO IT WAS A STRONG YEAR, AND CIRM IS GETTING STRONGER. AND YOU MIGHT ASK HOW STRONG CAN CIRM GET BASED ON THIS KIND OF YEAR? AND WHAT I'D LIKE TO DO NOW IS SHOW YOU HOW STRONG CIRM CAN GET. CIRM CAN GET JAKE STRONG. JAKE JAVIER LIVES IN MY HOMETOWN AND EARLIER THIS YEAR SUFFERED A SPINAL CORD INJURY. IT LEFT HIM PARALYZED BELOW THE NECK

AND HAD THE COURAGE TO PARTICIPATE IN ONE OF OUR CLINICAL TRIALS AND WAS THE FIRST TO RECEIVE A 10 MILLION CELL EMBRYONIC STEM CELL DOSE INTO HIS SPINAL CORD.

AND HIS MOM, ISABELL, WHO IS A FORCE OF NATURE, CAME UP WITH THE TERM "JAKE STRONG." AND THEY'RE HERE TODAY, AND I WANT THEM TO TALK TO YOU ABOUT THAT. JAKE.

MR. JAVIER: HI. I'M JAKE JAVIER. I'M 19 YEARS OLD FROM DANVILLE, CALIFORNIA. IT'S JUST LIKE 30 MINUTES FROM HERE. AND ON JUNE 9TH OF THIS LAST YEAR, I HAD A SPINAL CORD INJURY AFTER DIVING INTO A POOL THE DAY BEFORE MY HIGH SCHOOL GRADUATION THAT LEFT ME PARALYZED FROM THE CHEST DOWN AND WITH VERY LIMITED USE OF MY TRICEPS AND NO USE OF MY HANDS. AND THANKFULLY ON JULY 7TH I WAS ABLE TO GET THE STEM CELL INJECTION DIRECTLY INTO MY SPINAL CORD OF 10 MILLION EMBRYONIC CELLS.

AND IT'S VERY EXCITING BECAUSE THERE'S THE HOPE OF IT BEING ABLE TO GIVE ME BACK THE USE OF MY HANDS AND MY UPPER EXTREMITIES, WHICH WOULD BE HUGE. SO I JUST WANT TO THANK CIRM AND EVERYONE INVOLVED FOR THIS WONDERFUL OPPORTUNITY AND FOR ADVANCING THIS RESEARCH AND THE OPPORTUNITY TO ASK FOR EVERYONE IN MY SITUATION IN THE FUTURE. SO THANK

YOU.

(APPLAUSE.)

MS. JAVIER: THANK YOU SO MUCH. I'M ISABELL JAVIER. I'M HIS MOTHER. CAN YOU HEAR ME OKAY? HE SOUNDED MUCH BETTER ON THAT MICROPHONE.

AGAIN, THANK YOU SO MUCH. IT WAS A VERY DIFFICULT TIME OF OUR LIVES. JAKE IS ONE OF FOUR CHILDREN, THE THIRD IN LINE. AND ON JUNE 9TH, THE LAST DAY OF HIGH SCHOOL, AND I'M SURE ALL OF YOU CAN RELATE TO THAT WONDERFUL DAY WHEN YOUR CHILDREN WERE ABOUT TO GRADUATE, MIDAFTERNOON, BEAUTIFUL SUNSHINE OUT, AT A FRIEND'S POOL PARTY, WHERE ADULTS AND CHILDREN WERE PRESENT, FROM A STANDING POSITION DOVE INTO THE DEEP END. AND GOD ONLY KNOWS HOW THAT HAPPENED, BUT HIS HEAD HIT THE BOTTOM AND HE FRACTURED HIS NECK. AND IT WENT -- OUR LIFE SPIRALED INTO A FULL-SPEED CATASTROPHIC FEELING OF OUR ENTIRE LIFE AND JAKE'S LIFE BEING TURNED UPSIDE DOWN.

JAKE WAS TO GO TO CAL POLY TO PLAY DIVISION 1 FOOTBALL, RECRUITED ATHLETE, AT THE TIME OF THE INJURY 6 FOOT 4, 260 POUNDS, DEDICATED TO THE SPORT, ALMOST A 4.0 STUDENT, ACCEPTED IN THE MECHANICAL ENGINEERING PROGRAM AT CAL POLY, WHICH IF YOU KNOW CAL POLY UNIVERSITY IN SAN LUIS OBISPO,

VERY DIFFICULT TO GET INTO THE ENGINEERING PROGRAM. AND SO INITIALLY WHEN WE MET JOHN MUIR IN WALNUT CREEK INTENSIVE CARE UNIT, WE WERE SUPPOSED TO GO TO CRAIG HOSPITAL, OUR CHOSEN SELECTED HOSPITAL FOR REHAB, HIGHLY RECOMMENDED, EXCELLENT PROGRAM FOR SPINAL CORD INJURIES AS WELL AS SPRAIN INJURIES. AND WE RECEIVED A PHONE CALL. WE WERE VISITED BY ROMAN REED AND WE RECEIVED A PHONE CALL FROM GARY STEINBERG, THE DOCTOR OVER AT STANFORD HOSPITAL WHO REACHED OUT TO US AND SAID, "WE WANT JAKE TO BE PART OF THIS TRIAL."

IN ORDER TO PARTICIPATE, WE HAD TO GO TO SANTA CLARA VALLEY MEDICAL CENTER TO SEE IF JAKE WOULD BE ABLE TO BE ACCEPTED INTO THE PROGRAM. AND THE TESTS THAT WERE REQUIRED FOR HIM TO PASS WERE HARDER THAN ANY ACT OR SAT TEST THERE IS OUT THERE. WE WERE SO SCARED. HE KEPT FAILING INITIALLY BECAUSE HE WASN'T PASSING THE THREE PART OF THE SWAB, THE PRICK, AND THE DULL ON ONE PARTICULAR AREA OF HIS ELBOW. AFTER FOUR TRIES HE FINALLY PASSED IT. HIS SENSORIES WERE COMING STRONG ENOUGH, AND HE WAS ACCEPTED INTO THE PROGRAM AND WAS THE FIFTH PERSON IN THE WORLD TO GET 10 MILLION CELLS INJECTED DIRECTLY INTO HIS SPINAL CORD.

WHAT THAT HAS GIVEN JAKE IS THE HOPE OF

INDEPENDENCE, TO REGAIN THE USE OF HIS HANDS. RIGHT NOW HE DOESN'T HAVE THE USE OF HIS HANDS ALTHOUGH IT'S VERY DECEIVING. HE APPEARS TO. HE USES WHAT THEY CALL TENODESIS WHERE HE RAISES HIS HAND UP, AND THE FINGER AND THE THUMB, THE INDEX AND THE THUMB GOES TOGETHER AND HE'S ABLE TO SOMEWHAT GRASP ITEMS. BUT HE'S HOPING TO GET THE USE OF HIS HANDS BACK AND THE USE OF HIS TRICEPS, WHICH IS CALLED THE INDEPENDENCE MUSCLE, TO BE ABLE TO TRANSFER IN AND OUT OF BED AND THE CAR AND WHATNOT.

HE'S NOT EVEN CONCERNED ABOUT WALKING AT THIS POINT. AND THAT WAS NEVER PROMISED TO HIM WITH THE STEM CELL. WHAT HE RECEIVED WAS A HALF DOSE. BUT WE WANT TO THANK ALL OF YOU FOR WHAT YOU DO IN HELPING FAMILIES THAT GO THROUGH THESE TIMES IN THEIR LIVES TO GIVE THEM HOPE ABOVE ALL. THANK YOU SO MUCH. THANK YOU, EVERYONE. CIRM AND ALL OF YOU ON THE BOARD OF DIRECTORS, THANK YOU SO MUCH.

(APPLAUSE.)

DR. MILLS: SO THERE'S NOT A MOMENT TO LOSE IN THIS GAME. WE HAVE GOT TO GO. AND EVERY TIME YOU MEET SOMEONE AS COURAGEOUS AND AS STRONG AS JAKE WHO IS WILLING TO TAKE THAT CHANCE, TO TAKE THOSE RISKS FOR US, REMINDS US OF OUR RESPONSIBILITY AND OUR DUTIES TO GET ON WITH IT. SO LET'S GET ON

WITH IT.

THE FOUR KEY CHANGES THAT WE MADE THIS YEAR TO TRY TO IMPROVE PERFORMANCE AT CIRM AND TRY TO HIT OUR OPERATIONAL GOALS, AND THE FOUR KEY CHANGES THAT I'LL TELL YOU, BOARD OF DIRECTORS, WONDERFUL BOARD OF DIRECTORS, THAT YOU WERE BEHIND UNANIMOUSLY HAVE HAD A PHENOMENAL IMPACT ON OUR ORGANIZATION.

THE FIRST WAS TO STANDARDIZE OUR RECURRING PROGRAMS. SO THINGS THAT WE KNEW WE WANTED TO DO MORE OF, DISCOVERY, TRANSLATION, CLINICAL, THAT WE WERE GOING TO DO OVER AND OVER AGAIN, TO STANDARDIZE THAT, CREATE SYSTEMS LIKE TRAIN SCHEDULES SO YOU KNOW WHEN THESE PROGRAMS ARE GOING TO HAPPEN, YOU KNOW THE FREQUENCY IN WHICH THEY'RE GOING TO HAPPEN.

SECOND WAS ALL ABOUT SPEED. SO INCREASED THE SPEED AND THE CYCLE FREQUENCY OF WHAT IT IS THAT WE'RE DOING.

THE THIRD WAS GOING TO A MILESTONE-BASED DISBURSEMENT SYSTEM. THIS IS WHERE WE PAY FOR PROGRESS. DELIVER PROGRESS AND WE'LL PAY.

THE LAST IS ESTABLISHING, AND THIS IS INTERNALLY TO CIRM, CLEAR, OBJECTIVE MILESTONES AND GOALS THAT WE CAN CHART AND WE CAN TRACK OURSELVES AGAINST. AND AS NEIL LITTMAN, AND YOU'RE GOING TO

GET CREDIT FOR THIS, FORMERLY SAID WHEN WE PUT UP OUR METRICS BOARDS, "THESE MUST BE HERE FOR YOU TO FLOG US WHEN WE DON'T DO WELL." NO. SCOREBOARDS ARE THERE TO SHOW WHO WON THE GAME AND WHERE THE TEAM AT CIRM IS WINNING.

SO THE RESULT OF THAT IS A CIRM THAT'S MUCH, MUCH EASIER TO DO BUSINESS WITH. WE'RE THERE WHEN YOU'RE NEEDED OR FAST. WE'RE NOT OVERLY ONEROUS, BUT I WILL TELL YOU WE ARE ABSOLUTELY COMPLIANT WITH THE THINGS WE NEED TO BE COMPLIANT WITH. AND A LOT OF THAT HAS TO DO WITH CLARITY. SO JUST CREATING A CLEAR, EFFICIENT PATH FOR OUR APPLICANTS.

WITH REGARDS TO FREQUENT AND STANDARDIZED OFFERINGS, THIS IS THE FIRST YEAR WHERE WE ACTUALLY HAD ALL OF THESE PROGRAMS UP AND RUNNING. TWO DISCOVERY PROGRAMS, THREE TRANSLATIONAL PROGRAMS, 12 CLINICAL PROGRAMS. MUCH HIGHER IN FREQUENCY THAN WE'VE HAD IN THE PAST AND SEAMLESS. SO THE PRODUCT OF ANY ONE OF THESE IS THE PREREQUISITE FOR THE NEXT, FOR THE SUBSEQUENT AWARD. SO OUR APPLICANTS CAN GO SEAMLESSLY FROM DISCOVERY TO TRANSLATION AND TRANSLATION UP TO CLINICAL, AND THAT ALL ALLOWS US TO BE MORE EFFICIENT AND SPEED UP.

BUT IT HAS SOME OTHER SORT OF SHOCKING

ATTRIBUTES. AGAIN, WE TALK ABOUT IF CIRM IS SUCCESSFUL, THE VOLUME, SPEED, AND QUALITY OF WHAT WE DO SHOULD GO UP. SO LET'S SEE HOW THAT'S WORKING.

SO THE NUMBER OF REVIEW CYCLES NOW IS UP FOURFOLD, BUT THE COST PER APPLICATION REVIEWED IS DOWN 57 PERCENT. THE NUMBER OF APPLICATIONS WE RECEIVE, WHICH CENTERS AROUND QUALITY, THE MORE APPLICATIONS WE GET IN, WE CAN BE MORE SELECTIVE WITH, UP 96 PERCENT. OUR TIME TO APPROVAL, DOWN 82 PERCENT. THE NUMBER OF AWARDS UP 75 PERCENT. AND I'LL TELL YOU AS A SIDE NOTE TO THIS, AND THIS IS SOMETHING THAT CAME OUT OF A QUESTION THAT WE HAD WITH THE CONTROLLER'S OFFICE, ON TOP OF ALL OF THIS, THIS VERY SIGNIFICANT INCREASE, IF YOU JUST LOOK AT THESE NUMBERS FROM A BUSINESS STANDPOINT, VERY SIGNIFICANT INCREASE IN PRODUCTIVITY THAT WE HAVE. VERY SIGNIFICANT INCREASE IN THROUGHPUT. LEGAL COSTS, WHICH ARE NECESSARY TO MAKE THIS HAPPEN, HAVE DROPPED 20 PERCENT, WHICH IS FAIRLY REMARKABLE AND CERTAINLY ATTRIBUTE TO THE LEGAL TEAM.

ONE OF THE INTERESTING EXPERIMENTS, AND I KNOW JEFF AND OS REALLY LIKE THIS. AND I PROMISED JEFF I WOULD REPORT TO YOU DATA ON HOW THIS IS WORKING, SO I'M GOING TO ATTEMPT TO DO THAT, WAS A

CHANGE WE MADE IN OUR SCORING SYSTEM, AND PARTICULARLY WITH OUR CLINICAL SCORING SYSTEM. SO IN THE BEFORE, WE USED TO SCORE GRANTS ONE TO A HUNDRED. AND ANYTHING THAT WAS A 75 OR OVER WOULD BE DEEMED FUNDABLE, AND ANYTHING THAT WAS LESS THAN 65 WAS NOT FUNDABLE, AND ANYTHING IN THE MIDDLE WAS KIND OF IN PURGATORY, AND REALLY JUST PUT THE BOARD IN A VERY UNCOMFORTABLE POSITION BECAUSE THE BOARD HAD TO MAKE A DECISION ON WHETHER OR NOT THEY WOULD EITHER FUND A PROGRAM THAT PROBABLY WASN'T MERITORIOUS, BUT WOULD KEEP IT GOING, OR NOT FUND A PROGRAM BECAUSE IT WASN'T COMPLETELY MERITORIOUS, IT WAS MARGINAL, AND KILL IT FOREVER. AND THE REASON FOR THAT ALL CENTERED AROUND CYCLE TIME.

SO BECAUSE THESE PROGRAMS WERE OFFERED SO FAR AND FEW BETWEEN, EVERY 18 MONTHS OR SO, IF YOU HAD A CLINICAL TRIAL AND YOU GOT A SCORE AND YOU WEREN'T FUNDED FROM THE BOARD, THEN THAT PROGRAM ESSENTIALLY WAS KILLED. AND THAT I FOUND TO BE AN UNFAIR POSITION FOR YOU BOARD MEMBERS TO BE IN. AND WE THOUGHT ABOUT IT. WE THOUGHT WHAT CAN MAKE THAT BETTER? IF WE INCREASE THE FREQUENCY SO SIGNIFICANTLY, CLINICAL PROGRAMS, EVERY SINGLE MONTH WE RUN A CLINICAL PROGRAM, THEN WE CAN CHANGE OUR SCORING SYSTEM. AND INSTEAD OF HAVING A SCORING

SYSTEM THAT'S ONE THROUGH A HUNDRED, WE JUST HAVE A SCORING SYSTEM THAT'S ONE THROUGH THREE, 1, 2, OR 3. 1 IT SHOULD BE FUNDED, 3 IT SHOULDN'T BE FUNDED, 2 IT'S PRETTY GOOD, BUT IT CAN GET BETTER. AND PRETTY GOOD GETTING TO BETTER SHOULD IMPROVE OUR QUALITY PRETTY SIGNIFICANTLY. SO THAT'S WHAT WE DID.

NOW, THE TRADE-OFF IS ALL OF THE MEMBERS OF THE APPLICATION REVIEW SUBCOMMITTEE AND ALL THE MEMBERS OF GWG HAD TO AGREE TO TWELVEFOLD OR WHATEVER IT IS INCREASE IN YOUR WORKLOAD, MEET EVERY SINGLE MONTH FOR GWG, MEET EVERY SINGLE MONTH FOR APPLICATION REVIEW SUBCOMMITTEE, TREMENDOUS AMOUNT OF WORK. AND YOU DID. AND I JUST WANT TO SHOW SORT OF THE DIFFERENCES THAT WE'RE SEEING IN QUALITY.

SO THESE ARE NON-TIER I APPROVALS. SO THINGS THAT WERE APPROVED THAT WEREN'T IN TIER I. OVERALL WE'VE ONLY APPROVED 4 PERCENT UNDER THIS CURRENT PROGRAM COMPARED TO 17 PERCENT UNDER THE PREVIOUS PROGRAM. BUT CLINICAL, WHICH IS REALLY WHAT THIS PROGRAM TARGETS, WE'VE NOT APPROVED A SINGLE NON-TIER I PROGRAM WHILE 43 PERCENT OF PROGRAMS APPROVED PREVIOUSLY WERE EITHER IN TIER II OR IN TIER III. I'M TELLING YOU THIS IS FORESHADOWING HAVING BETTER PROGRAMS COME INTO THE SYSTEM LEADS TO BETTER RESULTS.

THE SECOND THING WE DID WAS WE MADE SOME REALLY SIGNIFICANT CHANGES ON HOW WE MADE PAYMENTS. SO WE USED TO HAVE MILESTONES AND WE TALKED ABOUT MILESTONES, AND THAT WAS VERY REAL. BUT THOSE MILESTONES WEREN'T LINKED ONE TO ONE WITH DISBURSEMENTS. DISBURSEMENTS WERE MADE ON A TIME BASIS. SO IF YOU HAD A PROGRAM THAT WAS GETTING \$8 MILLION OVER FOUR YEARS, EVERY SIX MONTHS YOU'D GET A MILLION DOLLAR PAYMENT AND THAT WOULD GO. AND IF YOU WERE FAILING YOUR MILESTONES, WELL, THE SCIENCE OFFICERS WOULD HAVE TO DEAL WITH THAT, BUT THAT WASN'T LINKED WITH GRANT ADMINISTRATION. SO THE DEFAULT IN THAT SETTING WAS WE WOULD PAY YOU. WE WOULD PAY YOU BECAUSE SOME TIME HAD GONE BY, AND EVERY TIME THAT INCREMENTAL AMOUNT OF TIME HAD PASSED, YOU WOULD GET A CHECK. AND IT WOULD REQUIRE POSITIVE ACTION, AFFIRMATIVE ACTION ON OUR PART, A SCIENCE OFFICER, TO SAY, "WAIT A MINUTE, I THINK THEY'RE BEHIND ENOUGH TO WHERE WE SHOULD THINK ABOUT HOLDING OFF ON THESE MILESTONES."

WELL, WE CHANGED THAT, AND WE REVERSED IT. AND WE SAID WE'RE GOING TO GIVE YOU ENOUGH MONEY TO GET TO YOUR FIRST MILESTONE. AND WHEN YOU GET TO YOUR FIRST MILESTONE, WHENEVER THAT IS, SEND US THE PROOF AND WE'LL GIVE YOU ENOUGH MONEY TO GET TO YOUR

SECOND MILESTONE. AND SO INSTEAD OF INCENTIVIZING IN THE PAST, ACTUALLY IF YOU ACCELERATED YOUR PROGRAM PREVIOUSLY, IT WOULD ACTUALLY REDUCE YOUR AWARD. LITERALLY IT WOULD GO DOWN BECAUSE YOU WOULD LOSE OVERHEAD, YOU WOULD LOSE THE TIME COMPONENT OF OVERHEAD. AND SO THE FASTER YOU DID YOUR WORK, THE LESS MONEY YOU GOT. UNDER THIS SYSTEM, WE'RE GIVING YOU AS MUCH MONEY AS THE AWARD SAYS PROVIDED YOU HIT THOSE MILESTONES. AND IF YOU HIT THOSE MILESTONES FASTER, THEN YOU GET THAT MONEY FASTER.

HOW BIG OF AN IMPACT IS THIS? THIS ONE IS BREATHTAKING IN MY MIND. SO THIS IS OUR MILESTONES HIT ON TIME. IT IS ALMOST A PERFECT SURROGATE METRIC BECAUSE YOU HAVE TO HIT THE MILESTONE, WHICH HAS A QUALITY COMPONENT TO IT, AND IT HAS TO BE HIT ON TIME. SO THERE'S A TIME COMPONENT TO IT. THEY HAVE GONE UP FOURFOLD. SO FROM 19 PERCENT TO 79 PERCENT OF OUR MILESTONES. 79 PERCENT OF OUR MILESTONES BEING HIT ON TIME IS JUST UNBELIEVABLE. BUT THAT'S WHAT HAPPENS WHEN YOU PUT THAT KIND OF SYSTEM IN PLACE.

AND IT TRANSLATES THROUGH TO OTHER VERY REAL THINGS. SO THIS IS PATIENT ENROLLMENT. THIS IS A BEAUTIFUL GRAPH, RIGHT. NUMBER OF PATIENTS THAT WE'VE PUT INTO THESE CLINICAL TRIALS OVER TIME

SINCE WE STARTED PUTTING PATIENTS INTO CLINICAL TRIALS IS ACTUALLY TWO DISTINCT SLOPES. SO GABRIEL THOMPSON, WHO WORKS AND HEADS GRANTS MANAGEMENT, BROKE THESE TWO SLOPES OUT. AND THESE TWO SLOPES ARE BASED ON VERY SPECIFIC THINGS. THESE ARE THE 1.0, WE CALL THEM 1.0 OR THE PREVIOUS AWARDS, THE SECOND ARE THE 2.0 AWARDS, AWARDS THAT ARE DONE AND CONDUCTED UNDER THIS MILESTONE-BASED SYSTEM. YOU CAN SEE THERE ARE DIFFERENT SLOPES ASSOCIATED WITH THOSE TWO GRAPHS.

HOW BIG? HOW MUCH FASTER IS THAT? WELL, WHEN YOU LOOK AT IT, IT'S NEARLY THREE TIMES FASTER UNDER THE NEW SYSTEM. SO A TRIAL THAT WOULD TAKE US THREE YEARS BEFORE, WE CAN NOW COMPLETE IN ONLY 13 MONTHS, WHICH IS EVERYTHING. THAT'S THE BUSINESS WE'RE IN. WE'RE IN THE ACCELERATION BUSINESS. BUT I WANT TO COME BACK AND I WANT TO REMIND US THAT WE'RE IN THE ACCELERATION BUSINESS AND WE'RE ONLY IN THE ACCELERATION BUSINESS PARTICULARLY IN CLINICAL TRIALS BECAUSE THERE ARE COURAGEOUS HEROES THAT MAKE THAT POSSIBLE. AND I USE THE TERM "HERO" AS I DID FOR JAKE BECAUSE THEY RISK THEIR LIVES FOR NO BENEFIT, BUT OF THAT HOPEFULLY FOR THE OTHERS.

AND YOU MIGHT ASK HOW COURAGEOUS, AND I WILL TELL YOU KARL COURAGEOUS. AND SO I WANT TO

INTRODUCE KARL TREDE TO TELL YOU ABOUT HIS EXPERIENCE AS THE FIRST PATIENT TO RECEIVE ANTI-CD47 IN A CIRM-FUNDED CLINICAL TRIAL AFTER BEING DIAGNOSED WITH THROAT AND LUNG CANCER. KARL.

(APPLAUSE.)

MR. TREDE: IF YOU THINK THIS MIC BOTHERS YOU, YOU SHOULD BE IN MY SHOES. IN 2006 I WAS DIAGNOSED WITH CANCER IN THE LARYNX, AT WHICH TIME I HAD SURGERY TO REMOVE THE BULB. A YEAR OR A MONTH LATER, I'M SORRY, IN APRIL OF 6, I HAD A LARYNGECTOMY TO REMOVE MY VOCAL CORDS AT STANFORD, WENT THROUGH 35 RADIATION TREATMENTS, AND IN 2011 WAS DECLARED CLEAR OF CANCER. IN 2012 WE FOUND CANCER IN MY LUNGS. WE FOUND ADENOID CYSTIC CARCINOMA, WHICH IS A CANCER FOR WHICH THERE'S NO ACTIVE TREATMENT.

AT THAT TIME WE TALKED ABOUT CLINICAL TRIALS. AND FORTUNATELY IN AUGUST OF 14 I WAS ABLE TO PARTICIPATE IN A TRIAL AT STANFORD FOR OVER A 72-WEEK PERIOD. I RECEIVED WEEKLY TREATMENTS. WE SAW A DECREASE IN THE GROWTH RATE, BUT DID NOT SEE SUFFICIENT BENEFIT TO JUSTIFY MY CONTINUING IN THAT PARTICULAR TRIAL. SO IN JANUARY OF THIS YEAR, WE STEPPED BACK AND ARE NOW IN A HOLDING PATTERN WAITING FOR ANOTHER TRIAL THAT MAY COME ALONG THAT

MIGHT FIT ME. AND I WANTED TO TAKE THIS OPPORTUNITY TO TELL ALL OF YOU THANK YOU FOR WHAT YOU DO, FOR YOUR SUPPORT, FOR YOUR FUNDING, WHICH GIVES PATIENTS LIKE ME IN MY SITUATION HOPE THAT WE COULD VERY, VERY POSSIBLY SEE A CURE. THANK YOU VERY MUCH.

(APPLAUSE.)

DR. MILLS: NOT A MOMENT TO LOSE IN THE GAME. WE'VE GOT TO GO.

AND THIS NEXT SLIDE TALKS ABOUT A VERY INNOVATIVE WAY THAT WE WERE ABLE TO NOT JUST DREAM UP, PASS, BUT ACTUALLY IMPLEMENT. I CALL IT THE PITCHING MACHINE AND SOMETHING SPECIFICALLY DESIGNED TO SHORTEN THAT GAP BETWEEN THE TRANSLATIONAL TIME. SO FROM WHEN SOMETHING IS DISCOVERED TO WHEN IT CAN GO INTO A CLINICAL TRIAL, EIGHT YEARS, THAT'S NOT ACCEPTABLE. EIGHT YEARS IS TOO LONG FOR SOMETHING THAT TAKES A NONCELL THERAPY ONLY 3.2 YEARS. SO WE SET OUT THE GOAL TO CUT IT IN HALF. WE DIDN'T JUST SET OUT THE GOAL. WE PROVIDED THE INFRASTRUCTURE NECESSARY TO DO THAT.

AND ONE OF THE THINGS THAT STRUCK ME WHEN I WAS A REVIEWER WAS HOW OFTEN WE WERE ASKING OUR RESEARCH SCIENTISTS TO BECOME EXPERTS IN REGULATORY WORK AND FILING IND'S AND DOING IND-ENABLING RESEARCH. AND EVENTUALLY WE JUST SAID, "WELL, WHY?"

WHY ARE WE ASKING OUR FISH TO TAKE FLYING LESSONS?  
WHY DON'T WE JUST LET OUR FISH SWIM?" AND SO THAT  
WAS THE IDEA BEHIND THE PITCHING MACHINE WHERE WE  
WOULD HAVE A TRANSLATING CENTER WHICH WOULD HELP  
CREATE IND, ACTUALLY HELP DO IND-ENABLING RESEARCH  
SPECIFICALLY FOR STEM CELL THERAPY COMPANIES SO THEY  
WOULD DEVELOP COMPETENCY IN THAT. AND THEN,  
SECONDLY, A CRO THAT COULD HELP COMPILE THAT DATA,  
FILE AN IND, AND GET THAT PROGRAM INTO THE CLINIC  
FASTER.

WE LAUNCHED THIS PROGRAM IN OCTOBER OF  
THIS YEAR. THERE WAS A GRAND OPENING. IT'S LOCATED  
PHYSICALLY DOWN IN SAN DIEGO. YOU CAN GO THERE.  
IT'S A REAL PLACE, AND I THINK MAY HAVE AN  
INCREDIBLY PROFOUND IMPACT ON THE DEVELOPMENT OF  
STEM CELL THERAPY, AND PARTICULARLY THE DEVELOPMENT  
OF STEM CELL THERAPY PROPRIETARY TO THE STATE OF  
CALIFORNIA. THIS IS OURS. THIS DOES NOT EXIST  
ANYWHERE ELSE. THIS IS A CALIFORNIA THING SUPPORTED  
BY THE VISION OF THE CALIFORNIA VOTERS AND AVAILABLE  
TO COMPANIES THAT WANT TO COME AND DO CLINICAL  
TRIALS AND WORK INSIDE THE STATE OF CALIFORNIA.

AND SO NEIL AND MARIA, A PHENOMENAL JOB  
GETTING THAT DONE.

SO WE HAVE A LOT OF STUFF THAT WE HAVE TO

GET DONE. SO WE MADE EXTRAORDINARY PROGRESS, AND I'M VERY, VERY PROUD OF THE TEAM FOR THE PROGRESS WE MADE THIS YEAR. SIXTEEN OF THE 50 NEW THINGS WE WANTED TO GET IN DEVELOPMENT WE ALREADY HAVE THERE. OUR PROGRESSION EVENTS ARE AT 33 PERCENT, AND WE'RE TRYING TO GET THEM TO 50. I'LL TELL YOU WE'RE GOING TO BURY THE NEEDLE ON THAT. IT'S GOING TO GO UP MUCH HIGHER. WE'VE ALREADY ENACTED THE NEW REGULATORY 21ST CENTURY CURES. WE ARE ON OUR WAY, I THINK, TO REDUCING TRANSLATIONAL TIME, BUT THAT'S A TOUGH ONE. WE'VE GOT TO GO FROM EIGHT TO FOUR YEARS THERE. AND SO WE'RE GOING TO HAVE TO SHOW REAL PROGRESS REAL QUICKLY.

FIFTY CLINICAL TRIALS, WELL, WE WANTED TEN, WE WANTED ONE-FIFTH DONE IN THE FIRST YEAR OF A FIVE-YEAR PLAN, AND WE GOT EXACTLY ONE-FIFTH OF THEM DONE. WE GOT TEN OF THEM DONE. BUT I THINK NEXT YEAR YOU'RE GOING TO SEE THAT, UNDER DR. MILLAN AND HER THERAPEUTICS TEAM, THAT THEY'RE GOING TO GET A LITTLE BIT AHEAD OF SCHEDULE THERE, I'M PREDICTING.

AND THEN WITH OUR PARTNERING SUCCESS, WITH THE SUCCESS OF THESE OTHER PROGRAMS, WITH HOPEFULLY ATP3 BECOMING A REALITY, WE THINK WE'LL BE ABLE TO PARTNER FAR MORE THAN 50 PERCENT OF OUR CLINICAL PROGRAMS.

SO I THINK THIS SLIDE IS REALLY IMPORTANT FOR ME. THERE'S A COMPONENT OF THIS PARTICULARLY JUXTAPOSED TO SUCH A STRONG YEAR WHERE WE NEED TO UNDERSTAND SOME REALITY AND HUMILITY, WHICH IS WE DIDN'T GET IT RIGHT THE FIRST TIME. SO CIRM 2.0 ISN'T REALLY 2.0. IF WE WERE SOFTWARE DEVELOPERS, IT WOULD BE SOMETHING LIKE CIRM 2.8. AS YOU GUYS KNOW WHO HAVE SAT ON THE COMMITTEES TO MAKE MODIFICATIONS TO THIS, WE HAVE IDENTIFIED PROBLEMS IN REAL TIME AND WE'VE CALLED THEM OUT AND WE HAVE WITHOUT RESERVATION BEEN BOLD ENOUGH AND COURAGEOUS ENOUGH TO SAY WE GOT THAT WRONG AND THAT NEEDS TO BE FIXED. AND WE MADE A NUMBER OF THEM TO THE VOTING PROCESS, TO THE REVIEW PROCESS, TO MILESTONES FOR ALL APPLICATIONS, NOT JUST CLINICAL. BUT THE POINT OF THIS, AND WHEN YOU MEET JAKE AND WHEN YOU MEET KARL, THE POINT OF THIS IS WE CANNOT EVER BE SATISFIED WITH WHAT WE'RE DOING. WE ALWAYS, ALWAYS HAVE TO BE GETTING BETTER. WE HAVE TO BE COMMITTED TO GETTING BETTER, UNAPOLOGETICALLY COMMITTED TO GETTING BETTER. AND SO WE WILL NEVER STOP GETTING BETTER.

HOW MUCH BETTER? UNTIL WE'RE CURED. I WANT TO INTRODUCE TO YOU EVANGELINA AND BRENDEN, OUR FIRST TWO PATIENTS TO HAVE BEEN CURED THROUGH

CIRM-FUNDED PROGRAMS THAT SPAN EVERYTHING FROM ALPHA CLINICS TO EDUCATION TO DISCOVERY TO TRANSLATION TO CLINICAL. EVANGELINA, SCID PATIENT; BRENDEN, X-LINKED CDG, CHRONIC GRANULOMATOUS DISEASE. BOTH OF THEM HAVE SIGNIFICANTLY REDUCED LIFE EXPECTANCIES OTHERWISE. BOTH OF THEM TODAY ARE CURED.

(APPLAUSE.)

MR. WHITTAKER: I JUST WANT TO THANK EVERYBODY FOR ALL THE WORK THAT YOU GUYS DO. MY EXPERIENCE HAS TRULY BEEN LIFE CHANGING, AND YOU GUYS ARE DOING GREAT WORK. AND I JUST HOPE THAT YOU CONTINUE TO PUSH THE BOUNDARIES AND DO THIS KIND OF RESEARCH AND HELP AS MANY PEOPLE AS YOU CAN. I THANK YOU.

(APPLAUSE.)

EVANGELINA: THANK YOU.

(APPLAUSE.)

MS. PADILLA-VACCARO: SO I DIDN'T KNOW WE WERE GOING TO SPEAK, BUT THANK YOU FOR KEEPING MY FAMILY COMPLETE.

(APPLAUSE.)

MR. PADILLA-VACCARO: I THINK ALICIA JUST SAID IT ALL. IF THERE'S ANYTHING THAT I'M UP HERE FOR IS JUST THANK YOU ALL FOR THE AMAZING WORK YOU DO. YOU KNOW, I JUST CAUGHT THE VERY END OF THIS

SPEECH, BUT JUST TO KEEP DOING WHAT YOU'RE DOING. I THINK IT'S HARD WHEN YOU READ AND HEAR ABOUT ALL OF THIS ADVANCED MEDICINE, IT'S HARD TO BELIEVE UNTIL YOU ACTUALLY SEE IT IN THE RESULTS. AND I JUST TRULY WOULDN'T GET TO ENJOY WATCHING MY DAUGHTER SEE SOME OF THE THINGS THAT WE DO THESE DAYS. YOU KNOW, WE GET ON THE TROLLEY AND TOUCH THINGS AND TRUST THAT SHE'S GOING TO BE OKAY. SO THANK YOU. THANK YOU VERY MUCH.

(APPLAUSE.)

CHAIRMAN THOMAS: RANDY, SENATOR TORRES WOULD LIKE TO SPEAK.

MR. TORRES: THIS WILL PROBABLY BE THE LAST TIME THAT I GET A NOTICE FROM THE WHITE HOUSE FOR AT LEAST FOUR YEARS, I HOPE. BUT THE PRESIDENT WILL SIGN THE CURES ACT IN NINE MINUTES IN A WHITE HOUSE CEREMONY WHICH WILL APPROPRIATE 6.8 BILLION FOR RESEARCH IN A TRULY BIPARTISAN EFFORT THAT I WAS VERY PROUD TO BE A PART OF WORKING WITH REPUBLICANS IN THE SENATE AND THE HOUSE. THANK YOU AGAIN, J.T. AND RANDY, FOR THE WORK YOU DID TO MAKE THIS HISTORIC EVENT IN A FEW MINUTES.

AND ALSO TO EVANGELINA AND TO BRENDEN AND TO JAKE AND TO KARL, THANK YOU SO MUCH FOR BEING HERE AS WELL. YOU'RE MAKING HISTORY FOR ALL

CALIFORNIANS.

(APPLAUSE.)

DR. MILLS: YOU GUYS ON THE BOARD, SINCE I'VE BEEN HERE, HAVE BEEN SO PHENOMENAL. AND SO AS WE WERE PREPARING THE STRATEGIC REPORT BACK, BECAUSE I FEEL VERY FIRMLY WE NEED TO DO WHAT WE SAID WE WERE GOING TO DO, I WAS GOING THROUGH NUMBERS. AND THE NUMBERS ARE GREAT AND THE EFFICIENCY NUMBERS ARE GREAT AND THE PRODUCTIVITY NUMBERS ARE GREAT, AND IT JUST DOESN'T MATTER UNTIL YOU SEE THAT. AND I JUST NEEDED YOU TO SEE THAT, AND THAT HAPPENED THIS YEAR, AND THAT HAPPENED BECAUSE OF US, AND THAT HAPPENED BECAUSE OF WHAT'S GOING ON AT CIRM. AND I CAN'T THANK YOU ENOUGH FOR GIVING ME THE OPPORTUNITY TO DO IT, AND I CAN'T THANK YOU ENOUGH FOR EVERYTHING YOU'VE DONE TO MAKE IT POSSIBLE. THE TERM "CURED" IS A REALLY STRONG TERM, AND IT'S A TERM THAT WE'VE BEEN AT CIRM HOPING WE WOULD REACH FOR A LONG TIME. AND IT'S NOT A TERM WE USED WITHOUT REALLY UNDERSTANDING WHAT IT MEANT, BUT THESE TWO AND NOW OTHERS HAVE BEEN CURED.

I WANT TO END WITH JUST ONE THING, AND THAT IS TO TELL YOU ABOUT, IN ADDITION TO WHAT'S TAKEN PLACE ON THE BOARD, WHERE THIS PROGRESS COMES FROM. IT COMES FROM A TEAM THAT I HAVE FALLEN IN

LOVE WITH. THEY ARE PHENOMENAL. AND TO JUST SAY THEY EMBRACED CHANGE WOULD BE LIKE SAYING THE LOMA PRIETO EARTHQUAKE SHOOK A LITTLE. THEY HAVE EMBRACED MONUMENTAL CHANGE. THEY HAVE ALIGNED AROUND THE MISSION. THEY ARE ALL IN, A TERM THAT WE START USING. THEY OWN THEIR GOALS. COME BY, TAKE A LOOK AT CIRM. THEY WRITE UP ON THE BOARD WHAT THEY'RE SUPPOSED TO DO, AND THEY ARE OBJECTIVELY PERFORMING, AND THAT TEAM IS PHENOMENAL. AND I JUST WANT TO THANK THEM, AND I'LL BE DONE. THANK YOU.

(APPLAUSE.)

CHAIRMAN THOMAS: MR. JUELSGAARD.

DR. JUELSGAARD: YES, J.T. SO ON TWO DIFFERENT OCCASIONS, BOTH FROM DR. MILLS AND THEN FROM SENATOR TORRES, WE'VE HEARD ABOUT THE 21ST CENTURY CURES ACT. TO BE QUITE HONEST, I HAVE ALMOST NO IDEA OF WHAT IT DOES FOR STEM CELL THERAPIES. IS THERE GOING TO BE AN OPPORTUNITY TO KIND OF MAKE A PRESENTATION SO THAT WE BETTER UNDERSTAND THE REGULATORY REFORM PEOPLE ARE REFERRING TO?

DR. MILLS: RIGHT. SO I CAN PROVIDE BRIEFLY NOW WHAT 21ST CENTURY CURES DOES SPECIFICALLY FOR STEM CELL THERAPY AND REGENERATIVE MEDICINE. IT MAKES A VERY UNIQUE AND UNUSUAL

CARVE-OUT. SO IT SPECIFICALLY DIRECTS FDA TO USE THE ACCELERATED THERAPY PATHWAY FOR STEM CELL AND REGENERATIVE MEDICINE TECHNOLOGIES. AND THEN IT GOES EVEN FURTHER TO MAKE A CARVE-OUT THAT SAYS, UNLIKE IN OTHER THERAPIES OR OTHER MODALITIES, REGENERATIVE MEDICINE CELL THERAPY DON'T CARRY THE REQUIREMENT OF NO OTHER AVAILABLE THERAPY. SO IT ALLOWS FOR A STEM CELL THERAPY TO BE BETTER THAN SOMETHING THAT MIGHT ALSO BE AVAILABLE AND STILL TAKE ADVANTAGE OF THE ACCELERATED APPROVAL PATHWAY.

LASTLY, IT ADDRESSES A SIGNIFICANT AMOUNT OF FUNDING SPECIFICALLY TO FDA TO HELP FDA DEVELOP THE STANDARDS IT NEEDS TO BE ABLE TO SPEED UP THEIR PROCESS FROM A RESEARCH STANDPOINT. SO IT'S AN FDA/NIH COLLABORATION. THOSE ARE ALL STEM CELL SPECIFIC, REGENERATIVE MEDICINE SPECIFIC PROVISIONS OF IT THAT IN THE EARLY VERSIONS SIMPLY WEREN'T THERE.

DR. JUELSGAARD: SO JUST ONE QUICK FOLLOW-UP QUESTION. SO YOU HAD A CONVERSATION WITH DR. CALIFF, YOU INDICATED. SO IT'S ONE THING FOR CONGRESS TO TELL THE FDA THAT YOU CAN GO AHEAD AND USE THE ACCELERATED APPROVAL PATHWAY USING SURROGATES OR WHATEVER. IT'S ANOTHER FOR THE FDA TO GO AHEAD AND AGREE TO DO THAT IN ANY PARTICULAR

CASE. IT'S BEEN A LITTLE RELUCTANT IN A NUMBER OF TIMES. SO DID DR. CALIFF GIVE YOU ANY HOPE THAT INDEED THEY WOULD DO THAT, THEY WOULD FOLLOW THE ACCELERATED APPROVAL, THEY WOULD GRANT ACCELERATED APPROVAL PATHWAYS FOR STEM CELL THERAPY?

DR. MILLS: SO NOT JUST ME. HE DID THAT TO ALL OF US. AND SO ONE OF THE THINGS ABOUT THIS PARTICULAR PIECE OF LEGISLATION, WHICH WAS SO GRATIFYING AND OPPOSED BY SO MANY, WAS NOT OVERWHELMING PASSAGE OF THE HOUSE AND BIPARTISAN PASSAGE IN THE SENATE, APPROVAL BY PRESIDENT OBAMA, WHO ACTUALLY LOBBIED FAVORABLY FOR IT, BUT WITH THESE COMPROMISES, I'LL SAY, THEY WERE VIGOROUSLY SUPPORTED BY CALIFF AND BY THE FDA. SO THESE WERE THE CHANGES THAT FDA THOUGHT WOULD BE GOOD FOR THEM. AND SO I THOUGHT THAT WAS A PARTICULARLY GRATIFYING PART OF THE BILL.

CHAIRMAN THOMAS: DR. FRIEDMAN.

DR. FRIEDMAN: SO, RANDY, THANK YOU VERY MUCH FOR THAT THOUGHTFUL AND COMPREHENSIVE SUMMARY OF THE YEAR. I FOUND IT VERY USEFUL. AND I AGREE WITH YOU THAT THERE'S REALLY BEEN SO MUCH MEANINGFUL PROGRESS THAT YOU AND THE STAFF SHOULD OWN, SHOULD BE PROUD OF, AND FEEL LIKE YOU'RE DELIVERING ON THAT COMMITMENT.

I THINK IT'S REALLY GREAT AT THE END OF THE YEAR TO LOOK BACK AND TO CELEBRATE THOSE THINGS AND TO USE IT TO BUILD GOING FORWARD, BUT I WANT TO ASK YOU A HARDER QUESTION. IF YOU LOOK BACK ON THE LAST YEAR, WHAT ARE YOU MOST DISAPPOINTED IN? WHAT COULD WE LEARN THAT WILL HELP US PERFORM EVEN BETTER IN THE FUTURE? WHAT'S THE OPPORTUNITIES THAT WE MISSED?

DR. MILLS: SO WE WERE OFF TO A SLOW START IN THERAPEUTICS, AS I MENTIONED. WE HAVE ADDED TEN NEW CLINICAL TRIALS THIS YEAR, BUT WE HAD TWO NEW CLINICAL TRIALS AT THE HALF, AND WE NEEDED TO TAKE A FRESH LOOK ON HOW TO DO THAT. THERE ARE OTHER ASPECTS OF THE STRATEGIC PLAN. SO WE, FOR EXAMPLE, ENVISIONED, WE CALLED IT THE MATCH.COM OF CIRM, WHERE WE WOULD CREATE THIS EXCHANGE THAT WOULD HELP US LINK UP DIFFERENT PROGRAMS. THE MORE WE GOT INTO THAT, THE MORE WE FELT THAT, WHILE WE WERE CONSISTENTLY HEARING IT AT SORT OF EVERY VENUE WE WENT TO, THE LIKELY USAGE OF THAT WOULD BE SO INSIGNIFICANT COMPARED TO THE ENORMOUS COST TO DEVELOP THAT, THAT'S SOMETHING THAT'S PROBABLY GOING TO GET TABLED.

AND THEN I WOULD SAY, THIRDLY, THE WORK TO MAKE ATP3 COMPLIANT WITH STATE'S REQUIREMENTS AND

ALSO INTERESTING FROM A BUSINESS PERSPECTIVE AND, FRANKLY, PALATABLE TO TAXPAYERS IS STILL AN ONGOING CHALLENGE FOR US. SO WE'RE NOT -- WE HAVEN'T GIVEN UP ON IT, BUT, BOY, WE CERTAINLY -- WE HAVEN'T NAILED IT YET EITHER. AND SO I THINK THOSE THREE THINGS OFF THE TOP OF MY HEAD ARE THREE THINGS THAT COULD HAVE BEEN A LITTLE BIT BETTER, BUT WE'RE WORKING ON IT.

WHAT I LIKE ABOUT THE TEAM IS THEY HAVE ABSOLUTELY NO PROBLEM SAYING THAT SHOULD BE FIXED, FIX IT.

CHAIRMAN THOMAS: OTHER COMMENTS FROM MEMBERS OF THE BOARD? MR. SHEEHY.

MR. SHEEHY: WELL, FIRST, I WANT TO THANK THE FAMILIES AND THE PATIENTS FOR THEIR INCREDIBLE COURAGE. WE TALK ABOUT CLINICAL TRIALS, THAT TO GO INTO A CLINICAL TRIAL IS TO TAKE A RISK. AND THE BRAVERY IS JUST AWE INSPIRING. SO THANK YOU. AND THANK YOU AGAIN FOR COMING HERE TODAY TO TELL YOUR STORIES, TO SHARE. SO GRATIFYING FOR US ON THE BOARD TO SEE THAT OUR WORK IS MAKING PROGRESS.

AND THEN I WANT TO SALUTE RANDY AND THE CIRM TEAM ON THE UNBELIEVABLE WORK THEY'VE DONE THIS YEAR. WHEN HE TALKS ABOUT HOW THEY'VE RISEN TO THE CHALLENGE, IT'S BEEN A BIG CHALLENGE. YOU KNOW, TO

TRANSFORM YOURSELF AS AN AGENCY AND TO DO IT WITH SUCH GRACE AND TO DO IT IN A WAY THAT DRAMATICALLY IMPROVES THE PRODUCT, I'M SO PROUD OF THIS TEAM MYSELF, AND I'M SO, SO, SO GRATEFUL. THANK YOU.

(APPLAUSE.)

DR. MILLS: THEY'RE GOOD.

DR. DULIEGE: JUST WANT TO SAY, RANDY, I KNOW THERE'S NO MOTION, BUT I JUST WANT TO SECOND EXACTLY WHAT YOU JUST SAID.

CHAIRMAN THOMAS: I DON'T THINK WE'LL NEED TO TAKE ROLL CALL ON THAT ONE. WE HAVE A HUNDRED PERCENT CONSENSUS, RANDY.

DR. MILLS: THAT'S ALL RIGHT. STEVE WILL OBJECT.

CHAIRMAN THOMAS: HE'LL JUST ASK A FEW QUESTIONS.

DR. MILLS: THAT'S A FUNNY JOKE.

CHAIRMAN THOMAS: RANDY, THANK YOU. I DON'T THINK I COULD POSSIBLY SAY IT ANY BETTER THAN MR. SHEEHY JUST DID. IT'S BEEN A WONDERFUL YEAR. THE PROGRESS THAT YOU AND ALL OF OUR COLLEAGUES ON THE TEAM HAVE MADE HAS BEEN STRIKING AND DRAMATIC AND CONTINUES TO TAKE A GREAT PROGRAM AND MAKE IT EVEN GREATER.

AND I'D LIKewise LIKE TO JOIN MR. SHEEHY

IN THANKING THE VERY BRAVE PATIENTS WHO ARE FRONT AND CENTER DEMONSTRATING, I THINK, NOT JUST THEIR STRENGTH AND COURAGE AND FORTITUDE, BUT ALSO THE WISDOM OF PROPOSITION 71 AND WHAT THE VOTERS APPROVED TO ALLOW CIRM TO BE ABLE TO HELP YOU AND TO EFFECT TREATMENTS AND CURES. IT IS ENTIRELY WHAT WE'RE ALL ABOUT, AND THANK YOU SO MUCH FOR COMING TO SHARE THAT WITH US. THERE'S NO DRY EYES WHEN WE HEAR YOUR STORIES. SO THANK YOU.

DR. MILLS: AND IF I COULD HAVE ONE FINAL, MR. CHAIRMAN. THE IDEA OF, HEY, WE NEED SOMETHING MORE THAN NUMBERS HERE IS A GOOD IDEA, BUT MARIA BONNEVILLE, KEVIN MCCORMACK, AND THE REST OF THE COMMUNICATIONS TEAM MADE THAT HAPPEN. I DON'T KNOW HOW, BUT THEY DID IT. AND I THINK IT WAS VERY EFFECTIVE. THANK YOU. THANK YOU VERY MUCH. THANK YOU.

(APPLAUSE.)

CHAIRMAN THOMAS: THANK YOU, RANDY AND EVERYBODY. WE'RE GOING TO PROCEED NOW TO ITEM NO. 9, AND I'M GOING TO TURN THE PODIUM OVER TO SENATOR TORRES.

MR. TORRES: MR. CHAIRMAN AND MEMBERS, AS YOU KNOW, BOTH YOU AND I SERVE SIX YEAR TERMS, BUT WE ARE LIMITED TO SERVING TWO TERMS. THERE ARE TERM

LIMITS THAT APPLY HERE VERY MUCH LIKE THE LEGISLATURE. UNDER THE PROVISIONS OF PROPOSITION 71, THE GOVERNOR, LIEUTENANT GOVERNOR, TREASURER, AND CONTROLLER MUST NOMINATE CANDIDATES FOR CHAIR AND VICE CHAIR OF OUR ORGANIZATION. ONCE THOSE NOMINATIONS ARE MADE, THEN IT IS UP TO THE BOARD TO VOTE IN FAVOR OF THOSE NOMINATIONS OR IN OPPOSITION. AND I'D LIKE TO TURN OVER NOW TO SHERRY LANSING, WHO I BELIEVE IS ON THE LINE.

MS. LANSING: HI. I HOPE YOU CAN ALL HEAR ME BECAUSE I CAN HEAR YOU WONDERFULLY. AND I THINK THIS IS TRULY AN OPPORTUNE TIME, SO LET ME ADD MY CONGRATULATIONS TO RANDY AND THE TEAM AND THE PATIENTS. HAVING BEEN HERE FROM THE VERY BEGINNING, I CAN HONESTLY SAY THIS IS ONE OF THE PROUDEST DAYS, AND ONE OF THE MOST SUCCESSFUL TIMES I'VE SEEN CIRM GO THROUGH, AND IT DID THAT BECAUSE OF RANDY, THE TEAM, AND ALL THE PATIENTS. BUT IT ALSO DID IT, IN MY OPINION, BECAUSE OF THE EXTRAORDINARY LEADERSHIP OF JON THOMAS AND ART TORRES. SO I WOULD LIKE TO TELL YOU WHY I WANT TO NOMINATE BOTH OF THEM AND GET THE FULL SUPPORT OF THE BOARD.

SO I'M GOING TO START WITH JON. AND AS ALL OF YOU KNOW, J.T. WAS APPOINTED CHAIR OF CIRM IN 2011, AND THAT WAS FIVE AND A HALF YEARS AGO. HE

HAS GUIDED THIS AGENCY WITH A CALM, FOCUSED EXPERTISE AND INTEGRITY AND CHARM AND COMPASSION. I HONESTLY BELIEVE THAT WITHOUT HIS LEADERSHIP, NONE OF THE ACCOMPLISHMENTS THAT RANDY AND THE TEAM MADE WOULD HAVE BEEN ABLE TO HAPPEN.

J.T.'S OUTSTANDING PROFESSIONAL BACKGROUND AS AN INVESTMENT BANKER AND ATTORNEY, IN ADDITION TO HIS LIFELONG DEDICATION TO EDUCATION AND SCIENCE, HAS HELPED TO MAKE HIM AN EXTRAORDINARILY EFFECTIVE CHAIRMAN AS WELL AS AN AMBASSADOR FOR OUR ORGANIZATION.

SUPPORTERS OF HIS REAPPOINTMENT INCLUDES SUCH STATE LEADERS AS LIEUTENANT GOVERNOR GAVIN NEWSOM, TREASURER JOHN CHIANG, AND CONTROLLER BETTY YEE. THIS UNANIMOUS SUPPORT IS REALLY SOMETHING THAT WE RARELY SEE AND HE DESERVES IT.

AMONG HIS ACCOMPLISHMENTS, J.T. HAS BEEN AN AMBASSADOR FOR CIRM AT KEY MEETINGS AND HE REPRESENTS CIRM BEFORE MANY DIFFERENT GROUPS. AND I'M CONSTANTLY HEARING WHAT A WONDERFUL JOB JON DID. OUR RELATIONSHIP IN SACRAMENTO HAS NEVER BEEN BETTER. HE'S GUIDED US THROUGH A VERY DIFFICULT TIME WITH IOM, AND HE'S RESPONSIBLE FOR SECURING OUR BOND FUNDING ALLOCATION. HE HAS ALSO BROUGHT TOGETHER THIS BOARD AND THE WHOLE CIRM TEAM. I

THINK I HOPEFULLY HAVE UNANIMOUS SUPPORT.

J.T. HAS RISEN TO EVERY SINGLE CHALLENGE, EVERY SINGLE OBSTACLE PUT BEFORE HIM OVER THE PAST FIVE AND A HALF YEARS. HE'S DONE THIS WITH A PROACTIVE FOCUS AND OBJECTIVE LEADERSHIP. AND SO I HOPE YOU WILL JOIN ME IN VOTING TO RENEW J.T.'S APPOINTMENT AS CIRM'S CHAIRMAN.

SO I'LL DO THIS ONE FIRST, AND ASK, I GUESS, FOR COMMENTS, AND THEN I'D LIKE TO MOVE ON TO SAYING SOMETHING ABOUT ART.

MR. TORRES: THANK YOU, MADAM CHAIR OF THE GOVERNANCE COMMITTEE. IS THERE A SECOND TO SHERRY'S MOTION?

UNIDENTIFIED SPEAKER: SECOND.

MR. TORRES: IT'S BEEN MOVED AND SECONDED TO ELECT DR. JONATHAN THOMAS TO A SECOND AND FINAL SIX-YEAR TERM AS CHAIRMAN OF OUR BOARD. IS THERE ANY DISCUSSION?

DR. GASSON: I WANTED TO ECHO SHERRY'S COMMENTS -- THIS IS JUDY, SHERRY -- IN TERMS OF BOTH THE INWARD-FACING ACTIVITIES OF THIS LEADERSHIP TEAM WHICH HAVE, THROUGH GREAT EFFORTS, FOSTERED A COHESIVE, FORWARD-THINKING STAFF AND BOARD, AND ALLOWED US TO REALIZE A VERY, VERY COMPELLING STRATEGIC PLAN AS WE'VE ALL JUST HEARD TODAY. BUT

IN ADDITION TO THOSE EFFORTS, WHICH WOULD HAVE BEEN ENOUGH, THERE HAVE BEEN THE OUTWARD-FACING EFFORTS THAT WE'VE HEARD A BIT ABOUT TODAY AS WELL.

WE'RE NOT JUST TALKING SACRAMENTO. WE'RE TALKING WASHINGTON, D.C. WE'RE TALKING THE FDA. THESE CHANGES THAT WE'VE HEARD ABOUT TODAY WERE LITERALLY ALMOST UNTHINKABLE TWO OR THREE YEARS AGO. THEY'VE ALSO REACHED OUT AND EMBRACED BOTH ACADEMIA, INDUSTRY, AND THE PUBLIC THAT WE ARE ALL HERE TO SERVE. THE TIRELESS ENERGY OF J.T. AND ART AND RANDY ARE TRULY SOMETHING TO BEHOLD. AND I THINK THAT THE APPEARANCE OF THESE PATIENTS AND THESE FAMILIES TODAY BASICALLY SAY IT ALL. AND I KNOW THAT NONE OF US HERE WILL GIVE UP OR STOP TRYING UNTIL WE'RE ABLE TO CONTINUE TO IMPACT THESE TREMENDOUS DISEASES THAT CREATE SUCH CHALLENGES FOR THE PATIENTS AND THE FAMILY. I'M DELIGHTED TO BE HERE IN PERSON, AND I'M DELIGHTED TO SUPPORT THIS MOTION.

MR. TORRES: SHERRY, I THINK, WANTED TO MAKE SURE THAT, AND I THINK YOU ARE CORRECT, PART OF THE MOTION IS TO INCLUDE THE SAME COMPENSATION AND SERVICE PACKAGE THAT WAS PREVIOUSLY APPROVED BY THIS BOARD, CORRECT?

MS. LANSING: (NO AUDIBLE RESPONSE.)

MR. TORRES: THE ANSWER IS YES. ALL RIGHT. IS THERE ANY OTHER DISCUSSION BY MEMBERS OF THE BOARD? ALL RIGHT. SO THE MOTION BEFORE US IS TO APPROVE FOR A SECOND -- I'LL GET TO THE PUBLIC IN A MINUTE. THE MOTION BEFORE US IS TO APPROVE THE ELECTION OF DR. JONATHAN THOMAS AS THE CHAIR OF THE ICOC FOR A SECOND TERM OF SIX YEARS WITH THE SAME ECONOMIC PACKAGE AND SERVICE PERCENTAGE DETERMINATION THAT WAS APPROVED PREVIOUSLY. ALL RIGHT. ANY DISCUSSION FROM THE PUBLIC?

MR. REED: AGAIN, I KNOW THIS WILL BE A NONCONTROVERSIAL VOTE. THE TWO PEOPLE WE HAVE BEFORE US ARE SUPERB. I REMEMBER THINKING THAT JONATHAN THOMAS WAS THE MOST APPROACHABLE HUMAN BEING I THINK I'VE EVER MET. AND THAT FOR SOMEONE WHO GREETES THE PUBLIC AND WHO MEETS THE PATIENT ADVOCATES AND MAKES THEM FEEL WELCOME, THAT'S SO IMPORTANT. STRONG THINGS HE'S DONE, LIKE DEALING WITH THE IOM, MATTER OF RECORD, TERRIFIC STUFF, BUT THE APPROACHABILITY, THAT'S SO IMPORTANT.

AS FOR ART, SENATOR ART, I REMEMBER WE FOUGHT THROUGH SEVEN SEPARATE BILLS TO PUT CHANGES ONTO THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE. ALL OF THEM HAD TO BE FOUGHT. TREMENDOUS BATTLES. AND THEN ALONG CAME SENATOR ART, AND ALL

OF A SUDDEN THINGS BEGAN TO WORK. HE KNEW HOW TO TALK TO OUR BROTHERS AND SISTERS IN THE LEGISLATIVE HEADQUARTERS OF SACRAMENTO, AND WE WILL NEVER FORGET THAT. SO THEY'RE BOTH TREMENDOUS. WHAT CAN I SAY?

MR. TORRES: ANY FURTHER DISCUSSION OR COMMENTS FROM MEMBERS OF THE BOARD? MARIA, CALL THE ROLL.

MS. BONNEVILLE: LARS BERGLUND.

DR. BERGLUND: YES.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: YES.

MS. BONNEVILLE: JACK DIXON.

DR. DIXON: YES.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: HOWARD FEDEROFF.

DR. FEDEROFF: YES.

MS. BONNEVILLE: LEON FINE.

DR. FINE: YES.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: YES.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: YES.

MS. BONNEVILLE: JUDY GASSON.

DR. GASSON: YES.

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MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: YES.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: SHERRY LANSING.

MS. LANSING: YES.

MS. BONNEVILLE: KATHY LAPORTE.

MS. LAPORTE: YES.

MS. BONNEVILLE: BERT LUBIN.

DR. LUBIN: YES.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: YES.

MS. BONNEVILLE: LLOYD MINOR.

DR. MINOR: YES.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: YES.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: AYE.

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: YES.

MS. BONNEVILLE: AL ROWLETT. JEFF SHEEHY.

MR. SHEEHY: YES.

MS. BONNEVILLE: OS STEWARD.

DR. STEWARD: YES.

MS. BONNEVILLE: JONATHAN THOMAS.

CHAIRMAN THOMAS: I DON'T THINK I CAN  
VOTE.

MS. BONNEVILLE: SORRY. ART TORRES.

MR. TORRES: THE RECORD WILL STATE THAT  
DR. THOMAS DID NOT VOTE.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: KRISTINA VUORI. DIANE  
WINOKUR.

MS. WINOKUR: YES.

MS. BONNEVILLE: BRUCE WINTRAUB.

DR. WINTRAUB: YES.

MS. BONNEVILLE: MOTION CARRIES.

MR. TORRES: MOTION CARRIES UNANIMOUSLY.  
CONGRATULATIONS, DR. THOMAS.

(APPLAUSE.)

CHAIRMAN THOMAS: THANK YOU, EVERYBODY.  
SHERRY, THAT WAS A VERY HUMBLING SET OF INTRODUCTORY  
REMARKS, AND THANK YOU SO MUCH FOR THAT. THANK YOU  
TO EVERYBODY FOR YOUR COMMENTS. AS I SAID IN MY  
LETTER TO THE BOARD, THIS HAS BEEN THE PRIVILEGE OF  
A LIFETIME TO BE ABLE TO WORK WITH ALL OF YOU IN  
PURSUING THIS GRANDEST OF MISSIONS. AND I VERY MUCH

APPRECIATE YOUR CONFIDENCE IN GOING FORWARD AND LOOK GREATLY FORWARD WITH MUCH ENTHUSIASM TO EVEN BIGGER AND BETTER THINGS. SO THANK YOU SO MUCH.

OKAY. WE'RE GOING TO NOW TURN TO ITEM NO. 10, WHICH IS THE ELECTION OF SENATOR TORRES FOR HIS SECOND TERM AS VICE CHAIR. SHERRY, WOULD YOU LIKE TO --

MS. LANSING: IT IS SUCH AN HONOR TO BE ABLE TO SPEAK ON BEHALF OF ART AS I DID ON BEHALF YOU. I HAVE THE GREATEST ADMIRATION FOR ART. HE HAS BEEN A STEADY HAND AND AN INCREDIBLY EFFECTIVE AMBASSADOR FOR CIRM SINCE BECOMING OUR VICE CHAIR IN 2011. AS YOU ALL KNOW, HE WAS APPOINTED BY FORMER STATE TREASURER BILL LOCKYEAR. I'VE KNOWN ART FOR A LONG TIME. I'VE KNOWN HIM SINCE HIS EXTRAORDINARY ACCOMPLISHED YEARS IN THE CALIFORNIA STATE LEGISLATURE AND HIS 14-YEAR TENURE AS CHAIR OF THE CALIFORNIA DEMOCRATIC PARTY. ART IS LITERALLY ALWAYS THE FIRST PERSON I TURN TO WHEN I NEED ADVICE ABOUT A LEGISLATIVE MATTER. HE ALWAYS HANDLES ANY QUESTION I GIVE HIM WITH A STRAIGHTFORWARD AND DIRECT ANSWER AND ALSO WITH A SENSE OF HUMOR. AND THAT IS SOMETHING YOU SOMETIMES NEED, SO I REALLY APPRECIATE IT.

ART'S ACCOMPLISHMENTS AS OUR VICE CHAIR

INCLUDE CONSTANT OUTREACH TO OUR STATEWIDE CONSTITUTIONAL OFFICERS, MEMBERS OF OUR LEGISLATURE, AND CONGRESS. HE REACHES OUT TO BOTH DEMOCRATS AND REPUBLICANS IN CALIFORNIA AND IN OTHER STATES AS WELL. EACH MEMBER OF THE LEGISLATURE OR CONGRESS WHOSE DISTRICT RECEIVES ONE OF OUR GRANTS IS NOTIFIED AND INFORMED OF OUR WORK BY ART. HE HAS WORKED ON INCREASING OUR TRANSPARENCY. HE'S WORKED TO INCREASE THE TRANSPARENCY OF THE OPERATIONS OF OUR AGENCY FOR THE BENEFIT OF THE CALIFORNIA TAXPAYERS.

AS AN ALTERNATE MEMBER OF THE GWG, THE GRANTS WORKING GROUP, ART HAS ATTENDED MEETINGS AND PARTICIPATED IN THE REVIEW OF THE APPLICATIONS. HE HAS AN INCREDIBLY GOOD WORKING RELATIONSHIP WITH J.T., RANDY, AND THE ENTIRE BOARD. HE DOES OUTREACH IN OUR COMMUNITY AND HE ALSO DOES OUTREACH TO THE INTERNATIONAL SECTOR.

ART, AS YOU ALL KNOW, IS A COLON CANCER AND OSTEOARTHRITIS SURVIVOR, NOT TO MENTION THAT HE UNDERSTANDS WHAT A PATIENT GOES THROUGH. HE'S ALSO ONE OF THE MOST INTELLIGENT AND THOUGHTFUL INDIVIDUALS I'VE EVER MET.

CHAIRMAN THOMAS: THANK YOU. SO IT'S MOVED BY SHERRY THAT WE REELECT SENATOR TORRES FOR

HIS SECOND TERM WITH THE SAME COMPENSATION PACKAGE,  
PERCENTAGE EFFORT, ALL THAT. DO WE HAVE A SECOND  
HERE?

MR. SHEEHY: SECOND.

(MULTIPLE SECONDS.)

CHAIRMAN THOMAS: HEARD A LOT OF SECONDS.

MR. SHEEHY WAS THE FIRST THERE. WE'LL GIVE THAT ONE  
TO MR. SHEEHY.

SO I'D JUST LIKE TO SAY, ART, THAT IT'S  
BEEN A TREMENDOUS EXPERIENCE WORKING WITH YOU. ART  
AND I GO BACK MANY YEARS BEFORE CIRM, AND ONE OF THE  
GREAT PLEASURES AND PRIVILEGES OF MY BEING ABLE TO  
COME HERE WAS TO KNOW THAT ART WAS HERE TO HAVE AS A  
COLLEAGUE TO WHOM I CAN TURN TO DISCUSS ALL OF THE  
MAJOR POLICY ISSUES THAT CONFRONT THE BOARD ON AN  
ONGOING BASIS, TO GET TREMENDOUS INFORMED GUIDANCE  
ON ALL SORTS OF ISSUES. AND IT IS IMPOSSIBLE TO  
OVERSTATE, IN THE POLITICAL ENVIRONMENT IN WHICH WE  
OPERATE ON A SUBJECT MATTER THAT IS NOT WITHOUT SOME  
CONTROVERSY, THE VALUE OF HAVING SOMEBODY SO  
CONNECTED POLITICALLY BOTH SIDES OF THE AISLE AND  
HAS HAD GREAT RESPECT FOR SO MANY YEARS THAT  
IMMEDIATELY ALLOWS US TO COME IN AND DISCUSS ISSUES  
WITH A GRAVITAS THAT COMMANDS ATTENTION AND GETS  
RESULTS.

ART HAS JUST DONE A WONDERFUL JOB IN THIS HIS LATEST ITERATION OF MANY YEARS OF PUBLIC SERVICE TO THE PEOPLE OF CALIFORNIA. SO I COULD NOT SECOND HIS NOMINATION ANY MORE STRONGLY.

MS. LANSING: I THINK I WAS CUT OFF. I ALSO WANTED TO ADD ONE MORE THING, ...THAT THIS DOUBLE COMBINATION, IN MY OPINION, MAKES HIM EXTRAORDINARILY QUALIFIED TO SERVE AS OUR VICE CHAIR AND AS AN ADVOCATE FOR THE PATIENTS WHO ARE BENEFITING FROM THE TREATMENTS THAT WE SUPPORT.

CHAIRMAN THOMAS: THANK YOU, SHERRY. OTHER COMMENTS FROM MEMBERS OF THE BOARD? MR. JUELSGAARD.

DR. JUELSGAARD: THIS IS JUST A QUESTION, AND THIS IS CONTEMPORANEOUS WITH WHAT SENATOR TORRES ASKED ABOUT YOUR NOMINATION. DOES THE NOMINATION OR DOES THE MOTION INCLUDE THE SAME COMPENSATION AND TIME OF EFFORT THAT HE CURRENTLY USES?

CHAIRMAN THOMAS: SHERRY, I DON'T KNOW IF YOU HEARD THAT QUESTION.

MS. LANSING: YES, I BELIEVE IT DOES.

CHAIRMAN THOMAS: THE ANSWER IS YES. OTHER COMMENTS BY MEMBERS OF THE BOARD? MR. SHEEHY.

MR. SHEEHY: I JUST LOVE ART. IT'S BEEN SUCH A PHENOMENON TO HAVE HIM TO SERVE WITH, WITH

SENATOR TORRES. AND ONE OF THE THINGS THAT I'VE NOTICED IS THAT WHENEVER A PATIENT OR A PATIENT ADVOCATE COMES TO THE BOARD TO TALK, ART GOES OVER AND WELCOMES THAT PERSON AND REALLY GETS THEIR STORY AND SHARES WITH THEM. IT COMES FROM SUCH A GENUINE HEARTFELT PASSION ABOUT MAKING A DIFFERENCE FOR PATIENTS.

AND THEN THIS LAST PIECE WITH THE FDA, THE 21ST CENTURY CURES ACT, I MEAN, WE'VE BEEN TALKING ABOUT THIS AND NOW THIS HAS HAPPENED. HIS CONTRIBUTIONS ARE JUST INVALUABLE. AND THANK YOU, SENATOR TORRES, FOR YOUR SERVICE AND FOR AGREEING TO DO THIS AGAIN FOR ANOTHER SIX YEARS.

CHAIRMAN THOMAS: OTHER COMMENTS FROM MEMBERS OF THE BOARD? COMMENTS FROM MEMBERS OF THE PUBLIC? HEARING NONE, MARIA, WILL YOU PLEASE CALL THE ROLL.

MS. BONNEVILLE: LARS BERGLUND.

DR. BERGLUND: YES.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: YES.

MS. BONNEVILLE: JACK DIXON.

DR. DIXON: YES.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

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MS. BONNEVILLE: HOWARD FEDEROFF.

DR. FEDEROFF: YES.

MS. BONNEVILLE: LEON FINE.

DR. FINE: YES.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: YES.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: YES.

MS. BONNEVILLE: JUDY GASSON.

DR. GASSON: YES.

MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: YES.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: SHERRY LANSING.

MS. LANSING: YES.

MS. BONNEVILLE: KATHY LAPORTE.

MS. LAPORTE: YES.

MS. BONNEVILLE: BERT LUBIN.

DR. LUBIN: YES.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: YES.

MS. BONNEVILLE: LLOYD MINOR.

DR. MINOR: YES.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: YES.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: AYE.

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: YES.

MS. BONNEVILLE: AL ROWLETT. JEFF SHEEHY.

MR. SHEEHY: YES.

MS. BONNEVILLE: OS STEWARD.

DR. STEWARD: YES.

MS. BONNEVILLE: JONATHAN THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: KRISTINA VUORI.

DR. VUORI: YES.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: YES.

MS. BONNEVILLE: BRUCE WINTRAUB.

DR. WINTRAUB: YES.

MS. BONNEVILLE: MOTION CARRIES.

(APPLAUSE.)

MR. TORRES: FIRST OF ALL, THANK YOU SO MUCH, SHERRY, FOR THOSE VERY KIND WORDS. AND THE FRIENDSHIP AND THE LOVE GOES BACK TO YOU FROM ME AND FROM MY CHILDREN ESPECIALLY AS WE HAVE WORKED

TOGETHER FOR SO MANY YEARS.

SO JEFF SHEEHY, YOUR CONTRIBUTIONS ARE INVALUABLE, NOT ONLY TO THIS EFFORT HERE, BUT WHAT YOU DID BEFORE YOU CAME TO THIS BOARD. SO I'M HONORED THAT YOU SECONDED BY NOMINATION, JEFF.

TO YOU, DR. THOMAS, TO J.T., IT HAS BEEN EXTRAORDINARY. AND WHO WOULD HAVE KNOWN THAT WE WOULD BE WORKING AGAIN TOGETHER AFTER SO MANY YEARS IN AN EFFORT THAT IS THIS LEVEL?

MY CHILDREN ASKED ME, "DAD, YOU SPENT ALL THESE YEARS IN THE LEGISLATURE. WHAT DO YOU THINK ABOUT WHAT YOU'RE DOING NOW?" I HAD NO HESITATION. I SAID, "THIS IS THE MOST EXTRAORDINARY, INSPIRING EXPERIENCE I HAVE EVER HAD IN MY LIFE." AND WHEN JEFF SAYS ABOUT THE PATIENTS, MY HEART GOES OUT BECAUSE WE KNOW WHAT WE'RE TRYING TO DO AND WE KNOW THAT WE'RE TRYING TO BE ADVOCATES FOR PEOPLE WHO ARE IN NEED. AND THE FACT THAT WE HAVE A ROLE TO PLAY IN A VERY CONCRETE, DIRECTED WAY IS ABSOLUTELY AWE INSPIRING TO ME. SO I WANT TO THANK EACH AND EVERY MEMBER OF THE BOARD FOR YOUR SUPPORT AND FOR YOUR CONFIDENCE, AND I WILL CONTINUE TO HOPEFULLY MEET THOSE EXPECTATIONS.

LASTLY, I ALSO SERVE AS VICE CHAIRMAN OF THE ONE LEGACY BOARD, WHICH IS THE LARGEST ORGAN

TRANSPLANT FOUNDATION IN THE COUNTRY. TODAY YOU APPROVED A GRANT FOR STANFORD TO DEAL WITH KIDNEY TRANSPLANTS. THE KIDNEY TRANSPLANT SURGEONS THAT WERE WITH ME THIS WEEK IN LOS ANGELES AT OUR BOARD MEETING WERE SO EXCITED THAT THIS POTENTIAL, ALSO WORKING WITH UCLA, WOULD BE APPROVED BY THIS BOARD SO ELOQUENTLY. SO ON BEHALF OF THEM AND KIDNEY TRANSPLANT AND TRANSPLANT PATIENTS ACROSS THIS STATE, I WANT TO THANK EACH AND EVERY ONE OF YOU FOR VOTING THE WAY YOU DID TODAY TO GIVE THESE PATIENTS HOPE FOR THE FUTURE.

AND TO THE PATIENTS THAT ARE HERE TODAY, AGAIN, I SAY THANK YOU FOR YOUR COURAGE, FOR YOUR DETERMINATION, FOR YOUR VALOR, AND I KNOW WHAT YOU ARE GOING THROUGH FROM PERIPHERAL SENSE, BUT INTERNALLY MY HEART GOES OUT TO YOU. AND KNOW THAT WE WILL BE BY YOUR SIDE. THANK YOU.

(APPLAUSE.)

CHAIRMAN THOMAS: OKAY. WE ARE NOW GOING TO HAVE PEOPLE GET THEIR LUNCHES -- NO. MARIA, WHAT ARE WE GOING TO DO?

MS. BONNEVILLE: WE'RE GOING TO TAKE UP ITEM NO. 16.

CHAIRMAN THOMAS: LIKE I WAS SAYING, JUST TESTING. OKAY. ITEM NO. 16, BUDGET ALLOCATION FOR

2017 SCIENTIFIC PROGRAMS. DR. MILLS.

(A RECESS WAS TAKEN.)

CHAIRMAN THOMAS: COULD EVERYONE PLEASE TAKE YOUR SEATS. OKAY. AGAIN, COULD EVERYONE PLEASE TAKE YOUR SEATS. OKAY. WE'RE GOING TO GO BACK NOW TO NO. 16, DISCUSSION OF THE BUDGET. DR. MILLS.

DR. MILLS: THANK YOU, CHAIRMAN THOMAS AND MEMBERS OF THE BOARD. WHAT I'D LIKE TO SPEAK ABOUT NEXT IS A NEW FOR US. AND SO BASICALLY WHAT IT DOES, WHAT WE'RE TRYING TO DO HERE, IS FOR A YEAR SET UP FUNDING ALLOCATIONS ACROSS THE FIVE PILLARS OF WHAT WE DO: INFRASTRUCTURE, DISCOVERY, TRANSLATIONAL, CLINICAL, AND EDUCATION. AND ONE OF THE REASONS WE WANTED TO DO IT THIS WAY WAS TO GIVE THE MAXIMUM NUMBER OF BOARD MEMBERS AN OPPORTUNITY TO PARTICIPATE IN DECISION MAKING. AND SO WE HAPPEN TO BE IN A WINDOW RIGHT NOW WHERE I BELIEVE, JAMES, WE HAVE NO CONFLICTED MEMBERS. SO EVERYONE CAN PARTICIPATE IN THIS PARTICULAR FUNDING DECISION.

SO WHAT WE'RE TRYING TO DO IS SET UP FUNDING, BASICALLY LANES BY THESE DIFFERENT AREAS FOR THE YEAR. AGAIN, JUST TO TALK ABOUT THE BUCKETS. WE STARTED WITH 2.75 BILLION IN THE BIG BUCKET AND 180 MILLION IN THE ADMINISTRATIVE BUCKET.

I'VE ALREADY SHOWED THIS SLIDE ONCE, BUT IT'S WORTH REPEATING. LAST YEAR OR THIS CURRENT ENDING 2016, WE MADE \$262 MILLION IN NEW AWARDS, WE TOOK 30 MILLION BACK, FOR A NET OF 232 MILLION, WHICH LEAVES US 528 MILLION IN THE UNCOMMITTED BUCKET.

I'D LIKE TO TAKE YOU THROUGH, THOUGH, SOME RECONCILIATION OF THOSE ACTIVITIES THE WAY WE WOULD SIMILAR TO A BUSINESS. SO WE STARTED OUT JANUARY 1ST OF THIS YEAR WITH 1.99 BILLION COMMITTED AND 760 MILLION UNCOMMITTED. THE NUMBER OF AWARDS THAT WERE ACTIVE WAS 261 AT THAT TIME, AND THAT REPRESENTED AN ACTIVE BALANCE, WHICH IS THE AMOUNT OF MONEY WE ARE ACTUALLY MANAGING ON A DAILY BASIS, OF 342 MILLION. DURING THE YEAR WE ADDED AN ADDITIONAL 84 PROGRAMS OR ANOTHER 262 MILLION AND WE HAD 30 MILLION IN AWARD REDUCTIONS. SO AS OF DECEMBER 31ST, WE WILL HAVE 2.2 BILLION COMMITTED, 528 MILLION UNCOMMITTED, WHICH IS AVAILABLE TO BE COMMITTED, 255 AWARDS OR \$406 MILLION UNDER ACTIVE MANAGEMENT.

THE REASON THOSE ACTIVE MANAGEMENT NUMBERS ARE SO IMPORTANT IS BECAUSE THE AMOUNT UNDER ACTIVE MANAGEMENT RELATES TO THE AMOUNT THAT'S LIKELY OR ABLE TO GET RETURNED. AND THAT RETURN RATE ENDS UP BEING VERY IMPORTANT FOR US BECAUSE, AS YOU CAN SEE, WE HAVE 528 MILLION UNCOMMITTED, BUT WE'RE

PROJECTING NEW AWARDS OF 692 MILLION, AND THAT'S BECAUSE WE USE A FORMULA TO ESTIMATE THE AMOUNT OF MONEY WE EXPECT TO GET RETURNED TO THE ORGANIZATION ON AN ANNUAL BASIS AND IT VARIES. THERE'S FLUCTUATION BY YEAR. THIS LAST YEAR'S ACTIVE AWARD BALANCE HAPPENED TO BE LOW, SO IT WAS ABOUT \$30 MILLION THAT WAS RETURNED. THE YEAR PRIOR IT WAS 46 MILLION. SO IT OSCILLATES AROUND, AND IT'S A FUNCTION OF THE AMOUNT UNDER ACTIVE MANAGEMENT. SO HAVING \$406 MILLION UNDER ACTIVE MANAGEMENT, WE EXPECT NEXT YEAR THE RETURN RATE TO THE ORGANIZATION TO BE HIGHER THAN THE 30 MILLION IT WAS THIS YEAR. SO THAT ALL LEAVES US WITH, FOR PLANNING PURPOSES, \$692 MILLION TO MAKE IN NEW AWARDS.

SO WHAT DID WE DO IN 2016? I THINK WE START WITH SORT OF THE CURRENT OR THE ACTUALS. SO IN EDUCATION WE HAD TWO ROUNDS, WE MADE 21 AWARDS FOR 43.1 MILLION. DISCOVERY, WE HAD FOUR ROUNDS, 37 AWARDS, \$46.7 MILLION. TRANSLATION, WE HAD TWO ROUNDS, 11 AWARDS, \$54.7 MILLION. AND IN CLINICAL, 12 ROUNDS, 12 AWARDS, AND 87.1 MILLION. AND IN INFRASTRUCTURE WE MADE THE AWARDS FOR THE TRANSLATING AND THE ACCELERATING CENTER WHICH TOTALED \$30 MILLION. SO FOR THE YEAR WE MADE 83 AWARDS UNDER 22 DIFFERENT ROUNDS THAT OUR REVIEW

TEAM HAD TO HANDLE, WHICH EQUALED \$261.6 MILLION.

SO WHAT WE ARE RECOMMENDING, AND OBVIOUSLY FOR YOUR DISCUSSION AND CONSIDERATION AND REVISION AS YOU SEE FIT, IS FUNDING ALLOCATIONS IN THESE LANES FOR 2017. AND WHAT WE'RE RECOMMENDING IS THAT THE BOARD APPROVE THE ALLOCATION, MEANING THE DOLLAR AMOUNT PER PROGRAM, AND USE THE ROUND AND NUMBER OF AWARDS FOR GUIDANCE PURPOSES ONLY. SO HAVE THOSE BE NONBINDING. THE REASON WE'RE MAKING THAT RECOMMENDATION IS TO GIVE THE BOARD MORE FLEXIBILITY AS IT MOVES THROUGH THE YEAR TO MAKE FUNDING DECISIONS THAT MORE TAILOR THE CHANGES IN THE CIRCUMSTANCE, BUT WITHOUT EXCEEDING THE CAP. AND SO THESE ARE THE RECOMMENDATIONS WE'RE MAKING.

TO PUT THEM IN PERSPECTIVE, SO THIS IS 2016 ACTUAL VERSUS WHAT WE'RE ASKING FOR IN 2017, EDUCATION GOES FROM 43.1 TO ONE MILLION. WHAT YOU'RE SEEING THERE IS THE 43.1 MILLION IN EDUCATION WAS ACTUALLY A FIVE-YEAR AWARD. SO WE'RE FUNDED IN EDUCATION FOR THE NEXT FIVE YEARS. THAT'S ALREADY ALLOCATED. THE \$1 MILLION INCREMENTAL AWARD IS ACTUALLY JUST FOR CONFERENCE GRANTS. IN 2018 THROUGH 2020, WE'RE ESTIMATING A NEED OF ABOUT ANOTHER \$3 MILLION, AGAIN, FOR CONFERENCE AWARDS.

IN DISCOVERY WE DID 46.7 MILLION THIS

YEAR. THAT WAS ACTUAL. WE ARE REQUESTING 52 MILLION AND CONTINUING 52 MILLION IN 2018.

TRANSLATION, 54.7 WAS ACTUAL. WE'RE HAVING THAT COME DOWN TO 45 MILLION.

IN CLINICAL, 87.1, WHICH WE ARE TAKING UP, AND THIS LOOKS LIKE A VERY SIGNIFICANT JUMP, 87 TO 215. WHAT YOU'RE SEEING IN THERE IS WHAT WE EXPECT TO DO WITH THE ADDITION OF IF, AND IT'S A COMPLETELY CONTINGENT IF, THE ATP3 AWARD WERE TO BE APPROVED, WE WOULD ALLOCATE ALL 75 MILLION IN THAT YEAR. SO THAT'S THE UPTICK THERE.

FROM AN INFRASTRUCTURE STANDPOINT, WE SPENT 30 MILLION. THAT WAS ON THE ACCELERATING AND TRANSLATING CENTERS. WE HAVE 16 MILLION THAT WE WOULD LIKE TO SPEND IN 2017, AND THAT WOULD BE FOR THE ESTABLISHMENT OF TWO ADDITIONAL ALPHA CLINICS. THIS IS NOT THE CONCEPT PLAN COMING BEFORE YOU NOW. SO THIS IS JUST THE BUDGET ALLOCATION TO PUT THE MONEY ASIDE FOR IT. GOING FORWARD, OBVIOUSLY THAT WOULD COME TO THE BOARD AS A CONCEPT PLAN, AND THE BOARD WOULD APPROVE THAT BEFORE WE WOULD RUN THAT COMPETITION. BUT THAT'S WHAT WE ARE LOOKING TO DO IN 2017.

SO ALL IN ALL, LOOKING TO EARMARK FOR 2017 329 MILLION, AGAIN, WITH THE CAVEAT THAT IF THE

ALPHA CLINICS -- NOT THE ALPHA CLINICS. I'M SORRY -- IF ATP3 WERE NOT AWARDED, 75 MILLION WOULD COME OUT OF THAT NUMBER AND CARRY FORWARD INTO CLINICAL TRIALS FOR LATER USE.

WE, THE TEAM INTERNALLY AND PARTICULARLY GABE THOMPSON, HAVE SPENT A LOT OF TIME GOING OVER AND FIGURING OUT WHAT ALLOCATIONS ARE NEEDED AND WHAT RESTRAINT IS NEEDED IN SOME AREAS AND DISCIPLINE IS NEEDED IN SOME AREAS IN ORDER FOR US TO ACHIEVE ALL OF OUR BIG SIX GOALS WHICH WE LAID OUT IN OUR STRATEGIC PLAN AND APPROVED LAST YEAR. AND SO WE BELIEVE THAT THE RECOMMENDATIONS WE'RE MAKING ARE CONSISTENT WITH ACHIEVING THESE GOALS IN 2020 OR SOONER.

THERE ARE RISKS TO THIS BUDGET. OBVIOUSLY THE NUMBER OF MERITORIOUS APPLICATIONS IS FIRST AND FOREMOST. THERE IS A RISK THAT, IF RETURN AMOUNTS ARE LOWER THAN WHAT WE HAVE HISTORICALLY SEEN AND WHAT WE PROJECT, THAT THE AMOUNT OF MONEY THAT COMES BACK IN TO GET THEN REDEPLOYED WOULD BE LOWER AND, THEREFORE, THE NUMBER OF NEW AWARDS WE MAKE WOULD LOWER RISK. THAT'S A RISK THAT'S SORT OF A GOOD NEWS/BAD NEWS. ON ONE HAND WE'RE UNABLE TO MAKE AS MANY AWARDS. ON THE OTHER HAND, THE REASON WE'RE NOT IS BECAUSE THE AWARDS WE HAVE ARE WORKING

REALLY, REALLY WELL AND WE'RE NOT HAVING TO HAVE THOSE PROGRAMS TERMINATE. BUT IT IS SOMETHING TO BE AWARE ABOUT.

AS I SAID, THIS YEAR THE RETURN RATE WAS 30 MILLION VERSUS LAST YEAR IT WAS 46 MILLION, SO IT DID COME DOWN A LITTLE BIT. BUT, AGAIN, THE AWARD BALANCE CAME DOWN THIS LAST YEAR AND IT'S BACK UP NOW.

THERE IS ALWAYS THE RISK OF THE FACT THAT WE HAVE A FINITE LIFETIME THAT WE'RE GOING TO BE ABLE TO RETAIN AND ATTRACT TOP QUALITY TALENT. WE HAVE ABSOLUTE TOP QUALITY TALENT NOW. THEY'RE NOT ALLOWED TO GO ANYWHERE. WE PASSED THAT LAW LAST WEEK, I THINK. BUT IN ALL SERIOUSNESS, IT BECOMES AN ISSUE. THERE MAY NOT BE SUFFICIENT INVESTMENT. WE'RE SEEING WITH ATP3, NOT ACTUALLY A LACK OF INTEREST, BUT A LACK OF ABILITY TO COMPLY WITH OUR PRETTY STRICT STANDARDS.

AND THEN, LASTLY, WE MIGHT HAVE FAILURE RATES THAT ARE HIGHER THAN WHAT WE HAD PROJECTED.

THIS NEXT SLIDE IS ONE WHERE I'LL PUT UP AND GET OUT OF THE WAY BECAUSE I THINK THIS IS AN IMPORTANT SERIES OF QUESTIONS FOR THE BOARD TO DELIBERATE. AND I'LL BE HAPPY TO ANSWER OR CHIME IN WHAT I THINK, BUT IT'S REALLY IMPORTANT THAT THE

BOARD DISCUSS THESE THINGS AND GIVE GUIDANCE BACK TO CIRM ON HOW THESE ARE GOING TO GO FORWARD, BUT SPECIFICALLY CONSIDERATIONS AROUND APPROVED BUDGET CAPS. SO WE'RE TALKING ABOUT A FIXED AMOUNT OF MONEY APPROVING IN EACH OF THESE LANES, WHICH WILL NOT BE ABLE TO BE EXCEEDED.

SO IN THE PAST WHEN THE APPLICATION REVIEW SUBCOMMITTEE HAD MORE PROGRAMS THAN THEY WANTED, THEY COULD JUST RAISE THE CAP. WELL, THAT WON'T BE THE CASE HERE. AT LEAST THE ANNUALIZED CAP AS IT'S BEING CONSIDERED WILL BE A HARD CEILING FOR THE YEAR, WHICH LEADS INTO THE NEXT, WHICH IS WHAT DOES THE BOARD DO, WHAT DOES THE APPLICATION REVIEW SUBCOMMITTEE DO WHEN THE NUMBER OF GWG RECOMMENDATIONS, MORE SPECIFICALLY THE AMOUNT OF GWG RECOMMENDATION, EXCEEDS BUDGET ALLOCATION?

ARE THE NUMBER, AS WE HAVE SUGGESTED, ARE THE NUMBER OF ROUNDS IN THE RECOMMENDATIONS THAT WE'RE GOING TO APPROVE, ARE THEY GUIDANCE OR ARE THEY HARD? SO IF THE BOARD APPROVES THREE ROUNDS OF \$45 MILLION, IS IT \$15-MILLION ROUNDS WITH THREE \$15-MILLION CAPS, OR IS IT \$45 MILLION UP TO THREE ROUNDS? IT'S SOMETHING JUST TO BE VERY CLEAR ABOUT WHAT WE WANT TO DO.

AND THEN, LASTLY, A STANDARDIZED PROCESS

THAT ALLOWS US TO FAIRLY ADJUDICATE THESE THINGS, BUT IN SOME SORT OF STANDARDIZED WAY, SO WE CAN MAKE APPROVAL DECISIONS. AND I ALSO STRONGLY WOULD ASK YOU TO CONSIDER THAT INCLUDES MAXIMIZING PARTICIPATION OF THE APPLICATION REVIEW SUBCOMMITTEE MEMBERS. AND WE AGAIN, AND I MADE THIS ARGUMENT EARLY LAST WEEK, THAT DOESN'T TEND TO BASICALLY MODIFY THE CONCEPT PLAN DURING YOUR REVIEW.

SO I'LL STOP HERE, DR. THOMAS, AND HAPPY TO GET INVOLVED IN THIS, BUT I THINK IT'S A BOARD DISCUSSION AT THIS POINT.

CHAIRMAN THOMAS: THANK YOU, DR. MILLS.  
MR. SHEEHY.

MR. SHEEHY: SO, DR. MILLS, ACTUALLY I DID HAVE A QUESTION ON YOUR PRIOR SLIDE BEFORE WE GO INTO THIS. THIS ONE. OKAY. SO I LOOK AT 2016, AND TRANSLATIONAL IS 55 AND DISCOVERY WAS 46. I LOOK AT 2017, WE FLIPPED THOSE NUMBERS FOR GOING FORWARD. WHAT WAS THE THINKING BEHIND DOING THAT?

DR. MILLS: WHERE'S PAT?

DR. OLSON: FIRST, SO AS YOU MAY RECALL, WHEN THE BOARD ORIGINALLY APPROVED THE STRATEGIC PLAN AND THE BUDGET FOR THE TRANSLATION PROGRAM, IT WAS ACTUALLY A \$40-MILLION BUDGET, AND THERE WERE GOING TO BE TWO ROUNDS. THE FIRST ROUND, WHETHER

BECAUSE THERE WAS A BACKUP OR WHATEVER, THE GRANTS WORKING GROUP RECOMMENDED A NUMBER OF APPLICATIONS AND THIS BOARD APPROVED A NUMBER OF APPLICATIONS TOTALING ABOUT 37 MILLION. AT THAT POINT I THINK THERE WAS SOME DESIRE TO PURSUE A SECOND ROUND LAST YEAR, AND WE CAME BACK AND ASKED THE BOARD FOR ADDITIONAL MONEY. AT THAT POINT THEY ALLOCATED AN ADDITIONAL \$15 MILLION. BUT THE ORIGINAL INTENT WAS TO HAVE THE \$40-MILLION BUDGET.

OKAY. NOW SPEAKING TO DISCOVERY, THE DISCOVERY PROGRAM WAS ACTUALLY BROKEN DOWN INTO SEVERAL DIFFERENT PROGRAMS. YOU MAY RECALL IT WAS AN INCEPTION PROGRAM WHICH WAS SMALL SEED FUNDING TO REALLY TEST NEW IDEAS. THE BOARD ORIGINALLY APPROVED, AS PART OF THE STRATEGIC PLAN, 6.5 MILLION FOR THAT PROGRAM. WE HAD THE ONE ROUND. IT WAS ONLY FOR .2, MILLION BUT IT WAS A VERY POPULAR PROGRAM IN THE SENSE THAT WE ACTUALLY HAD OVER A HUNDRED APPLICATIONS SUBMITTED FOR THAT PROGRAM. AND REMEMBER THESE ARE SMALL FUNDING AMOUNTS. IT'S ABOUT 200, 250,000 FULLY BURDENED. BUT BECAUSE WE WERE ONLY DOING ONE ROUND, WE HAD MONEY LEFT OVER.

THE QUEST PROGRAM, WHICH I CALL THE WORKHORSE OF DISCOVERY, THAT'S THE CANDIDATE DISCOVERY PROGRAM. THAT'S THE PREDICATOR PROGRAM TO

THE TRAN PROGRAM. OKAY. WE HAD ALLOCATED 35 MILLION FOR THOSE AWARDS, TWO CYCLES. AND THAT IS WHAT ACTUALLY WE'RE STICKING WITH. THIS BOARD HAD ALLOCATED THAT IN THE STRATEGIC PLAN, AND WHAT WE'RE STICKING WITH IS 35 MILLION.

WE ALSO PUT IN PLACE WHAT WE CALLED AN INCENTIVE AWARD PROGRAM, WHICH IS THAT SUCCESSFUL QUEST APPLICANTS WHO ACTUALLY AT THE END OF THEIR AWARD WERE ABLE TO MOVE IT TO THE NEXT STAGE, EITHER FUNDED BY CIRM OR NOT, WE WOULD ACTUALLY GIVE THEM AN INCENTIVE AWARD, WHICH MEANT THIS BOARD HAD TO AGREE TO HOLD BACK ROUGHLY 7.5 MILLION BASED ON THE NUMBER OF AWARDS. SO WE'VE GOT 6.5 MILLION WE ORIGINALLY HAD FOR INCEPTION. THE NUMBER IS ACTUALLY THE SAME. IT WAS 52 MILLION IN 2015, AND IT'S 52 MILLION HERE. AND THEN WE HAD THE CHALLENGE PROGRAM. WE HAD TWO ROUNDS OF TWO MILLION. IN POINT OF FACT, WE DID NOT FUND THE FIRST ROUND, AND THAT WAS ONLY WHEN WE HAD SPECIFIC QUESTIONS AND WE DIDN'T DO ANOTHER ONE.

SO THE BREAKDOWN WE'RE PROPOSING FOR THIS YEAR, WE'VE ACTUALLY INCREASED THE TRANSLATION AWARD PROGRAM FROM WHAT WAS ORIGINALLY ALLOCATED IN THE STRATEGIC PLAN FROM 40 TO 45 MILLION. WHAT WE'RE PROPOSING FOR THE DISCOVERY PROGRAM IS TWO ROUNDS OF

AN INCEPTION PROGRAM AT ROUGHLY 4 MILLION EACH, THE QUEST AWARD PROGRAM AT THE SAME LEVEL YOU FUNDED IT AT FOR 2016, AND THE CHALLENGE AWARD PROGRAM AT 2 MILLION. SO POTENTIALLY ONE ROUND. AND, AGAIN, THAT IS CONTINGENT ON US COMING UP WITH A HIGHLY SPECIFIC QUESTION THAT WE REALLY WANT THE SCIENTIFIC COMMUNITY TO ANSWER.

DOES THAT ANSWER YOUR QUESTION?

MR. SHEEHY: KINDA SORT OF. WELL, FIRST OF ALL, WE SPENT MORE LAST YEAR IN TRANSLATION AND WE ACTUALLY HAD MORE MERITORIOUS PROGRAMS THAT WE COULD FUND. SO AT LEAST FROM A DEMAND SIDE, CUTTING THAT SEEMS LIKE WE'RE NOT GOING TO BE ABLE TO MEET THE DEMAND. WE MAY NOT BE ABLE TO MEET THE DEMAND IN SOME OF THESE PROGRAMS ALTOGETHER.

THE SECOND THING IS I'M TRYING TO UNDERSTAND HOW THAT TIES BACK INTO OTHER METRICS. IF I'M LOOKING AT TRYING TO ACHIEVE -- WHAT DO YOU CALL IT WHEN YOU MOVE FROM POINT A TO POINT B?

DR. MILLS: PROGRESSION EVENTS.

MR. SHEEHY: PROGRESSION EVENTS. IT SEEMS LIKE TRANSLATION IS A SWEET SPOT. AND ALSO, IF YOU'RE TRYING TO MOVE INTO CLINICAL TRIALS, THERE TRANSLATION WILL FEED CLINICAL TRIAL WORK. AND SO I'M NOT SURE I SEE WHY -- I GET THE TIE BACK TO THE

STRATEGIC PLAN, BUT I DON'T GET WHY WE'RE NOT TRYING TO MORE ALIGN TRANSLATION WITH DEMAND BECAUSE WE'RE GETTING MERITORIOUS PROGRAMS WHEN A LOT OF THAT REPRESENTS PROGRESSION EVENTS, WHICH IS ONE OF YOUR BIG SIX, AND IT WILL IMPACT CLINICAL TRIALS, WHICH IS ANOTHER ONE OF THE BIG SIX. AND SO I'M NOT COMPLETELY SURE THAT I SEE ALL OF THAT BEING COMPLETELY ALIGNED.

AND THEN, ALSO, IF I LOOK IN DISCOVERY, A LOT OF THE PROGRESSION WE'RE GETTING NOW, I THINK THROUGH TRANSLATION, IS PROBABLY CIRM 1.0 WHEN THOSE AWARDS WERE BIGGER IN DISCOVERY PHASE. SINCE OUR TRUE DISCOVERY GRANTS, THE FIRST ONES, INCEPTION ARE REALLY RELATIVELY SMALL. I WONDER IF WE'LL CONTINUE TO -- HOW MUCH -- I'M TOTALLY FOR SPENDING ABOUT WHAT WE SPENT LAST YEAR. I GUESS FOR ME I WOULD PROBABLY WANT TO BE FEEDING MORE OF THE TRANSLATION DEMAND THAT WE KNOW EXISTS BECAUSE IT SEEMS TO ME THAT MIGHT FIT BETTER IN TERMS OF THE BIG SIX. THAT'S JUST --

DR. MILLS: I THINK THE TWO THINGS THAT WE'RE SEEING HERE IS NOT FUNDING ANY OF THE 4 MILLION WE HAD IN DISCOVERY LAST YEAR FOR THE CHALLENGE AWARD AND THE \$7 MILLION HOLD-BACK THAT WE HAVE FOR INCENTIVE AWARDS, WHICH HAPPENS WHEN A

DISCOVERY PROGRAM PROGRESSES TO A TRANSLATIONAL PROGRAM. WE'RE RIGHT NOW EARMARKING THAT AT A HUNDRED PERCENT. SO WE ARE RIGHT NOW ASSUMING THAT 100 PERCENT OF OUR AWARDS WILL PROGRESS FROM A DISCOVERY STAGE AWARD TO A TRANSLATIONAL STAGE AWARD. AND WE'RE ONLY DOING THAT BECAUSE IT'S THE MOST CONSERVATIVE WAY TO DO IT AND WE HAVE NO DATA ON IT. AT SOME POINT WE WILL START ACTUALLY GETTING FALLOUT DATA, AND WE'LL BE ABLE TO RECOVER SOME OF THAT MONEY.

SO I THINK THE DISCOVERY NUMBER, JUST AS YOU SEE IT HERE, IS \$7 MILLION BIGGER THAN IT REALLY IS STRICTLY BECAUSE OF THAT CONSERVATIVE HOLD-BACK ON THAT PROGRAM. SO THERE'S THAT. BUT WITH THAT SAID, WE MODELED TRANSLATION OFF OF WHAT WE REAUTHORIZED FOR THIS LATEST ROUND, WHICH WAS \$15 MILLION. AND IN THE MIDDLE OF THE YEAR, WE MADE THE DECISION, AND I THINK IT WAS A GREAT ONE, TO GO FROM TWO ROUNDS OF TRANSLATION TO THREE ROUNDS OF TRANSLATION A YEAR. AND THAT WAY, WHEN SOMETHING WASN'T QUITE PERFECT, IT WOULD HAVE ABOUT A TWO-WEEK BREAK AND IT COULD GO BACK IN AN ALMOST ANALOGOUS FASHION TO THE WAY CLINICAL WORKS, AND WE'VE SEEN THE RESULTS OF THAT. SO THAT'S WHERE THE THREE ROUNDS OF FIFTEEN COME FROM THERE; BUT IF IT WERE

THE WILL OF THE BOARD TO SAY TAKE 5 MILLION OUT OF DISCOVERY AND PUT INTO TRANSLATION, WE WOULDN'T OBJECT TO THAT.

MR. SHEEHY: WELL, I'D PROBABLY SUGGEST THAT. I DON'T KNOW HOW OTHER PEOPLE FEEL. BUT THE OTHER THING I THINK I PROBABLY WOULD BE -- I WOULD SUGGEST THAT PERSONALLY. BUT, ALSO, IF YOU DIDN'T USE THAT 7.5 AND WE ENDED UP SOMETIME AROUND HERE NEXT YEAR, THAT SHOULD BE AVAILABLE, I THINK, PROBABLY FOR TRANSLATION GRANTS. THAT WOULD BE THE OTHER THING, IF YOU DON'T USE IT.

DR. MILLS: THAT 7.5 THAT DOESN'T GET USED WOULD BE RECOGNIZED IN A LATER YEAR AND BE PART OF THAT RETURN. SO THAT'S PART OF THAT MONEY THAT COMES BACK IN. SO WE'RE ALREADY KIND OF COUNTING ON A LOT OF THAT MONEY COMING BACK IN.

DR. FRIEDMAN: MAY I ASK JEFF'S QUESTION IN A SLIGHTLY DIFFERENT WAY? ARE THE ALLOCATION PROPOSALS THAT ARE BEING MADE HERE BASED UPON WHAT YOU EXPECT OR WHAT YOU THINK WOULD BE AN IDEAL BALANCE, NOT ONLY FOR 17, BUT FOR FUTURE YEARS? THAT WOULD HELP ME UNDERSTAND A LITTLE BIT BECAUSE I DON'T TAKE ISSUE WITH JEFF'S POINT. I THINK WE'LL FIND MERITORIOUS STUFF IN ALL OF THESE LANES. AND I'M TRYING TO UNDERSTAND WHAT THE RATIONALE WAS FOR

COMING UP WITH THESE NUMBERS.

DR. MILLS: SO IT'S APPROXIMATING THE AMOUNT OF DEMAND THERE IS OUT FOR THESE AWARDS VERSUS OUR ABILITY TO SATISFY THAT DEMAND.

DR. FRIEDMAN: SO IT'S SORT OF HISTORIC AND SORT OF YOUR SENSE OF WHAT THE LANDSCAPE IS RIGHT AT THIS MOMENT?

DR. MILLS: KEEPING IN MIND THAT WE ARE IN A ZERO-SUM GAME, PARTICULARLY NOT WITHIN THESE BUCKETS, BUT ALSO BETWEEN THESE BUCKETS. SO IF WE COULD, FOR EXAMPLE, OPEN UP EARLIER STAGE RESEARCH, WE COULD DRAIN ALL \$700 MILLION PROBABLY NEXT YEAR THROUGH THAT. SO THAT'S WHERE WE HAVE TO SAY WE WANT A SOLID AMOUNT OF THAT, BUT WE CAN'T HAVE MORE THAN THAT AND WE HAVE THE BUDGET FOR IT BECAUSE IF WE DON'T, WE WON'T BE ABLE TO DO OUR CLINICAL PROGRAM.

DR. FRIEDMAN: SO THAT BRINGS ME SORT OF TO THE NEXT POINT, WHICH IS THAT RATHER THAN MAKING SUGGESTIONS ABOUT HOW TO SHORE UP OR DETRACT FROM CERTAIN AREAS HERE WHEN WE REALLY DON'T KNOW EXACTLY WHAT THE QUALITY OF THE PROPOSALS WILL BE, AND THAT WILL BE REVEALED OVER TIME, I AM VERY SUPPORTIVE OF THE IDEA OF HAVING A GLOBAL BUDGET CAP, A TOTAL AMOUNT OF DOLLARS, BECAUSE AS YOU LOOK OUT FOR THE

NEXT THREE YEARS, YOU WANT TO DO THIS IN AN ORDERLY WAY, BUT I SEE LITTLE VALUE IN HAVING HARD CAPS ON SPECIFIC AREAS. I THINK RECOMMENDATIONS, GUIDELINES, BOARD-APPROVED GOALS, STAFF-APPROVED GOALS, THAT'S ALL FINE. BUT I THINK THE REALITY IS YOU WILL SEE WHAT COMES IN, AND THEN THE BOARD WILL BE FACED WITH VERY DIFFICULT CHOICES OF LOTS OF GOOD COMPETING THINGS. AND DO YOU TAKE IT FROM DISCOVERY OR TRANSLATION, BUT THIS BOARD IS USED TO DEALING WITH THINGS LIKE THAT. AND SO I FAVOR A HARD GLOBAL CAP AND SORT OF SOFT GUIDELINES FOR THE INDIVIDUAL AREAS.

DR. MILLS: SO THE REASON WE DON'T IS, AGAIN, BECAUSE THE DEMAND FROM THESE AREAS IS NOT UNEQUAL. SO IF IT'S A GLOBAL CAP, WE WILL, AGAIN, ON THE DISCOVERY SIDE OF THIS, WE'LL HAVE ALMOST INFINITE DEMAND. AND WE COULD FIND OURSELVES AT THE END OF EACH YEAR HAVING NO CLINICAL TRIALS OR VERY FEW CLINICAL TRIALS BECAUSE THE BUDGET WAS SUCKED UP BY AN AREA FOR WHICH THERE WAS A LOT MORE DEMAND.

DR. FRIEDMAN: NO. NO. LET ME BE CLEAR. I THINK YOU HAVE A HARD GLOBAL CAP AND THEN YOU HAVE RECOMMENDATIONS FOR EACH OF THESE AREAS SO THAT YOU CRAFT PEOPLE'S EXPECTATIONS WITHIN EACH OF THE CHANNELS. SO YOU'RE NOT GOING TO USE EVERYTHING UP

IN ONE AREA AND NOT OTHERS. BUT SAYING CLINICAL HAS TO BE 215 MILLION STRIKES ME AS A LITTLE ARBITRARY RIGHT NOW WHERE YOU SAY WE'RE GOING TO TRY AND GET IT IN AT 215 MILLION, BUT, OF COURSE, THINGS CHANGE.

DR. JUELSGAARD: LET ME FOLLOW UP ON WHAT DR. FRIEDMAN WAS JUST TALKING ABOUT, BUT FROM A LITTLE DIFFERENT PERSPECTIVE.

SO WE'RE REACHING THE END OF LIFE FOR CIRM FUNDING. AND YOU CAN MAKE ALL THE DIFFERENT ASSUMPTIONS YOU WANT TO ABOUT WHETHER IN 2018 THERE WILL BE ANOTHER BOND MEASURE THAT PASSES OR NOT. RIGHT NOW WE DON'T HAVE ONE. YOU CAN MAKE ASSUMPTIONS ABOUT WHETHER OR NOT THERE WILL BE AN ATP3 CANDIDATE, BUT RIGHT NOW WE DON'T HAVE ONE.

SO THE ASSUMPTION THAT WE HAVE RIGHT NOW IS THAT THERE WILL BE A TIME WHEN THERE ISN'T ANY MORE MONEY. SO WE HAVE ALL OF THESE CATEGORIES. FOR ME THE REALLY BIGGER QUESTION IS TO WHAT DO WE PUT THE MONEY. SO EVERY ONE OF THESE CATEGORIES AT THE END OF THE DAY IS NOT GOING TO GET ANY MORE MONEY AT SOME TIME. SO IT'S EITHER GOING TO HAPPEN WHEN WE RUN OUT OF MONEY GLOBALLY OR IT CAN HAPPEN BEFORE THEN. WE JUST HAVE TO MAKE THOSE DECISIONS ON HOW WE'RE GOING TO RUN THIS ORGANIZATION ON THE MONEY.

SO, FOR EXAMPLE, AND I KNOW THAT THIS WOULD BE A PRETTY CONTROVERSIAL SUBJECT, BUT NONETHELESS ONE, I THINK, THAT I'LL PUT ON THE TABLE. THE QUESTION IS RATHER THAN CONTINUING TO POUR THE AMOUNT OF MONEY THAT WE HAVE INTO THE EARLIER PROJECTS, DISCOVERY AND TRANSLATIONAL, AN ALTERNATIVE MIGHT BE TO WINNOW THOSE BACK CONSIDERABLY AND, INSTEAD, FOCUS MORE ON FUNDING CLINICAL DEVELOPMENT, AND THEREBY PROLONGING THE PATHWAY THAT WE'LL HAVE IN TERMS OF SUPPORTING CLINICAL OUTCOMES.

NOW, I'M NOT RECOMMENDING THAT NECESSARILY, BUT I THINK IT'S CERTAINLY SOMETHING WORTH CONSIDERING. I THINK IF WE HAD CONTINUING REVENUES AS WE WOULD IN A COMPANY SITUATION WHERE YOU'RE CONTINUALLY FUNDING WHAT YOU'RE DOING OR YOU GO TO THE MARKETPLACE TO GET MORE MONEY, WE DON'T HAVE THOSE. SO WE'RE FACED WITH A VERY DIFFERENT CIRCUMSTANCE, AND IT'S REALLY HOW TO BEST SPEND OUR MONEY AS WE'RE GETTING TOWARDS THE END OF THE ROAD.

I DON'T KNOW WHAT THOUGHT WENT INTO THAT IN TERMS OF PUTTING THIS TOGETHER. I SEE 362 OVER 18, 19, AND 20 AS BEING A POTENTIAL NUMBER. THAT'S NOT VERY MUCH MONEY LEFT THEN FOR THE NEXT THREE YEARS IF WE SPEND THIS AMOUNT OF MONEY IN 2017.

DR. MILLS: SO LET ME TRY TO COMMENT ON THAT BECAUSE I DO THINK IT'S IMPORTANT. I KEEP USING THIS ANALOGY OF THIS ENGINE. AND THE WAY THE ENGINE WORKS MOST EFFICIENTLY IS IF EVERY PART OF THE ENGINE IS BEING FED AND IS MOVING ALONG.

SO YOU HAVE WORK GOING ON AT THE VERY EARLIEST STAGES. THAT'S THE AIR COMING INTO THE ENGINE. AND THEN YOU HAVE THE TRANSLATIONAL WHERE IT'S GETTING SPED UP, AND THEN ULTIMATELY CLINICAL WHERE THE THRUST IS BEING GENERATED AND COMING OUT. I AGREE THAT WHEN YOU'RE SURE YOU'RE RUNNING OUT OF GAS AND YOU WON'T HAVE ANY MORE, THEN IT PROBABLY IS BEST TO START TURNING DOWN THE FRONT OF THE ENGINE AND THEN THE MIDDLE OF THE ENGINE AND, LASTLY, THE BACK PART OF THE ENGINE. BUT I WOULD SAY UNTIL THAT TIME THAT YOU'RE SURE IT'S GOING TO RUNNING OUT, DON'T STARVE THE ENGINE IN ANTICIPATION OF SOMETHING THAT MAY OR MAY NOT BE. IN FACT, WHAT WE'RE TRYING TO DO IS RUN THAT ENGINE WIDE OPEN, AND WE'RE TRYING TO DO THAT TO DEMONSTRATE TO THE WORLD AND TO THE PEOPLE OF CALIFORNIA HOW POWERFUL OF A TOOL THIS ACTUALLY COULD BE, THAT RUNNING AT MAXIMAL CAPACITY, THIS THING, WORKING IN CONCERT, ALL THE PIECES WORKING IN ALIGNMENT, CAN PRODUCE AN INCREDIBLE AMOUNT OF THRUST FOR THE STEM CELL INDUSTRY.

WE WILL HAVE THAT ANSWER IN 2018, AND AT 2018 IT'S EITHER KEEP IT GOING OR AT 2018 IT'S WIND IT DOWN OR IT'S SOMEWHERE IN BETWEEN OR IT'S HARD TO PREDICT. BUT AS I SIT HERE AND I THINK ABOUT 2017, I THINK I WANT THAT THING RUNNING WHITE HOT.

CHAIRMAN THOMAS: I THINK WE HAD DR. FEDEROFF AND THEN DR. DEAS.

DR. FEDEROFF: WELL, FIRST LET ME COMMEND YOU FOR A VERY THOUGHTFUL ARTICULATION OF THE NATURE OF THE PROBLEM. AND YOU DESCRIBE WHAT APPEARS TO BE AN APPROACH THAT HAS AT LEAST THREE DISCERNIBLE DIMENSIONS. ONE IS TIME AND THE OTHER IS THE FINITENESS OF THE RESOURCE. AND THE THIRD IS REALLY HOW TO GENERATE AND MAXIMIZE ROI.

IN THINKING ABOUT SOME OF THE QUESTIONS THAT HAVE BEEN PROFFERED JUST A MOMENT AGO, IT SEEMS TO ME THAT A COUPLE OF THINGS MIGHT BE CONSIDERED. FIRST IS THERE NEEDS TO BE AN EFFICIENT AND EFFECTIVE METHOD TO GIVE SOME DISCRETION TO OPTIMIZE IN REAL TIME OR NEARLY REAL TIME SO THAT YOU CAN HIT THE TIMING PARAMETER AS WELL AS BEING ABLE TO, HOWEVER IMPERFECT THE METRIC MIGHT BE, CALCULATE WHAT THE ANTICIPATED YIELD IN ROI IS.

THERE IS NO QUESTION THAT THE COST AND EXPENSE OF DOING PHASE I CLINICAL TRIALS IS

SUBSTANTIAL, BUT SAFETY AND TOLERABILITY IS ABSOLUTELY REQUIRED IN ORDER TO PROGRESS TO PHASE II CLINICAL INVESTIGATION. IF THAT ROI IS PERCEIVED TO BE VERY HIGH, THAT MAY EVEN HAVE NOW A FOURTH DIMENSION, HAVE A POLITICAL IMPACT ON THE SUSTAINABILITY OF THIS GREAT WORK THAT HAS BEEN UNDERTAKEN BY ALL OF YOU, THEN I WOULD COMMEND CONSIDERATION TO HOW TO DO THAT.

I ALSO THEN, FINALLY, WOULD SAY WITHOUT STAYING STRICTLY WITHIN THE LINES, AND MAYBE DR. FRIEDMAN'S IDEA IS ONE THAT I WOULD ENDORSE WITH SLIGHT MODIFICATION, IT'S GETTING TO THE ISSUE OF DISCRETION AND ADJUDICATION IN REAL TIME TO MAKE THE BEST DECISIONS SO THAT THE PROGRAM, TO THE BEST OF EVERYONE'S DETERMINATION, HAS AN OPPORTUNITY TO HAVE MAXIMUM IMPACT. SO I WOULD OFFER FOR CONSIDERATION THAT APPROACH RATHER THAN, AND I KNOW THIS IS FORMULAIC, BUT REALLY WELL THOUGHT OUT THAT WHICH YOU HAVE SHARED WITH US.

DR. MILLS: THE ONE THING I WOULD LIKE TO POINT OUT. I KNOW IT SEEMS LIKE WE PUT THESE INTO VERY SPECIFIC TIGHT LANES, BUT WE ACTUALLY DIDN'T. WE ACTUALLY GENERALIZED THEM. AND THE MEMBERS OF APPLICATION REVIEW SUBCOMMITTEE WILL PROBABLY BE ABLE TO SEE THAT, FOR EXAMPLE, IN DISCOVERY WE PUT

IN A GLOBAL NUMBER IN DISCOVERY, 52 MILLION. BUT DISCOVERY IS ACTUALLY MADE UP OF THREE SEPARATE PROGRAMS. SO IF THINGS ARE GOING ALONG IN DISCOVERY AND YOU LIKE THE PROGRAMS COMING OUT OF DISC1 OR DISC2, YOU CAN CANNIBALIZE THE MONEY IN DISC3 IN THE WAY, AT LEAST, WE'VE MADE IT UP. SO IT'S A WAY OF GIVING -- TRANSLATION HAS FOUR DIFFERENT PROGRAMS, CLINICAL HAS THREE DIFFERENT PROGRAMS. SO THERE IS LATITUDE UNDER THIS SYSTEM TO MOVE AROUND, BUT WHAT WE'RE SAYING WITHIN THE MAJOR STRATA THAT THEY STAY WITHIN THEIR LANES. JUST AS SORT OF CONTEXT FOR THAT.

DR. DEAS: WELL, I REALLY THINK THAT THE DISCUSSION HAS CERTAINLY MADE CLEAR YOUR STRATEGY, AND IT CERTAINLY SOUNDS LIKE A VERY GOOD ONE. I WOULD DEFINITELY SUPPORT THAT WE KEEP THE ENGINES GOING, AND WITH DISCOVERY ESPECIALLY BECAUSE THAT IS THE PIPELINE. CERTAINLY YOU WANT TO HAVE THE CLINICAL FLOWING. AND I WOULD AGREE WITH HOWARD, THAT AS LONG AS WE HAVE THESE PARAMETERS AND YOU HAVE FLEXIBILITY IN MOVING THINGS, THAT WOULD SUFFICE.

SO I THINK WE'RE KIND OF SAYING THE SAME THING NOW AFTER HAVING A ROBUST DISCUSSION, THAT THE NUMBERS THAT YOU'VE GIVEN US ARE BASICALLY

PARAMETERS, AND YOU ALSO HAVE THE DISCRETION TO MOVE THESE NUMBERS AROUND.

CHAIRMAN THOMAS: DR. MINOR.

DR. MINOR: I WOULD JUST SECOND THAT. AND I THINK ONE OF THE THINGS WE HEARD AT THE BEGINNING OF THE MEETING TODAY IS WHAT A REMARKABLE JOB THIS MANAGEMENT LEADERSHIP TEAM HAS DONE IN PLANNING AND THEN EXECUTING CIRM 2.0. AND I APPRECIATE ALSO THAT A LOT OF THOUGHT HAS GONE INTO THESE CATEGORIES AND THE ALLOCATIONS. AND I WOULD ENCOURAGE THAT WE SUPPORT THE MANAGEMENT TEAM AND THE ALLOCATIONS THAT THEY'RE RECOMMENDING.

CHAIRMAN THOMAS: MR. SHEEHY.

MR. SHEEHY: SO I MOVE WE ADOPT THE BUDGET AS PRESENTED BY THE PRESIDENT.

DR. DEAS: SECOND.

MR. TORRES: SECOND.

CHAIRMAN THOMAS: IT'S BEEN MOVED AND SECONDED. IS THERE FURTHER DISCUSSION BY MEMBERS OF THE BOARD?

DR. STEWARD: RANDY, I THINK IT WAS YOUR NEXT TO LAST SLIDE. YOU HAD SOME DISCUSSION ITEMS, AND I WONDERED IF YOU WANTED TO EXPAND ON ANY OF THOSE. YOU SAID AT THE TIME, I THINK, THAT YOU DID HAVE SOME RECOMMENDATIONS ON THOSE. I WONDER IF YOU

COULD UNPACK THAT A LITTLE BIT.

MR. SHEEHY: I WONDER IF IT'S BETTER TO ADOPT THE BUDGET AND THEN DISCUSS THIS. MIGHT BE CLEANER BECAUSE THESE ARE REALLY REVIEW ITEMS AS OPPOSED TO --

DR. STEWARD: THAT'S FINE.

MR. SHEEHY: THESE DON'T HAVE A MATERIAL IMPACT ON THE BUDGET SO WE WON'T HAVE TO COME BACK.

CHAIRMAN THOMAS: THANK YOU, MR. SHEEHY AND DR. STEWARD. COMMENTS BY MEMBERS OF THE BOARD ON THE MOTION TO APPROVE THE BUDGET? COMMENTS FROM MEMBERS OF THE PUBLIC?

DR. CHIU: ARLENE CHIU, CITY OF HOPE. JUST A QUICK QUESTION. IN LOOKING AT THE BUDGET, I DON'T SEE ATP3 IN ANY OF THE YEARS. IS THAT NOT GOING TO HAPPEN? IS THAT ACCOUNTED FOR? THANK YOU.

CHAIRMAN THOMAS: IT IS ACCOUNTED FOR, DR. MILLS?

DR. MILLS: CORRECT. ATP3 IS FULLY ALLOCATED IN THIS YEAR IN CLINICAL, WHICH IS WHY THE CLINICAL NUMBER LOOKS SO HUGE. SO THE REAL CLINICAL NUMBER IS THAT 215 MINUS 75. SO ALL 75 IS THERE.

DR. CHIU: I'M SORRY. I DON'T FOLLOW. COULD YOU EXPLAIN WHERE IS ATP3?

CHAIRMAN THOMAS: COULD YOU GO BACK TO

THAT SLIDE?

DR. MILLS: UP THERE WHERE IT SAYS CLINICAL, IT SAYS UP TO 215 MILLION FOR THE INVESTMENT TO BE MADE IN 2017. THAT IS 140 MILLION FOR NEWLY APPROVED CLINICAL TRIALS AND 75 MILLION TO FULLY FUND ATP FOR THE NEXT FIVE YEARS.

DR. CHIU: THANK YOU.

CHAIRMAN THOMAS: OTHER COMMENTS FROM MEMBERS OF THE PUBLIC? JAMES, IS THIS A ROLL CALL VOTE?

MR. HARRISON: VOICE VOTE EXCEPT FOR THOSE ON THE PHONE.

CHAIRMAN THOMAS: IT'S GOING TO BE A VOICE VOTE EXCEPT FOR THOSE ON THE PHONE. ALL IN THE ROOM IN FAVOR OF THIS MOTION TO APPROVE THE BUDGET PLEASE SAY AYE. OPPOSED? ANY ABSTENTIONS?

MR. JUELSGAARD: ABSTAIN.

CHAIRMAN THOMAS: MARIA, PLEASE CALL THE ROLL OF THOSE ON THE PHONE.

MS. BONNEVILLE: JACK DIXON. SHERRY LANSING. KATHY LAPORTE. JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: KRISTINA VUORI.

DR. VUORI: YES.

MS. BONNEVILLE: MOTION CARRIES.

CHAIRMAN THOMAS: THANK YOU. AND CONGRATULATIONS, DR. MILLS AND EVERYBODY ON THE TEAM.

SO WE DO HAVE DISCUSSION NOW ON THESE ITEMS THAT DR. MILLS HAS POSED AND ANY OTHERS THAT COME UP IN THE PROCESS. SO DR. MILLS. AND THEN, MARIA, WILL YOU PLEASE TELL US WHEN WE NEED TO GET LUNCH, ETC., BECAUSE WE HAVE A TIMETABLE HERE.

DR. MILLS: SO WE HAVE 15 MINUTES IF THAT'S SUFFICIENT.

CHAIRMAN THOMAS: WHY DON'T WE GET STARTED AND SEE HOW WE DO.

DR. MILLS: SO WITH THESE FUNDING CAPS, THE DIFFERENT KIND OF THINGS TO CONSIDER, AND I THINK WE ALL AGREE ON THIS, I THINK THERE WAS CONSENSUS ON THIS, IS THAT THE NUMBER OF ROUNDS AND THE NUMBER OF AWARDS THAT ARE MADE ARE GUIDANCE THAT ARE NOT -- THEY'RE NOT STRICT. WHAT IS THE HARD CAP IS THE DOLLAR VALUE. IF THAT HAPPENS IN TWO ROUNDS INSTEAD OF THREE, THAT'S FINE.

WE RECOMMEND AT CIRM THAT WHEN THERE IS A GWG RECOMMENDATION FOR FUNDING OF AWARDS WHICH EXCEEDS A CAP, HOWEVER THAT WORKS OUT, THAT WE EITHER REMEDY THAT BY JUST NOT FUNDING THE AWARDS, OR SORT OF WHAT WE DID LAST TIME WAS TAKE THE LOWEST

RANKING AWARD AND PARTIALLY FUND IT ONLY UNDER THE STIPULATION THAT THAT AWARD COULD MAKE UP THE DIFFERENCE IN MATCHING FUNDING. WHAT WE DON'T FAVOR, WHAT WE DON'T SUPPORT IS HAIRCUTTING ALL OF THE AWARDS TO MAKE THEM ALL FIT UNDER THE CAP AND NOT REQUIRING AN AWARD TO FULLY COMPLETE ITS WORK. SO, THEREFORE, NOT APPROVING A PARTIAL BUDGET FOR AN AWARD BECAUSE THAT'S NOT WHAT THE GWG WOULD HAVE LOOKED AT AND RECOMMENDED. I THINK THOSE ARE OUR SORT OF STRONGEST POINTS.

DR. STEWARD: SO DID YOU WANT BOARD DISCUSSION ON THAT, OR ARE WE THINKING THAT THESE ARE BASICALLY OPERATIONAL PRINCIPLES GOING FORWARD FOR THE GRANTS REVIEW SUBCOMMITTEE?

DR. MILLS: OUR THOUGHT OF PUTTING IT IN THIS SLIDE WAS BECAUSE COMING TO CONSENSUS ON HOW THE APPLICATION REVIEW SUBCOMMITTEE HANDLES THESE ISSUES WHEN THEY HAVE TO DEAL WITH THEM, AND HAVING THE DISCUSSION WHEN WE DON'T HAVE AN APPLICATION HANGING OVER OUR HEAD WHERE WHEN YOU MAKE A RECOMMENDATION, PEOPLE THINK YOU'RE MAKING A RECOMMENDATION BECAUSE OF AN AWARD OR NOT AN AWARD. SO WE HAVE NONE OF THAT OVER OUR HEAD NOW. BUT OBVIOUSLY OVER THE LAST FEW WEEKS, WE WENT THROUGH A SITUATION WHERE WE'VE RUN INTO THIS. AND I THOUGHT

THAT WAS A DIFFICULT TIME TO HAVE THIS DISCUSSION. NOW THAT WE DON'T HAVE ANYTHING HANGING OVER OUR HEAD, IT FEELS LIKE A TIME WE CAN HAVE A MORE HONEST DISCUSSION WITHOUT FEELING LIKE WE'RE PREJUDICING ANY PARTICULAR AWARD. THAT WAS THE PURPOSE.

DR. STEWARD: SO ALONG THOSE LINES, I'LL JUST SAY THAT I THINK WHAT YOU OUTLINED AS THE OPERATING PROTOCOL THAT ACTUALLY WAS USED ON THE LAST ROUND, I THOUGHT, WORKED PRETTY WELL. AND JUST TO SAY THAT OUT LOUD. THE APPLICATIONS THAT WERE ABOVE THE THRESHOLD FOR FUNDING WERE RECOMMENDED FOR FULL FUNDING, AND THE LAST APPLICATION THAT WAS ON THE LIST WAS OFFERED THE OPPORTUNITY FOR FUNDING PROVIDED THAT THEY COULD COME UP WITH THE DIFFERENCE TO MAKE THE PROJECT GO FORWARD IN THE APPROPRIATE WAY.

I THOUGHT THAT ACTUALLY WORKED OUT FAIRLY WELL, AND I GUESS I WOULD SAY I DON'T KNOW WHETHER YOU WANT A MOTION OR WHETHER YOU WANT TO JUST HAVE THE GENERAL OPINION OF THE BOARD.

DR. MILLS: FOR US THAT WAS PREFERABLE, BUT WHAT WE REALLY WANT IS CONSENSUS.

MR. SHEEHY: SO --

MS. LAPORTE: I THOUGHT WE WENT THROUGH A VERY THOUGHTFUL AND CHALLENGING CONVERSATION ABOUT

THIS ISSUE AND CAME UP WITH A REALLY GOOD SOLUTION. SO I WOULD JUST SUPPORT THE MANAGEMENT TEAM. I THOUGHT YOU MADE A REALLY COMPELLING ARGUMENT AT THE LAST CALL NOT TO MAKE A PRACTICE OF PARTIALLY FUNDING LOTS OF GRANTS THAT, THEREFORE, MAY FAIL BECAUSE THEY'RE NOT ALL GOING TO BE ABLE TO DEVELOP MATCHING FUNDS AND IT PENALIZES, FRANKLY, THE BEST GRANTS. AND THAT'S NOT, I THINK, WHAT WE WANT TO DO. SO I JUST APPLAUD YOUR BRINGING IT UP HERE. RIGHT NOW WE'RE STRUGGLING WITH THAT SPECIFIC SITUATION. BUT IT JUST HAPPENED AND IT'S IMPORTANT TO SUPPORT YOUR POSITION.

CHAIRMAN THOMAS: THANK YOU, KATHY.

MR. SHEEHY.

MR. SHEEHY: SO, FIRST OF ALL, I'M IN TOTAL AGREEMENT WITH THE, AND I THINK YOU WERE LOOKING AT THE FIRST TWO OR THREE. I WANTED TO COME TO THE ISSUE, THE LAST ONE, FROM MAXIMIZING PARTICIPATION. AND REALLY THIS GOES BACK TO THE DECISION TO HAVE GRANT APPROVALS TAKE PLACE WITHIN THE APPLICATION REVIEW SUBCOMMITTEE. THAT WAS TO BE -- WE TOOK PROGRAMMATIC REVIEW OUT OF THE GRANTS WORKING GROUP AND MOVED IT TO THE APPLICATION REVIEW SUBCOMMITTEE.

SO WHAT HAPPENED IN PROGRAMMATIC REVIEW IS

THAT APPLICATIONS WERE NEVER CONSIDERED EN MASSE EXCEPT FOR THE GLOBAL FINAL VOTES, AND THAT WAS THE PRINCIPLE OF PROGRAMMATIC REVIEW. AND I FELT LIKE THAT WE LOST SIGHT OF THAT. AND THE REASON WE DID THAT IS BECAUSE WE WANTED TO ALLOW THE GREATEST NUMBER OF PEOPLE WHO WERE THERE TO PARTICIPATE IN THE VOTES. OTHERWISE, WHEN YOU DO A BIG BUNCH OF GRANTS, THE CONFLICTS SUDDENLY LEAVE YOU WITH A GREATLY DIMINISHED NUMBER OF PEOPLE WHO ARE ABLE TO VOTE. SO I FELT LIKE WE LOST A KEY PRINCIPLE AS WE MOVED THAT TO THE APPLICATION REVIEW SUBCOMMITTEE.

SO TO ME IT WOULD BE VERY IMPORTANT TO HAVE THAT PRINCIPLE STILL CARRY OVER FROM PROGRAMMATIC REVIEW, THAT WE NOT TAKE BIG CHUNKS OF GRANTS IN A SINGLE MOTION. IF SOMEONE HAS A MOTION THEY WANT TO MAKE WHERE THAT APPLIES TO SEVERAL GRANTS, THEN THEY CAN DO THAT ON AN INDIVIDUAL BASIS AS WE CONSIDER EACH GRANT. AS A COMMITTEE IT'S GREAT THAT THE GREATEST NUMBER CAN PARTICIPATE IN VOTES. AND ALSO IT'S HARD -- SO THAT'S THE ONE THING IS THAT WE REALLY FOCUS ON TAKING GRANTS ONE AT A TIME.

AND THEN I THINK IT'S REALLY IMPORTANT, BECAUSE WE'RE GOING TO FACE THIS ISSUE AGAIN AND AGAIN, THAT WE REALLY THINK ABOUT WHAT CRITERIA THAT

WE AS INDIVIDUALS ARE GOING TO USE TO DECIDE WHETHER OR NOT WE WANT TO APPROVE A GRANT. WE'RE GOING TO HAVE MORE GRANTS THAT ARE MERITORIOUS THAN WE HAVE FUNDS TO FUND THEM. AND THAT REQUIRES SOME PRIORITIZATION AND SOME THOUGHTFULNESS ABOUT OUR PORTFOLIO.

I DO THINK IT WOULD BE GREAT IF WE DID HAVE INFORMATION ABOUT OUR PORTFOLIO RELEVANT TO THOSE GRANTS WHEN THEY COME TO THE BOARD SO THAT WE CAN SEE -- I THINK WE HAVE A SENSE OF UNMET MEDICAL NEED, IF THAT CAN BE PART OF THE DISCUSSION WHEN THEY COME, BUT I THINK WE'RE -- IT'S BEEN GREAT BECAUSE WE'VE BEEN KIND OF LIKE SANTA CLAUS, AND WE CAN ALWAYS REACH IN THE BAG AND PULL OUT ONE MORE PRESENT. WITH ALL DUE RESPECT, DR. FRIEDMAN, WE REALLY HAVEN'T EXERTED VERY MUCH DISCIPLINE OVER THE YEARS. WE'VE PULLED A LOT OF STUFF UP AND MOVED IT FORWARD, WHICH IS GREAT, AND SOME OF THOSE PROJECTS I THINK HAVE BEEN SUCCESSFUL ACTUALLY. SO IT WAS NOT A BAD THING AND WE DEFINITELY PRIMED THE FIELD. NOW WE'VE GOT TO LOOK AT A GREAT PROJECT AND SAY WE CANNOT FUND YOU BECAUSE WE SIMPLY DO NOT HAVE THE MONEY. AND WE HAVE TO BE ABLE TO DO THAT AS INDIVIDUALS AND THEN AS A GROUP COME TO CONCLUSIONS. AND I THINK THAT IT BEHOOVES US AS MEMBERS OF THE

APPLICATION REVIEW SUBCOMMITTEE TO BE REALLY  
THOUGHTFUL ABOUT THAT.

DR. PRIETO: I'D LIKE TO SECOND THAT. I  
THINK WE HAVE GOTTEN AWAY FROM A REAL CONSIDERATION  
OF OUR PORTFOLIO AND PRIORITIZING. AND I THINK THAT  
USED TO HAPPEN AT THE GWG, AND I DON'T THINK IT'S  
HAPPENED IN QUITE THE SAME MANNER SINCE WE MOVED IT  
TO THE APPLICATION REVIEW SUBCOMMITTEE.

ONE OF THE PIECES OF INFORMATION, I THINK,  
THAT WOULD BE HELPFUL FOR US, AND I DON'T KNOW IF WE  
HAVE THE CAPACITY TO GENERATE THIS, BUT WOULD BE TO  
BRING SOME UNDERSTANDING OF WHAT ALTERNATIVES EXIST  
FOR FUNDING A PARTICULAR APPLICATION IF WE'RE UNABLE  
TO BECAUSE IT'S CERTAINLY ONE OF THE THINGS THAT  
GOES INTO MY CALCULATION.

CHAIRMAN THOMAS: OKAY. THANK YOU. OTHER  
THOUGHTS FROM MEMBERS OF THE BOARD?

I'LL JUST SAY THAT IN THE COURSE OF THE  
DISCUSSION WE HAD OVER THE LAST COUPLE OF WEEKS, I  
WAS FULLY IN FAVOR OF THE RESOLUTION WE REACHED AT  
THE LAST MEETING. I THINK WE NEED TO MAKE SURE WE  
EXERCISE BUDGETARY DISCIPLINE GOING FORWARD SO THAT  
WE ARE GOING TO HIT POINTS WHERE WE CAN'T FUND  
EVERYTHING WE WANT, AND WE NEED TO UNDERSTAND THAT.  
AND I KNOW THE INCLINATION WOULD BE PERHAPS TO

INCREASE THE SIZE OF THE BUDGET TO ACCOMMODATE, BUT THAT'S A TRICKY THING TO DO BECAUSE WE'RE GOING TO COME INTO SITUATIONS WHERE, AT THE END OF A YEAR, WE COULD WELL HAVE PROJECTS THAT EXCEED THE BUDGETED AMOUNT BY A GREAT DEAL OF MONEY. IT WASN'T THE CASE IN THIS LAST DIALOGUE, BUT I THINK WE JUST HAVE TO, IN MY OPINION, ADHERE TO STRICT BUDGET DISCIPLINE. AND YOU'RE CORRECT. WE DO NEED TO PRIORITIZE HOW TO IMPLEMENT THAT DISCIPLINARY APPROACH AND STICK TO IT. AND IT WILL PERFORCE MEAN THAT WE'RE GOING TO HAVE SOME PROJECTS THAT WERE RECOMMENDED FOR FUNDING THAT WILL NOT GET FUNDED, BUT THAT'S JUST A BUDGETARY REALITY. WE HAVE TO LIVE WITH THAT.

DR. MILLS: IT'S NOT EASY EITHER. SO, FOR EXAMPLE, I HAVE TWO GREAT LAWYERS. I CAN ONLY AFFORD ONE OF THEM. THAT'S ME BEING FUNNY.

CHAIRMAN THOMAS: THE ONLY OTHER POINT I WANT TO MAKE ON MAXIMIZING PARTICIPATION IN GENERAL, WHICH GOES A LITTLE BEYOND WHAT MR. SHEEHY SAID, IS THE BOARD, AS YOU CAN SEE, WAS VERY WELL REPRESENTED TODAY. WE HAD ALL BUT I BELIEVE ONE MEMBER AVAILABLE, AND HE WAS TRAVELING AND UNAVAILABLE AND COULD NOT CALL IN. I CAN'T EXPRESS IN MORE STRONG TERMS THE VALUE OF HAVING MAXIMUM PARTICIPATION BY ALL MEMBERS OF THE BOARD AND OF THE APPLICATION

REVIEW SUBCOMMITTEE BECAUSE THAT ALLOWS FOR THE GREATEST DIALOGUE AND INPUT AND GETS US TO THE MOST INFORMED DECISION.

SO I WANT TO APPLAUD EVERYBODY TODAY. THIS IS A GREAT SHOWING. IT'S THE BEST ATTENDANCE WE'VE HAD THIS YEAR, AND IT MEANS A LOT IN TERMS OF OUR ACHIEVING OUR RESULTS. SO THANK YOU, EVERYBODY, ON THAT POINT.

ANY OTHER COMMENTS? OKAY. THANK YOU. AND THEN, MARIA, WILL YOU PLEASE DIRECT US TO WHAT WE'RE SUPPOSED TO BE DOING HERE?

MS. BONNEVILLE: YOU GUYS GET TO EAT LUNCH NOW, AND IT'S SERVED IN THIS ROOM RIGHT OVER THERE. PLEASE FEEL FREE TO SIT AT THE TABLES OR AT YOUR DESK. WE'RE GOING TO BREAK FOR ABOUT HALF-HOUR TO 40 MINUTES AND THEN WE'LL RECONVENE THE MEETING.

(A RECESS WAS TAKEN.)

CHAIRMAN THOMAS: COULD EVERYBODY PLEASE TAKE THEIR SEATS. OKAY. LET'S SEE. GIVE IT ANOTHER MINUTE OR TWO FOR PEOPLE TO TAKE THEIR SEATS.

OKAY. WE'RE GOING TO PICK UP NOW -- WE ARE COMING DOWN THE HOME STRETCH. WE ARE GOING TO FIRST TAKE THE ALWAYS EXCITING AND CONTROVERSIAL CONSENT ITEMS. DO I HEAR A MOTION THAT WE APPROVE

ITEMS 7 AND 8?

DR. STEWARD: SO MOVE.

CHAIRMAN THOMAS: MOVED BY DR. STEWARD.

MR. SHEEHY: SECOND.

CHAIRMAN THOMAS: IS THAT A SECOND, MR. SHEEHY, OR A QUESTION?

MR. SHEEHY: THAT'S A SECOND WITH A QUESTION.

CHAIRMAN THOMAS: THAT WORKS.

MR. SHEEHY: COULD WE POST THE BIOS OF THE NEW GRANTS WORKING GROUP MEMBERS? I DIDN'T SEE THEM.

CHAIRMAN THOMAS: THAT'S OMITTED. WE WITHDREW THAT ITEM.

ANY DISCUSSION ON THE CONSENT ITEMS? HEARING NONE, I ASSUME, MR. HARRISON, A VOICE VOTE WILL SUFFICE. ALL THOSE IN FAVOR PLEASE SAY AYE. OPPOSED? ABSTENSIONS? MARIA, PLEASE CALL THE ROLL FOR ANY ON THE PHONE.

MS. BONNEVILLE: KATHY LAPORTE.

MS. LAPORTE: AYE.

MS. BONNEVILLE: JOE PANETTA. KRISTINA VUORI.

DR. VUORI: YES.

MS. BONNEVILLE: JACK DIXON.

MOTION CARRIES.

CHAIRMAN THOMAS: OKAY. WE COME NOW TO ONE OF THE PERIODIC, VERY BITTERSWEET TASKS THAT COME BEFORE THE BOARD, WHICH IS TO SAY GOODBYE TO A BOARD MEMBER WHO IS LEAVING THE BOARD AFTER HAVING GIVEN YEOMAN'S SERVICE FOR MANY, MANY YEARS. AND IN THIS INSTANCE I REFER TO DR. FRIEDMAN HERE TO MY RIGHT.

IF YOU WERE TO LOOK AT IN YOUR MATERIALS TAB 13, YOU WILL SEE A RESOLUTION WHICH CHRONICLES THE EXTRAORDINARY CAREER OF DR. FRIEDMAN PRIOR TO ANY OF HIS WORK WITH CIRM. AND YOU WILL SEE, UPON READING THIS, THAT HE IS A TRULY EXTRAORDINARY PERSON. THE STATE OF CALIFORNIA WAS VERY LUCKY THAT HE WAS AVAILABLE TO SERVE ON THE CIRM BOARD AT ITS EARLIEST STAGE THROUGH TO TODAY AND HAS SEEN A LOT OF MOST INTERESTING STUFF ALONG WITH A NUMBER OF OTHER MEMBERS OF THE BOARD WHO HAVE BEEN SERVING WITH HIM SINCE THEN.

HE WAS, I KNOW WHEN I FIRST STARTED IN 2011, SOMEBODY I TALKED TO REGULARLY, RELIED ON HIS TREMENDOUS JUDGMENT AND EXPERTISE TO HELP ME, WHEN I WAS STARTING OUT, ADDRESS THE MANY ISSUES THAT CONFRONT CIRM ON A DAILY, WEEKLY, MONTHLY, AND ANNUAL BASIS. IT IS VERY SAD FOR US TO LOSE HIM,

ONLY OFF THE BOARD, MIND YOU. DON'T WANT TO BE OVERLY DRAMATIC.

DR. FRIEDMAN: I'M WAITING FOR YOU TO BREAK OUT THE JAMESON'S. I FEEL LIKE WE'VE GOT A WAKE.

CHAIRMAN THOMAS: SO BEFORE PRESENTING HIM WITH THE RESOLUTION, WHICH IS THAT YOU SEE IN TAB 13, I WAS WONDERING IF A COUPLE OF THE LONGER STANDING BOARD MEMBERS WHO HAVE BEEN WITH DR. FRIEDMAN WOULD LIKE TO SAY A FEW WORDS.

DR. PRIETO: YES. I THINK IT MIGHT BE DIFFICULT FOR SOME OF THE NEWER BOARD MEMBERS TO APPRECIATE, BUT IN THE EARLY DAYS OF PUTTING TOGETHER THIS NEW AND UNPRECEDENTED STATE AGENCY, THINGS NOT INFREQUENTLY GOT CONTENTIOUS. I BELIEVE AT ONE CLOSED SESSION THE WORDS EITHER HE GOES OR I GO WERE UTTERED. AND IN THE FACE --

CHAIRMAN THOMAS: WHO WERE THE HE AND THE I?

DR. PRIETO: BEST LEFT UNSAID. HAVING SOMEONE LIKE MICHAEL WHO IS ABLE TO MAINTAIN HIS COMPOSURE AND HIS GOOD HUMOR AND TO BE THE VOICE OF REASON WAS SUCH AN INCREDIBLY VALUABLE ESSENTIAL, QUALITY FOR US. AND I JUST WANT TO SAY THAT IT HAS BEEN A RARE HONOR AND PLEASURE SERVING WITH YOU, AND

WE'LL MISS YOU HERE GREATLY.

DR. FRIEDMAN: THANK YOU.

DR. PRIETO: THANK YOU.

CHAIRMAN THOMAS: THANK YOU.

(APPLAUSE.)

MR. SHEEHY: WELL, DR. FRIEDMAN, WHEN WE FIRST STARTED OUT, WE WERE PULLING PEOPLE FROM DIFFERENT PLACES. AND YOU HAD PATIENT ADVOCATES, YOU HAD PEOPLE FROM INDUSTRY, AND THEN YOU HAD ACADEMIC RESEARCH LEADERS, LIKE DR. FRIEDMAN. AND IT WAS A REAL QUESTION AS TO WHETHER THIS MELANGE WOULD REALLY MIX AND GEL. AND I THINK OF DR. FRIEDMAN, AND WE HAD PHIL PIZZO AND CLAIRE POMEROY AND JERRY LEVY FROM UCLA. AND PEOPLE COULD HAVE TAKEN -- I'LL HAVE TO SAY THERE WERE ONE OR TWO WHO TOOK THE ATTITUDE WHAT AM I DOING SITTING WITH THESE PEOPLE, THEY DON'T KNOW ANYTHING WHEN THEY LOOKED AT THE PATIENT ADVOCATES. WHY ARE THEY GETTING TO MAKE DECISIONS EQUAL TO ME? AND THEN OTHER FOLKS, AND I DO THINK OF DR. FRIEDMAN WHO REALLY EMBRACED IT AND REALLY SAW THE POTENTIAL TO GAIN GREATER STRENGTH WITH THE INTEGRATION OF ALL THESE DIFFERENT POINTS OF VIEW.

WITHOUT PEOPLE LIKE -- WITHOUT THAT CADRE REALLY, I DON'T KNOW THAT THIS INSTITUTION WOULD

HAVE WORKED BECAUSE THERE WERE TIMES WHEN IT WAS QUITE FRACTIOUS. AND WE HAD TO CREATE OURSELVES FROM NOTHING. RIGHT? WE DIDN'T HAVE A PAPERCLIP. WE WERE BEING SUED BY CERTAIN PARTIES IN ORDER TO STOP US. AND THE OTHER THING THAT WAS ALWAYS GREAT ABOUT DR. FRIEDMAN WAS HIS ABILITY TO TAKE -- WE HAVE ALL THESE DIFFERENT VIEWPOINTS AND ALL THIS NOISE GOING ON -- TO DISTILL ALL THESE DIFFERENT VIEWPOINTS INTO A DISCRETE SET OF CLEAR QUESTIONS THAT WOULD REALLY FOCUS US ON THE ISSUE AT HAND AND GET US TO A DECISION POINT.

AND THEN, FINALLY, WHAT'S BEEN REALLY, MUCH LIKE SENATOR TORRES' POLITICAL ACUMEN, HIS EXPERIENCE WITH THE FDA HAS BEEN A LODESTONE FOR US. AND WE ARE VERY FORTUNATE TO HAVE HAD THAT EXPERIENCE ON THIS BOARD OVER THE LAST DECADE. IT'S BEEN AN ABSOLUTE JOY TO SERVE WITH DR. FRIEDMAN. I JUST LOVED IT. IT'S BEEN A JOY TO KNOW YOU. AND THANK YOU. THANK YOU VERY MUCH.

DR. FRIEDMAN: THANK YOU.

(APPLAUSE.)

DR. STEWARD: SO AS ONE OF THE OTHER, I GUESS, OLD-TIMERS ON THE BOARD.

CHAIRMAN THOMAS: ON TENURE ONLY.

DR. STEWARD: I CAN'T REALLY ADD VERY MUCH

SPECIFICALLY TO WHAT FRANCISCO AND JEFF HAVE ALREADY SAID, BUT I JUST WANT TO EMPHASIZE THAT MIKE WAS ALWAYS THE ONE THAT YOU LOOKED TO WHEN YOU NEEDED A THOUGHTFUL COMMENT. IT WAS THOUGHTFUL WITH JUST THAT LITTLE TOUCH OF HUMOR THAT BROUGHT US ALL TOGETHER AND SEEMED TO CALM SOMETIMES, AS FRANCISCO SAID, SOME SOMETIMES DIFFICULT CONVERSATIONS. SO JUST TO SAY IT'S BEEN A GREAT PLEASURE WORKING WITH YOU OVER THE YEARS, AND WE TRULY WILL MISS YOU. YOUR WISDOM, YOUR THOUGHTFULNESS, AND YOUR OVERALL JUST MANNER OF BEING IS JUST FANTASTIC. THANK YOU FOR BEING HERE.

(APPLAUSE.)

CHAIRMAN THOMAS: OKAY. SO BEFORE WE HEAR FROM YOU, MICHAEL, LET ME PRESENT TO YOU A FRAMED RESOLUTION WHICH, AGAIN, YOU CAN SEE IN TAB 13, WHICH CHRONICLES THE LIFE AND TIMES OF DR. FRIEDMAN AND ONE OF THE TRULY VALUABLE MEMBERS OF OUR BOARD. SO ONE MORE ROUND OF APPLAUSE PLEASE.

(APPLAUSE.)

DR. FRIEDMAN: I THINK THE THING THAT YOU ALL WILL MISS THE MOST IS NOBODY GETS QUITE AS EMBARRASSED AS ME QUITE AS QUICKLY OR IS AS UNCOMFORTABLE WITH THIS AS GENEROUS AND KIND AS YOU ARE. IT HAS OVER THE LAST 12 YEARS FREQUENTLY BEEN

A PLEASURE TO SERVE ON THIS ORGANIZATION. IT HAS ALWAYS BEEN A PRIVILEGE TO DO SO. AND THE TIME HAS PASSED VERY QUICKLY. I THINK WE ALL TEND TO LOOK AT THINGS AND ASK THE QUESTION WAS THE GAME WORTH A CANDLE? WAS IT AN INVESTMENT OF TIME AND ENERGY THAT I FEEL GOOD ABOUT? UNQUALIFIED THE ANSWER IS YES IN THIS CASE.

PERMIT ME JUST A SECOND TO SHARE A COUPLE OF THOUGHTS, IF I MAY. I'D LIKE TO THANK A NUMBER OF ENTITIES AND PEOPLE. FIRST AND FOREMOST, I WANT TO THANK AND RECOGNIZE THE CITIZENS OF THIS STATE THAT TOOK A CHANCE ON THIS PROPOSITION. AND I APPRECIATE THAT SO MUCH FOR TWO REASONS. ONE IS THAT AT A TIME IN OUR COUNTRY WHEN SCIENCE IS BEING QUESTIONED, THE CITIZENS OF CALIFORNIA SAID WE WILL VOTE WITH SCIENCE. THAT DOESN'T MEAN SCIENCE IS PERFECT. IT MEANS IT'S FLAWED, IT'S IMPERFECT, IT STRUGGLES TO REACH GOOD CONCLUSIONS, BUT THE CITIZENS OF THE STATE VOTED FOR SCIENCE. AND I APPLAUD THAT AND I THANK THEM.

THE SECOND IS AT A TIME IN OUR NATION WHEN THERE IS GREAT DISCOMFORT, IF NOT DISTRUST WITH THE ORGANS OF GOVERNMENT, THE CITIZENS OF CALIFORNIA SAID THIS IS AN INVESTMENT IN A STATE ORGANIZATION THAT THEY THINK IS WORTHWHILE.

NOW, I ABSOLUTELY SUBMIT TO YOU THAT GOVERNMENT IS IMPERFECT AND SOMETIMES INEFFICIENT AND SOMETIMES JUST BADLY FLAWED, BUT THIS WAS A GREAT VOTE OF CONFIDENCE FROM THE STATE INTO A MECHANISM TO ALLOW THE ACHIEVEMENT OF ASPIRATIONS THAT THE CITIZENS THOUGHT WAS IMPORTANT. AND SO FIRST OF ALL, AT A TIME WHEN MONEY IS VERY PRECIOUS AND THE STATE HAS MANY, MANY THINGS TO DO, I THANK THE CITIZENS FOR GIVING US ALL THIS OPPORTUNITY TO SERVE IN THIS CAPACITY.

I WANT TO THANK MY FELLOW BOARD MEMBERS WHO HAVE BEEN SO THOUGHTFUL, HARDWORKING, KIND, GENEROUS, WHO I HAVE WATCHED OVER THE LAST MORE THAN DECADE INVEST SO MUCH ENERGY AND SO MUCH OF THEIR CREATIVITY INTO TRYING TO ACHIEVE SOMETHING VERY GREAT, SOMETHING WELL WORTH OUR MUTUAL EFFORT AND SUPPORT.

OVER THE COURSE OF THE HISTORY OF THIS ORGANIZATION, SOMETIMES PEOPLE HAVE TAKEN THE OPPORTUNITY TO CRITICIZE BOARD MEMBERS AS BEING TOO PAROCHIAL OR TOO SELF-INTERESTED OR NOT SUFFICIENTLY INTERESTED IN THE OVERALL OUTCOME. I COULDN'T DISAGREE WITH THOSE CRITICISMS MORE STRONGLY. WHAT I FOUND ON THIS BOARD IS PEOPLE PASSIONATELY DEVOTED TO PATIENTS, THEIR FAMILIES, THEIR LOVED ONES WHO

HAVE TRIED REALLY HARD. YES, PEOPLE HAVE THEIR OWN FAVORITES. SOME PEOPLE ARE MORE INTERESTED IN ONE DISEASE THAN ANOTHER. THAT'S OKAY. SOME PEOPLE ARE MORE COMFORTABLE WITH ONE TECHNOLOGY THAN ANOTHER. THAT'S OKAY. IT BRINGS BALANCE AND MIXTURE TO THIS MOSAIC OF A BOARD. BUT I HAVE SEEN ONLY THE HIGHEST INTEGRITY, THE HIGHEST THOUGHTFULNESS, THE MOST GENEROSITY, THE LEAST SELFISHNESS THAT I CAN IMAGINE FOR AN ENTERPRISE LIKE THIS. AND I THANK MY FELLOW MEMBERS FOR ALLOWING ME TO SERVE WITH THEM.

I WANT TO THANK THE STAFF AND THE LEADERSHIP. I REALIZE HOW HARD THIS HAS BEEN AND HOW MUCH EFFORT HAS BEEN EXPENDED TRYING TO MAKE THIS A MORE EFFECTIVE AND EFFICIENT ACTIVITY. AND I THANK YOU ALL FOR THE GOOD EFFORTS THAT YOU HAVE PUT IN, YOU AND YOUR PREDECESSORS, PEOPLE AS FAR AS BACK AS ARLENE FROM MANY, MANY YEARS AGO WHO WORKED SO HARD TO MAKE THIS A GROWING CONCERN AND WHO CONTINUES TO DEDICATE EFFORT IN THAT REGARD.

I'M NOT GOING TO THANK THE PATIENTS OR THEIR FAMILIES. I'M JUST GOING TO HONOR THEM BECAUSE WHAT THEY DO IS THEY FUEL US, THEY HELP US TO WANT TO DO THIS BETTER. WE ALL FEEL THIS IMPATIENCE. TIME IS SO PRECIOUS. AND WE TRY AND BUY SOMETHING FOR THOSE PATIENTS TO MAKE THEIR LIVES

BETTER.

I'VE BEEN ASKED BEFORE WHETHER I THINK THE SUCCESS THAT WE'VE HAD HERE HAS MET MY EXPECTATIONS. IT HAS. I KNOW IT HASN'T MET EVERYONE'S EXPECTATIONS. WE'D ALL LIKE MORE CURES, WE'D ALL LIKE MORE DRAMATIC INTERVENTIONS. WE'RE DEALING WITH THE MOST COMPLICATED, SUBTLE, DIFFICULT ISSUES IMAGINABLE, BIOLOGIC ISSUES, PHILOSOPHIC ISSUES, LEGAL ISSUES. AND THE PROGRESS THAT WE'VE MADE HAS BEEN REALLY MEANINGFUL. I THINK IT IS A FUNCTION OF HAVING SO MUCH ENERGY AND SO MUCH POWER INVESTED IN SUCH HARD PROBLEMS. AND WHEN I GOT HERE MORE THAN A DECADE AGO, I BELIEVED THAT WE WERE ON THE CUSP OF DOING SOMETHING REALLY WONDERFUL. I STILL BELIEVE THAT. I CAN'T TELL WHICH DISEASE, I CAN'T TELL YOU WHICH POPULATION, BUT I HAVE NEVER BEEN SO SECURE IN MY BELIEF THAT IT WILL HAPPEN. IT JUST TAKES A CERTAIN AMOUNT OF TIME AND ENERGY.

AND TO QUOTE A NOBEL LAUREATE, "YOU CAN'T HURRY LOVE." OH, NO. THAT WAS THE SUPREMES. "THINGS COME IN A RIGHTNESS OF TIME," AND THIS WILL BE THE RIGHTNESS OF TIME AND WE SHOULDN'T BE IMPATIENT. WE SHOULD BE EXPECTANT. AND THAT'S FINE.

I REMEMBER MORE THAN A DECADE AGO TALKING

TO SOMEBODY ABOUT THIS; AND AS I'M SITTING HERE, I'M THINKING BACK ON IT AND REMEMBERING IT. AT THE TIME I SAID THAT THERE'S A WONDERFUL SPEECH SORT OF NEAR THE END OF JULIUS CAESAR WHERE THE UNFORTUNATE BRUTUS TALKS ABOUT JUST BEFORE A BIG BATTLE. HE SAYS, YOU KNOW, "THERE'S A TIDE IN THE AFFAIRS OF MEN THAT, TAKEN AT THE FLOOD, LEADS ON TO SUCCESS, FORTUNE. OMITTED, ALL THE VOYAGE OF THEIR LIFE IS SPENT IN SHALLOWS AND IN MISERY. ON SUCH A FULL SEA ARE WE NOW AFLOAT." THAT'S IT. ON SUCH A FULL SEA ARE NOW AFLOAT. AND IT'S BEEN A PLEASURE TO SAIL WITH YOU ON THAT JOURNEY. THANK YOU, GUYS.

(APPLAUSE.)

CHAIRMAN THOMAS: THANK YOU, DR. FRIEDMAN. THAT WAS WONDERFULLY WELL SAID.

I BELIEVE WE HAVE ONE MORE ITEM BEFORE WE GET TO GENERAL PUBLIC COMMENT, WHICH IS ITEM NO. 12, CONSIDERATION OF CHANGES TO THE CONCEPT PLANS FOR THE DISCOVERY AND TRANSLATION PROGRAMS. MR. HARRISON.

MR. HARRISON: THAT'S A REALLY DIFFICULT ACT TO FOLLOW. DR. FRIEDMAN, I'D LIKE TO PERSONALLY THANK YOU ON BEHALF OF THE CIRM TEAM FOR EVERYTHING YOU BROUGHT TO THIS BOARD OVER THE LAST 12 YEARS. LIKE YOUR FELLOW BOARD MEMBERS, WE TOO HAVE LOOKED

TO YOU AS THE PERSON WHO WILL OFFER A THOUGHTFUL COMMENT, BRING THE DEBATE BACK TO CENTER, AND GENERALLY HELP THE BOARD REACH A CONSENSUS. SO WE'RE VERY GRATEFUL TO HAVE HAD THE CHANCE TO WORK WITH YOU.

DR. MILLS SAID EARLIER TODAY THAT WE ARE CONSTANTLY LOOKING AT OUR POLICIES AND PROGRAMS TO IDENTIFY AREAS WHERE WE CAN IMPROVE THEM. WE HAVE HAD SOME EXPERIENCE NOW WITH THE DISC AND TRAN PROGRAMS, WHICH THIS BOARD APPROVED IN JULY OF 2015. AND WE COME TO YOU TODAY WITH A REQUEST FOR AN AMENDMENT TO THOSE TWO CONCEPT PLANS.

UNDER THE CURRENT POLICY, THE DISC AND TRAN CONCEPT PLANS AUTHORIZE NON-CALIFORNIA ORGANIZATIONS TO APPLY FOR FUNDING TO CONDUCT RESEARCH IN CALIFORNIA. AND A NON-CALIFORNIA ORGANIZATION IS DEFINED AS AN ORGANIZATION THAT EMPLOYS 50 PERCENT OR LESS OF ITS EMPLOYEES IN CALIFORNIA.

THIS POLICY WAS ACTUALLY ADOPTED FROM OUR CLIN PROGRAM WHICH WAS DESIGNED TO ATTRACT THE BEST CLINICAL PROGRAMS FROM AROUND THE COUNTRY TO CALIFORNIA LARGELY IN LIGHT OF THE FACT THAT, FRANKLY, AT THAT TIME THERE WERE NOT A LOT OF CLINICAL PROGRAMS NATIONALLY OR IN CALIFORNIA. SO

WE THOUGHT IT WAS ESSENTIAL TO BROADEN THE SCOPE OF THE CLIN PROGRAM TO ALLOW THE INVOLVEMENT OF OUT-OF-STATE ENTITIES WHO WOULD DO WORK IN CALIFORNIA.

WE WOULD LIKE TO RECONSIDER THAT POLICY AS IT APPLIES TO THE DISC AND TRAN PROGRAM. AS THIS BOARD EXPERIENCED AT ITS MOST RECENT MEETING, CONSIDERATION OF TRAN AWARDS, THE VOLUME AND QUALITY OF WORK BEING DONE IN CALIFORNIA ACTUALLY EXCEEDS THE AMOUNT OF FUNDS THAT WE HAVE AVAILABLE. AND WE EXPECT THE SAME WILL BE TRUE OF OUR DISC PROGRAMS. IN LIGHT OF THAT, WE HAVE CONCLUDED THAT WE DO NOT THINK IT'S NECESSARY TO EXPAND THE DISC AND TRAN PROGRAMS TO INCLUDE OUT-OF-STATE ORGANIZATIONS IN ORDER TO ACHIEVE OUR AIMS. WE HAVE PLENTY OF CAPABLE AND MERITORIOUS PROJECTS ARISING FROM INSTITUTIONS IN THE STATE TO MORE THAN FILL OUR NEEDS.

SO, THEREFORE, WE WOULD REQUEST THE BOARD'S APPROVAL TO AMEND THE CONCEPT PLANS TO RESTRICT ELIGIBILITY FOR OUR DISC AND TRAN FUNDING TO CALIFORNIA ORGANIZATIONS; THAT IS, ORGANIZATIONS THAT PAY AN EMPLOYEE MORE THAN 50 PERCENT OF THEIR EMPLOYEES IN CALIFORNIA. I'D BE HAPPY TO ANSWER ANY QUESTIONS.

CHAIRMAN THOMAS: DO I HEAR A MOTION TO THAT EFFECT?

MR. TORRES: MOVE.

CHAIRMAN THOMAS: MOVED BY SENATOR TORRES. SECONDED BY --

DR. PRIETO: SECOND.

CHAIRMAN THOMAS: DR. PRIETO. DISCUSSION BY MEMBERS OF THE BOARD? DISCUSSION BY MEMBERS OF THE PUBLIC?

DR. JUELSGAARD: SO JUST OUT OF SOME CURIOSITY, JAMES, AND YOU MAY NOT KNOW. WE MAY NEED TO TURN TO STAFF. BUT WHAT PARTICULAR PROJECTS THAT COME TO MIND HAVE WE APPROVED IN THE PAST THAT, HAD WE ADOPTED THIS POLICY EARLIER, WE WOULDN'T HAVE BEEN ABLE TO APPROVE?

MR. HARRISON: IN FACT, WE'VE ONLY APPROVED ONE OUT-OF-STATE PROJECT IN THE TRAN PROGRAM. FOUR HAVE BEEN SUBMITTED. ONLY ONE HAS BEEN APPROVED. WITH RESPECT TO THE DISC PROGRAM, ONLY ONE HAS BEEN SUBMITTED AND IT WAS NOT APPROVED. THE PROGRAM THAT WAS APPROVED, PAT CAN HELP ME HERE, IS A PROGRAM BY SEMMA THERAPEUTICS, WHICH IS BASED IN BOSTON.

CHAIRMAN THOMAS: DR. STEWARD AND THEN MS. WINOKUR.

DR. STEWARD: SO I WONDER IF YOU COULD COMMENT ON THE THEORETICAL POSSIBILITY THAT THERE WOULD BE A TECHNOLOGY OR OPERATION THAT WASN'T PRESENT IN THE STATE OF CALIFORNIA THAT WE WOULD SOMEHOW MISS BY HAVING THIS AS A HARD AND FAST RULE. I THINK THAT'S PROBABLY TO RANDY OR PAT, YES.

DR. MILLS: I THINK THAT THE KINDS OF APPLICATIONS THAT WE'RE LOOKING AT EITHER CAN BE FUNDED BY OTHER SOURCES OUTSIDE. AND I THINK THE BIGGEST PART, AS JAMES SAID, ABOUT WE HAVE -- WE'RE DRINKING FROM A FIREHOSE HERE WITH REGARDS TO THE KINDS OF TECHNOLOGIES INTERNALLY.

WHAT WE STRUGGLED WITH IS A NUMBER OF THINGS. ONE IS SORT OF A FAIRNESS ISSUE. WE ARE THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE. AND SO WHEN WE HAVE SO MUCH DEMAND INSIDE THE STATE THAT WE CAN'T MEET, IT DOES SEEM A LITTLE BIT STRANGE TO GO OUTSIDE.

THE SECOND IS JUST A PURE LOGISTICAL ONE. IT IS A VERY, VERY DIFFICULT TASK TO DIVIDE UP THESE EXPENSES AND EXPENDITURES AND COVER AND MANAGE THEM WHEN YOU'RE TALKING ABOUT THIS SPANNING MULTIPLE STATES OUTSIDE AND AUDITING IT.

AND THEN THE THIRD IS, WHILE WE COULD DO THIS, WHAT WE REALLY WANT ARE THESE TECHNOLOGIES TO

COME TO CALIFORNIA. AND THERE WAS REALLY NOTHING ABOUT THIS MECHANISM THAT WAS BRINGING THEM IN. WE ORIGINALLY THOUGHT IT AS AN ATTRACTIVE TOOL, BUT IT'S NOT THERE. THAT'S VERY DIFFERENT THAN WHAT WE SEE IN THE CLINICAL STAGE PROGRAMS, AND WE DON'T HAVE THIS RESTRICTION ON THE CLINICAL STAGE PROGRAMS, BECAUSE OFTENTIMES TRIALS EITHER CAN BE AND OFTENTIMES ARE NEEDED TO BE RUN OVER MULTIPLE STATES. SO THERE IT'S A MORE PRACTICAL SOLUTION.

MS. WINOKUR: I'M IN FAVOR OF DOING THIS, BUT I JUST WANTED TO POINT OUT THAT OUR ABILITY TO DO IT HAS ATTRACTED TO CALIFORNIA COMPANIES AND INDIVIDUALS WHO HAVE ADDED TO OUR PROGRAM. ALSO, BECAUSE WE'VE BEEN ABLE TO ATTRACT PEOPLE TO CALIFORNIA AND MAKE SCIENTIFIC CONTRIBUTIONS TO OUR PROGRAM, MANY OTHER STATES HAVE STARTED WHAT THEY CONSIDER SIMILAR TO PROP 71. AND THAT'S TO OUR CREDIT.

CHAIRMAN THOMAS: MR. SHEEHY, DO YOU HAVE A COMMENT?

MR. SHEEHY: I GUESS I JUST -- I WONDER SINCE A LOT OF THE -- I JUST THINK WITH THE NIH BEING SO TIGHT THESE DAYS, THAT WE MIGHT NOT WANT TO PRESERVE SOME OF THIS FUNDING IN THE EARLIER STAGES FOR CALIFORNIA RESEARCHERS. THE PAYLINES ARE SO LOW

AT NIH. I DON'T KNOW. PERSONALLY I'M SUPPORTIVE OF IT, I THINK.

CHAIRMAN THOMAS: ANY OTHER COMMENTS FROM MEMBERS OF THE BOARD? MEMBERS OF THE PUBLIC? MR. REED.

MR. REED: I JUST WANTED TO BE SURE NOTHING IN THIS WOULD PREVENT A COOPERATION BETWEEN SCIENTISTS IN OTHER STATES OR OTHER NATIONS. IS THAT CORRECT?

DR. MILLS: THAT'S ABSOLUTELY CORRECT.

MR. REED: THANK YOU.

CHAIRMAN THOMAS: SEEING NO FURTHER COMMENT, JAMES, VOICE VOTE? ALL THOSE IN FAVOR PLEASE SAY AYE. OPPOSED? ABSTAIN? MARIA, CALL THE ROLL PLEASE.

MS. BONNEVILLE: KATHY LAPORTE. KRISTINA VUORI.

DR. VUORI: YES.

MS. BONNEVILLE: JOE PANETTA.

CHAIRMAN THOMAS: OKAY. THE MOTION PASSES. THANK YOU VERY MUCH, MR. HARRISON.

WE'VE COME NOW TO THE GENERAL PUBLIC COMMENT PORTION OF THE MEETING. WOULD ANY MEMBER OF THE PUBLIC LIKE TO MAKE A STATEMENT ON ANY MATTER? OKAY. HEARING NONE, I BELIEVE THAT CONCLUDES OUR

AGENDA. AGAIN, THANK YOU, EVERYBODY, FOR MAKING THE EFFORT TO BE HERE. THIS WAS A WONDERFUL MEETING. FINAL THANK YOU TO DR. FRIEDMAN FOR ALL OF YOUR WONDERFUL WORK OVER THE YEARS, AND WE WISH YOU NOTHING BUT THE BEST GOING FORWARD. WITH THAT, WE WILL STAND ADJOURNED AND EVERYBODY HAVE A WONDERFUL HOLIDAY SEASON.

(THE MEETING WAS THEN CONCLUDED AT 01:46 PM.)

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 AND THE APPLICATION REVIEW SUBCOMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD AT THE LOCATION INDICATED BELOW

1001 BROADWAY  
OAKLAND, CALIFORNIA  
ON  
DECEMBER 13, 2016

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

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