BEFORE THE

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

REGULAR MEETING

LOCATION:	CLAREMONT HOTEL 41 TUNNEL ROAD BERKELEY, CALIFORNIA
DATE:	SEPTEMBER 20, 2014 10 A.M.
REPORTER:	BETH C. DRAIN, CSR CSR. NO. 7152
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I N D E X

OAKLAND, CALIFORNIA; WEDNESDAY, SEPTEMBER 10, 2014

10 A.M.

CHAIRMAN THOMAS: OKAY. GOOD MORNING, EVERYBODY. WE'D LIKE TO CALL THE SEPTEMBER 2014 MEETING OF THE ICOC TO ORDER. FIRST ITEM OF BUSINESS IS THE PLEDGE OF ALLEGIANCE. MARIA, WILL YOU LEAD US IN THAT, PLEASE.

MS. BONNEVILLE: PLEASE STAND IF YOU ARE ABLE.

(THE PLEDGE OF ALLEGIANCE.)

CHAIRMAN THOMAS: MARIA, PLEASE CALL THE ROLL.

MS. BONNEVILLE: LINDA BOXER.

DR. BOXER: HERE.

MS. BONNEVILLE: DAVID BRENNER.

DR. BRENNER: HERE.

MS. BONNEVILLE: KEN BURTIS.

DR. BURTIS: PRESENT.

MS. BONNEVILLE: ANNE-MARIE DULIEGE. LEON FINE.

DR. FINE: PRESENT.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: HERE.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: HERE.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: HERE.
MS. BONNEVILLE: SAM HAWGOOD. DAVID HIGGINS.
DR. HIGGINS: HERE.
MS. BONNEVILLE: STEVE JUELSGAARD.
DR. JUELSGAARD: HERE.
MS. BONNEVILLE: SHERRY LANSING.
MS. LANSING: HERE.
MS. BONNEVILLE: JACOB LEVIN.
DR. LEVIN: HERE.
MS. BONNEVILLE: BERT LUBIN.
DR. LUBIN: HERE.
MS. BONNEVILLE: LAUREN MILLER.
MS. MILLER: HERE.
MS. BONNEVILLE: JOE PANETTA.
MR. PANETTA: HERE.
MS. BONNEVILLE: FRANCISCO PRIETO.
DR. PRIETO: HERE.
MS. BONNEVILLE: ROBERT QUINT. AL ROWLETT. JEFF SHEEHY.
MR. SHEEHY: HERE.
MS. BONNEVILLE: OS 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.

CHAIRMAN THOMAS: THANK YOU VERY MUCH, MARIA. THIS BEING SEPTEMBER 10TH AND ONE DAY IN ADVANCE OF THE 13TH ANNIVERSARY OF THAT AWFUL DAY IN 2001, WOULD LIKE, IF WE COULD PLEASE, HAVE A MOMENT OF SILENCE IN HONOR OF THOSE WHO LOST THEIR LIVES ON THAT DAY.

(MOMENT OF SILENCE.)

CHAIRMAN THOMAS: THANK YOU, EVERYBODY.

I'M DELIGHTED TO ANNOUNCE THAT WE HAVE A NEW MEMBER OF OUR BOARD. HE IS DAVID HIGGINS WHO IS COMING ONTO THE BOARD AS THE PATIENT ADVOCATE FOR PARKINSON'S IN PLACE OF OUR LONGTIME AND TIRELESS AND DEDICATED JOAN SAMUELSON, WHO, AS YOU KNOW, STEPPED DOWN A FEW MONTHS AGO.

DAVID, COULD YOU PLEASE GIVE A BIT OF YOUR BACKGROUND TO THE BOARD AND INTRODUCE YOURSELF.

DR. HIGGINS: SURE. MY NAME IS DAVID HIGGINS. I'M FROM SAN DIEGO AND HAVE A BACKGROUND IN

BIOTECHNOLOGY INDUSTRY AS WELL AS PATIENT ADVOCACY FOR PARKINSON'S. I WAS DIAGNOSED WITH PARKINSON'S IN 2011 AND HAVE A LONG SORT OF FAMILY PEDIGREE. IT'S SORT OF A PARKINSON'S ROYAL FAMILY. MY MOTHER DIED FROM PARKINSON'S EARLIER THIS YEAR, AND MY GRANDMOTHER DIED MANY YEARS AGO AFTER BEING ONE OF THE FIRST PERSONS IN ONE OF THE VERY FIRST L-DOPA TRIALS.

SO ONE OF MY EXPERIENCES HAS BEEN TO SEE THE BENEFIT AND ADVANTAGES OF ADVANCEMENT OF MEDICINE THROUGH GOOD RESEARCH. I'M HAPPY TO BE HERE.

CHAIRMAN THOMAS: THANK YOU. THANK YOU VERY MUCH.

SO A FEW THINGS I WANTED TO TELL YOU ABOUT. NO. 1, HAVE A VERY INTERESTING EVENT COMING UP, ACTUALLY A COUPLE OF THEM. A PRODUCER OF MOTOWN NAMED MARK DAVIS DEVELOPED AN INTEREST IN THE HISTORY OF STEM CELL RESEARCH. AND HE WENT OUT AND, TOTALLY UNSOLICITED BY US OR ANYBODY, PUT TOGETHER A DOCUMENTARY ON THE HISTORY OF STEM CELLS AND STEM CELL RESEARCH. AND THAT DOCUMENTARY IS GOING TO BE SHOWN IN A COUPLE OF PRIVATE SHOWINGS, ONE IN THE BAY AREA ON SEPTEMBER 23D, THE OTHER NEXT WEEK THAT SHERRY IS GRACIOUSLY HOSTING DOWN IN LOS ANGELES ON SEPTEMBER 15TH.

WE HAVE LINKS OF THIS. IT'S ACTUALLY ABOUT AN HOUR AND A HALF LONG FEATURE FILM. CIRM AND ITS GRANTEES FEATURE VERY PROMINENTLY IN THIS PIECE. AND I THINK IT IS SOMETHING THAT WILL PROVIDE GREAT EDUCATION TO THE PUBLIC. MARK IS LOOKING TO GET IT ON VARIOUS TYPES OF MEDIA SO HE CAN SPREAD THE STORY. BUT IF YOU SAW THIS, IT'S EVERY BIT A FULL-BLOWN, HIGHLY PROFESSIONAL PIECE AND TELLS THE STORY, I THINK, VERY WELL. SO IF ANYBODY IS INTERESTED, PLEASE LET US KNOW. IT'S A BIT FAR TO COME FOR SOME OF YOU WHO LIVE DOWN IN SAN DIEGO, FOR EXAMPLE, WHATEVER, BUT I THINK THIS IS SOMETHING YOU'D REALLY LIKE. SO IF ANYBODY WOULD LIKE A LINK, WOULD LIKE A DVD, WOULD LIKE TO COME TO THE SHOWING ITSELF, PLEASE ACTUALLY LET KEVIN KNOW BECAUSE HE'S THE KEEPER OF ALL KNOWLEDGE ON THIS.

SECOND THING, IN THE PAST MONTH WE HAD OUR ANNUAL BRIDGES CONFERENCE. FOR THOSE NEWER MEMBERS, THIS IS OUR PROGRAM WE SET UP A NUMBER OF YEARS AGO TO ENABLE COLLEGE STUDENTS FROM UNIVERSITIES THAT DON'T HAVE PROGRAMS THAT WE FUND TO HAVE ACCESS TO THOSE INSTITUTIONS AND TO WORK ON PROJECTS IN CONJUNCTION WITH SCIENTISTS AT THOSE INSTITUTIONS. AND ANNUALLY THEY COME TOGETHER AND PRESENT THEIR WORK, AND IT IS MOST INTERESTING. I DON'T KNOW HOW

MANY OF YOU HAVE EVER BEEN ABLE TO GO SEE THIS, BUT THE LEVEL OF SOPHISTICATION, THE LEVEL OF ENTHUSIASM THAT THESE STUDENTS BRING TO THE TASK IS MOST INTERESTING.

AND IN TALKING TO A NUMBER OF OUR PI'S, A LOT OF WORK THAT HAS BEEN INCORPORATED INTO PROJECTS THAT WE'VE ACTUALLY FUNDED STEMS FROM PEOPLE WHO ARE PART OF THIS BRIDGES PROGRAM. SO I WANTED THE BOARD TO KNOW ABOUT THIS; AND IF YOU HAVE AN OPPORTUNITY TO EVER TALK TO ONE OF THESE STUDENTS, I THINK YOU'D FIND IT STRIKING AND VERY REWARDING.

I WANTED TO REPORT TO THE BOARD ALSO SORT OF AN INTERESTING SHIFT IN THE LANDSCAPE IN THE FUNDING OF RESEARCH IN REGENERATIVE MEDICINE. YOU MAY RECALL A COUPLE YEARS AGO WE TALKED ABOUT A TREND THAT WAS STARTING TO DEVELOP WHERE BIG PHARMA WAS NOT HAPPY WITH THE RESULTS OF A GREAT DEAL OF MONEY PUT INTO R&D OVER THE PAST DECADE AND WAS STARTING TO CONSIDER OUTSOURCING THE R PART AND KEEPING THE D PART. AT THAT POINT THERE WAS NOT A LOT OF INTEREST IN REGENERATIVE MEDICINE AT THE PHARMA LEVEL. IT WAS KIND OF DEEMED TOO EARLY. AND THE SLACK ON THAT CONTINUED TO BE PICKED UP BY CIRM, BY NIH, BY TO A CERTAIN EXTENT DISEASE FOUNDATIONS, ETC.

INCREASINGLY OVER THE COURSE OF THE LAST

YEAR, I'VE SPENT A LOT OF TIME TALKING TO PEOPLE IN PHARMA, TALKING TO PEOPLE IN BIG BIOTECH, TALKING TO OTHERS IN THE FIELD, AND IT IS INTERESTING THAT YOU'RE NOW SEEING A SHIFT, THIS MOVEMENT TO FARM OUT RESEARCH IS GAINING A GREAT DEAL OF MOMENTUM, NOT JUST IN GENERAL IN MEDICAL RESEARCH, BUT SPECIFICALLY, AND INTERESTINGLY AS PERTAINS TO US, IN THE FIELD OF REGENERATIVE MEDICINE. A NUMBER OF BIG PHARMA NOW HAVE ACTUAL REGENERATIVE MEDICINE DIVISIONS. THEY ARE ACTIVELY LOOKING TO FORM STRATEGIC ALLIANCES WITH PI'S WHO ARE DEVELOPING PRODUCTS IN THE FIELD. AND YOU'VE SEEN THAT ACTUALLY SORT OF COME TOGETHER IN ONE OF OUR OWN PROJECTS WHICH IS VIACYTE WHERE JANSSEN JOINED CIRM, AND THE THIRD FUNDING LEG, WHICH IS THE DISEASE FOUNDATION COMMUNITY, THEIR JDRF, TO PUT MONEY INTO THAT VERY PROMISING WORK THAT VIACYTE IS DOING.

BUT WHAT'S INTERESTING IS WE'RE NOW SEEING THESE COMPANIES ARE WANTING TO TALK. THEY'RE WANTING TO HEAR WHAT WE'RE DOING. AND I THINK YOU'RE GOING TO SEE AN INCREASING TREND OF THIS ALLIANCE STARTING TO FORM AND CO-FUNDING COMING IN FROM THESE BIG PHARMA AND FROM BIG BIOTECH WHO ARE LOOKING TO INCREASE PIPELINE. AND IT'S KIND OF A WIN-WIN FOR THE PEOPLE DOING THE RESEARCH BECAUSE THEY GET SOME

LIGHT AT THE END OF THE FUNDING TUNNEL AND IT'S VERY PROMISING.

NOW, WHAT'S, I THINK, ABOVE AND BEYOND THAT INTERESTING, PERTAINING TO US AS WELL, FOR YEARS VENTURE CAPITAL HAS STAYED ON THE SIDELINES, WERE DEEMED TOO EARLY, TOO SPECULATIVE, TOO DIFFICULT TO MAP OUT RETURN ON INVESTMENT THAT WOULD BE SATISFACTORY TO THE LP'S AND THE VC PARTNERSHIPS. HAVING NOW HAD CONVERSATIONS WITH A NUMBER OF VC'S WHO ARE ACTUALLY IN THE LIFE SCIENCE AREA AS WELL AS SOME PEOPLE WHO ARE IN PRIVATE EQUITY IN THE LIFE SCIENCE AREA, YOU'RE STARTING TO SEE A SHIFT IN THAT AS WELL.

YOU KNOW, BIOTECH FOR ABOUT TEN YEARS WASN'T FARING TOO WELL IN THE MARKETS. THE LAST TWO OR THREE YEARS HAS SEEN A HUGE RESURGENCE WITH MANY IPO'S COMING THIS YEAR, A GREAT DEAL OF INTEREST IN THE MARKET IN GENERAL, AND THE SPACE. THAT GETS THE VC'S ATTENTION. AND, IN FACT, NOW YOU'RE STARTING TO SEE FUNDS THAT ARE ACTUALLY BEING CONTEMPLATED TARGETED AT REGENERATIVE MEDICINE, WHICH IS A VERY NEW DEVELOPMENT. YOU ADD TO THAT AS WELL THE INTEREST LEVEL IN THE HIGH NET WORTH COMMUNITY IN FUNDING MEDICAL RESEARCH, WHICH EITHER COMES IN THE FORM OF UNRESTRICTED GIFTS IN MANY INSTANCES, AND

WE'VE BEEN A GREAT BENEFICIARY OF THAT, AS YOU KNOW, FOLKS LIKE DENNY SANFORD, ELI BROAD, AND MANY WHO GAVE CONTRIBUTIONS EARLY ON IN CIRM'S HISTORY. YOU ALSO SEE A LOT OF INTEREST THAT'S TARGETED, SPECIFIC DISEASE RESEARCH THROUGH THE HIGH NET WORTH COMMUNITY FOR TYPICALLY PEOPLE WHO HAVE FAMILY MEMBERS WITH A DISEASE OR CONDITION.

BUT THE POINT OF ALL THIS IS THEY TOO ARE NOW LOOKING AT REGENERATIVE MEDICINE AS A POTENTIAL AREA TO PUT MONEY INTO PRINCIPALLY ON THIS PHILANTHROPIC SIDE.

SO IF YOU KIND OF ADD ALL THIS TOGETHER, THE TREND IS NOW INCREASING, THAT WE'RE GETTING A LOT OF INTEREST, I'D SAY -- WOULDN'T SAY A LOT. WE'RE GETTING A DEVELOPING INTEREST ON MANY DIFFERENT FRONTS TO ADVANCE THE FIELD OF REGENERATIVE MEDICINE. AND IT'S ONE OF THE AREAS THAT I AM PRINCIPALLY FOCUSED ON. IT'S AN AREA RANDY IS PRINCIPALLY FOCUSED ON. AND STAY TUNED, BUT I THOUGHT YOU WOULD LIKE TO HEAR THAT DESCRIPTION AS OVER TIME WE'LL BRING BACK TO YOU DEVELOPMENTS AS THEY COME THROUGH ON THIS PARTICULAR TOPIC.

OKAY. SO THAT CONCLUDES THE CHAIR'S REPORT. NOW TURN IT OVER TO DR. MILLS FOR THE PRESIDENT'S REPORT.

DR. MILLS: MR. CHAIRMAN, THANK YOU, BOARD, THANK YOU FOR THE OPPORTUNITY TO SPEAK WITH YOU TODAY. I WILL ATTEMPT TO KEEP MY REMARKS SOMEWHAT LIMITED; BUT OBVIOUSLY IF THERE ARE ANY QUESTIONS THAT YOU HAVE FOR ME AT ANY TIME, PLEASE ASK.

TODAY I'LL BE TALKING A LITTLE BIT ABOUT STAYING FOCUSED ON THE MISSION. I'LL BE PROVIDING A LITTLE BIT OF COMMENTARY, AGAIN, ON OUR BUDGET, BOTH OUR OPERATING BUDGET AND OUR AWARD BUDGET. AND THEN LASTLY, I'D LIKE TO INTRODUCE A CONCEPT THAT WE'RE WORKING ON AT CIRM WHICH WE'RE UNDER THE WORKING TITLE OF CIRM 2.0, WHICH IS HOW WE GO ABOUT TAKING A FRESH LOOK AT OUR CURRENT PROCESS, OUR CURRENT INITIATIVES, AND HOW DO WE USE THAT TO IMPROVE AND BUILD A BETTER STEM CELL AGENCY.

BUT AS I SAID WHEN I ACCEPTED THE POSITION AS PRESIDENT OF CIRM, ONE OF THE THINGS I PROMISED WAS I WOULD ALWAYS MAKE SURE THAT WE WERE REMINDED OF OUR MISSION. AND OUR MISSION AT CIRM IS UNIQUE AND IT'S VERY, VERY IMPORTANT. WE'RE HERE TO ACCELERATE STEM CELL TREATMENTS TO PATIENTS WITH SIGNIFICANT UNMET MEDICAL NEEDS. THAT'S WHAT OUR JOB IS. WE WANT TO MOVE THE STEM CELLS ON THE LEFT TO THE PATIENTS ON THE RIGHT. IT REALLY IS ALL ABOUT THE PATIENTS, AND IT REALLY IS IMPORTANT THAT WE ALWAYS

REMEMBER THAT THE PURPOSE THAT WE'RE HERE AND THE REASON THAT CIRM EXISTS IS TO SERVE OUR PATIENTS.

AS I MENTIONED AT PREVIOUS BOARD MEETINGS, WE'VE DEVELOPED A TEST THAT HELPS US DETERMINE WHETHER OR NOT WE'RE BEING SUCCESSFUL IN OUR ACTIVITIES. WHETHER AN ACTIVITY IS WORTHY OF OUR ATTENTION OR NOT CENTERS AROUND THE ANSWERS TO THIS. THE FIRST BEING IS THIS SOMETHING THAT'S GOING TO SPEED UP THE DEVELOPMENT OF A STEM CELL TREATMENT? THE SECOND, IS IT GOING TO INCREASE THE LIKELIHOOD OF SUCCESS? THE THIRD, IS WHAT WE'RE WORKING ON ACTUALLY AN UNMET MEDICAL NEED? AND THEN LASTLY, IS IT EFFICIENT. I WILL AGAIN POINT OUT THAT THE FOURTH POINT IS, WITHOUT QUESTION, SUBORDINATE TO THE FIRST THREE. MEANING THE MOST IMPORTANT THING FOR ME IS TO DEVELOP STEM CELL THERAPIES AND GET THEM TO PATIENTS. IF IT'S INEFFICIENT, BUT IT'S EFFECTIVE, I WOULD CONSIDER DOING IT. OKAY. SO THAT'S JUST SOMETHING I ALWAYS LIKE TO KEEP IN MIND.

NEXT THING I'D LIKE TO DO IS JUST PROVIDE A LITTLE BIT OF COMMENT ON OUR BUDGET. WE TALKED A LITTLE BIT ABOUT THIS LAST MEETING. I'LL JUST GO THROUGH IT AGAIN. IT WAS SOMEWHAT NEW AT THE LAST MEETING, SO I THOUGHT IT MIGHT BE A GOOD IDEA TO GO OVER. PARTICULARLY THERE'S SOME NEW MEMBERS TO THE

BOARD AND MEMBERS THAT WEREN'T HERE LAST TIME. AND COMING IN FOR ME IT WAS INTERESTING TO LEARN THIS. SO I JUST WANT TO GO OVER IT AGAIN.

SO CIRM, WHEN WE TALK ABOUT CIRM AND WE TALK ABOUT THE $3 BILLION INITIATIVE, IT REALLY FOR OUR PURPOSES DIVIDES UP INTO TWO DISTINCT BUCKETS, EITHER OF WHICH, WHEN THEY RUN OUT OF MONEY, CIRM COMES TO AN END. BUT THE TWO BUCKETS ARE BASICALLY -- THE SMALL BUCKET OR THE LITTLE BUCKET, AS I REFER TO IT, IS OUR ADMINISTRATIVE BUCKET. SO THIS IS THE MONEY THAT FUNDS THE ACTUAL AGENCY CIRM ITSELF. AND THAT WAS AWARDED AT ABOUT $180 MILLION. THE LARGER BUCKET IS THE MONEY THAT CIRM HANDS OUT TO OUR INVESTIGATORS TO CONDUCT THE RESEARCH AND DEVELOPMENT ACTIVITIES THAT WE WERE DESIGNED TO FUND. THAT'S ABOUT $2.75 BILLION. AND SO THOSE TWO BUCKETS ARE DISTINCT. THEY CAN'T GET CROSSED. WE CAN'T USE MONEY IN ONE BUCKET FOR THE OTHER. AND SO THAT'S WHY IT'S IMPORTANT, IF WE THINK ABOUT OUR BALANCE SHEET OR OUR CASH OR CAPITAL ON HAND AS SORT OF A FUEL TANK, WE HAVE TO MAKE SURE WE'RE LOOKING AT BOTH OF THESE FUEL TANKS.

SO THE GRANTS ADMINISTRATION BUDGET, ACTUALLY A FAIRLY EASY BUDGET FOR US TO GO OVER, AND CHILA IS GOING TO ACTUALLY BE SPEAKING MORE TO THIS

BUDGET IN A JUST LITTLE BIT. AS YOU CAN SEE, WE'RE DOING A REASONABLY GOOD JOB CONTROLLING EXPENSES HERE. BUT THIS IS A $180 MILLION BUDGET THAT WAS SET OUT AT THE ONSET OF CIRM TEN YEARS AGO. AS OF TODAY, WE'VE SPENT ABOUT $89 MILLION, MEANING WE HAVE ABOUT $91 MILLION LEFT IN THIS TANK. OUR CURRENT SPEND RATE OUT OF THIS BUCKET IS ABOUT $13 MILLION A YEAR, WHICH WOULD THEN GIVE US ENOUGH MONEY, IF WE CONTINUE AT THAT BURN RATE, TO INTO 2021.

THE ONE THING THAT I WILL COMMENT ABOUT THIS BUDGET THAT YOU'LL SEE COMPARED TO CHILA'S NUMBERS, YOU WILL SEE CHILA'S NUMBERS, CHILA'S NUMBER IS 15.2 AND YOU'RE SAYING IT'S ABOUT 13 HERE. THERE IS ABOUT $2 MILLION OF MONEY THAT EXISTS IN CHILA'S BUDGET THAT DOESN'T COME OUT OF THIS PARTICULAR TANK. IT COMES OUT OF ACTUALLY THE OTHER. AND THAT CENTERS AROUND THERE'S CERTAIN COSTS THAT WERE ORIGINALLY STRUCTURED TO COME OUT OF THE BIG BUCKET, AND THOSE ARE THINGS LIKE LEGAL EXPENSES AND THERE ARE A FEW OTHER THINGS. SO THAT'S THE DIFFERENCE BETWEEN THE $13 MILLION I'M SHOWING HERE AND THE $15 MILLION THAT YOU'LL SEE IN HER BUDGET.

THE AWARD BUDGET, THIS IS MONEY THAT WE GIVE OUT TO RECIPIENTS, THAT'S A MUCH LARGER BUCKET, 2.75 BILLION. NOW, AS OF TODAY, WE'VE AWARDED

APPROXIMATELY $1.9 BILLION OF THAT. NOW, AWARD DOESN'T MEAN SPENT. AWARDED MEANS WE HAVE COMMITTED THAT MONEY. WE HAVE TOLD THE APPLICANTS THAT WE HAVE APPROVED THEIR GRANT. BUT THE WAY THAT OUR SYSTEM WORKS, THE WAY THAT OUR FUNDING SYSTEM WORKS IS WE DISBURSE THAT MONEY OUT OVER TIME AND OUT OVER HITTING CERTAIN MILESTONES. AND SO JUST BECAUSE THAT MONEY IS AWARDED DOESN'T MEAN IT'S ALL GOING TO GET SPENT. IN FACT, GIVEN WHAT WE DO AS BIOTECH, IT WOULD BE A GREAT THING FOR US IF WE WERE TO ACTUALLY SPEND ALL OF THAT MONEY, BUT NOTHING IN BIOTECH WORKS AT A HUNDRED PERCENT. SO THERE WILL BE A PORTION OF THAT $1.9 BILLION THAT WE DON'T SPEND OUT BECAUSE AS A PROGRAM REACHES NO-GO MILESTONES AND WE DECIDE TO DISCONTINUE IT FOR FUTILITY, THAT REMAINING MONEY WILL COME BACK AND GO INTO THIS GENERAL BUDGET. WE ESTIMATE THAT TO BE CONSERVATIVELY SOMEWHERE BETWEEN 50 AND $100 MILLION.

ADDITIONALLY, WE HAVE ANOTHER $880 MILLION THAT HAS NOT YET BEEN AWARDED, AND THAT'S A FAIRLY LARGE AMOUNT OF MONEY AS WELL. SO IF YOU PUT THOSE TWO THINGS TOGETHER IN ROUND NUMBERS, AGAIN, THIS LEAVES US ABOUT A BILLION DOLLARS WHICH WE HAVE LEFT TO AWARD WITH CIRM.

NOW, OUR CURRENT FUNDING RATE IS AROUND A

$190 MILLION A YEAR IF YOU LOOK AT WHAT WE ACTUALLY AWARD PER YEAR. GIVEN THAT, THAT WILL TAKE US UNTIL ABOUT 2020. SO WE DO HAVE A GOOD LONG RUNWAY AHEAD OF US AT OUR CURRENT SPEND RATE.

NOW, THERE'S BASICALLY THREE POINTS THAT I WANT TO MAKE REGARDING TO OUR BUDGET. FIRST IS THERE ARE THINGS THAT GO ON IN THE DEVELOPMENT OF STEM CELL THERAPIES AND IN BIOTECHNOLOGY WHERE THEY JUST AREN'T ACCELERATED BY SPENDING MORE MONEY. THERE ARE SOME THINGS THAT JUST TAKE TIME. A 12-MONTH TOXICOLOGY STUDY IS GOING TO TAKE 12 MONTHS. AND IF YOU DOUBLE THE AMOUNT OF MONEY YOU SPEND ON IT, IT'S STILL GOING TO TAKE 12 MONTHS. AND SO THAT'S SOMETHING WE JUST HAVE TO BE AWARE OF, THAT SPENDING MORE MONEY WON'T NECESSARILY GET US THE RESULT WE WANT.

BUT THE COROLLARY TO THAT, THOUGH, IS OUR GOAL HERE IS NOT TO SAVE MONEY. AND I WANT TO MAKE SURE THIS POINT IS CLEAR. SO WHILE I HAVE A VERY STRONG SENSE OF RESPONSIBILITY TO THE PEOPLE OF CALIFORNIA TO NOT WASTE MONEY, I DON'T LIKE WASTING MONEY UNDER ANY CIRCUMSTANCES, I DON'T LIKE FUNDING THINGS THAT HAVE NO CHANCE OF SUCCESS, OUR GOAL IS NOT TO SAVE MONEY. OUR GOAL IS TO FIND CURES. AND SO MY COMMITMENT IS I WILL PUT FORWARD RECOMMENDATIONS FOR ANYTHING AND EVERYTHING THAT WILL

ACTUALLY MOVE THE BALL DOWN THE FIELD AND ADDRESS OUR MISSION AND BRING TREATMENTS TO PATIENTS.

THE THIRD THING THAT I WANT TO TALK ABOUT WITH REGARDS TO THIS CENTERS AROUND THE QUALITY OF THE APPLICATIONS THAT WE RECEIVE. I AM ACTUALLY CONCERNED THAT WE WILL NOT BE ABLE TO MAINTAIN A $190 MILLION ANNUAL AWARD RATE WITH OUR CURRENT PIPELINE OF PROJECTS. WE HAVE A LOT OF THINGS FUNDED. WE HAVE A LOT OF GOOD PROJECTS UP ON FUNDING, BUT I AM CONCERNED THAT WE DON'T HAVE ENOUGH THINGS COMING INTO THE PIPELINE THAT ARE HIGH QUALITY.

NOW, I DON'T WANT TO FUND THINGS THAT ARE NOT HIGH QUALITY. THAT DOESN'T SERVE OUR MISSION. SO ONE OF THE THINGS THAT WE REALLY NEED TO FOCUS ON IS HOW DO WE INCREASE THE INFLOW OF APPLICANTS, HIGH QUALITY APPLICANTS, INTO OUR SYSTEM SO WE CAN CONTINUE OUR FUNDING RATE.

DOES ANYONE HAVE ANY QUESTIONS ON THAT? SO THAT JUST BRINGS ME INTO THE THIRD POINT I WANTED TO MAKE, WHICH IS A PROJECT, AS I SAID, WE'VE TERMED INTERNALLY AS CIRM 2.0. IT'S HOW DO WE TAKE A FRESH LOOK AT WHAT WE'RE DOING AND DO IT BETTER? I WANT TO SAY ON THE OUTSET THIS IS IN NO WAY A CRITICISM OF HOW WE GOT TO WHERE WE ARE. BUT MY GOAL WHEN I CAME ON WAS TO ALWAYS PUT THE NEEDS OF THE PATIENTS AHEAD

OF EVERYTHING ELSE. AND FROM TIME TO TIME, I'M A FIRM BELIEVER THAT THINGS CAN ALWAYS GET BETTER, AND FROM TIME TO TIME IT'S JUST APPROPRIATE FOR US TO STEP BACK AND SAY, ALL RIGHT. HERE'S WHERE WE ARE, BUT WHAT CAN WE BE DOING BETTER? SO THAT'S WHAT CIRM 2.0 IS ABOUT. IT'S ABOUT FINDING A WAY TO MAKE A BETTER STEM CELL AGENCY.

SO OUR PURPOSE IS TO CREATE A PROCESS AT CIRM FOR ATTRACTING, AWARDING, AND ADMINISTERING GRANTS THAT BETTER SERVE OUR OVERALL MISSION. AND HERE WHAT'S REALLY IMPORTANT IS THAT OUR PROCESS SERVES OUR MISSION, NOT THAT WE BECOME SORT OF BEHOLDEN TO OUR PROCESS. NOW, IF WE'RE SUCCESSFUL WITH THIS, I THINK WE WILL ACTUALLY HAVE A LOT MORE HIGH QUALITY APPLICANTS TO THE PROCESS. AND WE REALLY, REALLY WANT THE BEST, HIGH QUALITY THINGS THAT HAVE THE BEST SHOT OF BEING SUCCESSFUL COMING INTO OUR SYSTEM.

WE CAN REDUCE CYCLE TIME. WE'RE AN AGENCY THAT EXISTS TO ACCELERATE STEM CELL THERAPIES. SO ANYTHING WE CAN DO THAT DIRECTLY REDUCES CYCLE TIME ON OUR END OR WOULD DIRECTLY IMPACT A THERAPY REACHING A PATIENT WE OUGHT TO DO. THAT IS DIRECTLY WITHIN OUR CONTROL.

ANOTHER ASPECT, I THINK WE CAN FIND WAYS TO

HELP ACCELERATE PROGRAMS THAT WE ALREADY HAVE FUNDED. AND THIS GOES BACK TO THINGS I WAS TALKING ABOUT LIKE DIRECTLY WORKING WITH OUR PARTNERS ON WHETHER IF THEY HAVE AN ISSUE WITH THE FDA OR IF THEY HAVE AN ISSUE WITH BUSINESS DEVELOPMENT OR ENROLLMENT OR WHATEVER IT MIGHT BE, HOWEVER WE CAN ACTIVELY ENGAGE AND HELP THEM I WANT TO DO THAT.

AND THEN THE LAST THING THAT I THINK IS REALLY IMPORTANT IS THAT WE HAVE CLARITY. THAT AT THE OUTSET OR AT THE CONCLUSION OF THIS PROCESS, THE PEOPLE INSIDE CIRM, THE BOARD, OUR GRANTEES, OUR PATIENT ADVOCATES UNDERSTAND THE PROCESS BY WHICH CIRM RUNS VERY CLEARLY, THEY FEEL COMFORTABLE WITH IT, AND THEY KNOW HOW TO USE IT, AND THEY KNOW HOW TO TAKE ADVANTAGE OF IT FOR THE PURPOSES OF ACHIEVING OUR MISSION.

SO LET ME JUST TAKE YOU REALLY QUICKLY THROUGH THE OVERALL PROCESS. I'M GOING TO USE AN EXAMPLE OF CLINICAL STAGE PROJECTS RIGHT NOW. SO THIS IS SOMETHING THAT'S AT OR AROUND THE IND STAGE. WE WILL BE LOOKING AT CIRM'S ENTIRETY OF PRODUCTS FROM THE BASIC RESEARCH ALL THE WAY THROUGH CLINICAL DEVELOPMENT; BUT I'LL TELL YOU FROM A SCOPE STANDPOINT, WE'RE STARTING AT THE CLINICAL STAGE PROJECTS. AND THE REASON FOR THAT IS JUST SIMPLY A

MATTER OF NUMBERS. THERE ARE FEWER OF THEM, AND SO WE CAN TEST THESE CONCEPTS OUT, GET THEM PERFECTED, AND THEN MOVE THEM BACK UPSTREAM TO THE LARGER AREAS SUCH AS BASIC BIOLOGY WHERE WE HAVE MORE APPLICATIONS.

SO THIS IS OUR OVERALL PROCESS AND WHAT IT LOOKS LIKE. THERE ARE GENERALLY FOUR PHASES TO WHAT WE DO. THERE'S AN APPLICATION PHASE WHICH STARTS WITH A CONCEPT PLAN BEING APPROVED BY THE BOARD. THERE'S AN RFA GENERATED FROM THAT. SO THERE'S A CONCEPT PLAN APPROVED BY THE BOARD, THERE'S AN RFA. SOMETIMES WE REQUIRE LETTERS OF INTENT FROM OUR APPLICANTS. WE REVIEW THOSE. IF ALL THAT GOES WELL, THEN WE GET APPLICATIONS THAT COME AND ARE SUBMITTED TO US.

THE SECOND STAGE IS ACTUALLY THE REVIEW. THIS HAS TO DO WITH ELIGIBILITY VERIFICATION TO MAKE SURE THAT THE APPLICATION IS WITHIN SCOPE. CONFLICT OF INTEREST IS REALLY IMPORTANT FOR US. SO AS WE ASSEMBLE A PANEL OF REVIEWERS, WE HAVE TO MAKE SURE THAT THOSE PANELS AREN'T CONFLICTED WITH THE INVESTIGATORS THAT ARE APPLYING FOR THE GRANTS. WE HOLD GRANT WORKING GROUP MEETING, WHICH IN MY FORMER LIFE I USED TO PARTICIPATE IN AND HAD A LOT OF FUN WITH. AND THEN LASTLY, PREPARE RECOMMENDATIONS THAT

COME BACK TO THE BOARD FOR THE BOARD ULTIMATELY TO MAKE AN APPROVAL DECISION ON.

THE NEXT PHASE IS CONTRACTING. SO THIS IS WHERE WE'VE AWARDED, WE'VE MADE A DECISION TO FUND A GRANT, BUT WE NEED TO WORK OUT A CONTRACT FOR THAT. WE NEED TO COME UP WITH SOME LEGAL DOCUMENT THAT SAYS THIS IS HOW WE'RE GOING TO PAY THIS MONEY OUT. THESE ARE THE MILESTONES. OFTEN, BECAUSE OF HOW LONG THIS PROCESS TAKES, BY THE TIME WE GET TO THE CONTRACTING PHASE, A LOT OF THE UNDERLYING ASSUMPTIONS OR THE PHASE OF THE PROGRAM HAS CHANGED, AND SO WE HAVE TO AMEND MILESTONES, WE HAVE TO AMEND ASSUMPTIONS THAT WERE IN THE ORIGINAL PROGRAM, AND THEN OBVIOUSLY WORK OUT THE FINANCIAL TERMS OF THE AGREEMENT.

AND THEN LASTLY IS THE ADMINISTRATION OF THE GRANTS. SO WE'VE GONE THROUGH THIS PROCESS, WE'VE AWARDED IT, NOW WE WANT TO ACTUALLY HAVE THIS WORK TAKE PLACE. AND SO THINGS WE DO HERE IS SORT OF PAYING OUT ON THAT GRANT, PROGRESS REPORTING. SO US FIGURING OUT ARE THEY MAKING PROGRESS ALONG THEIR TIMELINE AND THEIR SCHEDULES. WE HAVE A PROCESS CALLED CDAP WHICH IS INTENDED TO HELP THEM WORK THROUGH PROBLEMS THEY HAVE. AND THEN OBVIOUSLY MILESTONE EVALUATION. ARE THEY ACTUALLY ACHIEVING THE MILESTONES WE SET OUT TO DO?

SO AS WE LOOK AT THIS, THOUGH, AND THAT'S A LOT, SO AS WE LOOK AT THIS IN TIME, WE CAN SEE THAT THERE ARE PROBABLY OPPORTUNITIES WHERE WE MIGHT BE ABLE TO SHORTEN THINGS. SO OUR APPLICATION WINDOW RIGHT NOW IS ANYWHERE BETWEEN 9 TO 15 MONTHS. THIS IS A REAL SERIOUS KILLER AND CONSUMER OF TIME. IF YOU HAVE A GOOD IDEA FOR A CLINICAL STAGE PRODUCT RIGHT NOW AND YOU WANT TO SAY, YOUR WINDOW OF WHEN YOU'LL BE ABLE TO APPLY TO US FOR THAT IS SOMEWHERE BETWEEN 9 TO 15 MONTHS OF WAITING. SO THAT'S A PRETTY LONG WAIT.

ONCE YOU APPLY TO US, IT WILL TAKE US SOMEWHERE BETWEEN FIVE TO SEVEN MONTHS TO CONDUCT THAT REVIEW WITH ALL THESE DIFFERENT STEPS THAT I TALKED ABOUT. HERE'S ANOTHER SURPRISING ONE. CONTRACTING AT THIS STAGE TAKES BETWEEN FIVE TO SEVEN MONTHS. SO TO WORK OUT ALL THOSE DIFFERENT DETAILS IS A LOT OF TIME. THE PROBLEM IS WHEN YOU PUT ALL THAT TOGETHER, IF YOU HAVE A GOOD IDEA OF A PRODUCT THAT'S READY TO GO INTO A CLINICAL TRIAL, RIGHT NOW IT'S TAKING SOMEWHERE BETWEEN 19 TO 29 MONTHS IN ORDER TO ACTUALLY COME UP WITH AN APPROVED AND CONTRACTED FUNDING DECISION ON THAT. THAT'S AN OPPORTUNITY FOR US. THAT IS CLEARLY AN OPPORTUNITY FOR US.

THE NEXT ASPECT OF THIS IS OUR GRANTS TEND TO WORK OUT OVER FOUR YEARS. THERE'S ANOTHER OPPORTUNITY THERE BECAUSE THAT'S AN ASSUMPTION THAT WHATEVER IT IS WOULD TAKE ABOUT FOUR YEARS. MOST CLINICAL TRIALS, PARTICULARLY PHASE I CLINICAL TRIALS, DON'T TAKE FOUR YEARS. SO THE AVERAGE IS ACTUALLY SOMETHING LIKE 19 MONTHS. SO THERE'S PROBABLY SOME OPPORTUNITY TO PICK UP THERE.

SO I'LL JUST END -- WELL, ACTUALLY THIS IS A PENULTIMATE SLIDE WITH THE OPPORTUNITIES THAT WE HAVE AS WE LOOK AT THIS. SO WE HAVE OPPORTUNITIES FOR MORE FREQUENT APPLICATION REQUESTS. RIGHT NOW WE'RE TAKING THEM, AGAIN, AS I SAID, SOMEWHERE BETWEEN 9 TO 15 MONTHS. WE HAVE OPPORTUNITIES TO SHORTEN OUR REVIEW TIME. IF YOU THINK ABOUT THE IMPACT THAT WOULD HAVE ON A NUMBER OF DIFFERENT THINGS, IF YOU'RE A COMPANY THAT'S CONTEMPLATING CONDUCTING A CLINICAL TRIAL AND YOU'RE LOOKING AT THIS CYCLE TIME OF SAYING THIS IS GOING TO TAKE ME 20 MONTHS OR SO IN ORDER TO GET A FUNDING DECISION FROM CIRM, MOST SMALL COMPANIES CAN'T WAIT 20 MONTHS FOR A FUNDING DECISION. THAT IDEA IS GOING TO GET FUNDED BY SOMEONE ELSE OR THAT IDEA IS NOT GOING TO BE ACCEPTABLE.

BUT IF YOU THINK ABOUT THE FLIP SIDE OF

THAT, IT'S EVEN SCARIER, WHICH IS WHAT IF THAT IS THE PROGRAM THAT GOES ON AND IS SUCCESSFUL AND WORKS AND EVENTUALLY GETS APPROVED AND GETS TO PATIENTS? THAT 22 MONTHS OR HOWEVER LONG IT IS IS A DIRECT DELAY ON THE BACK END OF THAT PROCESS. SO THAT MEANS THIS PROGRAM IS GETTING TO PATIENTS 22 MONTHS LATER THAN IT OTHERWISE COULD HAVE. AND SO THAT FOR US IN THE WORLD I COME FROM, PEDIATRIC GRAFT VERSUS HOST DISEASE, THAT'S ABOUT 700 KIDS DEAD. SO THAT FOR ME IS PLENTY OF MOTIVATION AND A REAL OPPORTUNITY FOR US TO SAY HOW DO WE BUILD A BETTER PRODUCT. I MEAN IT'S KIND OF INTERESTING. WE THINK ABOUT CIRM AND CIRM IS ESSENTIALLY THE MONEY STORE FOR STEM CELL ACTIVITIES. WHAT COULD BE WRONG WITH A PRODUCT IF YOU'RE THE MONEY STORE, BUT WE HAVE TO FIND WAYS TO BUILD A BETTER PRODUCT, AND THAT'S WHAT WE'RE LOOKING AT HERE WITH THIS.

WE ALSO HAVE TO FIND WAYS OF STRUCTURING AGREEMENTS THAT DRIVE THE BEHAVIOR WE WANT, MILESTONES THAT ACTUALLY DRIVE PEOPLE TO TRY TO EXCEED THEIR TIMELINES OR BEAT THEIR TIMELINES AND GET THINGS TO PATIENTS FASTER. I THINK WE CAN IMPROVE ON OUR SUCCESS CRITERIA.

AND THEN LASTLY, THE ACCELERATING ACTIVITY. SO WE DO A GOOD JOB WITH CDAP RIGHT NOW. HOW DO WE

DO THAT BETTER? HOW CAN WE INTERACT WITH COMPANIES AND WITH ACADEMIC INSTITUTIONS BETTER TO HELP THEM OUT IN THE THINGS THAT THEY MAY NOT HAVE AS MUCH EXPERTISE IN? GOING WITH THEM TO FDA MEETINGS, HELPING THEM THROUGH THAT, HELPING THEM WITH, AS J.T. WAS TALKING ABOUT, BUSINESS DEVELOPMENTS ACTIVITIES WHICH MAY NOT BE IN THEIR BAILIWICK. ANYTHING WE CAN DO. MY VIEW HERE IS ANYTHING WE CAN DO TO TAKE THESE PROGRAMS AND DRAG THEM ACROSS THE GOAL LINE IS THE KINDS OF THINGS THAT WE SHOULD BE DOING BECAUSE, AT THE END OF THE DAY, OUR MISSION IS TO BRING THESE TREATMENTS TO PATIENTS.

THEN THE LAST OPPORTUNITY I THINK ON HERE IS SEAMLESS TRANSITIONS SO THAT WHEN AN ACTIVITY IS COMPLETED, A PHASE OF ACTIVITY THAT CIRM IS FUNDING IS COMPLETED, THEY DON'T HAVE TO WONDER WHETHER OR NOT THEY'RE ELIGIBLE FOR FUNDING OR IF THERE'S AN RFA CYCLE, BUT THEY CAN MOVE JUST DIRECTLY AND SEAMLESSLY INTO THE NEXT AREA.

SO THIS IS THE CONCEPT BEHIND CIRM 2.0. IT'S NOT FULLY WORKED OUT YET. WE'RE GOING TO BE DOING THAT OVER TIME. THIS IS SORT OF THE SCHEDULED ROLLOUT PLAN FOR THIS. SO NOW THROUGH OCTOBER WE'RE GOING TO BE MEETING, WE HAVE BEEN MEETING, WE'RE GOING TO CONTINUE MEETING WITH VARIOUS STAKEHOLDERS

ABOUT THIS PROCESS. WE'RE GOING TO BE REFINING WORKING IDEAS ON HOW DO WE MAKE THIS BETTER. WE'RE GOING TO BE TESTING THINGS TO SEE WHETHER OR NOT OUR ASSUMPTIONS HOLD TRUE. ASSUMPTIONS ARE A BIG POINT HERE. WE'RE ALSO GOING TO BE HOLDING A MEETING WITH THE SCIENTIFIC SUBCOMMITTEE BECAUSE WE HAVE TO MAKE SURE THAT THEY'RE ON BOARD AND THE BOARD IS OKAY WITH THIS PROCESS AS WE GO FORWARD.

THEN THE IDEA WOULD BE AT THE OCTOBER BOARD MEETING WE'LL COME BACK TO YOU WITH A CONCEPT PLAN FOR WHAT CIRM 2.0 ACTUALLY LOOKS LIKE AND BRING THAT TO YOU FOR YOUR CONSIDERATION. AND THEN AT THE DECEMBER BOARD MEETING, IF ALL IS GOING WELL, WE'LL BE ADOPTING THE NECESSARY POLICIES AND PROCEDURE MODIFICATIONS THAT WE DO TO MAKE THIS A REALITY BECAUSE THERE IS A LOT OF PROCEDURAL RAMIFICATIONS TO THESE KINDS OF CHANGES. THE ULTIMATE GOAL HERE, THEN, WOULD BE FOR A JANUARY 1ST LAUNCH OF CIRM 2.0.

SO THAT'S ACTUALLY ALL I HAVE TODAY; BUT, AGAIN, ANY QUESTIONS I'D BE MORE THAN HAPPY TO TAKE.

CHAIRMAN THOMAS: RANDY, I THINK IT WOULD BE INTERESTING FOR THE BOARD TO HEAR A LITTLE BIT MORE ABOUT THE PROCESS YOU HAD INTERNALLY IN DEVELOPING THE CIRM 2.0 AND THE INCLUSION OF EVERYBODY ON THE TEAM, ETC.

DR. MILLS: YEAH. SO THIS HAS ACTUALLY BEEN -- THIS HAS BEEN A GREAT WAY FOR ME TO GET TO KNOW THE PEOPLE AT CIRM. SO WHEN I SAY TO YOU THE CIRM TEAM IS ONE OF THE MOST TALENTED I'VE EVER MET, IT'S NOT BECAUSE I SEE THEM PASS IN THE HALLWAY. WHAT WE DECIDED TO DO WITH CIRM 2.0 IS HOLD BASICALLY SMALL GROUP MEETINGS OF PEOPLE AND GO THROUGH THIS PROCESS WITH THEM AND SAY, OKAY, WHAT DO YOU THINK ABOUT THIS? IF YOU KNEW NOTHING ABOUT THE WAY CIRM OPERATED TODAY, HOW WOULD YOU DO THIS IF YOU WERE STARTING FROM NEW? AND GET EVERYONE'S INPUT. AND I MEAN EVERYONE'S INPUT, RECEPTIONIST, PR PEOPLE, SCIENTIFIC OFFICERS. EVERYONE LITERALLY IN THE ORGANIZATION IS PARTICIPATING IN THE CONSTRUCTION OF CIRM 2.0 AND IN DIVERSE GROUPS.

SO WE INTENTIONALLY DON'T PICK ALL THE SCIENCE OFFICERS IN ONE MEETING AND PR PEOPLE IN ANOTHER MEETING. IT'S INTENTIONALLY MIXED UP. AND THE RESULTS OF THAT HAVE BEEN REMARKABLE. YOU GET VERY INTERESTING OUTSIDE-OF-THE-BOX IDEAS AND CONCEPTS AND ENGAGING. SO WHEN I TELL YOU THEY'RE ONE OF THE MOST TALENTED TEAMS I'VE EVER SEEN, IT'S BECAUSE, IN AN INDIVIDUAL SMALL GROUP BASIS, I AM WATCHING THEM PERFORM AND I AM WATCHING THEM THINK IN WAYS THAT ARE COMPLETELY RESPONSIVE TO OUR MISSION,

WHICH, AGAIN, IS ABOUT ACCELERATING THESE STEM CELL THERAPIES TO PATIENTS AND NOT HOLDING ONTO LEGACY POLICIES AND PRACTICES.

SO I DON'T KNOW IF THAT HELPED.

MS. LANSING: THIS IS SHERRY. I JUST WANT TO SAY THANK YOU BECAUSE THIS IS NOT A REFLECTION ON THE PAST. WE'RE AT A NEW POINT. AND I THINK THAT THE VISION THAT YOU'RE PRESENTING AND THE LEADERSHIP THAT YOU'RE PRESENTING, REPRESENTING THE WHOLE TEAM, IS CLEAR AND I THINK CORRECT. AND I JUST WANT TO THANK YOU FOR THIS. IT WAS A REALLY GREAT PRESENTATION.

DR. MILLS: THANK YOU.

DR. LUBIN: THIS IS BERT LUBIN FROM CHILDREN'S OR UCSF BENIOFF CHILDREN'S OAKLAND. I'M LEARNING. IT TAKES A LITTLE WHILE. BUT THE ISSUE OF INDIVIDUAL TRAINING OPPORTUNITIES AND THE PORTFOLIO WE'VE HAD FOR BASIC SCIENCE, I DIDN'T HEAR THAT AT ALL IN THIS DISCUSSION. MAYBE COULD YOU ELABORATE ON THAT?

DR. MILLS: I'M ACTUALLY GLAD YOU ASKED IT. THE REASON I DIDN'T TALK ABOUT IT IN REGARDS TO THE CIRM 2.0, I ALLUDED TO IT AT THE BEGINNING, IS WE NEEDED TO PICK A PART OF THE SPECTRUM TO START WITH ON DEVELOPING THE PROCESS. BUT THE POINT OF IT IS

FIGURE OUT A NEW OPERATING SYSTEM AND THEN APPLY THAT ACROSS ALL OF OUR PROGRAMS. I WANT ALL OF OUR PROGRAMS TO BE AS EFFICIENT AND AS EFFECTIVE AS THEY CAN BE.

SO NOT HEARING ABOUT IT ISN'T A REFLECTION ON OUR COMMITMENT TOWARDS THOSE PROGRAMS. IT'S A REFLECTION JUST SIMPLY ON WE HAD TO PICK A PLACE TO START, AND SO THAT'S WHERE WE STARTED.

WITH REGARDS TO THINGS LIKE OUR TRAINING PROGRAMS AND OUR BASIC BIOLOGY PROGRAMS, THERE IS NOTHING GOING ON AT CIRM THAT'S ELIMINATING THOSE PROGRAMS. WE ARE TAKING A FRESH LOOK AT THOSE PROGRAMS TO SEE HOW WE CAN MAKE THEM BETTER AND, FRANKLY, HOW WE CAN MAKE THEM MORE RESPONSIVE TO THE ONE, TWO, THREE, FOUR CRITERIA. AND IT'S INTERESTING WHEN YOU ASK THAT QUESTION, HOW CAN WE MAKE THESE PROGRAMS MORE RESPONSIVE TO THE ONE, TWO, THREE, FOUR CRITERIA, THE CREATIVE IDEAS THAT COME UP THAT ENHANCE THE PROGRAMS. SO I DON'T WANT TO LET TOO MUCH OUT OF THE BAG ON WHAT'S GOING ON WITH THOSE, BUT LOOK FORWARD TO SOME VERY INTERESTING THINGS GOING FORWARD. THOSE PROGRAMS ARE NOT GOING AWAY.

DR. LUBIN: AND WILL THEY BE INCLUDED IN YOUR DISCUSSIONS AT FUTURE MEETINGS THAT YOU ALLUDED TO?

DR. MILLS: YES. SO THEY WILL BE, BUT, AGAIN, THE FIRST ROLLOUT OF THE CIRM 2.0 IS A PROCESS CENTERING AROUND THE CLINICAL STAGE, AND THEN IT WILL ROLL INTO THOSE. BUT THE REALLY CLEAR POINT IS, WHICH I THINK IS WHAT YOU'RE ALLUDING TO, IS THOSE PROGRAMS ARE NOT GOING AWAY.

CHAIRMAN THOMAS: MR. PANETTA.

MR. PANETTA: THANK YOU, MR. CHAIRMAN. I CAN'T ARTICULATE ANY BETTER, RANDY, WHAT SHERRY SAID ABOUT THE LEADERSHIP THAT YOU'RE SHOWING HERE. AND I THINK, IN ADDITION, I THINK AS WE MOVE INTO THE TRANSLATIONAL PHASES, AND TO CHAIRMAN'S POINTS ABOUT WORKING MORE CLOSELY WITH THE PHARMA COMPANIES AND THE BIOTECH COMPANIES, OUR OUTSIDE EXPERIENCE, I'M SURE, IS GOING TO REALLY PLAY A HUGE ROLE IN LEADING US MORE IN THAT DIRECTION. AND THAT GOES TO MY QUESTION REALLY.

I WAS STRUCK BY YOUR COMMENT THAT YOU HAVE A CONCERN THAT WE MIGHT NOT SEE THE QUALITY, THE HIGH QUALITY APPLICATIONS THAT YOU WANT TO SEE IN THE FUTURE AND THE FACT THAT I THINK YOU SAID ABOUT $1.9 BILLION HAS BEEN SPENT THUS FAR IN THE GRANT FUNDING PROCESS. SO I WONDER IF YOU MIGHT COMMENT ON THE QUALITY ASPECT BECAUSE I THINK ONE OF OUR EXPECTATIONS WAS THAT IN SPENDING $1.9 BILLION IN

GRANT FUNDING, THAT WE WOULD HOPEFULLY MOVE INTO A TRANSLATIONAL PHASE WHERE WE WOULD SEE THESE HIGH QUALITY APPLICATIONS COMING IN. SO IF YOU COULD EXPAND A LITTLE BIT ON WHAT THAT SITUATION IS AND WHAT YOUR CONCERNS ARE.

DR. MILLS: SURE. SO THE PARTICULAR ASPECT I WAS TALKING ABOUT THERE, A LARGE DRIVER OF OUR SPEND ARE THOSE CLINICAL STAGE PROGRAMS. SO AT SOMEWHERE BETWEEN 10 TO $20 MILLION IN AWARD, THOSE ARE VERY LARGE DRIVERS OF OUR BURN RATE OUT OF THAT AWARD BUCKET AS A REVIEWER. SO THIS IS PRE ME COMING TO CIRM. WE WOULD GO THROUGH THESE REVIEW MEETINGS AND, AS YOU GUYS WOULD SEE, WE WOULD GO THROUGH AND HAVE -- WE MIGHT REVIEW 15 OR 20 APPLICATIONS AND WE ONLY END UP GIVING AWARDABLE SCORES TO THREE OR FOUR, AND THAT'S NOT BECAUSE WE HAD ANY INTEREST IN NOT GIVING GOOD SCORES. THERE WERE JUST THREE OR FOUR THAT DESERVED, BY MERIT, FUNDABLE SCORES. THAT'S MY CONCERN. I WOULD SAY THAT'S MY GOAL IS HOW DO WE DRIVE UP AND INCREASE THE NUMBER OF PROGRAMS COMING IN THAT WARRANT GIVING A FUNDABLE SCORE TO.

I THINK, AND THIS GOES BACK TO J.T.'S POINT, AS I GO OUT AND I TALK TO DIFFERENT STAKEHOLDERS IN OTHER AREAS, NOT JUST IN COMPANIES, BUT OTHER AREAS, CIRM IS NOT AS WIDELY KNOWN OR IF IT

IS KNOWN, NOT NEARLY UNDERSTOOD WELL ENOUGH TO BE FULLY UTILIZED. AND THAT IS A REAL OPPORTUNITY. SO AS I SAY, I'M CONCERNED ABOUT NOT GETTING ENOUGH QUALITY. IT'S NOT THAT THE PROGRAMS THAT WE FUNDED AREN'T MOVING THROUGH WELL. IT'S THAT WE'LL NEED MORE THAN THAT, I THINK, IN ORDER TO KEEP THE ENGINE RUNNING AT THE SPEED WE WANT IT TO RUN. AND WE'RE MISSING AN OPPORTUNITY RIGHT NOW BECAUSE THERE'S JUST A LOT OF MISINFORMATION ABOUT WHAT CIRM IS AND WHAT CIRM ISN'T.

AND THAT'S PART OF IF WE HAVE A GOOD CIRM 2.0 INITIATIVE, AND ACTUALLY ONE OF THE THINGS I'VE TALKED WITH SOME BOARD MEMBERS ABOUT AND I'M GOING TO ASK YOU ALL AS IT ROLLS OUT IS TO HELP SPREAD THE WORD. THAT WILL BE A VERY IMPORTANT PART. IF WE BUILD A BETTER PRODUCT IN CIRM 2.0, THE NEXT STEP WILL BE MARKETING THAT PRODUCT AND GETTING THE WORD OUT AND ELIMINATING THE MISCONCEPTION SO WE DO HAVE MORE HIGH QUALITY APPLICATIONS COMING INTO THE SYSTEM.

DR. BOXER: THANKS. ACTUALLY MY QUESTION WAS ALSO RELATED TO THAT, AND I THINK YOU'VE ANSWERED A LOT OF IT. BUT I GUESS JUST TO CLARIFY A COUPLE OF THINGS. SO AS I UNDERSTAND IT, OBVIOUSLY CIRM HAS FUNDED HIGH QUALITY PROJECTS.

DR. MILLS: ABSOLUTELY.

DR. BOXER: I DON'T THINK ANYONE DISAGREES WITH THAT. PERHAPS SOME OF THEM AREN'T PROGRESSING AS QUICKLY, AND THAT'S DIFFICULT TO PREDICT, BUT YOU'RE ALSO SAYING IT WOULD BE GOOD TO GET MORE HIGH QUALITY PROJECTS THAT ARE ESSENTIALLY READY FOR THE CLINICAL TRIAL STAGE. IS THAT --

DR. MILLS: YEAH. THE MORE HIGH QUALITY PROJECTS COME, AND CLEARLY I DID NOT ARTICULATE THIS WELL, IS NOT A REFLECTION ON THE PROGRAMS WE HAVE. IT'S HOW DO WE CONTINUE TO FEED THAT PIPELINE. AND I SAY THAT IF YOU LOOK AT OUR APPLICATIONS OVER TIME, THEY'RE DROPPING. SO WHEN WE DID SOME OF THE EARLIER CLINICAL STAGE AWARDS, WE WOULD HAVE 15 OR 17. SOME OF THOSE EARLY ONES I REMEMBER THERE BEING LOTS OF APPLICATIONS. WE'D GO TO REVIEWS FOR A FEW DAYS. NOW THREE MIGHT COME IN AT A PARTICULAR CALL. THAT'S WHAT I'M TALKING ABOUT AS CONCERNING ME IS THE APPLICATIONS AREN'T COMING. IT'S NOT A REFLECTION OF THE WORK THAT'S GOING ON. IT'S NOT A REFLECTION OF WHAT'S GOING THROUGH THE PIPELINE. BUT I WOULD LIKE TO KEEP THAT CYCLE GOING AND ATTRACT MORE BECAUSE THERE IS STEM CELL WORK GOING ON OUT THERE.

DR. BOXER: SO YOUR VIEW IS THAT THERE ARE POTENTIALLY MORE AREAS, MORE PROJECTS THAT ARE READY

FOR THIS PHASE THAT WE SORT OF COULD POTENTIALLY --

DR. MILLS: WITHOUT QUESTION.

DR. BOXER: -- BE FUNDING.

DR. MILLS: WITHOUT QUESTION.

DR. BOXER: OKAY. THANKS. THAT'S HELPFUL.

CHAIRMAN THOMAS: DIANE.

MS. WINOKUR: WHAT ABOUT COLLABORATIONS? THERE ARE ANY NUMBER OF ORGANIZATIONS ACROSS THE COUNTRY THAT ARE FUNDING STEM CELL RESEARCH AT A MUCH LOWER RATE, AND IT MAKES IT TAKE EVER SO MUCH LONGER AND THEY ARE FUNDING SOME CALIFORNIA RESEARCHERS. SO THEY HAVE IDENTIFIED PROJECTS AND THEY ARE PARTIALLY FUNDING THEM. IF WE COLLABORATED WITH THEM WITH OUR GREATER STRENGTH AND OUR GREATER FUNDING, PERHAPS WE WOULD GET IN PROJECTS THAT WE AREN'T GETTING APPLICATIONS FROM.

DR. MILLS: ABSOLUTELY. AND I THINK THE QUESTION, THEN, IS SO WHY AREN'T THEY. WHY AREN'T WE GETTING THOSE IN?

MS. WINOKUR: THAT IS.

DR. MILLS: AND I THINK THIS GOES BACK TO AN AWARENESS ISSUE. WE HAVE A GOOD PRODUCT. WE DO NEED TO MAKE IT MORE WIDELY UNDERSTOOD AND MORE CORRECTLY UNDERSTOOD. AND AS I'VE GONE OUT AND I'VE TALKED TO PEOPLE, THE PEOPLE THAT YOU WOULD THINK

WOULD BE INTERESTED IN THIS KIND OF THING, A LOT OF THEM ARE JUST RUNNING OFF OF MISPERCEPTIONS ABOUT WHAT THEY THINK ABOUT CIRM. AND SO IT'S ALL AN OPPORTUNITY FOR US TO CORRECT IT.

MS. WINOKUR: WELL, I WAS THINKING THAT SOME KIND OF AWARENESS GROWING AMONG THE ORGANIZATIONS THAT ARE FUNDING SOME OF THESE GOOD PROJECTS, BUT AT A MUCH LOWER RATE, WOULD BE A GOOD WAY TO INCREASE IT.

DR. MILLS: ABSOLUTELY. ABSOLUTELY.

CHAIRMAN THOMAS: I THINK, DIANE, I'LL JUST ADD ON THAT. THAT ALL GETS TO SORT OF THE NOTION THAT WE'VE BANDIED ABOUT FROM TIME TO TIME OF LEVERAGING OUR FUNDS. AND WE'VE HAD INTERNAL DISCUSSIONS ABOUT HOW WE REALLY NEED TO REACH OUT IN A MUCH MORE COMPREHENSIVE WAY TO THE DISEASE FOUNDATIONS, FOR EXAMPLE, THAT ARE DOING THE SORT OF WORK THAT YOU'RE SAYING TO TRY TO BRING THEM INTO THIS CONSORTIUM OF FUNDING GROUPS THAT WE'RE TRYING TO PUT TOGETHER FOR OUR PROJECTS. SO THAT'S SOMETHING WE'RE VERY INTENT ON IMPROVING ON, AND IT'S A GREAT POINT. THANK YOU.

MS. WINOKUR: THANK YOU.

CHAIRMAN THOMAS: DR. FINE.

DR. FINE: I WONDER WHETHER THE PERCEIVED

FALL-OFF IN READY-FOR-PRIME-TIME STUDIES IS RELATED TO SOMETHING THAT, IN FACT, CIRM DOESN'T HAVE ANY CONTROL OVER. THAT'S THE DIMINISHING AND STILL NOT RESTORED FUNDING FOR THE PRECLINICAL STAGES OF PROJECTS THAT CAN ONLY BECOME READY FOR CLINICAL APPLICATION WHEN ALL THE BASIC WORK HAS BEEN DONE. AND THE CURRENT EXPERIENCE STILL IS THAT FEDERAL FUNDING IS NOWHERE NEAR WHERE IT SHOULD BE TO ALLOW THAT PHASE TO BE FUNDED. AND EVEN IF THERE IS FUNDING, THOSE PARTICULAR TYPE OF STUDIES ARE NOT DOING WELL AT STUDY SECTIONS.

DR. MILLS: YEAH. AND SO THAT GOES BACK TO THE OTHER COMMENT WE MADE IS WE ARE GOING TO BE CONTINUING OUR EARLIER STAGE FUNDING AS WELL. I WILL ALSO SAY THERE ARE ALSO OTHER TECHNOLOGIES OUT THERE THAT ARE LITERALLY IN A HOLDING PATTERN RIGHT NOW BECAUSE THEY BELIEVE FUNDING IS NOT AVAILABLE TO THEM, AND THAT'S SOMETHING WE CAN FIX.

DR. BRENNER: I THINK SEVERAL OF US HAVE ALLUDED TO THIS IN THIS DISCUSSION. BUT I THINK THERE'S A PHILOSOPHICAL ISSUE THAT THE BOARD NEEDS TO ADDRESS. AND THAT IS SHOULD WE NOW BE SWITCHING GEARS -- YOU AND I TALKED ABOUT THIS -- AND MORE EMPHASIZE CLINICAL TRIALS AND LESS BASIC SCIENCE, OR SHOULD WE KEEP GOING AS WE'RE DOING. AND THE

QUESTION IS HAS CIRM EVOLVED OVER OUR LIFETIME THAT WHEN INITIALLY WE SPENT ALL OUR FUNDING ON TRAINING, BASIC RESEARCH, AND NOW DO WE HAVE ENOUGH THINGS READY TO GO INTO CLINICAL TRIALS. IS THAT THE DELIVERABLE WE WANT TO MAKE IN THE NEXT COUPLE YEARS, OR SHOULD WE CONTINUE OUR PRESENT WAY OF MULTITASKING, DOING A LOT OF DIFFERENT THINGS? I THINK THAT WILL REFLECT IN YOUR BUDGET. IF WE CHANGE DRAMATICALLY TO MORE CLINICAL TRIALS, THOSE ARE MUCH MORE EXPENSIVE THAN THE FUNDAMENTAL RESEARCH THAT WE KIND OF ARE COMFORTABLE WITH AND KNOW HOW TO DO AND WE KNOW HOW TO PACE OURSELVES FOR IT.

DR. MILLS: THEY ARE MORE EXPENSIVE. AS I SAY, THERE'S JUST NOT A VOLUME OF THEM RIGHT NOW COMING IN. I DO THINK IT IS A GOOD TOPIC FOR THE BOARD TO TAKE UP AND DISCUSS AND BUILD CONSENSUS AROUND, AND WE WILL FOLLOW THAT LEAD. MY OWN THOUGHT ON THIS, HAVING TAKEN A PRODUCT FROM PRECLINICAL ALL THE WAY THROUGH PHASE IV AND AN APPROVAL, IS THERE ISN'T A DROP-OFF IN BASIC BIOLOGY AS IT GOES ON. IT'S SORT OF A MISCONCEPTION THAT YOU DO ALL THIS PRECLINICAL WORK AND THEN YOU GET INTO THE CLINIC AND THE PRECLINICAL WORK'S OVER. I CAN TELL YOU WE DID MORE WORK IN PHASE III AND PHASE IV PRECLINICALLY, MORE BASIC BIOLOGY LABORATORY WORK, THAN WE DID

PRE-IND.

SO THE CONCEPT OF TURNING THAT ENGINE OFF I THINK WOULD BE A CATASTROPHICALLY BAD MISTAKE.

DR. BRENNER: I AGREE COMPLETELY. BUT I THINK THE POINT IS THAT THE REVERSE ISN'T TRUE, THAT YOU CAN SPEND A LOT OF TIME DOING BASIC RESEARCH AND NOT PUSH IT INTO CLINICAL RESEARCH. THAT'S WHAT MOST OF US DO FOR OUR WHOLE LIVES. THAT'S WHAT THE NIH IS BASED UPON. SO THAT WAS THE PHILOSOPHICAL DECISION. WE CAN CONTINUE DOING MORE BASIC RESEARCH, OR WE COULD USE THE CLINICAL RESEARCH WE'RE DOING TO GET MORE INSIGHTS, WHICH IS SORT OF A CHANGE IN OUR PHILOSOPHY, WHAT YOU JUST SAID, WHICH I AGREE WITH COMPLETELY.

DR. MILLS: OKAY.

CHAIRMAN THOMAS: OTHER COMMENTS? RANDY, ONE OTHER QUESTION AS PERTAINS TO THESE SMALL GROUP DISCUSSIONS YOU'VE BEEN HAVING. I THINK THE BOARD WOULD BE INTERESTED IN HEARING HOW THAT'S, SINCE THEY NEVER GET TO HEAR ABOUT THIS SORT OF THING, IMPACTING THE CULTURE INTERNALLY AND EMPOWERMENT AND ALL THAT SORT OF THING.

DR. MILLS: YEAH. SO I THINK IN GENERAL WHEN YOU HAVE A TALENTED GROUP OF PEOPLE, LISTENING TO THEM IS A PRETTY GOOD IDEA BECAUSE YOU'RE GOING TO

COME UP WITH IDEAS. I THINK THE OTHER THING WE NEED TO BE A LITTLE BIT OKAY WITH IS, AND WHEN YOU DO THAT, THERE'S GOING TO BE SOME MISTAKES, BUT THAT CREATES AN OPPORTUNITY FOR GROWTH WITHIN THE ORGANIZATION. I AM OKAY HAVING THERE BE SOME MISTAKES. I'M NOT OKAY WITH THERE BEING CATASTROPHIC MISTAKES, BUT SOME MISTAKES IS GOOD. WHEN YOU DO THAT, YOU'RE CLEARLY THEN PLACING TRUST IN PEOPLE. WHEN YOU PLACE TRUST IN PEOPLE, YOU TEND TO GET -- IT TENDS TO PAY A PRETTY GOOD DIVIDEND. AND I THINK THAT'S THE CULTURAL ASPECT THAT J.T. IS REFERRING TO AS WE ARE TRUSTING THEM, WE'RE EXPECTING THEM TO DELIVER, AND WE'RE GOING TO BE BEHIND THEM WHEN THEY DELIVER THEIR RESULTS. AND YOU JUST TEND TO GET MORE OUT OF AN ORGANIZATION THAT WAY.

CHAIRMAN THOMAS: OKAY. ANY OTHER COMMENTS OR QUESTIONS FOR DR. MILLS? THANK YOU VERY MUCH.

PART 2 OF THE PRESIDENT'S REPORT IS THE FINANCE UPDATE, AND CHILA WILL GIVE THAT TO THE BOARD NOW. THANK YOU.

MS. SILVA-MARTIN: GOOD MORNING, MR. CHAIR, MEMBERS OF THE BOARD. TODAY I WILL BE REPORTING ON THE FINAL EXPENDITURES FOR THE '13-'14 FISCAL YEAR AS WELL AS PROVIDING YOU WITH A CURRENT REPORT ON OUR CURRENT FINANCIAL STATUS.

I DO WANT TO SAY THAT WE COMPLETED THE '13-'14 FISCAL YEAR ON TIME AND WITHIN BUDGET, AND WE ARE NOW RIGHT IN THE MIDDLE OF THE FINANCIAL AUDIT, AND THAT AUDIT IS SCHEDULED TO BE SUBMITTED TO THE STATE CONTROLLER'S OFFICE ON OCTOBER 15TH.

SO NOW LOOKING AT OUR ACTUAL EXPENDITURES AGAINST WHAT WAS BUDGETED FOR THE '13-'14 FISCAL YEAR. AS YOU CAN SEE, WE WERE BUDGETED A TOTAL OF $17.4 MILLION, AND OUR ACTUALS CAME IN AT 15.2 WITH AND UNDERRUN OF ABOUT $2.2 MILLION. AND REALLY THERE ARE THREE KEY DRIVERS AFFECTING THAT UNDERRUN.

FIRST OF ALL, WE HAD POSITIONS THAT WE HAD BUDGETED FOR DURING THE '13-'14 FISCAL YEAR THAT WERE NEVER FILLED. AS A MATTER OF FACT, WE ELIMINATED THOSE POSITIONS IN THE '14-'15 BUDGET.

WE ALSO HAD SCHEDULED FUNDS FOR REVIEWS, AND WE ACTUALLY POSTPONED TWO REVIEWS THAT DID NOT MATERIALIZE.

AND THEN FINALLY, WE HAD SOME EXTERNAL SERVICES FUNDS SET ASIDE FOR CONTINGENCY ITEMS THAT DID NOT MATERIALIZE OR THEY CAME IN AT LOWER THAN WHAT WE HAD ALLOCATED. SO THAT REALLY IS WHAT MAKES UP THE VARIANCE OF $2.2 MILLION.

SO NOW LOOKING AT OUR ACTUALS YEAR OVER YEAR, AS YOU CAN SEE, FOR THE '13-'14 FISCAL YEAR,

OUR EXPENDITURES WERE ACTUALLY $1.1 MILLION LESS THAN WHAT WE SPENT IN THE '12-'13 FISCAL YEAR. AND REALLY THE KEY DRIVERS FOR THAT WERE NONREOCCURRING COSTS WE HAD OR COSTS THAT WE ELIMINATED. FOR EXAMPLE, WE DON'T HOLD OUR GRANTEE MEETING EVERY YEAR, AND SO IN '12-'13 WE DID HAVE A MEETING. WE HAD SEVERAL NONREOCCURRING COSTS THAT OCCURRED IN THE '12-'13 FISCAL YEAR, SUCH AS OUR FINAL PAYMENTS FOR IOM REVIEW AND AN ONLINE JOURNAL. AND THEN WE DID SOME REVIEWS INTERNALLY AND WERE ABLE TO ELIMINATE QUITE A BIT OF FUNDS FOR EXTERNAL PROGRAMMING BECAUSE WE BROUGHT THAT FUNCTION IN-HOUSE. SO THAT IS WHAT EXPLAINS THE VARIANCE YEAR OVER YEAR.

AND THEN THESE NEXT TWO CHARTS REALLY PROVIDE YOU WITH OUR COST CENTERS ACTUALS TO THEIR BUDGET. AND AS YOU CAN SEE, FOR THE REASONS THAT I STATED PREVIOUSLY, EACH OF OUR COST CENTERS, FOR THE MOST PART ALL OF OUR COST CENTERS, EXCEPT THE FINANCE AND OPERATIONS UNIT, WERE WITHIN THEIR ACTUAL BUDGETS. AND IN COMPARING THOSE COSTS YEAR OVER YEAR, AGAIN, THE REASONS FOR THE REDUCTION IN COSTS WERE THE ONE-TIME, NONREOCCURRING COSTS THAT HAPPENED IN THE '12-'13 FISCAL YEAR.

SO NOW LOOKING AT OUR CURRENT FINANCES, I DO WANT TO SAY, AS DR. MILLS INDICATED EARLIER, FOR

THE '13-'14 FISCAL YEAR, OUR GRANT DISBURSEMENTS WERE RIGHT AT $194.4 MILLION. OUR AVAILABLE CASH AS OF AUGUST IS $63.4 MILLION. SO WE CONTINUE TO HAVE A VERY HEALTHY CASH RESERVE. WE DO HAVE FUNDS STILL AVAILABLE FOR US THROUGH OUR COMMERCIAL PAPER AUTHORIZATION, AND THE STATE OF CALIFORNIA IS GOING TO HAVE A BOND SALE LATER THIS MONTH, AND WE ARE HOPING THAT WE WILL BE PART OF THAT AND WILL BE GETTING ADDITIONAL FUNDS.

THIS REALLY CONCLUDES MY REPORT. ARE THERE ANY QUESTIONS?

CHAIRMAN THOMAS: MR. JUELSGAARD.

DR. JUELSGAARD: YES, CHILA, JUST ONE QUESTION. SO I DON'T RECALL WHAT THE '14-'15 BUDGET NUMBERS ARE, BUT WHAT DOES THAT OVERALL BUDGET NUMBER LOOK LIKE COMPARED TO THE '13-'14 ACTUALS?

MS. SILVA-MARTIN: SO OUR '14-'15 BUDGET IS $17.3 MILLION. SO COUPLE MILLION DOLLARS MORE THAN WHAT WE ACTUALLY SPENT IN THE CURRENT YEAR. BUT THAT BUDGET DOES INCLUDE -- WE DID ELIMINATE THOSE POSITIONS THAT I TALKED ABOUT EARLIER. AND AS YOU KNOW, WE HAVE VACANCIES CURRENTLY THAT WE HAVE NOT FILLED AND I BELIEVE WE DON'T INTEND TO FILL THEM. SO THAT WILL IMPACT, OBVIOUSLY, THE ACTUAL EXPENDITURES DURING THIS CURRENT YEAR AS WELL.

DR. JUELSGAARD: THANK YOU.

MS. SILVA-MARTIN: ANY OTHER QUESTIONS?

CHAIRMAN THOMAS: ONE COMMENT. AS THE BOARD LOOKS AT THE PENULTIMATE LINE THERE, ADDITIONAL FUNDS FROM FALL BOND SALES, ONE LINE, BUT IT REPRESENTS A HUGE AMOUNT OF WORK. WE HAVE HAD FROM THE OUTSET VERY STRONG RELATIONSHIPS WITH THE DEPARTMENT OF FINANCE AND THE GOVERNOR'S OFFICE, WHICH IS THE PARTY TO WHOM WE ACTUALLY REPORT ON WHAT IT IS WE NEED ON A SEMIANNUAL BASIS. AND THAT INTERACTION, AND THERE'S LOTS OF GIVE-AND-TAKE, IS THE BASIS FOR WHAT GOES INTO OUR COMPONENT OF THE SEMIANNUAL TREASURER'S BONDS OR COMMERCIAL PAPER ISSUANCE. AND THAT, OF COURSE, IS -- SO THE RELATIONSHIPS WITH THE GOVERNOR'S OFFICE AND THE RELATIONSHIP WITH THE TREASURER'S OFFICE ARE CRITICAL TO MAINTAINING THIS STREAM OF FUNDING THAT CHILA IS TALKING ABOUT.

AND I'D LIKE TO JUST HAVE A SHOUTOUT HERE FOR AMY LEWIS, WHO IS OUR PERSON HERE WHO DEALS ON THE FRONT LINES. LYNN HARWELL, AS YOU KNOW, DID THAT FOR MANY YEARS. WHEN SHE LEFT, AMY HAS TAKEN THIS ON, AND THAT PAIR OF RELATIONSHIPS IS CRITICAL AND INVOLVES LOTS OF SPREADSHEETS AND JUSTIFICATIONS AND GIVE-AND-TAKE AND ALL THAT SORT OF THING, AND IT ALL

LEADS TO THIS SINGLE LITTLE LINE HERE, ADDITIONAL FUNDS FROM BOND SALES. SO I WANT EVERYBODY TO KNOW THAT THAT IS A COMPLEX PROCESS THAT WE SPENT A LOT OF TIME DEALING WITH.

ANY OTHER COMMENTS ON CHILA'S PRESENTATION? OKAY. THANK YOU.

OKAY. ON TO ACTION ITEMS, ITEM NO. 7, CONSIDERATION OF APPLICATION FOR PA 14-01, THE CIRM ACCELERATED DEVELOPMENT PATHWAY. DR. PRIEST IS GOING TO LEAD US THROUGH THIS DISCUSSION.

DR. PRIEST: GOOD MORNING, MEMBERS OF THE BOARD AND MEMBERS OF THE PUBLIC. MY NAME IS CATHERINE PRIEST, AND I WILL BE PRESENTING THE ACCELERATED DEVELOPMENT PATHWAY TODAY, PROGRAM ANNOUNCEMENT 14-01.

I WILL COVER THE OBJECTIVE OF THE PROGRAM, INFORMATION ON THE AWARD ITSELF, A SUMMARY OF THE APPLICANTS WE HAD, THE REVIEW CRITERIA AND PROCESS FOR REVIEW BY THE GRANTS WORKING GROUP, AND FINALLY THE FUNDING RECOMMENDATIONS FROM THE GRANTS WORKING GROUP AND THE CIRM TEAM.

THE OBJECTIVE OF THE ACCELERATED DEVELOPMENT PATHWAY WAS TO FURTHER ADVANCE THE PROGRESS OF SUCCESSFUL PROJECTS THAT ARE WORKING TO DEVELOP A STEM CELL-BASED THERAPEUTIC AND ARE ALREADY

FUNDED IN THE CIRM DISEASE TEAM AND STRATEGIC PARTNERSHIP PORTFOLIO, PARTICULARLY THOSE TEAMS THAT HAVE THE POTENTIAL TO REACH CLINICAL DEMONSTRATION OF AN ACCEPTABLE SAFETY PROFILE AND CLINICAL PROOF OF CONCEPT DURING OR BEFORE 2017.

AND IN THE REMAINDER OF THE PRESENTATION, I WILL REFER TO THE FUNDED DISEASE TEAM OR STRATEGIC PARTNERSHIP AWARD AS THE TEAM'S PARENT AWARD.

THE ACCELERATED DEVELOPMENT PATHWAY WAS DESIGNED TO SUPPORT ONGOING CIRM PROGRAMS THAT ARE IN OR NEAR EARLY CLINICAL DEVELOPMENT. IT WAS OPEN TO ALL AWARDEES THAT HOLD AN ACTIVE DISEASE TEAM OR STRATEGIC PARTNERSHIP AWARD THAT INCLUDES FUNDING TO CONDUCT A CLINICAL TRIAL. TEAMS WERE ASKED TO PROPOSE ADDITIONAL ACTIVITIES THAT WOULD FALL OUTSIDE THE PLANS OF THEIR PARENT AWARD AND WOULD ACCELERATE THEIR PROGRESS TOWARD DEMONSTRATION OF CLINICAL PROOF OF CONCEPT.

THE ACCELERATED DEVELOPMENT PATHWAY WAS DESIGNED WITH ACTIVITY-BASED FUNDING WHICH WAS CAPPED BOTH FOR EACH TEAM AND FOR EACH TYPE OF ACTIVITY. TEAMS COULD REQUEST A MAXIMUM OF $25 MILLION IN TOTAL COST FUNDING. TEAMS COULD REQUEST UP TO A MAXIMUM OF $5 MILLION FOR MANUFACTURING IMPROVEMENTS SUCH AS PROCESS OR DEVICE OPTIMIZATION, ASSAY DEVELOPMENT, OR

SCALE-UPS, UP TO A MAXIMUM OF $10 MILLION FOR KEY DEVELOPMENT ACTIVITIES SUCH AS BIOMARKER VALIDATION, BRIDGING STUDIES, AND ASSAY DEVELOPMENT, AND UP TO A MAXIMUM $20 MILLION TO CONDUCT ADDITIONAL CLINICAL ACTIVITIES SUCH AS A FOLLOW-ON CLINICAL TRIAL OR ADDING ADDITIONAL PATIENT GROUPS OR CLINICAL TRIAL SITES TO THEIR ONGOING CLINICAL TRIAL. TOTAL COST COULD INCLUDE DIRECT PROJECTS AND FACILITIES COSTS AS WELL AS INDIRECT COSTS.

OF NOTE, PROPOSALS WERE SPECIFICALLY STRUCTURED IN A MODULAR MANNER TO GIVE THE GRANTS WORKING GROUP THE OPPORTUNITY TO RECOMMEND INDIVIDUAL ACTIVITIES WITHIN AN APPLICATION FOR ADDITIONAL FUNDING AT THIS TIME.

TO SUMMARIZE THE AREAS OF THE PORTFOLIO THAT WERE REPRESENTED IN THE REVIEW, APPLICATIONS WERE SUBMITTED BY FIVE AWARDEES THAT WE'RE PRESENTING TO YOU TODAY. IMPORTANTLY, ALL TEAMS THAT APPLIED FOR THE ACCELERATED DEVELOPMENT PATHWAY HAVE ACTIVE AWARDS THAT ARE IN GOOD STANDING, AND THEY WILL CONTINUE TO RECEIVE FULL, ONGOING SUPPORT OF THE PARENT AWARDS AND WILL BE ELIGIBLE TO REAPPLY TO THE ACCELERATED DEVELOPMENT PATHWAY IN THE FUTURE.

LOOKING AT THIS TABLE, WE HAD AN APPLICATION FROM A TEAM WORKING IN TYPE 1 DIABETES

USING THE APPROACH OF AN ALLOGENEIC PANCREATIC PROGENITOR CELL IN AN ISOLATION DEVICE. AND THIS TEAM IS FUNDED UNDER THEIR PARENT AWARD TO CONDUCT A PHASE I-II CLINICAL TRIAL IN TYPE 1 DIABETES, AND THIS TEAM HAS AN ACTIVE IND TO PERFORM THESE STUDIES.

WE HAD AN APPLICATION FROM A TEAM WORKING IN RETINITIS PIGMENTOSA USING THE APPROACH OF AN ALLOGENEIC RETINAL PROGENITOR CELL FOR TRANSPLANTATION. AND THIS TEAM IS FUNDED UNDER THEIR PARENT AWARD TO CONDUCT A PHASE I-II CLINICAL TRIAL IN RETINITIS PIGMENTOSA.

WE HAD AN APPLICATION FROM A TEAM WORKING IN CHRONIC LYMPHOCYTIC LEUKEMIA OR CLL. THIS TEAM IS USING A MONOCLONAL ANTIBODY APPROACH, AND THEY ARE FUNDED UNDER THEIR PARENT AWARD TO CONDUCT A PHASE I A AND PHASE 1 B CLINICAL TRIAL IN CLL, AND THEY ALSO HAVE AN ACTIVE IND.

WE HAD AN APPLICATION FROM A TEAM WORKING IN AMYOTROPHIC LATERAL SCLEROSIS OR ALS, AND THIS TEAM IS USING A GENETICALLY MODIFIED ALLOGENEIC NEURAL PROGENITOR CELL AS THEIR APPROACH TO THE DISEASE. AND THEY ARE FUNDED UNDER THEIR PARENT AWARD TO CONDUCT A PHASE I CLINICAL TRIAL IN ALS.

AND FINALLY, WE HAVE A TEAM WORKING IN THE AREA OF SICKLE CELL DISEASE USING A GENETICALLY

MODIFIED AUTOLOGOUS HEMATOPOIETIC STEM CELL APPROACH. AND IN THEIR PARENT AWARD, THEY ARE FUNDED TO CONDUCT A PHASE I CLINICAL TRIAL IN SICKLE CELL DISEASE. THIS TEAM ALSO HAS AN ACTIVE IND.

MOVING ON TO A DESCRIPTION OF THE PROCESS OF REVIEW, THE ACCELERATED DEVELOPMENT PATHWAY REVIEW CRITERIA CONSISTED OF A NUMBER OF POINTS THAT THE MEMBERS OF THE GRANTS WORKING GROUP EVALUATED BASED ON SCIENTIFIC AND TECHNICAL MERIT. THEY EXAMINED THE APPLICATIONS ACCORDING TO THE FOLLOWING CRITERIA: CLINICAL COMPETITIVENESS AND IMPACT OF THE PROPOSED THERAPY, CONTINUED RELEVANCE OF THE THERAPEUTIC TO REGENERATIVE MEDICINE, STRENGTH OF THE DEVELOPMENT PROGRAM, QUALIFICATIONS OF THE DEVELOPMENT TEAM, DEMONSTRATION OF PROGRESS ON THEIR PARENT AWARD, AND EFFECTIVE PROGRAM LEADERSHIP TO DATE, AND THE APPROPRIATENESS AND FEASIBILITY OF THE PROPOSED ACTIVITIES TO ACCELERATE THE DEVELOPMENT PROGRAM TO CLINICAL PROOF OF CONCEPT BY OR DURING 2017.

THUS, THERE WAS AN ASSESSMENT OF THE ACTIVITIES PROPOSED, THEIR LIKELIHOOD TO ACCELERATE THE DEVELOPMENT PROGRAM, AND WHETHER THIS WAS THE BEST TIME FOR A TEAM TO INITIATE ADDITIONAL ACTIVITIES PROPOSED.

THE GRANTS WORKING GROUP USED A TWO-STEP

REVIEW PROCESS FOR THE ACCELERATED DEVELOPMENT PATHWAY. IN STEP 1, THE GRANTS WORKING GROUP REVIEWED AND DISCUSSED THE ENTIRE APPLICATION ACCORDING TO THE REVIEW CRITERIA FOR THE PROGRAM ANNOUNCEMENT AND VOTED ON WHETHER, QUOTE, BASED UPON THE REVIEW CRITERIA OUTLINED IN PROGRAM ANNOUNCEMENT 14-01, THE TEAM HAS DEMONSTRATED ADEQUATE READINESS AND CAPACITY TO CONSIDER AND INTEGRATE NEW PROPOSED ACTIVITIES THAT WILL ADVANCE OR ACCELERATE THEIR PROGRAM TOWARD A CLINICAL PROOF OF CONCEPT POTENTIALLY BY OR DURING 2017, UNQUOTE. AND A YES VOTE ON THIS STATEMENT REPRESENTED AN OVERALL SCORE OF 65 OR HIGHER ON THE APPLICATION WHILE A NO VOTE REPRESENTED AN OVERALL SCORE BELOW 65, THUS PLACING THE REQUEST FOR ADDITIONAL FUNDING IN TIER III. APPLICATIONS WITH MAJORITY YES VOTE PROCEEDED TO SCORING FOR THE INDIVIDUAL MODULES, AND APPLICATIONS WITH MAJORITY NO OR TIE VOTE ON THE QUESTION ABOVE WERE NOT CONSIDERED FURTHER BY THE GRANTS WORKING GROUP AND WERE PLACED IN TIER III AT THIS TIME.

IN STEP 2 OF THE REVIEW PROCESS, FOR THOSE APPLICATIONS WITH A MAJORITY YES VOTE, THE PRINCIPAL NEW ACTIVITIES PROPOSED BY THE TEAM WERE SCORED USING A CONVENTIONAL 1 TO 100 RANGE. AN AVERAGE SCORE OF 75 TO 100 PLACED THE ACTIVITY MODULE IN TIER I AND

RECOMMENDED FOR FUNDING. AN AVERAGE SCORE OF 65 TO 74 PLACED THE ACTIVITY MODULE IN TIER II, REPRESENTING MODERATE SCIENTIFIC QUALITY AND/OR NO CONSENSUS BETWEEN THE REVIEWERS DURING THE REVIEW. AND AN AVERAGE SCORE OF 1 TO 64 PLACED AN ACTIVITY MODULE IN TIER III, NOT RECOMMENDED FOR ADDITIONAL FUNDING AT THIS TIME.

SO WHAT YOU WOULD SEE IN THE GRANTS WORKING GROUP SUMMARY AND RECOMMENDATIONS, THEN, FOR EACH APPLICATION IS A STATEMENT REFLECTING THE RESULTS OF STEP 1. DID THE MAJORITY OF THE GRANTS WORKING GROUP VOTING MEMBERS ON THE APPLICATION ASSESS THE TEAM AS READY TO INTEGRATE THE PROPOSED ADDITIONAL ACTIVITIES AT THIS TIME TO ADVANCE OR ACCELERATE THEIR PROGRAMS TOWARDS CLINICAL PROOF OF CONCEPT? THEN COMMENTS FROM THE GRANTS WORKING GROUP REGARDING THE OVERALL MERIT OF THE APPLICATION THAT IMPACTED THAT DECISION. AND FOR WITH THOSE APPLICATIONS WITH A MAJORITY YES VOTE ON STEP 1, YOU WILL ALSO SEE ADDITIONAL COMMENTS FROM THE GRANTS WORKING GROUP THAT LED TO THE SCORES GIVEN FOR THE ACTIVITY MODULES IN STEP 2 OF THE REVIEW PROCESS.

MOVING NOW TO THE GRANTS WORKING GROUP SCORING AND FUNDING RECOMMENDATIONS, I KNOW THIS IS PRINTED SMALL, BUT IT IS IN YOUR PACKAGE. THE GRANTS

WORKING GROUP IDENTIFIED TWO PROGRAMS THAT THEY FELT WERE READY TO BE CONSIDERED BY CIRM FOR ADDITIONAL FUNDING AT THIS TIME: THE APPLICANT TEAM WORKING IN TYPE 1 DIABETES, THIS IS APPLICATION AP 1-08039, AND THE APPLICANT TEAM WORKING IN RETINITIS PIGMENTOSA, THIS IS APPLICATION AP 1-08040.

IN THE FIRST OF THESE APPLICATIONS, SCORING BY THE GRANTS WORKING GROUP MEMBERS PLACED THE APPLICANT'S MODULE 1 IN TIER I, RECOMMENDED FOR, FUNDING, AND THE ACTIVITIES IN MODULE 3 IN TIER II.

IN THE SECOND OF THESE APPLICATIONS, SCORING BY THE GRANTS WORKING GROUP MEMBERS PLACED THE APPLICANT'S MODULE 2.2 IN TIER II. AND FOR THE LAST THREE APPLICATIONS, THE GRANTS WORKING GROUP VOTED TO NOT RECOMMEND ADDITIONAL FUNDING FOR THE TEAMS AT THIS TIME.

SO AT THIS POINT I WILL STOP TO ALLOW THE BOARD TO BEGIN PROGRAMMATIC DISCUSSION, AND I WILL CONTINUE WITH THE CIRM TEAM RECOMMENDATIONS OF FUNDING WHEN THE BOARD IS READY TO PROCEED.

CHAIRMAN THOMAS: THANK YOU, DR. PRIEST. BEFORE WE TURN THIS OVER TO MR. SHEEHY, COULD YOU GIVE THE BOARD A BIT OF FLAVOR ON WHY THREE OF THE FIVE WERE NOT RECOMMENDED FOR FUNDING?

DR. PRIEST: OF COURSE. WHEN WE FIRST

LOOKED AT THE 17 TEAMS THAT WERE ELIGIBLE TO APPLY TO THE ACCELERATED DEVELOPMENT PATHWAY, WE RECOGNIZED THAT THE TEAMS ARE AT MANY DIFFERENT PHASES IN THEIR DEVELOPMENT PLANS. SOME ARE QUITE EARLY; SOME ARE ALREADY MOVING INTO CLINICAL TRIALS. SO DURING THE REVIEW, SOME OF THE COMMENTS WERE MOST LIKELY STRUCTURED AROUND THE ACTIVITIES BEING OF VALUE THAT THE TEAMS PROPOSED; HOWEVER, THEY WERE A LITTLE BIT TOO FAR OF A STRETCH FOR THE GRANTS WORKING GROUP TO HAVE A GOOD CONFIDENCE IN THAT ACTIVITY'S PROBABILITY TO SUCCEED. THEY WERE JUST A LITTLE TOO FAR OUT IN THE DEVELOPMENT PLAN, IF YOU WILL. FOR EXAMPLE, IF A TEAM IS STILL LOOKING TO HAVE ITS FINAL INTERACTIONS WITH THE FDA ABOUT STARTING A PHASE I CLINICAL TRIAL, NOT KNOWING ANY DATA ABOUT THE PHASE I CLINICAL TRIAL, IT WAS DIFFICULT FOR THE GRANTS WORKING GROUP TO SAY, YES, WE SHOULD COMMIT MONEY FOR A PHASE II CLINICAL TRIAL TO FOLLOW IT ON. SO IT WAS A BIT OF A STRETCH OUT AND LOOKING AT WHAT'S A GOOD INVESTMENT FOR CIRM AS ADVICE AND ALSO WITH THE UNDERSTANDING THAT THESE TEAMS COULD COME BACK AND APPLY LATER FOR THIS TYPE OF AWARD WAS ANOTHER IMPACT FROM THE GRANTS WORKING GROUP.

CHAIRMAN THOMAS: ON THAT LAST POINT, BECAUSE, AS WE SEE HERE, WHATEVER THE BOARD DOES

TODAY WILL BE SIGNIFICANTLY BELOW THE AMOUNT WE HAD ORIGINALLY ALLOCATED TO THE PROGRAM, WHAT ARE THE THOUGHTS AT THIS POINT ON TIMETABLES FOR COMING BACK FOR A NEXT ROUND OF APPLICATION?

DR. PRIEST: WELL, AS PRESIDENT MILLS DISCUSSED, WE WOULD OBVIOUSLY LIKE TO SHORTEN THE REVIEW CYCLE. WHEN THIS APPLICATION -- WHEN THE PROGRAM ANNOUNCEMENT WAS FIRST POSTED, WE THOUGHT PERHAPS A YEAR FROM THE INITIAL FUNDING CALL, WHICH WAS LAST SPRING, BUT WE'D LIKE TO ROLL THIS INTO ALSO CIRM 2.0, SO A MUCH FASTER, MORE NIMBLE ABILITY FOR TEAMS TO COME IN. WHEN THEY HAVE ACTIVITIES OUTSIDE THE SCOPE OF THEIR PARENT AWARD, BUT THEY RECOGNIZE THAT THEY WILL ACCELERATE THE PATHWAY WITH THAT LONG FUNDING CYCLE OF 15 TO 29 MONTHS, SOMETIMES A TEAM COULD APPLY WITH MORE STRENGTH IN THEIR APPLICATION WITH A LITTLE BIT MORE CLINICAL INFORMATION. SO HAVING A MUCH SHORTER TURNAROUND WOULD BE OUR GOAL.

CHAIRMAN THOMAS: DR. LUBIN.

DR. LUBIN: I'M SURE THIS WAS DONE BY THE GRANTS WORKING GROUP, BUT I JUST WOULD APPRECIATE YOUR COMMENTS ON THE FIELD ITSELF AND HOW IT'S PROGRESSING AND HOW OTHER PEOPLE ARE ALSO ENGAGED IN SIMILAR AREAS OF RESEARCH AND HOW THE CIRM APPLICATION THAT WE'RE CURRENTLY ENGAGED WITH RELATES

TO THE OTHER INVESTIGATORS IN THAT FIELD. AS WE HEARD EARLIER TODAY, THERE ARE MANY PEOPLE ENTERING THIS FIELD, AND IN SOME OF THESE AREAS THERE ARE A NUMBER OF PROGRAMS THAT MIGHT BE A LITTLE BIT FURTHER THAN THE ONES THAT WE'VE CURRENTLY FUNDED. HOW DOES THIS IMPACT THE DECISION TO FUND OR TO CONTINUE OR TO EXPAND THE FUNDING FOR AREAS THAT WE'RE IN?

DR. PRIEST: WELL, THAT WAS A COMPONENT OF THE REVIEW CRITERIA. LOOKING AT THE CLINICAL COMPETITIVENESS AND WHAT ELSE IS IN THE AREA. WE ARE CERTAINLY AWARE OF AND WE ASK OUR TEAMS TO REVIEW THE CURRENT COMPETITION, IF YOU WILL, AS WELL IN THE PROGRAM IN THE DISEASE AREA. WE ARE, AS YOU KNOW, FUNDING A NUMBER OF RISKY PROGRAMS. WE ARE NOT DOING THE LOW HANGING FRUIT NECESSARILY, SO WE MAY NOT BE THE FASTEST, BUT I THINK THE APPROACHES AND THE GRANTS WORKING GROUP ALSO SAID THE APPROACHES THAT CIRM IS FUNDING ARE CRITICAL TO ADVANCE THE FIELD AND PROVIDE ALTERNATIVE METHODS TO ADDRESS THESE TERRIBLE DISEASES.

DR. LUBIN: THANK YOU.

CHAIRMAN THOMAS: DR. FINE.

DR. FINE: WILL THERE BE AN OPPORTUNITY TO REFLECT ON WHY IT IS THAT 9 OUT OF 13 APPLICATIONS WERE DEEMED NOT WORTHY OF FUNDING? THESE ARE VERY

WELL-FUNDED STUDIES, WELL-ESTABLISHED, AND THERE MUST BE SOME LESSONS LEARNED WHICH SOMEBODY SHOULD BE ABLE TO SUMMARIZE AS TO WHAT THE SHORTCOMINGS WERE AS A GROUP IN THOSE STUDIES THAT WERE NOT FUNDED.

CHAIRMAN THOMAS: I THINK THIS IS A PERFECT TIME FOR THAT. DR. PRIEST -- DR. FEIGAL.

DR. FEIGAL: THANKS. I JUST WANT TO MAKE IT CLEAR THAT THERE WERE FIVE APPLICATIONS THAT WERE CONSIDERED AT THIS TIME, AND THERE WERE THREE THAT WERE NOT RECOMMENDED FOR FUNDING. SO THE OTHER TEAMS THAT HAVE FUNDING FOR A CLINICAL TRIAL HAD THE OPPORTUNITY TO COME IN AT THE NEXT TIME THIS SOLICITATION WOULD BE AVAILABLE. SO I WANT TO MAKE IT CLEAR. SO IF YOU'RE QUESTION IS WHY WEREN'T THE THREE RECOMMENDED FOR FUNDING, DR. PRIEST CAN RE-GO OVER THAT.

DR. FINE: THEN I OBVIOUSLY MISSTATED IT BECAUSE I WAS JUST LOOKING AT A COLUMN WHICH WAS INCORRECT OBVIOUSLY.

DR. PRIEST: SO OBVIOUSLY IF THERE ARE QUESTIONS ABOUT A SPECIFIC AWARD, THE SCIENCE OFFICER THAT IS MOST INTIMATELY INVOLVED WITH THAT TEAM IS PREPARED TO PRESENT THE SUMMARY FROM THE GRANTS WORKING GROUP FOR EACH INDIVIDUAL APPLICATION. HOWEVER, WE MADE IT CLEAR THAT WE'RE LOOKING AT

TIMELINE ADVANCEMENT TO 2017 AND WHETHER THE PROPOSED ACTIVITIES, EACH OF WHICH WAS REVIEWED AS A SINGLE MODULE, SO THIS WASN'T A DECISION ON WHETHER ALL OF THE ACTIVITIES WOULD PUSH THAT TEAM FORWARD AT THIS TIME, SOME SAID THESE ARE REALLY GOOD ACTIVITIES, BUT WE NEED MORE INFORMATION IN YOUR DEVELOPMENT PROJECT BEFORE YOU CAN CHOOSE WHICH OF THE PATHS FORWARD YOU'RE PROPOSING.

SO MANY OF THE REVIEW CRITERIA CAME BACK WITH WE JUST NEED A LITTLE BIT MORE TIME. AND BECAUSE THE CALL STRUCTURE WAS SO DELAYED, I THINK WE REALLY ASKED TEAMS TO STRETCH AND THINK ABOUT WHAT COULD BUILD OUTSIDE THEIR AWARDED PARENT AWARD. REMEMBER THAT THESE TEAMS HAVE A FULL DISEASE TEAM OR STRATEGIC PARTNERSHIP AWARD. THESE ARE LARGE AWARDS. THE TEAMS ARE DOING MANY, MANY THINGS RIGHT NOW. SO WE SAID ARE THERE ADDITIONAL THINGS THAT THE GRANTS WORKING GROUP SUPPORTS AS A WAY TO STRETCH AND EVEN MOVE YOUR PROJECT FARTHER FASTER.

CHAIRMAN THOMAS: MR. JUELSGAARD AND MR. PANETTA.

DR. JUELSGAARD: SO MY QUESTION IS ONE OF THE INVOLVEMENT OF CIRM STAFF IN THESE PROJECTS ONCE THEY HAVE BEEN APPROVED AND THESE PARTICULAR PROJECTS. SO THE FIRST QUESTION COMES IN THE FORM OF

WAS IT FORESEEABLE THAT, AND LET'S JUST DEAL WITH THE THREE PROJECTS THAT WERE RECOMMENDED NOT TO FUND, WAS THAT FORESEEABLE BY PEOPLE WITHIN THIS ORGANIZATION THAT THAT WOULD BE A LIKELY OUTCOME IF THEY HAD LOOKED AT THE APPLICATION AND KNEW HOW EVALUATIONS HAD GONE IN THE PAST OR WOULD LIKELY GO HERE? DO WE HAVE THAT KIND OF INTERNAL CAPABILITY TO BE ABLE TO TELL PEOPLE, WELL, YOU KNOW, IT'S LIKELY THAT YOUR APPLICATION IS NOT GOING TO GET FUNDED. THIS IS NOT GOING TO PREVENT THEM FROM MAKING THE PRESENTATION, BUT IT TELLS THEM BEFORE THEY WALK INTO THE ROOM WHERE SOME OF THE POTENTIAL WEAKNESSES ARE AND WHERE THEY MIGHT ASK -- FAST FORWARD THEM TO BASICALLY ADDRESSING SOME OF THEM.

THIS GOES BACK TO SOME OF THE TIME FRAMES THAT DR. MILLS WAS PRESENTING. SO THINGS ARE TAKING A LOT OF TIME. AND TO SOME EXTENT, IF THERE'S ADVISEMENT ALONG THE WAY ABOUT WHERE THERE ARE HOLES IN TERMS OF DEVELOPMENT PROJECTS, THAT OUGHT TO BE ADDRESSED IF YOU ARE GOING TO BE SEEKING MORE MONEY BEFORE YOU COME IN. I THINK THAT COULD ALSO HELP SHORTEN THE TIME FRAMES. AND MAYBE WE JUST DON'T HAVE THAT EXPERTISE OR MAYBE WE DON'T DO THAT, BUT I REALLY WONDER IF THAT'S NOT A CAPABILITY THAT MIGHT BE USEFUL FOR OUR GRANTEES, ESPECIALLY THOSE IF WE'RE

SPENDING THIS KIND OF MONEY ALREADY ON THEM, WANTING TO SEE THEM BE SUCCESSFUL, MAYBE INVESTING A LITTLE BIT MORE TO GIVE THEM A BETTER SENSE OF THE PATHWAY THEY NEED TO BE ON IF THEY'RE NOT REALLY ON THE BEST ONE.

DR. PRIEST: EXACTLY. AND I AGREE. I WILL REMIND YOU THAT THERE WERE 17 TEAMS THAT WERE ELIGIBLE TO COME IN FOR THIS CALL. A NUMBER OF THOSE TEAMS REACHED OUT TO THE SCIENCE STAFF, AND WE DISCUSSED WHETHER, IN OUR OPINION AND SOME COACHING BACK AND FORTH, WHETHER THIS WOULD BE THE MOST APPROPRIATE TIME FOR THEM TO ASK FOR ADDITIONAL FUNDING. NOT ALL TEAMS ASKED FOR THAT INPUT. AND YOU WILL SEE THAT NOT ALL 17 TEAMS CHOSE TO APPLY AT THIS TIME EITHER.

WHEN WE REACHED OUT IN A WEBINAR GIVING MORE INFORMATION TO ALL TEAMS, WE ALSO EMPHASIZED THAT THERE WOULD BE ADDITIONAL CALLS AND TO USE THEIR APPLICATION WISELY FOR WHEN THE MOST IMPACTFUL ADDITIONAL ACTIVITIES COULD BE APPLIED TO THEIR PROGRAM.

I WOULD REMIND YOU ALSO THAT WE HAVE THE CDAP PROGRAM, THE CLINICAL DEVELOPMENT ADVISORY PANEL. THIS IS A GROUP OF OUTSIDE EXPERTS THAT CONTINUE TO ADVISE BOTH CIRM AND THE APPLICANTS

THEMSELVES AS THEY PROGRESS THROUGH THEIR DEVELOPMENT PATHWAY. SO THEY ARE GETTING INTERNAL FEEDBACK FROM CIRM ON A FREQUENT BASIS, AND THEY'RE ALSO GETTING ADDITIONAL PROGRAM FEEDBACK FROM MEMBERS OF THE CDAP REVIEW.

CHAIRMAN THOMAS: DOES THAT FULLY ANSWER YOUR QUESTION, MR. JUELSGAARD?

DR. JUELSGAARD: FOR THE TIME BEING.

CHAIRMAN THOMAS: OKAY. THANK YOU. WE'VE GOT MR. PANETTA, THEN WE HAVE DR. PRIETO AND DR. LEVIN.

MR. PANETTA: THANKS, J.T. DR. PRIEST, I JUST -- I WANT TO BETTER UNDERSTAND THE REVIEW PROCESS BECAUSE, AGAIN, IT GOES TO HOW WE'RE DECIDING TO PROGRESS SOME OF THESE PROJECTS ALONG. AND ON THE DIABETES PRODUCT, WHEN I READ THE SUMMARY, WHAT I READ WAS THAT THE PHASE II TRIAL PROPOSAL WAS WELL-THOUGHT OUT, BUT THAT IT WOULD PROBABLY BE BEST TO OBTAIN THE PHASE I DATA FIRST BEFORE MOVING ON TO PHASE II. AND WHAT I'D LIKE TO UNDERSTAND BETTER IS WHETHER THAT'S WHAT'S REFLECTED IN THE LOW SCORE. DOES THAT COME INTO PLAY IN THE SCORING PROCESS, OR WERE THERE OTHER ASPECTS OF THE PROPOSAL FOR THE PHASE II TRIAL THAT CAME INTO PLAY THAT REDUCED ITS SCORE BECAUSE ALL THAT I SAW HERE WAS THAT IT WAS

WELL THOUGHT OUT, BUT THAT IT WOULD BE BEST TO OBTAIN DATA FIRST. AND MAYBE THAT'S THE WAY TO GO, BUT I JUST WANT TO UNDERSTAND IT.

CHAIRMAN THOMAS: MR. PANETTA, THAT SORT OF GETS INTO DISCUSSION OF THE MERITS OF THE PROGRAM WHICH REALLY COMES UNDER MR. SHEEHY AND THE PROGRAMMATIC DISCUSSIONS. IF YOU TABLE THAT QUESTION, SPECIFIC QUESTION ABOUT THAT INDIVIDUAL AWARD, I'D APPRECIATE THAT.

DR. PRIETO.

DR. PRIETO: THANK YOU. I JUST THOUGHT MAYBE I COULD SHED SOME LIGHT GENERALLY ON THE REVIEW PROCESS AND CLARIFY THIS FOR EVERYONE, NOT TO SPECIFICALLY ADDRESS ONE APPLICATION, BUT BOTH FOR PROJECTS WHICH GOT SOME FAVORABLE RECOMMENDATIONS AND THOSE THAT DIDN'T. EACH APPLICANT WAS ASKED TO PROVIDE PROJECTS THAT COULD ADVANCE THEIR TIMELINE, ACCELERATE THEIR DEVELOPMENT, AND THEN EACH MODULE WAS LOOKED AT INDIVIDUALLY. AND SO SOME WERE JUDGED FAVORABLY, YES, THIS COULD ACCELERATE DEVELOPMENT, SOME THIS MIGHT BE INTERESTING INFORMATION OR IT WOULD BE USEFUL INFORMATION, BUT WOULD NOT REALLY CHANGE THE TIMELINE, WOULD NOT BRING US TO THE OUTCOME WE WANT ANY FASTER. AND SO THAT COULD BE THE SOURCE OF A RECOMMENDATION NOT TO FUND BECAUSE IT

REALLY ISN'T ACHIEVING THE GOALS OF THE RFA.

CHAIRMAN THOMAS: DR. LEVIN.

DR. LEVIN: THANKS. I THINK IT'S A VERY INTERESTING LINE OF DISCUSSION THAT DR. FINE STARTED AND MAYBE IS SOMETHING THAT SHOULD BE CONSIDERED FOR CIRM 2.0. AS WE GO FORWARD, WE REALLY SEEM TO BE INVESTING IN INDIVIDUALS, WE'RE INVESTING IN PROJECTS THAT WE HAVE A LOT OF FAITH IN THAT WE'VE PUT A LOT OF TIME INTO, A LOT OF MONEY INTO, AND I KNOW THAT CIRM STAFF ARE VERY CLOSELY INVOLVED IN NOT THE DAY-TO-DAY OPERATIONS, BUT THE PROGRESS OF THE PROJECTS.

AND YOU MENTION THAT YOU DO GIVE SOME COUNSELING TO PEOPLE COMING IN, AND YET YOU SEE 11 DIFFERENT ASPECTS OF PROJECTS AT LEAST THAT WERE REQUESTING FUNDING AND ONLY TWO HAVE BEEN RECOMMENDED FOR FUNDING. THAT'S LESS THAN 20 PERCENT OR ABOUT THE SAME AS THE NIH DOES. AND I WOULD HOPE THAT WE COULD DO BETTER THAN THAT WITH THE AMOUNT OF COMMUNICATION AND KNOWLEDGE THAT WE HAVE. AND THAT MAYBE THAT IS A GOAL OF CIRM 2.0 IS TO GET THAT UP TO HALF OF EVERYTHING. AT THIS LATE STAGE, GET THE FEEDBACK THAT THEY NEED AND GET THE PROACTIVE ADVICE LIKE YOU WERE MENTIONING WITH FDA MEETINGS OR BUSINESS DEVELOPMENT OR WHATEVER THEY NEED WORK HAND

IN HAND. WE'RE BASICALLY A FOUNDATION. A LOT OF HIGH END FOUNDATIONS LIKE HHMI OR THE MOORE FOUNDATION WORK VERY CLOSELY WITH THEIR GRANTEES TO MAKE SURE THAT EVERYBODY IS ALIGNED IN GETTING WHAT WE ALL WANT AT THE END.

DR. MILLS: JUST TO COMMENT ON IT. SO I THINK THIS PROGRAM IS A GOOD EXAMPLE OF THE NEED TO JUST STEP BACK AND DO A 2.0 BECAUSE LARGELY THIS PROGRAM IS IN PLACE BECAUSE THE NORMAL REVIEW PROCESS IS SO LONG. AND IF YOU REMOVE THAT ASSUMPTION, THAT IT HAS TO TAKE 18 MONTHS TO GET A CLINICAL PROGRAM APPROVED OR A MODIFICATION TO A CLINICAL PROGRAM APPROVED, THE NEED FOR THIS PROGRAM FALLS AWAY. AND SO WHAT HAPPENED HERE WAS A LOT OF THESE MANY PROGRAMS -- EXAMPLE WAS THEY HAVEN'T PULLED THEIR IND FOR PHASE I TRIAL AND THEY'RE COMING BEFORE US ASKING US TO FULLY FUND A PHASE II TRIAL. THAT DOESN'T MAKE SENSE IF WE HAD A TIMELY REVIEW CYCLE THAT COULD SAY WHEN YOU'RE READY FOR PHASE II, WE'RE GOING TO BE RESPONSIVE AND YOU'RE NOT GOING TO SKIP A BEAT, AND WE'RE GOING TO FUND A PHASE II WHEN IT'S APPROPRIATE. BUT UNDER THE CURRENT SYSTEM, IT WAS WHAT THEY -- IT WAS ALL THEY COULD DO. WE CAN FUND THIS PHASE II TRIAL NOW KNOWING IT WOULD OTHERWISE TAKE 18 OR 20 MONTHS AND AN EQUAL AMOUNT OF DELAY. WE DON'T WANT

TO TAKE THAT RISK. AND SO I THINK JUST, AGAIN, NOT GETTING ANY SPECIFICS, BUT I THINK, JUST AS THE GRANTS WORKING GROUP WAS LOOKING AT THIS, THEY WERE SAYING THERE'S NO NEED TO FUND THESE PROGRAMS THIS FAR AHEAD. IT'S REALLY -- I CAN'T EMPHASIZE ENOUGH. THERE WAS NO DISCUSSION OR CONSENSUS THESE WEREN'T GOOD PROGRAMS. IT WAS JUST THEY'RE JUST REACHING IN TIME AND THE REACHING IN TIME BECAUSE WE'VE CREATED AN ARTIFICIAL ARTIFACT, WHICH IS OUR REVIEW CYCLE NORMALLY TAKES TOO LONG.

SO I'M HOPING -- THE IDEA OF AN ACCELERATED DEVELOPMENT PATHWAY MADE ME SCRATCH MY HEAD A LITTLE BIT BECAUSE WHAT IS CIRM? WE REALLY SHOULD BE THE ACCELERATED DEVELOPMENT PATHWAY, AND WE NEED A SYSTEM THAT'S RESPONSIVE. AND JUST NATURALLY THIS CONCEPT FOLDS INTO IT.

CHAIRMAN THOMAS: MR. JUELSGAARD.

DR. JUELSGAARD: I'D LIKE TO FOLLOW UP ON THE COMMENTS THAT DR. LEVIN JUST MADE BECAUSE I VERY MUCH AGREE WITH HIM. AND SO I'M GOING TO APPROACH THIS FROM A COMPANY PERSPECTIVE. SO WHEN ONE COMPANY AGREES TO FUND THE RESEARCH AND DEVELOPMENT FOR A PROJECT IN ANOTHER TYPICALLY SMALLER COMPANY, IT JUST DOESN'T GIVE THEM THE MONEY AND SAY GO WITH GOD. IT GIVES THEM THE MONEY AND SAYS, YOU KNOW WHAT, WE'RE

GOING TO PUT ONE OR TWO OR THREE PEOPLE ON THIS PROJECT FROM OUR SIDE TO KEEP TRACK OF IT TO MAKE SURE WE KNOW WHERE IT'S GOING, TO GIVE YOU ADVICE ALONG THE WAY, ETC., ETC.

AND MY QUESTIONS OF DR. PRIEST REALLY KIND OF RELATED TO THAT ISSUE, WHICH IS, AND THIS IS PERHAPS RELATED TO CIRM 2.0, WHICH IS WHETHER WE ACTUALLY DO NEED TO GET MORE INVOLVED WITH THE PROJECTS THAT ARE GOING WHERE WE HAVE EXPERTISE THAT WE CAN PROVIDE EITHER FROM WITHIN THE ORGANIZATION OR FROM OUTSIDE THE ORGANIZATION THROUGH OUR CONTACTS TO HELP PEOPLE MAKE BETTER PROGRESS AND TO HELP THEM UNDERSTAND WHERE THERE ARE SHORTCOMINGS OR PITFALLS AND WHERE THEY CAN SPEED THINGS UP, ETC. AND SO I APPRECIATE VERY MUCH YOUR COMMENT, AND I WONDER IF WE CAN DO THAT BETTER.

CHAIRMAN THOMAS: DR. MILLS, DO YOU CARE TO RESPOND TO THAT?

DR. MILLS: I FEEL CONFIDENT WE CAN.

CHAIRMAN THOMAS: OKAY. ARE THERE ANY OTHER COMMENTS, PRELIMINARY COMMENTS, ON THE PROCESS BEFORE WE GET TO PROGRAMMATIC REVIEW? HEARING NONE, WILL NOW TURN IT OVER TO MR. SHEEHY.

MR. SHEEHY: THANK YOU, CHAIRMAN THOMAS. SO I THINK THE BEST WAY TO PROCEED WOULD BE FOR OUR

FIRST MOTION TO LOOK AT MOVING ANY OF THE APPLICATIONS FROM TIER III INTO TIER I. AND THE OUTCOME FROM THAT, IF ONE OF THOSE MOTIONS WAS SUCCESSFUL, WE WOULD THEN SEND IT BACK TO THE GRANTS WORKING GROUP FOR A REVIEW OF THE MODULES AND SCORING.

SO IS THERE ANY MOTION TO MOVE ANY OF THE APPLICATIONS IN TIER III INTO TIER I? OKAY. THEN, SEEING NONE, I WILL PASS IT OVER TO DR. PRIETO TO TALK ABOUT TIER I BECAUSE THE FIRST PROJECT IN TIER I -- THE TIER I PROJECT I HAVE A CONFLICT WITH.

DR. PRIETO: THANK YOU, JEFF. OKAY. SO I THINK TO START THIS DISCUSSION, THE FIRST THING I'LL ASK IS IS THERE A MOTION TO MOVE ANYTHING FROM TIER I INTO TIER III, INTO THE DO NOT FUND CATEGORY?

DR. PRIEST: EXCUSE ME, DR. PRIETO. WE ALSO HAVE THE CIRM TEAM AND GRANTS WORKING GROUP RECOMMENDATIONS ABOUT THE TIER I MODULE.

DR. PRIETO: DO WE NEED A MOTION TO START DISCUSSION THOUGH BECAUSE THEN I WAS GOING TO ASK FOR --

DR. PRIEST: I APOLOGIZE.

DR. PRIETO: OKAY. SO HEARING NO MOTION, THEN I THINK THE NEXT STEP WE WANT IS THE STAFF RECOMMENDATIONS, AND THEN I'LL ENTERTAIN ANOTHER

MOTION ABOUT MOVING ANYTHING FROM THE MIDDLE TIER, TIER II.

MR. TORRES: YES. THIS IS ART TORRES. I MOVE TO RECOMMEND THE STAFF RECOMMENDATIONS FOR FUNDING.

MR. SHEEHY: THAT CREATES CONFLICT ISSUES, I THINK, SENATOR TORRES. MAYBE WE SHOULD JUST TAKE THEM ONE AT A TIME. DOES THAT WORK? LET'S TAKE ONE RECOMMENDATION AT A TIME.

MR. TORRES: I RECOMMEND THE FIRST RECOMMENDATION WHICH I DO NOT HAVE A CONFLICT, BUT I KNOW THERE ARE SOME THAT ARE IN THE BOARD THAT DO.

DR. PRIETO: OUR MAKING A MOTION, THEN, TO APPROVE THE RECOMMENDATION FOR MODULE 1.

MR. TORRES: THE DIABETES, YES.

DR. PRIETO: IS THERE A SECOND?

DR. JUELSGAARD: SECOND.

DR. PRIETO: OKAY. SECOND BY MR. JUELSGAARD. STAFF RECOMMENDATIONS.

DR. PRIEST: SO FOR MODULE 1, THE ACTIVITIES CONSIST OF ADDITIONS TO THE PHASE I TRIAL AND DEVICE DEVELOPMENT. AND THE RECOMMENDATION FROM THE CIRM TEAM IS TO FUND MODULE 1.

DR. PRIETO: SO ARE THERE ANY QUESTIONS ABOUT THIS MODULE OR ANY PROGRAMMATIC COMMENTS?

OKAY. DO WE HAVE TO TAKE A VOTE -- SHALL WE VOTE ONE BY ONE BY MODULE? WE'RE GOING TO BE VOTING EN BLOC FOR EVERYTHING IN TIER I AT THE END. SO THIS IS ALREADY IN TIER I.

MR. HARRISON: THIS MODULE IS ALREADY IN TIER I. WE DO HAVE A MOTION ON THE TABLE TO FUND MODULE 1 IN APPLICATION 8039?

MR. TORRES: CORRECT.

MR. HARRISON: SO UNLESS THE MAKER AND THE SECOND WOULD AGREE TO TAKE IT OFF THE TABLE, WE SHOULD PROCEED TO PUBLIC COMMENT AND A VOTE ON THAT MOTION.

DR. PRIETO: OKAY. FIRST, ANY BOARD COMMENT?

CHAIRMAN THOMAS: COULD I JUST ASK FOR A BIT OF ELABORATION SO EVERYBODY UNDERSTANDS TECHNOLOGICALLY WHAT WE'RE TALKING ABOUT HERE? WHEN THEY'RE PROPOSING A LARGER FORMAT DEVICE, COULD YOU EXPLAIN TO THE BOARD WHAT THAT MEANS?

DR. PRIEST: SO THE CURRENT DEVICE THAT WILL BE IMPLANTED TO CONTAIN THE PANCREATIC PROGENITOR CELLS IN THIS STUDY IS ABOUT THE SIZE OF A CREDIT CARD. AND IT WILL BE NECESSARY TO IMPLANT MULTIPLE DEVICES. HOWEVER, IT WOULD BE MORE AMENABLE TO THE PATIENT, PERHAPS, TO HAVE A SINGLE DEVICE THAT

COULD CONTAIN A LARGER NUMBER OF CELLS. AND THERE'S SOME PROCESS DEVELOPMENT WORK INVOLVED WITH THAT. IT'S NOT A STRAIGHT YOU MAKE IT BIGGER AND YOU PUT MORE CELLS AND THE CELL SURVIVAL COULD BE COMPROMISED IF THE WORK IS NOT DONE IN A MORE STAGED MANNER. IS THAT SUFFICIENT?

CHAIRMAN THOMAS: YES, THANK YOU.

DR. PRIETO: ANY PUBLIC COMMENT? OKAY. HEARING NONE, CAN WE DO THIS BY VOICE VOTE?

MR. HARRISON: NO.

DR. PRIETO: OKAY. MARIA, DO YOU WANT TO CALL THE ROLL?

MS. BONNEVILLE: ANNE-MARIE DULIEGE. DAVID HIGGINS.

DR. HIGGINS: ABSTAIN.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: YES.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: AYE.

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: YES.

MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: DIANE WINOKUR.
MS. WINOKUR: YES.
MR. HARRISON: MOTION CARRIES WITH EIGHT YES VOTES AND ONE ABSTENTION.
DR. PRIETO: OKAY. MOVING ON MODULE BY MODULE, THEN THE NEXT MODULE IS MODULE 3, CURRENTLY IN TIER II. I'LL ENTERTAIN A MOTION TO MOVE THAT INTO TIER I AS PER STAFF RECOMMENDATION. MR. JUELSGAARD.
DR. JUELSGAARD: I MOVE THAT WE MOVE THE MODULE 3 OF THIS 08039 INTO TIER -- OR I MOVE THAT WE AGREE WITH STAFF RECOMMENDATION AND FUND THIS PARTICULAR MODULE, MODULE 3.
MR. TORRES: SECOND.
DR. PRIETO: OKAY. MOVED AND SECONDED. BOARD COMMENTS? ANY PUBLIC COMMENT?
MR. REED: I HAVE NO DISAGREEMENT WITH YOUR RECOMMENDATION, BUT I THINK THAT WE NEED TO HAVE A CLEARER EXPLANATION OF WHAT IS BEING FUNDED HERE. PUBLIC PEOPLE DO NOT KNOW ALL THE THINGS THAT YOU KNOW, AND I THINK IT'S REALLY IMPORTANT THAT AT EACH

STAGE WE SPEND AT LEAST A COUPLE PARAGRAPHS IN SAYING WHAT EXACTLY THIS IS.

DR. PRIETO: DR. PRIEST, CAN YOU TELL US A LITTLE BIT ABOUT WHAT'S IN MODULE 3 AND THE REASON FOR THE STAFF RECOMMENDATION?

DR. PRIEST: OF COURSE. MODULE 3 CONTAINS SCALE-UP ACTIVITIES, SO HOW TO MAKE MORE CELLS MORE EFFICIENTLY AND MORE EFFECTIVELY. DEVICE DEVELOPMENT, SO CONTINUATION OF SOME OF THE EARLIER WORK DISCUSSED IN THE MODULE 1. AND BRIDGING STUDIES TO MAKE THOSE DEVICES IN A LARGER FORMAT WITH MORE CELLS AVAILABLE FOR MOVING INTO THE PHASED TRIALS. SO WE NEED TO BRIDGE THEM IN. AND THERE ARE SOME STUDIES THAT WILL NEED TO BE DONE TO SHOW THAT THE DEVICE IS WORKING SIMILARLY AS THE SMALLER DEVICE THAT HAS ALREADY BEEN INVESTIGATED.

MR. REED: MY QUESTION IS WHAT IS THIS FOR? I KNOW WHAT IT IS. THIS IS NOT CLEAR. YOU'RE USING TECHNICAL LANGUAGE WHICH IS NOT UNDERSTOOD BY THE GENERAL PUBLIC, INCLUDING MYSELF, AND I COME TO AS MANY OF THESE AS I CAN, WHAT DISEASE THIS IS INTENDED TO HELP? WHAT IS THIS FOR?

DR. PRIETO: I MAY BE ABLE TO SHED A LITTLE BIT OF LIGHT ON THIS. SO THE ISSUE IN DIABETES AND IN THIS PARTICULAR TREATMENT APPROACH FOR DIABETES IS

IN PART A QUESTION OF SIZE AND SCALE. A LOT OF THE ANIMAL STUDIES THAT HAVE BEEN DONE HAVE BEEN DONE IN VERY SMALL ANIMALS WITH SHORTER LIFE SPANS. AND THE NUMBER OF CELLS NEEDED TO MAINTAIN WHAT WE CALL GLUCOSE -- MAINTAIN A NORMAL BLOOD SUGAR AND PREVENT ALL THE TERRIBLE COMPLICATIONS OF DIABETES IS DEPENDENT IN PART ON THE SIZE OF THE ANIMAL. AND THERE'S A CERTAIN THRESHOLD, AND WE DON'T KNOW EXACTLY WHERE THAT IS, OF HOW MANY CELLS DO YOU NEED, BUT IT SEEMS CLEAR THAT THE CREDIT CARD SIZE DEVICE THAT VIACYTE IS CURRENTLY WORKING WITH IS NOT ADEQUATE. ONE OR TWO OF THOSE WILL PROBABLY NOT BE SUFFICIENT FOR A HUMAN. SO THEY ARE WORKING ON DEVELOPING A LARGER DEVICE AND TRANSITIONING THEIR CURRENT TECHNOLOGY INTO THIS LARGER DEVICE. AND THEN MOVING THAT FORWARD, HOW DO YOU MANUFACTURE THE LARGER DEVICE? HOW DO YOU ANSWER ALL THE TECHNICAL QUESTIONS? SO IT WAS FELT TO BE --

MR. REED: THAT I DO UNDERSTAND, BUT THIS IS THE SECOND ONE WE'RE TALKING ABOUT. WE'RE TALKING ABOUT MODULE 3.

DR. PRIETO: THESE ARE SEPARATE RELATED ISSUES REGARDING BRINGING THAT LARGER DEVICE TO AN ACTUAL MANUFACTURING -- MANUFACTURABLE STATE.

DR. MILLS: I THINK I SEE WHAT THE QUESTION

IS. EACH PROGRAM, EACH OVERALL PROGRAM SUBMITTED A PLAN, AND THOSE PLANS HAD MULTIPLE MODULES. SO THIS IS MODULE 1 AND MODULE 3, ALL UNDER THAT SAME UMBRELLA PROGRAM.

MR. REED: BOTH OF THESE ARE THE VIACYTE THING?

DR. MILLS: YES. THEY ARE MODULE 1 AND MODULE 3 UNDER VIACYTE.

MR. REED: PLEASE REMEMBER WE DON'T KNOW WHAT YOU GUYS ARE TALKING ABOUT A LOT OF THE TIME.

DR. MILLS: SORRY ABOUT THAT.

CHAIRMAN THOMAS: THANK YOU, DON, FOR THAT COMMENT. WE NEED TO MAKE SURE THAT WE ARE CLEAR.

I HAVE A QUESTION, DR. PRIEST. THE PHRASE "DEVICE DEVELOPMENT" APPEARS IN BOTH MODULE 1 AND MODULE 3. PRESUMABLY THERE'S NO OVERLAP IN FUNDING FOR WHATEVER ASPECTS WE'RE TALKING ABOUT. COULD YOU JUST ADDRESS THAT QUESTION?

DR. PRIEST: THAT'S CORRECT. THESE TWO STATEMENTS AND ACTIVITIES DO NOT OVERLAP. ONE IS, IF YOU WILL, AN INTERMEDIATE SIZE AND THEN A LARGE SIZE IF YOU WOULD LIKE TO THINK OF IT THAT WAY. SO IT IS STAGED PROGRESS. AND, OF COURSE, THE CIRM TEAM IN THE CONTRACTING STAGE WOULD WORK WITH THE APPLICANT TO SET UP MILESTONES THAT MAKE SURE THAT THE WORK

DOES NOT PROGRESS FASTER THAN IT SHOULD. WE WILL BE CONTINUALLY CHECKING IN WITH THE TEAM TO MAKE SURE THAT THE MILESTONE IS MET BEFORE WE AUTHORIZE PROGRESS ONTO THE NEXT SET OF ACTIVITIES.

CHAIRMAN THOMAS: AND A POINT THAT'S BEEN MADE I'D LIKE TO REITERATE. THIS PARTICULAR PRODUCT BY VIACYTE REPRESENTS THE FIRST EMBRYONIC STEM CELL-DERIVED PRODUCT FUNDED BY CIRM TO ENTER HUMAN CLINICAL TRIALS. SO THIS IS A BIG DEAL DEVELOPMENT FOR CIRM AND FOR THE FIELD.

DR. PRIETO: ANY OTHER QUESTIONS OR COMMENTS? MARIA, CAN WE CALL THE ROLL.

MS. BONNEVILLE: ANNE-MARIE DULIEGE. DAVID HIGGINS.

DR. HIGGINS: ABSTAIN.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: 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. OS STEWARD. JONATHAN THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: YES.

MR. HARRISON: MOTION CARRIES WITH EIGHT YES VOTES AND ONE ABSTENTION.

DR. PRIETO: OKAY. WITH THIS, I THINK I'M CONFLICTED AND WE'LL TURN THIS OVER TO JEFF.

MR. SHEEHY: SO I THINK FIRST MAYBE WHAT WOULD BE HELPFUL IF, DR. PRIEST, COULD YOU GIVE A DISCUSSION OF THE GRANT IN TIER II AND THE STAFF RECOMMENDATION ON IT SO THAT WE HAVE -- WE'LL START WITH A LITTLE BACKGROUND BECAUSE I DO AGREE WITH -- I UNDERSTAND WHY SOME MEMBERS OF THE PUBLIC WERE FINDING THIS A BIT CONFUSING.

DR. PRIEST: SO NOW WE'LL MOVE ON TO A DISCUSSION OF THE SECOND APPLICATION THAT WAS ON THE LARGE TABLE. AND THIS IS APPLICATION NUMBER -- APPLICANT 1-08040, AND IT'S FOCUSED IN THE AREA OF RETINITIS PIGMENTOSA.

THIS APPLICANT MODULE 2.2, WHICH IS THE MODULE THAT WAS PLACED IN TIER II BY THE GRANTS

WORKING GROUP, LOOKS AT STUDIES TO REPEAT THE DOSING OF THE CELLULAR PRODUCTS THAT THE TEAM IS DEVELOPING. SO PHASE I CLINICAL TRIAL AS IT'S WRITTEN IS TO ADMINISTER CELLS INTO ONE EYE OF PATIENTS. IF THAT IS FAVORABLE, THEY WOULD LIKE THE OPPORTUNITY TO DEVELOP A PROGRAM WHERE YOU COULD DOSE EITHER INTO BOTH EYES ON A PATIENT OR REPEAT DOSING OVER TIME.

SO THIS MODULE CONSISTS OF STUDIES LOOKING AT REPEATED DOSING. AND THE RECOMMENDATION FROM THE CIRM STAFF IS ACTUALLY NOT TO FUND THIS MODULE AT THIS TIME. IF THE PHASE I CLINICAL STUDIES SUGGEST THAT A SINGLE ADMINISTRATION IS SAFE AND PROVIDES BENEFIT TO PATIENTS, AND IF DATA SUGGESTS IT COULD BE ENHANCED BY MULTIPLE INJECTIONS, IT WILL CERTAINLY BE IMPORTANT TO UNDERSTAND WHAT HAPPENS TO THOSE CELLS AFTER MULTIPLE ADMINISTRATIONS. HOWEVER, THE PROPOSED ACTIVITIES TO ADDRESS THIS QUESTION NEED NOT INITIATE IMMEDIATELY TO ADVANCE THE OVERALL DEVELOPMENT PROGRAM FOR THE TEAM. IF THERE IS A DELAY IN STARTING THIS, THE GRANTS WORKING GROUP AND THE CIRM TEAM FELT THAT THE PROGRAM COULD STILL BE ACCELERATED OVERALL, BUT IT NEED NOT START IMMEDIATELY ON THESE ACTIVITIES.

AND IMPORTANTLY, THE REVIEWERS IN THE GRANTS WORKING GROUP MADE SUGGESTIONS THAT IT COULD

INCREASE THE VALUE OF THESE STUDIES. SO THE RECOMMENDATION FROM THE CIRM TEAM IS THAT THE APPLICANT CONSIDER THE SUGGESTIONS MADE BY THE GRANTS WORKING GROUP AND REAPPLY FOR THIS PROPOSED WORK AT A LATER STAGE IN THEIR DEVELOPMENT PROGRAM.

MR. SHEEHY: AND JUST TO KIND OF CLARIFY, BECAUSE THIS WAS KIND OF -- THIS PARTICULAR REVIEW OF THIS APPLICATION KIND OF WENT IN TWO DIRECTIONS BECAUSE IT ACTUALLY DID GET THE YES VOTE, RIGHT. SO THEY DID FEEL LIKE IT WAS SUFFICIENT TO BE REVIEWED, BUT NO MODULES REALLY MADE THE CUT, WHICH IS KIND OF A BIT CONFUSING. SO IN THIS INSTANCE I THINK WHAT THE REVIEWERS RECOGNIZE IS THAT THIS IS A VERY IMPORTANT PROGRAM THAT'S DOING WELL. AND I DO THINK, AS DR. PRIEST HAD SAID, THAT REALLY IMPORTANT INFORMATION WAS GIVEN TO THESE GRANTEES ABOUT HOW THEY COULD ACCELERATE THEIR PROJECT. AND IF, AS DR. MILLS HAS SUGGESTED, WE COULD GET A FASTER TURNAROUND, I THINK THAT THE CLEAR DIRECTION FROM THE GRANTS WORKING GROUP IS COME BACK WITH BETTER DEVELOPED PLANS. WE THINK YOU'VE GOT A GREAT CHANCE OF HAVING SIGNIFICANT SUCCESS WITHIN A FAIRLY SHORT PERIOD OF TIME.

SO IN A WAY, AND I THINK THIS IS KIND OF GETTING LOST IN THIS, WE DID GET VERY IMPORTANT

INFORMATION TO THE GRANTEES ABOUT HOW TO MAKE THEIR PROJECTS MORE SUCCESSFUL IN A SHORTER PERIOD OF TIME. AND I DO THINK IT'S VERY IMPORTANT TO KNOW THAT THESE ARE ALL WELL-FUNDED PROJECTS THAT ARE DOING WELL. THESE ARE NOT PROJECTS THAT ARE FAILING. WE WERE LOOKING FOR SUGGESTIONS ON HOW TO MAKE THEM DO BETTER FASTER. AND I THINK THAT THE REVIEW WAS ACTUALLY AN INCREDIBLY IMPORTANT EXERCISE. SO WE'RE GETTING KIND OF MUDDLED AROUND. WE DIDN'T HAVE A HIGH SUCCESS RATE, BUT I THINK THAT WE HAVE REALLY INFORMED OUR APPLICANTS, AND WE REALLY HAVE STARTED THE PROCESS OF ACCELERATING THEIR PROJECTS.

MR. PANETTA.

MR. PANETTA: THANK YOU. THAT CLARIFIES THE QUESTION THAT I HAD BECAUSE WHAT I WAS THINKING WAS THAT IT LOOKED AS THOSE THESE WERE SIMPLY BEING GIVEN SCORES OF LESS THAN 65 BECAUSE WE WEREN'T READY TO DO THEM YET. AND THAT WAS WHERE THE CONFUSION CAME UP WAS IS THERE A DIFFERENTIATION BETWEEN BEING ABLE TO SAY TO AN APPLICANT YOU'VE GOT A GREAT APPLICATION BUT WE'RE NOT READY TO GO THERE YET VERSUS A SCORE OF LESS THAN 65.

MR. SHEEHY: MR. JUELSGAARD.

DR. JUELSGAARD: SO THIS IS A PROCESS QUESTION. SO IN THIS SCORING SYSTEM THAT'S BEEN

USED, AND WE'LL LOOK AT THE ONE WE'RE JUST TALKING ABOUT RIGHT NOW, SO WE'VE GOT BOTH AN AVERAGE SCORE AND A MEDIAN SCORE, RIGHT. AND THE MEDIAN SCORE IS, I THINK, 80 IF I'M READING THIS CORRECTLY; WHEREAS, THE AVERAGE SCORE IS 74. DO YOU THROW OUT THE HIGHEST AND LOWEST SCORES IN TERMS OF ANY COMPUTATIONS OR DO YOU USE ALL SCORES?

DR. PRIEST: DR. SAMBRANO, MAY I ASK YOU TO ADDRESS THAT QUESTION?

DR. SAMBRANO: NO, WE DON'T THROW OUT ANY SCORES BECAUSE WE USE THE AVERAGE. AND THE AVERAGE ALLOWS EACH GRANTS WORKING GROUP MEMBER SCORE TO CONTRIBUTE TO THE OVERALL SCORE. BUT THAT'S ALSO WHY WE INDICATE WHAT THE MEDIAN IS, THE RANGE IS. AND I THINK HERE WHAT YOU HAVE IS A SITUATION WHERE YOU HAVE DIFFERENT VIEW FROM DIFFERENT REVIEWERS OR YOU HAVE A SPLIT, SOME THAT HAD HIGH SCORES FOR THE PROPOSAL AND OTHERS THAT HAD LOW SCORES. AND SO WE TRY IN OUR SUMMARY TO DESCRIBE AS BEST WE CAN THE DIFFERENT VIEWS. AND IN SOME CASES, ESPECIALLY IF IT ENDS UP IN TIER II, IT'S SOMETHING WHERE IT'S A DECISION PERHAPS BETTER MADE AT THE BOARD AS TO WHICH SIDE YOU AGREE WITH. WE PROVIDE THE STAFF RECOMMENDATION ON IF WE AGREE WITH ONE SIDE OR THE OTHER OR IF WE CAN PROVIDE ADDITIONAL INFORMATION

THAT INFORMS YOU IN ORDER TO DECIDE WHICH WAY TO GO.

DR. JUELSGAARD: AND SO YOU VIEW THE AVERAGE SCORE AS A BETTER INDICATOR THAN THE MEDIAN SCORE?

DR. SAMBRANO: I THINK IT'S A BETTER INDICATOR, BUT I WOULDN'T USE IT BY ITSELF. SO I THINK THE MEDIAN IS A HELPFUL INDICATOR, BUT THE AVERAGE ALLOWS EACH AND EVERY CONTRIBUTOR TO CONTRIBUTE TO THE OVERALL SCORE THAT YOU SEE BECAUSE IF YOU HAVE ONE REVIEWER THAT GIVES A LOW SCORE, THE MEDIAN WILL NOT NECESSARILY REFLECT THAT, BUT THE AVERAGE WILL.

MR. SHEEHY: OKAY. SO AT THIS POINT IS THERE EITHER A RECOMMENDATION -- EITHER A MOTION TO ACCEPT THE STAFF RECOMMENDATION OR A MOTION TO NOT ACCEPT?

MR. HARRISON: COULD I JUST MAKE ONE SUGGESTION TO TRY TO EXPEDITE THIS? IF WE COULD ASK FOR A MOTION IF ANY MEMBER OF THE BOARD IS INTERESTED IN MOVING MODULE 2.2 INTO TIER I AND FUNDING IT. IF THERE'S NO SUCH MOTION, WE CAN THEN PROCEED WITH A FINAL MOTION TO CLOSE FUNDING ON THIS ROUND.

MR. SHEEHY: THAT SOUNDS LIKE A GREAT IDEA. DO I HAVE SUCH A MOTION?

MR. TORRES: SO MOVED.

MR. SHEEHY: SO SENATOR TORRES HAS MADE THE MOTION. DO WE HAVE A SECOND? I'LL SECOND IT. SO THAT IS --

DR. FINE: WHAT IS THE MOTION?

MR. HARRISON: THE MOTION IS TO MOVE --

MR. SHEEHY: NO, I'M NOT GOING TO SECOND IT. I GET CONFUSED. SORRY. THIS IS VERY CONFUSING.

MR. HARRISON: SO THE MOTION MADE BY SENATOR TORRES WAS TO MOVE MODULE 2.2 IN APPLICATION 8040 INTO TIER I AND TO FUND IT. AND NOW WE HAVE THE QUESTION AS TO WHETHER THERE'S A SECOND.

MR. TORRES: OH, NO. NO. NO. THAT WAS NOT MY MOTION. MY MOTION WAS TO MOVE THE STAFF RECOMMENDATIONS.

MR. SHEEHY: OKAY. SO I DON'T THINK WE HAVE A MOTION. SO THAT MOTION FAILS, DISAPPEARS.

SO I THINK NOW WE'RE AT THE GLOBAL MOTION. SO THE MOTION WE WOULD TAKE NOW IS TO FUND EVERYTHING IN TIER I --

MR. HARRISON: YOU'VE ACTUALLY ALREADY APPROVED MOTIONS WITH RESPECT TO THE MODULES YOU'D LIKE TO FUND. SO THIS CAN SIMPLY BE A MOTION NOT TO FUND THE REMAINING APPLICATIONS AND MODULES.

MR. TORRES: THAT'S MY MOTION. SO MOVED.

MR. SHEEHY: THANK YOU, SENATOR TORRES.

DR. JUELSGAARD: I'D SECOND THAT MOTION.

MR. SHEEHY: WE GOT A SECOND. SO I THINK WE HAVE A ROLL CALL VOTE WITH THE STANDARD DISCLAIMER.

MR. HARRISON: RIGHT. FOR MEMBERS OF THE APPLICATION REVIEW SUBCOMMITTEE WHO ARE VOTING, PLEASE REMEMBER TO INDICATE YES OR NO EXCEPT WITH RESPECT TO THOSE APPLICATIONS WITH WHICH YOU HAVE A CONFLICT IF, IN FACT, YOU DO HAVE A CONFLICT WITH ANY OF THE APPLICATIONS.

MS. BONNEVILLE: ANNE-MARIE DULIEGE. DAVID HIGGINS.

DR. HIGGINS: ABSTAIN.

MS. BONNEVILLE: STEVE JUELSGAARD.

DR. JUELSGAARD: YES.

MS. BONNEVILLE: SHERRY LANSING. LAUREN MILLER.

MS. MILLER: YES.

MS. LANSING: I WAS ON MUTE. SHERRY LANSING, YES.

MR. HARRISON: EXCEPT WITH RESPECT TO THOSE --

MS. LANSING: EXCEPT FOR THE ONES THAT I'M RECUSED FROM.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: FRANCISCO PRIETO.

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

MS. BONNEVILLE: ROBERT QUINT.

DR. QUINT: YES. NO CONFLICTS.

MS. BONNEVILLE: AL ROWLETT. JEFF SHEEHY.

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

MS. BONNEVILLE: OS STEWARD. JONATHAN THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: YES.

MR. HARRISON: MOTION CARRIES WITH TEN YES VOTES AND ONE ABSTENTION.

CHAIRMAN THOMAS: MR. SHEEHY, CAN I JUST --

MR. SHEEHY: I WAS GOING TO SAY BACK TO YOU.

CHAIRMAN THOMAS: THANK YOU. WE HAVE A MEMBER OF THE PUBLIC WHO WOULD LIKE TO SPEAK, THE CEO OF VIACYTE IS HERE. PAUL, IF YOU'D LIKE TO INTRODUCE

YOURSELF.

MR. LAIKIND: THANK YOU. I'M PAUL LAIKIND, PRESIDENT AND CEO OF VIACYTE. I WOULD LIKE TO TAKE THIS OPPORTUNITY TO THANK THE MEMBERS OF THE ICOC, THE GRANTS REVIEW WORKING GROUP, THE CIRM STAFF, AND ESPECIALLY THE CITIZENS OF CALIFORNIA, WHOM YOU ALL REPRESENT, FOR THE CONTINUED SUPPORT OF THE WORK WE'RE DOING AT VIACYTE TO DEVELOP WHAT WE HOPE WILL BE AN IMPORTANT, INNOVATIVE, NEW TREATMENT FOR DIABETES.

LISTENING TO THESE DISCUSSIONS HAS BEEN VERY INTERESTING. CIRM HAS BEEN A PARTNER WITH US IN THIS ENDEAVOR SINCE THE EARLY DAYS, AND THE CONFIDENCE AND SUPPORT HAS ALLOWED US TO MAKE TREMENDOUS PROGRESS IN THIS PROGRAM.

LAST MONTH WE WERE CLEARED BY THE FOOD AND DRUG ADMINISTRATION TO BEGIN CLINICAL TRIALS EVALUATING OUR STEM CELL-DERIVED ISLET REPLACEMENT THERAPY CANDIDATE IN PATIENTS WITH TYPE 1 DIABETES. FOLLOWING UP ON THAT EXCITING NEWS, IT WAS PROBABLY ANNOUNCED JUST YESTERDAY THAT THE FIRST CENTER TO ENROLL PATIENTS IN THIS TRIAL WILL BE THE UNIVERSITY OF CALIFORNIA SAN DIEGO SCHOOL OF MEDICINE. TO OUR KNOWLEDGE THIS WILL BE THE FIRST TIME AN EMBRYONIC STEM CELL-DERIVED CELL REPLACEMENT THERAPY FOR

DIABETES WILL BE TESTED IN THE CLINIC. THIS EXCITING DEVELOPMENT ILLUSTRATES THE IMPORTANCE OF CIRM'S MISSION FOR MEDICINE AND FOR CALIFORNIA. CIRM IS ALL ABOUT BREAKING NEW GROUND, NURTURING PROMISING MEDICAL ADVANCES, AND STIMULATING OUR GREAT STATE'S ECONOMY.

I CAN SAY WITHOUT DOUBT THAT THE PROGRESS WE HAVE MADE AT OUR COMPANY IN DEVELOPING OUR THERAPEUTIC CANDIDATE WOULD NOT HAVE BEEN POSSIBLE BUT FOR THE TREMENDOUS SUPPORT WE RECEIVED FROM CIRM. IMPORTANTLY, CIRM SUPPORT HAS BEEN MULTIPLIED. IT HAS HELPED US TO SECURE OTHER FUNDING THAT WE NEED TO DRIVE THIS PROJECT FORWARD. SOME WILL POINT OUT THAT WE ARE STILL AT A VERY EARLY STAGE WITH THIS PROJECT, AND THERE'S NO DENYING THAT. THERE'S MUCH LEFT TO DO AND TO DISCOVER. HOWEVER, TOGETHER WE HAVE MADE TREMENDOUS PROGRESS AND INCREASED THE ODDS OF SUCCESS WITH EACH MILESTONE ACHIEVED. WHATEVER THE OUTCOME, CIRM HAS PUSHED BOUNDARIES OF MEDICINE AND IS STEP BY STEP BRINGING US CLOSER TO REALIZING THE TREMENDOUS PROMISE OF REGENERATIVE MEDICINE. SO FOR THAT I WANT TO AGAIN THANK YOU FOR THE CONTINUED SUPPORT THAT WE'VE HAD.

CHAIRMAN THOMAS: THANK YOU VERY MUCH, PAUL, AND CONTINUED GOOD WORK. BEST OF LUCK GOING

FORWARD. WE ARE ALL HEAVILY PULLING FOR YOU.

OKAY. WE HAVE THREE RELATIVELY QUICK ITEMS BETWEEN NOW AND EVERYBODY GETTING LUNCH. SO WE'LL PROCEED APACE HERE.

ITEM NO. 8, CONSIDERATION OF APPOINTMENT OF A NEW PATIENT ADVOCATE MEMBER TO THE GRANTS WORKING GROUP, WHICH HAS TO STAND AS A SEPARATE SUBITEM FOR ITEM 8. DR. SAMBRANO.

DR. SAMBRANO: OKAY. MR. CHAIRMAN, MEMBERS OF THE BOARD, MEMBERS OF THE PUBLIC, THANK YOU VERY MUCH. I'M GOING TO PRESENT THE COMPONENT OF NEW SCIENTIFIC MEMBERS AND THEN REAPPOINTMENT OF SCIENTIFIC MEMBERS TO THE GRANTS WORKING GROUP WHOSE TERMS HAVE NOW EXPIRED OR JUST EXPIRING.

SO IN YOUR BOOKS YOU HAVE BIOS FOR NEW MEMBERS. I WILL NAME THOSE. THOSE ARE DRS. ALI SYED ARBAB, JASON BURDICK, MANUELA GERNERT, TIMOTHY HACKER, ALI KHADEMHOSSEINI, AND EDMUND MIKUNAS. SO THOSE ARE NEW TO THE GRANTS WORKING GROUP, AND WE REQUEST APPOINTMENT TO THE GRANTS WORKING GROUP OF THOSE INDIVIDUALS.

AND THEN THERE IS A TABLE THAT PROVIDES A LIST OF 19 MEMBERS WHO WERE ORIGINALLY APPOINTED IN 2008, SO FOR SIX YEARS, AND THEIR APPOINTMENTS HAVE NOW OR ARE EXPIRING. AND IN ACCORDANCE WITH THE

RULES OF PROP 71, THE REAPPOINTMENTS NEED TO BE STAGGERED INTO THIRDS. THAT IS, EACH WITH A TWO-, A FOUR-, OR A SIX-YEAR TERM. SO WE PROPOSED THE TERMS AS SHOWN ON THAT TABLE FOR THESE 19 INDIVIDUALS AND WOULD REQUEST REAPPOINTMENT OF THESE INDIVIDUALS AS SUCH.

CHAIRMAN THOMAS: HEAR A MOTION TO THAT EFFECT?

MR. SHEEHY: SO MOVED.

DR. PRIETO: SECOND.

CHAIRMAN THOMAS: MOVED BY MR. SHEEHY, SECONDED BY DR. PRIETO.

QUESTION, DR. SAMBRANO. WHAT DOES THAT BRING THE TOTAL POOL TO AT THIS STAGE?

DR. SAMBRANO: SO THE TOTAL POOL IS ON THE ORDER OF NEARLY 200 MEMBERS. YOU KNOW, OVER THE LAST NEARLY TEN YEARS WE HAVE HAD APPOINTMENTS ON A MORE OR LESS REGULAR BASIS, BUT SOMETIMES THEY WITHDRAW FROM THE WORKING GROUP FOR VARIOUS REASONS. SOME HAVE COME TO CALIFORNIA, SO WE'VE LOST THEM BECAUSE OF THAT. DR. MILLS, UNFORTUNATELY, WAS ONE OF THOSE, BUT GRATEFUL TO HAVE HIM AS OUR PRESIDENT.

CHAIRMAN THOMAS: GLAD YOU POINTED THAT OUT, DR. SAMBRANO.

DR. SAMBRANO: BUT WE'RE TRYING TO MAINTAIN

AN ACTIVE ROSTER AS BEST WE CAN. AS WE CONTINUE FORWARD, HAVING THE ABILITY TO SELECT FROM A LARGE POOL LIKE THIS, ESPECIALLY WITH BROAD EXPERTISE, IS GOING TO CONTINUE TO BE IMPORTANT.

CHAIRMAN THOMAS: AND FOR THE BOARD'S UNDERSTANDING, HOW DO YOU GO ABOUT SOURCING NEW MEMBERS?

DR. SAMBRANO: SO IT'S IN A VARIETY OF WAYS. IN MANY CASES RECOMMENDATIONS FROM OTHER GRANTS WORKING GROUP MEMBERS, US NETWORKING WITH INDIVIDUALS AT MEETINGS, AT SCIENTIFIC CONFERENCES, OBSERVING THEM SPEAKING, AND KNOWING THAT THEY ARE EXPERTS IN PARTICULAR AREAS. AND IN MANY CASES THERE'S ONLY A HANDFUL OF EXPERTS WITHIN CERTAIN AREAS OR CATEGORIES, AND SO SEEKING THEM OUT BECOMES VERY IMPORTANT, AND IN MANY CASES ARE JUST WIDELY KNOWN.

CHAIRMAN THOMAS: MR. JUELSGAARD.

DR. JUELSGAARD: JUST A QUESTION ABOUT THE REAPPOINTMENTS FOR A MOMENT. HAVE EACH AND EVERY MEMBER OF THE GRANTS WORKING GROUP THAT ARE BEING NOMINATED FOR REAPPOINTMENT, HAVE THEY SERVED ON A GRANTS WORKING GROUP SINCE 2008, AT LEAST ONE?

DR. SAMBRANO: YES. I THINK THAT'S TRUE FOR ALMOST EVERYBODY. IF NOT, I CAN'T SEE ONE THAT

HASN'T. BUT THEY ALSO OFTEN PARTICIPATE IN PREAPP REVIEW. SO EVEN THOUGH WE MAY NOT SEE THEM IN PERSON, EITHER THROUGH TELECONFERENCE OR PREAPP REVIEWS, IS OFTEN WHEN WE MAY USE MANY OF THESE. AND ALSO THE TERM OF APPOINTMENT THAT WE ARE RECOMMENDING IS ALSO BASED IN PART ON WHAT THE FUTURE NEED MAY BE. SO WE TRY TO PARSE THEM BASED ON WHAT WE'RE PREDICTING TO BE THE NEED FOR FUTURE GRANTS WORKING GROUP MEETINGS AS WELL AS THEIR ABILITY TO PARTICIPATE.

MR. SHEEHY: SO JUST ONE QUICK COMMENT. FIRST OF ALL, I THINK ALL OF US OWE A HUGE DEBT OF GRATITUDE TO THESE REVIEWERS. THEY HAVE BEEN COMING TO CALIFORNIA PERFORMING WITH THE HIGHEST LEVEL OF INTEGRITY. THEY'RE NOT ELIGIBLE TO APPLY FOR OUR GRANTS. AND THIS IS NOT TO DENIGRATE THE NIH, BUT THE NIH PEOPLE ALL PARTICIPATE AS PART OF A COMMUNITY THAT THEY ALL SHARE IN THE BENEFIT OF THIS HAS REALLY BEEN VERY ALTRUISTIC. WHAT WE PROVIDE IN TERMS OF REIMBURSEMENT TO THESE INDIVIDUALS IS NOWHERE NEAR WHAT WE RECEIVE IN RETURN. AND HAVING BEEN IN VIRTUALLY EVERY REVIEW SINCE THE BEGINNING OF THIS AGENCY, THEY HAVE PERFORMED ADMIRABLY. IT'S JUST BEEN BRILLIANT.

I ALSO THINK WE SHOULD ACKNOWLEDGE THE WORK

OF DR. SAMBRANO AND HIS STAFF IN RECRUITING THESE FOLKS, KEEPING THEM MOTIVATED TO COME BACK AND SERVE WITH US. IT'S JUST BEEN A SPECTACULAR JOB.

CHAIRMAN THOMAS: OKAY. ANY OTHER COMMENTS OR QUESTIONS OF DR. SAMBRANO? DR. LUBIN.

DR. LUBIN: HAVE YOU HAD A SITUATION WHERE AN APPLICATION WAS OUTSIDE OF THE REALM OF THE REVIEWERS THAT WE HAD AND YOU BROUGHT SOMEONE IN AD HOC FOR THAT REVIEW? NIH DOES THIS AND I'M JUST CURIOUS.

DR. SAMBRANO: VIRTUALLY EVERY REVIEW. SO WE HAVE A CATEGORY OF REVIEWERS THAT WE CALL SPECIALISTS THAT DON'T NECESSARILY HAVE TO BE PART OF THE GRANTS WORKING GROUP. THEIR PARTICIPATION IS MORE LIMITED IN THAT THEY DON'T PROVIDE A SCORE OR RECOMMENDATION, BUT THEY DO PARTICIPATE, YES.

CHAIRMAN THOMAS: OKAY. WE HAVE A MOTION ON THE FLOOR TO APPROVE THE NEW MEMBERS AND REAPPOINT THE OLD MEMBERS. I THINK WE CAN DO THIS ON VOICE VOTE, MR. HARRISON.

MR. HARRISON: EXCEPT FOR THE FOLKS ON THE PHONE.

CHAIRMAN THOMAS: THANK YOU. ALL THOSE IN FAVOR PLEASE SAY AYE. OPPOSED? FOLKS ON THE PHONE PLEASE, MARIA IS GOING TO CALL YOUR NAME. SORRY. I

JUST GOT A VERY DIRTY LOOK IN CASE YOU WEREN'T IN THE ROOM.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: YES.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: YES.

MS. BONNEVILLE: SHERRY LANSING.

MS. LANSING: YES.

MS. BONNEVILLE: ART TORRES. KRISTINA VUORI.

DR. VUORI: YES.

MR. HARRISON: MOTION PASSES.

CHAIRMAN THOMAS: THANK YOU. MARIA, WHAT DO WE NEED TO DO WITH RESPECT TO THE NEW PATIENT ADVOCATE MEMBER OF THE GRANTS WORKING GROUP?

MS. BONNEVILLE: INTRODUCE HIM AS A NEW PATIENT ADVOCATE TO THE GRANTS WORKING GROUP AND ASK FOR A MOTION, AND THEN WE CAN VOTE ON HAVING HIM BE PART OF THE GRANTS WORKING GROUP.

CHAIRMAN THOMAS: THAT SOUNDS GOOD. THANK YOU. WE HAVE MR. HIGGINS IN THE ROOM. SO CAN WE HEAR A MOTION TO APPROVE HIS INCLUSION AS A NEW PATIENT ADVOCATE MEMBER OF THE GRANTS WORKING GROUP. MR. SHEEHY.

MR. SHEEHY: SO MOVED.

CHAIRMAN THOMAS: IS THERE A SECOND?

DR. PRIETO: SECOND.

CHAIRMAN THOMAS: IT'S BEEN MOVED AND SECONDED. ANY COMMENTS BY MEMBERS OF THE BOARD? HEARING NONE, COMMENTS BY MEMBERS OF THE PUBLIC? MR. HARRISON IS ABOUT TO SAY SOMETHING.

MR. HARRISON: NO.

CHAIRMAN THOMAS: OKAY. PROCEED TO A VOTE. ALL THOSE IN FAVOR OF MR. HIGGINS JOINING AS THE NEW PATIENT ADVOCATE TO THE GRANTS WORKING GROUP PLEASE SAY AYE. OPPOSED? MARIA, WILL YOU PLEASE -- OH, ABSTENTIONS, YES. MR. HIGGINS, I'M SURE, IS GOING TO ABSTAIN.

DR. HIGGINS: ABSTAIN.

CHAIRMAN THOMAS: YES. THANK YOU. MARIA, WILL YOU PLEASE POLL THOSE ON THE PHONE?

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: YES.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: YES.

MS. BONNEVILLE: SHERRY LANSING.

MS. LANSING: YES.

MS. BONNEVILLE: ART TORRES. KRISTINA VUORI.

DR. VUORI: YES.

MR. HARRISON: MOTION CARRIES. CONGRATULATIONS, MR. HIGGINS.

CHAIRMAN THOMAS: FURTHER WELCOME ABOARD, DAVID.

ACTION ITEM NO. 9, CONSIDERATION OF APPOINTMENT OF NEW MEMBERS TO THE STANDARDS WORKING GROUP, MR. LOMAX.

DR. LOMAX: THANK YOU, MR. CHAIRMAN, MEMBERS OF THE BOARD, MEMBERS OF THE PUBLIC. AS YOU ARE AWARE, WE HAVE A CIRM STANDARDS WORKING GROUP. THIS WORKING GROUP IS CHARGED WITH CONSIDERING STANDARDS FOR THE OVERSIGHT OF OUR FUNDED RESEARCH, AND WE HAVE TWO NEW MEMBERS TO BRING FORWARD FOR YOUR CONSIDERATION.

FIRST IS DR. BENHUR LEE FROM MT. SINAI HOSPITAL. I'M VERY PLEASED THAT DR. LEE IS INTERESTED IN PARTICIPATING IN THE STANDARDS WORKING GROUP. HE IS A STEM CELL SCIENTIST. YOU HAVE BACKGROUND MATERIALS ON HIS WORK. AND HE'S ALSO BEEN A SCIENTIST WHO HAS SERVED ON STEM CELL RESEARCH OVERSIGHT COMMITTEES IN THE PAST, SO HE'S VERY AWARE OF THE ISSUES THAT IS COME UP IN THE CONTEXT OF REVIEWING PROPOSALS AND MAKING SURE WE GET THE BEST SCIENCE UNDER THE HIGHEST STANDARDS. SO VERY PLEASED THAT HE HAS EXPRESSED INTEREST AND, LIKE I SAY,

ENCOURAGED THAT WE CAN GET HIM INVOLVED.

IN ADDITION, I'D JUST LIKE TO ADD THAT DR. LEE WOULD BE REPLACING DR. TIMOTHY CAMPE FROM THE UNIVERSITY OF WISCONSIN. DR. CAMPE WAS CONCERNED -- BECAUSE OF HIS WORK, HE WAS CONCERNED POTENTIALLY BECAUSE OF COLLABORATIONS AND INCREASINGLY SORT OF NETWORKING WITH RESEARCHERS IN CALIFORNIA THAT THERE MIGHT BE A PERCEIVED CONFLICT THERE. I ASSURED HIM THERE WAS NO ACTUAL CONFLICT, BUT HE CHOSE TO STEP DOWN. BUT I'D LIKE TO ACKNOWLEDGE DR. CAMPE'S WORK ON THE STANDARDS WORKING GROUPS, ANOTHER TERRIFIC PARTICIPANT WHO GAVE CONSIDERABLE TIME AND INTELLECTUAL ENERGY TO OUR WORK.

IN ADDITION, I'D LIKE TO BRING FORWARD A NOMINATION FOR YOUR CONSIDERATION, SENATOR ART TORRES. AS YOU MAY KNOW, MARCY FEIT WAS ONE OF THE BOARD MEMBERS, PATIENT ADVOCATE BOARD MEMBERS, ON THE WORKING GROUP. AGAIN, A FANTASTIC PARTICIPANT OF TREMENDOUS INTELLECT THAT WE WILL MISS, BUT, AGAIN, SENATOR TORRES HAS AGREED -- EXPRESSED INTEREST IN SERVING.

SO, AGAIN, FOR YOUR CONSIDERATION DR. BENHUR LEE AND SENATOR ART TORRES FOR THE STANDARDS WORKING GROUP.

CHAIRMAN THOMAS: HEAR A MOTION TO THAT

EFFECT?

DR. PRIETO: MOVE WE ACCEPT THE RECOMMENDATION.

MR. SHEEHY: SECOND.

CHAIRMAN THOMAS: MOVED BY DR. PRIETO, SECONDED BY MR. SHEEHY. FURTHER DISCUSSION OF MEMBERS OF THE BOARD? ANY COMMENTS FROM MEMBERS OF THE PUBLIC? HEARING NONE, VOICE VOTE IN THE ROOM. ALL THOSE IN FAVOR PLEASE SAY AYE. OPPOSED? MARIA, PLEASE CALL THE ROLL.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: YES.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: YES.

MS. BONNEVILLE: SHERRY LANSING.

MS. LANSING: YES.

MS. BONNEVILLE: KRISTINA VUORI.

DR. VUORI: YES.

MR. HARRISON: MOTION IS APPROVED.

CHAIRMAN THOMAS: THANK YOU. I'LL PROCEED TO ITEM 10, CONSIDERATION OF POLICY REGARDING NOTIFICATION BY CIRM EMPLOYEES OF PROSPECTIVE EMPLOYMENT. DR. MILLS AND MR. HARRISON.

DR. MILLS: SO THIS POLICY ACTUALLY COMES OUT OF A RECOMMENDATION OR A COMMENT THAT WAS MADE BY

DR. FRIEDMAN AT THE LAST BOARD MEETING. AND IT WAS MADE IN RESPONSE TO CONFLICTS OF INTEREST AND SUBSEQUENT EMPLOYMENT BY MEMBERS OF CIRM. IF YOU WILL RECALL, AT THE LAST BOARD MEETING, I VOLUNTARILY ENTERED INTO AN AGREEMENT WHERE I AGREED TO NOT ENGAGE IN ANY EMPLOYMENT-RELATED ACTIVITIES WITH ANY CIRM RECIPIENT FOR ONE YEAR FOLLOWING MY TENURE AS PRESIDENT OF CIRM. AND AS A RESULT OR A QUESTION OF THAT, DR. FRIEDMAN ASKED THE QUESTION OR POSED THE CONCEPT THAT WHILE THAT STANDARD MIGHT BE A GOOD THING FOR ME TO DO, IT'S NOT NECESSARILY APPROPRIATE FOR THE ACTUAL TEAM MEMBERS OF CIRM. AND I COMPLETELY AGREE WITH HIS SENTIMENT THERE.

SIMILARLY, HOWEVER, THOUGH, WE DO NEED TO TAKE PROACTIVE MEASURES TO MAKE SURE PROCEDURES ARE IN PLACE THAT WOULD PREVENT A CIRM MEMBER WHO WAS ENGAGED IN AN EMPLOYMENT-RELATED DISCUSSION WITH A GRANT AWARDEE OR ONE THAT WAS IN THE APPLICATION PROCESS FROM BEING ABLE TO MAKE DECISIONS AND INFLUENCING THAT, THE STANDARD CONFLICT OF INTEREST. AND SO THAT'S WHAT WE ATTEMPTED TO DO.

WE WANT TO A AFFIRM THAT TEAM MEMBERS OF CIRM ARE ELIGIBLE TO SEEK EMPLOYMENT. MANY, MOST OF THE INSTITUTIONS IN THE STATE OF CALIFORNIA THAT RECEIVE GRANT FUNDING FROM CIRM WOULD ALSO BE THE

TYPES OF INSTITUTIONS THAT WOULD BE VERY FORTUNATE TO HAVE MANY OF OUR MEMBERS. AND I WOULDN'T WANT TO DO ANYTHING FROM OUR SIDE THAT WOULD PRECLUDE THEM FROM BEING ABLE TO GO THERE IN AN APPROPRIATE MANNER. AND THE REASON FOR THAT ISN'T THAT I WANT TO LOSE THEM, BUT I WANT TO BE ABLE TO RECRUIT THEM AWAY FROM THE INSTITUTIONS AS WELL AND KNOW THAT JUST BECAUSE THEY COME TO CIRM, THEY WON'T FOREGO OPPORTUNITIES FOR EMPLOYMENT IN OTHER PLACES WHERE THEY LIKELY WOULD.

AND SO WITH THAT, I ASKED JAMES TO HELP CONSTRUCT, AND I THINK HE DID A FINE JOB, A POLICY OR A PROCEDURE THAT WOULD ENABLE A CIRM EMPLOYEE WHO IS ENGAGED IN A POTENTIAL EMPLOYMENT CONSIDERATION WITH A GRANT RECIPIENT OF CIRM A MECHANISM BY WHICH THEY COULD CONFIDENTIALLY DISCLOSE THAT TO COUNSEL, GET THE APPROPRIATE ADVICE FROM COUNSEL THAT WOULD THEN PROACTIVELY PRECLUDE THEM FROM ENTERING INTO OR INADVERTENTLY VIOLATING A CONFLICT OF INTEREST STANDARD.

MR. HARRISON: SO JUST AS A QUICK NOTE, STATE LAW ALREADY PROHIBITS STATE ADMINISTRATIVE OFFICIALS FROM PARTICIPATING IN A DECISION IN WHICH A PROSPECTIVE EMPLOYER IS INVOLVED. SO THIS POLICY IS REALLY DESIGNED TO PROTECT CIRM TEAM MEMBERS AGAINST INADVERTENT VIOLATIONS OF THE LAW AND ALSO TO PROTECT

THE INTEGRITY OF CIRM'S DECISION-MAKING PROCESS BY ENSURING THAT ONCE EMPLOYEES ARE IN A POSITION WHERE THEY HAVE BEGUN THOSE SORTS OF DISCUSSIONS, THEY KNOW THAT THEY NEED TO STEP ASIDE AND REFRAIN FROM PARTICIPATING IN ANY DECISIONS INVOLVING THE PROSPECTIVE EMPLOYER.

SO THE POLICY WOULD PROVIDE AS FOLLOWS: EMPLOYEES WOULD BE ASKED TO CONTACT CIRM'S LEGAL OFFICE WHEN THE EMPLOYEE BEGINS DISCUSSIONS WITH A PROSPECTIVE EMPLOYER THAT IS EITHER A CIRM GRANTEE OR LOAN RECIPIENT OR AN ENTITY THAT IS CURRENTLY APPLYING FOR CIRM FUNDS. CIRM'S LEGAL COUNSEL WOULD MAINTAIN THE CONFIDENCE OF THAT INFORMATION AND ADVISE THE EMPLOYEE OF HIS OR HER RESPONSIBILITIES UNDER THE LAW AND THE STEPS THAT HE OR SHE NEEDS TO TAKE IN ORDER TO REMAIN IN COMPLIANCE, AND THE EMPLOYEE WOULD THEN BE ASKED TO REFRAIN FROM PARTICIPATING IN ANY DECISIONS REGARDING THE PROSPECTIVE EMPLOYER.

THE POLICY IS DESIGNED INTENTIONALLY TO BE FLEXIBLE BECAUSE OBVIOUSLY THERE ARE A VARIETY OF CIRCUMSTANCES THAT MAY PRESENT THEMSELVES. AND WHAT MIGHT BE APPROPRIATE IN TERMS OF THE STEPS TO BE TAKEN TO PREVENT INADVERTENT VIOLATIONS IN A CASE MAY BE DIFFERENT THAN ANOTHER. SO WE WOULD APPROACH THIS

ON A VERY FLEXIBLE BASIS TO MAKE SURE THAT BOTH TEAM MEMBERS AS WELL AS THE INTEGRITY OF OUR DECISION-MAKING PROCESSES ARE PROTECTED. I'D BE HAPPY TO ANSWER ANY QUESTIONS.

CHAIRMAN THOMAS: MR. JUELSGAARD.

DR. JUELSGAARD: SO, JAMES, AS I READ WHAT YOU PUT TOGETHER, THE PROCESS THAT YOU DESCRIBED FOR EMPLOYEES IS ADVISORY, NOT MANDATORY?

MR. HARRISON: THAT'S CORRECT.

DR. JUELSGAARD: YOU'RE SUGGESTING THAT EMPLOYEES DO THIS, BUT NOT REQUIRING THAT THEY DO IT?

MR. HARRISON: THAT'S CORRECT. WE'VE TRIED TO BALANCE INDIVIDUAL'S PRIVACY INTEREST AND OBVIOUSLY THEIR ABILITY TO LOOK FOR FUTURE EMPLOYMENT OPPORTUNITIES WITH OUR DESIRE TO PROTECT THE INTEGRITY OF THE AGENCY'S DECISION-MAKING PROCESS AND TO PROTECT THE EMPLOYEES THEMSELVES.

CHAIRMAN THOMAS: DR. PRIETO.

DR. PRIETO: WHY NOT MAKE THIS MANDATORY?

MR. HARRISON: WELL, WE WERE CONCERNED ABOUT A COUPLE OF ISSUES. ONE, WE ARE LAWYERS FOR CIRM AND FOR YOU AS A BOARD, NOT FOR THE INDIVIDUAL EMPLOYEES. WE'RE MAINTAINING THE CONFIDENCE OF THIS INFORMATION BASED ON DIRECTION FROM THE PRESIDENT THAT WE ARE AUTHORIZED TO DO SO. ORDINARILY A LAWYER

WOULD NOT BE ALLOWED TO MAINTAIN THE PRIVACY OF THE INFORMATION LIKE THAT.

WE HOPE THAT EMPLOYEES WILL FEEL COMFORTABLE GIVEN THE ASSURANCE FROM THE PRESIDENT THAT WE'LL MAINTAIN THE CONFIDENCE OF THAT INFORMATION, BUT WE UNDERSTAND THAT THERE MAY BE INDIVIDUAL PRIVACY CONCERNS. AND WE WERE THEREFORE SOMEWHAT CAUTIOUS IN MANDATING THAT THEY DISCLOSE TO US.

DR. JUELSGAARD: WELL, I WONDER, JAMES, WHETHER WE COULD EVEN MAKE IT MANDATORY, WHETHER WE COULD GO BEYOND WHAT STATE LAW REQUIRES. I THINK THAT THAT WOULD REQUIRE A LITTLE RESEARCH TO FIGURE OUT WHETHER THAT'S POSSIBLE.

MR. HARRISON: THAT WAS ANOTHER CONCERN. ONE OF THE INTERESTING THINGS ABOUT CONFLICT OF INTEREST LAWS IS THAT IT'S A RESPONSIBILITY IMPOSED UPON THE INDIVIDUAL PUBLIC OFFICIAL. IN FACT, THERE ARE MANY STATE AGENCIES THAT ACTUALLY REFUSE TO PROVIDE ANY ADVICE ABOUT CONFLICTS OF INTEREST TO MEMBERS OR STAFF ON THE GROUNDS THAT IT'S THEIR INDIVIDUAL RESPONSIBILITY. WE TAKE THE VIEW THAT IT'S IMPORTANT TO ADVISE YOU AND OUR TEAM MEMBERS TO PROTECT CIRM ITSELF AND THE INTEGRITY OF OUR DECISIONS. BUT THAT WAS A CONCERN AS WELL, WHICH IS

WHY WE DID NOT MAKE IT MANDATORY.

CHAIRMAN THOMAS: DR. LEVIN.

DR. LEVIN: SO NOT REALLY MY BUSINESS AND NOT MY AREA OF EXPERTISE, BUT I'M STILL KIND OF CURIOUS HOW THIS IS GOING TO WORK. IMAGINE IF AN EMPLOYEE WILL COME TO YOU TO DISCLOSE CONFIDENTIALLY THEY'RE IN DISCUSSIONS WITH A CIRM GRANTEE SO AS NOT TO TELL THE ENTIRE ORGANIZATION AND THEN AN OPPORTUNITY COMES UP. RANDY SAYS, HEY, GO WORK ON THIS GRANT. NOW THEY SAY, NO, I'M NOT GOING TO DO IT. HOW DO THEY -- THEN THE CONFIDENTIALITY IS LOST OR THEY LOOK INSUBORDINATE. IS THERE A MECHANISM FOR DOING THAT?

MR. HARRISON: WELL, AGAIN, AS I SAID EARLIER, WE TRIED TO BE SOMEWHAT FLEXIBLE IN DESIGNING THIS BECAUSE IT WILL DEPEND ON THE CIRCUMSTANCES. UNDER THE CIRCUMSTANCES THOUGH, WE WOULD ADVISE THE EMPLOYEE THAT HE OR SHE HAS TO ADVISE DR. MILLS THAT THEY CAN'T PARTICIPATE IN WHATEVER DECISION IS AT ISSUE, AND IT WILL BE UP TO THAT EMPLOYEE WHETHER OR NOT HE OR SHE IS COMFORTABLE SHARING THE REASON WHY. THEY CERTAINLY WON'T BE REQUIRED TO. BUT THAT'S AN OBLIGATION THAT'S IMPOSED, AGAIN, BY EXISTING LAW.

DR. MILLS: BUT I WOULD SAY, THOUGH, IT'S

IMPORTANT TO KNOW THAT THERE ARE MEMBERS OF THE CIRM TEAM THAT HAVE CONFLICTS OF INTEREST THAT AREN'T FOR THESE REASONS. THEY EXIST NOW. SO IF SOMEBODY WERE TO COME TO ME AND SAY I CAN'T DO THAT PROJECT BECAUSE I HAVE A CONFLICT OF INTEREST, THAT WOULDN'T SEEM UNUSUAL TO ME.

MR. PANETTA: JAMES, SO GIVEN THAT THIS IS AN IMPORTANT ISSUE, AND WHAT WE'VE GOT IS A POLICY, BUT IT'S UP TO THE INDIVIDUAL EMPLOYEE TO UNDERSTAND THAT HE OR SHE IS PROHIBITED FROM ENGAGING IN EMPLOYMENT DISCUSSION AND THEN BEING INVOLVED IN A DECISION INVOLVING FUNDING, DO WE PROVIDE ANY COUNSELING TO CIRM EMPLOYEES RELATIVE TO THE CONFLICT OF INTEREST LAWS WHEN THEY COME TO WORK AT CIRM, OR DO YOU DO THAT DURING --

MR. HARRISON: YES. AND TO SOME DEGREE THAT HAS ALREADY BEEN HAPPENING INFORMALLY. EMPLOYEES ARE VERY WELL AWARE OF THE CONFLICT RULES UNDER WHICH WE OPERATE. AND AS RANDY SAID, IT'S NOT UNCOMMON FOR AN EMPLOYEE TO HAVE TO RECUSE HIMSELF OR HERSELF FROM PARTICIPATING IN A DECISION BASED ON A CONFLICT JUST AS IT IS FOR ALL OF YOU. SO THEY ARE VERY FAMILIAR WITH THE RULES, AND WE DO COUNSEL THEM. AND THIS SORT OF ADVICE ALREADY HAPPENS ON AN AD HOC BASIS. WE THOUGHT IT WAS IMPORTANT TO FORMALIZE IT

SO EMPLOYEES KNEW WHAT OUR HOPES AND EXPECTATIONS WERE AND SO THAT THEY KNEW THEY WOULD HAVE AN OPPORTUNITY FOR CONFIDENCE COUNSELING ON ISSUES LIKE THIS BECAUSE WE RECOGNIZE THEY'RE SENSITIVE.

DR. BURTIS: THE OPERATIVE WORD IS JUST SHOULD, SO IT'S AN ADVISORY. WOULD THIS ALSO -- WOULD THERE EVER BE THE CIRCUMSTANCE WHERE WE WOULD APPLY THIS TO THE GRANTEES AND SAY, IF YOU ARE GOING TO ENTER EMPLOYMENT DISCUSSIONS WITH ONE OF OUR CIRM EMPLOYEES, YOU SHOULD ADVISE THE COUNSEL AT CIRM FROM THE OTHER SIDE?

MR. HARRISON: WELL, WE COULD ASK. THAT MAY RAISE CONCERNS ON THE PART OF SOME OF OUR GRANTEES AND, FRANKLY, ALSO ON THE PART OF OUR EMPLOYEES BECAUSE IT COULD BE PERCEIVED AS A RESTRAINT ON TRADE ON THEIR ABILITY TO FIND OTHER EMPLOYMENT. AND AS RANDY SAID, IT WOULD BE NATURAL FOR SOME OF THE INSTITUTIONS THAT ARE FUNDED BY CIRM TO WANT TO RECRUIT CIRM TEAM MEMBERS. SO WE DON'T WANT TO IN ANY WAY INTERFERE WITH THAT. WE JUST WANT TO MAKE SURE WE HAVE A MECHANISM IN PLACE SO THAT EMPLOYEES KNOW THAT THEY CAN GET ADVICE IN A CONFIDENTIAL MANNER THAT WILL PROTECT THEM AND THAT WILL PROTECT THE AGENCY. THANK YOU.

CHAIRMAN THOMAS: THANK YOU, MR. HARRISON.

DO WE HAVE A MOTION TO APPROVE THIS POLICY?

MR. SHEEHY: SO MOVED.

CHAIRMAN THOMAS: MOVED BY MR. SHEEHY.

DR. PRIETO: SECOND.

CHAIRMAN THOMAS: SECONDED BY DR. PRIETO. ANY FURTHER DISCUSSION FROM MEMBERS OF THE BOARD? DISCUSSION FROM MEMBERS OF THE PUBLIC? HEARING NONE, IS THIS A VOICE VOTE AS WELL, MR. HARRISON. YES. ALL THOSE IN FAVOR IN THE ROOM PLEASE SAY AYE. OPPOSED? ABSTENTIONS? MARIA, PLEASE POLL THOSE ON THE PHONE.

MS. BONNEVILLE: ELIZABETH FINI.

DR. FINI: YES.

MS. BONNEVILLE: MICHAEL FRIEDMAN.

DR. FRIEDMAN: YES.

MS. BONNEVILLE: SHERRY LANSING.

MS. LANSING: YES.

MS. BONNEVILLE: ART TORRES. AND KRISTINA VUORI.

DR. VUORI: YES.

CHAIRMAN THOMAS: MOTION PASSES. THANK YOU, EVERYBODY. WE'VE NOW COME TO THE VERY IMPORTANT PART OF THE AGENDA, WHICH IS LUNCH.

MS. BONNEVILLE: SPOTLIGHT.

CHAIRMAN THOMAS: YES. THANK YOU, MARIA.

I WAS JUST GETTING TO THAT.

MS. BONNEVILLE: THAT'S GOOD.

CHAIRMAN THOMAS: WE WOULD LIKE EVERYBODY TO GO GET THEIR LUNCH WHEN MARIA TELLS US WHERE THAT IS AND TO COME RIGHT BACK BECAUSE WE HAVE THE LATEST IN A VERY INTERESTING SERIES OF SPOTLIGHTS TO HEAR WHILE WE ARE HAVING LUNCH. AND THEN AFTER THAT, WE WILL FINISH UP WITH THE AGENDA. SO, MARIA, WHICH ROOM ARE WE GOING TO HERE?

MS. BONNEVILLE: LUNCH IS THE SAME ROOM WE HAD BREAKFAST IN THIS MORNING, JUST ACROSS THE HALLWAY AND DOWN JUST ONE ROOM.

CHAIRMAN THOMAS: OKAY. THE MENDOCINO ROOM. SO IF EVERYBODY COULD GET THEIR LUNCH AND PROMPTLY RETURN, THANK YOU. THOSE ON THE PHONE, HOPE YOU HAVE TASTY REPAST AS WELL. THANK YOU.

(A LUNCH RECESS WAS TAKEN AND THE SPOTLIGHT WAS THEN PRESENTED, NOT REPORTED NOR HEREIN TRANSCRIBED. THE FOLLOWING WAS THEN HEARD IN OPEN SESSION:)

CHAIRMAN THOMAS: OKAY. NEXT WE'RE GOING TO HEAR FROM OUR COMMUNICATIONS GURU. KEVIN, WILL YOU APPROACH THE PODIUM?

MR. MC CORMACK: YAY, COMMUNICATIONS. IT'S THE FAT LADY IS ABOUT TO SING. CHAIRMAN THOMAS,

MEMBERS OF THE BOARD, MEMBERS OF THE PUBLIC, AND TEAM MEMBERS, ACTUALLY I'D LIKE TO BEGIN BY THANKING RACHEL. I'M ALWAYS IN AWE OF SOMEONE WHO CAN COME UP HERE AND TALK ABOUT SOMETHING AS SENSITIVE AND PERSONAL AS THIS. I MEAN IT'S SOMETHING THAT A LOT OF ADULTS WOULD HAVE A LOT OF PROBLEMS TALKING ABOUT, BUT RACHEL DID IT WITH SUCH GRACE AND DIGNITY AND WITH SUCH POWER THAT IT'S EXTRAORDINARY. AND I ALWAYS FEEL ONE OF THE BEST PARTS OF MY JOB IS THAT I GET TO WORK WITH PATIENT ADVOCATES LIKE RACHEL. AND SO THIS WAS ANOTHER EXAMPLE OF WHAT AN AMAZING JOB I HAVE.

IT'S ALWAYS A GREAT PLEASURE TO COME AND TALK TO YOU AND UPDATE YOU ON WHAT WE'RE UP TO. AND ONE OF THE THINGS MY COLLEAGUE DON GIBBONS AND I SPEND A LOT OF TIME DOING IS PITCHING STORIES TO THE MEDIA. WE'RE ALWAYS TRYING TO GET REPORTERS INTERESTED -- AND, DAVID, I HOPE YOU ARE PAYING ATTENTION -- INTERESTED IN REPORTING ABOUT SOME OF THE REALLY EXCITING WORK THAT'S GOING ON. ONE OF THE PROBLEMS WE ENCOUNTER, OTHER THAN THE FACT THAT THERE ARE FEWER AND FEWER SPECIALIZED HEALTHCARE REPORTERS OUT THERE, IS THAT A LOT OF WORK THAT WE FUND IS PRECLINICAL. IT'S IMPORTANT WORK OBVIOUSLY AND FASCINATING WORK; BUT WHEN YOU TALK TO A LOT OF

REPORTERS, THEY SAY WE'VE ALREADY DONE STORIES ABOUT CURING CANCER IN MICE. AND IF MICE READ NEWSPAPERS, WE'D DO A LOT MORE STORIES, BUT THEY DON'T. THEY'RE INTERESTED IN STORIES IN PEOPLE.

SO IT'S A LITTLE FRUSTRATING, BUT UNDERSTANDABLE BECAUSE A LOT OF THINGS THAT WORK WELL IN MICE DON'T DO QUITE SO WELL IN PEOPLE. AND SO A LOT OF REPORTERS, A LOT OF EDITORS ARE KIND OF HOLDING BACK UNTIL THEY SEE WHAT'S GOING ON.

I THINK WE'RE BEGINNING TO SEE A CHANGE IN THAT. TWO INCIDENTS KIND OF REINFORCE THAT. THE FIRST IS THAT WHEN VIACYTE GOT APPROVAL FROM THE FDA TO BEGIN THEIR CLINICAL TRIAL IN TYPE 1 DIABETES -- AND CONGRATULATIONS AGAIN, PAUL -- THERE WAS A LOT OF MEDIA INTEREST IN THIS. THE *UNION TRIBUNE* IN SAN DIEGO DID A GREAT STORY ABOUT THIS. A NUMBER OF OTHER NEWSPAPERS AND MEDIA OUTLETS THROUGHOUT THE COUNTRY DID STORIES ABOUT THIS. IN FACT, LAST NIGHT CHANNEL 6 IN SAN DIEGO DID A STORY ABOUT THE TRIAL STARTING. TO AN EXTENT THAT'S UNDERSTANDABLE IN SAN DIEGO BECAUSE VIACYTE IS BASED THERE, THE TRIALS ARE GOING TO BE BASED AT UCSD. SO THERE'S A LOT OF LOCAL INTEREST. BUT IT ALSO GOT A LOT OF INTEREST IN OTHER PLACES AS WELL, SUCH AS IN THE *IMPERIAL VALLEY PRESS* BECAUSE I THINK IT SHOWS THAT THERE'S A LOT OF

INTEREST IN ANYTHING THAT CAN TACKLE A DISEASE LIKE DIABETES, TYPE 1 OR TYPE 2. THERE'S A LOT OF INTEREST IN THERE. AND THE *IMPERIAL VALLEY PRESS*, BY THE WAY, ALSO DID A GREAT FEATURE PIECE WHEN WE ANNOUNCED THE NEWEST MEMBER OF OUR BOARD, DR. HIGGINS. SO THAT'S ONE OF OUR FAVORITE PAPERS OF THE MOMENT.

THE SECOND INCIDENT WAS WHEN ASTERIAS GOT APPROVAL FROM THE FDA TO DO A CLINICAL TRIAL IN SPINAL CORD INJURY. IT WAS KIND OF A REVISED VERSION OF THE GERON TRIAL. AND, AGAIN, THE *SAN FRANCISCO CHRONICLE* DID A GREAT IN-DEPTH, FRONT-PAGE PIECE ABOUT THIS. AND *SAN FRANCISCO BUSINESS TIMES* ALSO DID A PIECE AS WELL. AGAIN, THERE'S A STRONG LOCAL CONNECTION, SO THAT DRIVES THAT COVERAGE. BUT THIS WAS ALSO PICKED UP IN MORE THAN A HUNDRED DIFFERENT OUTLETS AROUND THE COUNTRY, A LOT OF THEM WEBSITES, WHICH IS GREAT BECAUSE MORE AND MORE PEOPLE ARE GETTING A LOT OF THEIR NEWS, HEALTH AND MEDICAL NEWS, FROM THE INTERNET.

AND THEN, FINALLY, WE SAW THIS BIG STORY IN *NATURE BIOTECHNOLOGY* CALLED THE "STATE OF THE THERAPIES", WHICH LOOKED AT THE ROLE OF GOVERNMENT AGENCIES IN HELPING TO KIND OF DERISK SOME OF THE PROBLEMS THAT COMMERCIAL COMPANIES HAVE IN

COMMERCIALIZING THERAPIES. AND DR. ELLEN FEIGAL DID A GREAT JOB OF WALKING A REPORTER THROUGH WHAT WE DO AND SPENDING A LOT OF TIME WITH HER OVER SEVERAL WEEKS TO EXPLAIN HOW WE WORKED. AND THIS GAVE CIRM A REALLY KIND OF PROMINENT ROLE IN THE STORIES AND ALSO MADE SURE THAT IT WAS ACCURATE. SO THOSE WERE REALLY GOOD, AND I THINK WE'RE SEEING MORE AND MORE OF THIS.

THE *BAY VIEW REPORTER*, IT'S THE SAN FRANCISCO NEWSPAPER THAT REACHES TO THE AFRICAN-AMERICAN COMMUNITY, RECENTLY RAN A LARGE FEATURE PIECE ON THE WORK OF DR. DONALD KOHN, WHO'S TARGETING TREATMENT FOR SICKLE CELL ANEMIA, CLEARLY AN ISSUE THAT'S VERY IMPORTANT TO THE AFRICAN-AMERICAN COMMUNITY.

SO WE'RE SEEING MORE AND MORE INTEREST IN THE WORK THAT WE'RE DOING AS MORE AND MORE OF THESE THERAPIES MOVE OUT OF THE LAB AND INTO PEOPLE.

BUT SOMETIMES YOU GET STORIES THAT GET A LOT OF MEDIA ATTENTION THAT YOU REALLY DIDN'T EXPECT, AND ONE OF THEM CAME RECENTLY WITH THE INTERSECTION OF MICKEY MOUSE AND DISNEY AND DR. MANI VESSAL. MANI, AS MOST OF YOU KNOW, HEADS OUR CREATIVITY PROGRAM, AND THAT'S THE PROGRAM THAT TARGETS -- THAT GETS HIGH SCHOOL TEENS, HIGH SCHOOL STUDENTS INTERNSHIPS IN SOME OF THE WORLD-CLASS STEM CELL

RESEARCHER'S FACILITIES THAT WE FUND. IT'S A GREAT PROGRAM. EVERYONE LOVES IT. THE STUDENTS LOVE IT, HAVE A GREAT TIME. AND THE STAFF IN THESE RESEARCH FACILITIES REALLY ENJOY HAVING THESE YOUNG STUDENTS AROUND. THEY'RE SO ENTHUSIASTIC ABOUT THE WORK THAT THEY DO. IT'S REALLY INFECTIOUS.

I LOVE IT BECAUSE I'M SHAMELESS AND IT GIVES ME A CHANCE TO PITCH THE INTERSECTION OF KIND OF THE REALLY SMART, BRIGHT, CUTE HIGH SCHOOL KIDS AND WORLD-CLASS STEM CELL RESEARCH. SO WE'RE TRYING TO GET SOME MEDIA COVERAGE OF THIS EVERY YEAR. SOMETIMES IT WORKS; SOMETIMES NOT. THIS YEAR IT ACTUALLY WORKED REALLY WELL, AND IT'S PARTLY BECAUSE WE ASKED THE STUDENTS TO EITHER WRITE A BLOG OR MAKE A VIDEO WITH THE OTHER STUDENTS ABOUT THEIR ACTIVITIES IN THE RESEARCH LAB.

AND ONE GROUP IN PARTICULAR MADE A VIDEO THIS YEAR THAT REALLY TOOK OFF. FIRST IT GOT SOME PLAY IN NBC TV IN LOS ANGELES AND THEN ABC TV IN SAN FRANCISCO, AND THEN FOR SOME REASON NBC IN NEW YORK ALSO FOUND IT AND LOVED IT. THE *SAN FRANCISCO EXAMINER* DID A REALLY GOOD, LONG FEATURE PIECE ABOUT THE PROGRAM. AND THEN KCBS AND KGO RADIOS, WHICH ARE THE TWO LARGEST DRIVE-TIME RADIO NEWS SHOWS IN THE BAY AREA, RAN PIECES ABOUT IT.

WHEN WE POSTED THE VIDEO ONLINE, IT WAS WATCHED MORE THAN 7500 TIMES IN 25 COUNTRIES FROM THE U.S. AND THE UK TO MEXICO AND MALAYSIA, AS CLEARLY THERE WAS A HUGE AUDIENCE OUT THERE. SO WHAT WAS THIS PIECE? WELL, IT WAS THE STUDENTS AT CITY OF HOPE IN DUARTE. AND WHAT THEY DID WAS THEY TOOK THE HIT SONG "LET IT GO" FROM THE DISNEY MOVIE *FROZEN* AND REWROTE THE LYRICS TO TALK ABOUT THEIR EXPERIENCES IN THE LAB.

BEFORE I SHOW IT, I WOULD APOLOGIZE TO ALL OF THOSE WHO HAVE YOUNG CHILDREN OR GRANDCHILDREN AND HAVE SPENT THE LAST SIX MONTHS TRYING TO GET THIS SONG OUT OF YOUR BRAIN. THIS IS IN A WORTHY CAUSE.

(VIDEO WAS THEN SHOWN, NOT REPORTED NOR HEREIN TRANSCRIBED.)

MR. MC CORMACK: CYTOKINES RAGE ON. YOU GOT TO LOVE THAT. I WOULDN'T TRY AND TOP THAT. I'M LEAVING THAT UP TO TODD.

MR. DUBNICOFF: THAT'S A TOUGH ACT TO FOLLOW.

CHAIRMAN THOMAS: BEFORE YOU START, KEVIN, WHO IS THE SINGER IN THAT? DO YOU KNOW WHO IT IS? IS THAT THE WOMAN FROM THE MOVIE?

MR. MC CORMACK: IT SOUNDED LIKE IT. WHEN I FIRST HEARD IT, I THOUGHT HOW DID THEY GET IDINA

MENZEL TO, AS JOHN TRAVOLTA SAID, IDINA MENZEL, TO RECORD THE SONG. BUT, NO, IT'S ONE OF THE WOMEN WHO WORKS IN THE LAB. SHE JUST HAS THIS EXTRAORDINARY VOICE. IT WAS AMAZING.

CHAIRMAN THOMAS: WOW. IMPRESSIVE.

MR. DUBNICOFF: ALL RIGHT. SO CHAIRMAN THOMAS, MEMBERS OF THE BOARD, AND MEMBERS OF THE PUBLIC, AS YOU HEARD EARLIER THIS MORNING, ONE OF DR. MILLS' MANTRAS IS IT'S ALL ABOUT THE PATIENTS. AND IN THE NEXT THREE MINUTES, I'M GOING TO INTRODUCE A STORIES OF HOPE BROCHURE THAT IS DESIGNED TO BE ALL ABOUT THE PATIENTS.

IT FEATURES SIX PATIENT ADVOCATES WHO TELL THEIR PERSONAL STORIES ABOUT LIVING WITH AN INCURABLE DISEASE OR INJURY AND THEIR HOPE FOR NEW THERAPIES. THE STORIES ALSO INCLUDE DISCUSSIONS ABOUT CIRM-FUNDED RESEARCH TO BRING STEM CELL-BASED TREATMENTS TO CLINICAL TRIALS.

NOW, WE PLACED THE BROCHURES IN FRONT OF ALL THE BOARD MEMBERS, AND THERE'S SOME IN THE BACK IF YOU'RE INTERESTED. ONE THING YOU'LL SEE IS THAT WE HAVE THE BROCHURE IN BOTH ENGLISH AND SPANISH. AND AS YOU'RE BROWSING THROUGH THE BROCHURE, YOU WILL NOTICE THAT YOUR FELLOW BOARD MEMBER, LAUREN MILLER, IS A FEATURED PATIENT ADVOCATE. LAUREN, THANK YOU SO

MUCH FOR TAKING THE TIME TO DO THE PHOTO SHOOT AND THE PHONE INTERVIEW TO SHARE YOUR FAMILY'S STORIES ABOUT THEIR EXPERIENCES WITH ALZHEIMER'S.

MS. MILLER: IT WAS MY PLEASURE.

MR. DUBNICOFF: AND ALSO THANKS GOES OUT TO DR. PRIETO FOR REFERRING HIS PATIENT FOR THE DIABETES STORY. THANK YOU.

SO I LOST MY TRAIN OF THOUGHT THERE, BUT WHAT ARE THESE BROCHURES GOING TO BE USED FOR? THEY MAKE EXCELLENT HANDOUTS FOR OUR VARIOUS OUTREACH EFFORTS LIKE PATIENT ADVOCATE MEETINGS, WORLD STEM CELL SUMMIT, OR WHEN WE GIVE PRESENTATIONS TO COMMUNITY ORGANIZATIONS LIKE THE ROTARY CLUB. THESE TYPES OF GROUPS WANT TO HEAR PERSONAL STORIES, SO OUR GOAL IS TO DRAW THEM IN WITH THESE BEAUTIFUL PORTRAITS AND EASY-TO-DIGEST, HUNDRED-WORD STORIES IN THE BROCHURE. AND TO DRIVE TRAFFIC BACK TO OUR WEBSITE, WE'VE INCLUDED LINKS IN EACH STORY TO MORE IN-DEPTH, 5- TO 600-WORD ESSAYS. AND IF YOU HAPPEN TO HAVE A COMPUTER IN FRONT OF YOU, YOU CAN GET TO THOSE ONLINE STORIES BY GOING TO OUR WEBSITE, CIRM.CA.GOV AND THEN CLICKING ON THE OUR PROGRESS TAB. AND THEN YOU'LL SEE STORIES FOR HOPE LINK THERE.

AND MY COLLEAGUE, DR. ANN HOLDEN, HAS

DECLARED THIS WEEK STORIES OF HOPE WEEK, AND SHE'S BEEN POSTING ONE STORY EACH DAY TO OUR BLOG, THE STEM CELLAR, WHICH YOU CAN REACH AT BLOG.CIRM.CA.GOV. AND SHE'S BEEN POSTING -- SHE'S ALSO BEEN TWEETING AND FACEBOOKING ABOUT THOSE BLOG POSTS.

SO THAT'S ABOUT IT. IF ANY OF THE BOARD MEMBERS ARE INTERESTED IN GETTING EXTRA COPIES FOR FUTURE EVENTS TO HAND OUT, LET US KNOW. THANK YOU.

MR. MC CORMACK: I'D JUST LIKE TO THANK TODD FOR WORKING REALLY HARD ON PUTTING THOSE BROCHURES TOGETHER. IT'S A LOT OF WORK, A LOT OF LOGISTICAL WORK AND A LOT OF SCRAMBLING AROUND TO MAKE SURE PHOTOGRAPHERS AND EVERYONE ELSE KNOWS EXACTLY WHAT THEY DO. THEY'RE VERY USEFUL BROCHURES BECAUSE WHAT THEY DO IS WE ALL TALK ABOUT THE RESEARCH, BUT THIS PUTS A HUMAN FACE ON THE RESEARCH. AND I THINK THAT'S A REALLY IMPORTANT THING, PARTICULARLY WHEN WE'RE TALKING TO THE PUBLIC, GOING OUT TO HEALTH FAIRS, TO, AS TODD SAID, ROTARY CLUBS. ANY OF THE SPEECHES WE GIVE, IF WE CAN BRING ALONG MATERIALS LIKE THIS, IT REALLY HELPS CONNECT AND KIND OF MAKE THAT BRIDGE BETWEEN WHAT WE DO, WHICH IS FUNDING THE RESEARCH, AND THE PEOPLE IN THE ROOM BECAUSE MOST OF THE DISEASES IN HERE I'M SURE WE ALL KNOW SOMEONE WHO'S AFFECTED BY IT ON ONE LEVEL OR

ANOTHER. AND SO THEY REALLY HELP MAKE THE CONNECTION BETWEEN THE AUDIENCE AND WHAT WE'RE DOING AND THE FACT THAT THE PEOPLE OF CALIFORNIA HAVE HELPED SUPPORT ALL THIS AND IT'S THEIR VISION THAT WE TRANSLATE INTO ACTION.

SO I'D BE HAPPY TO TAKE ANY QUESTIONS OR JUST TO WISH YOU ALL ADIEU.

CHAIRMAN THOMAS: THANK YOU, KEVIN.

MR. MC CORMACK: ADIEU.

CHAIRMAN THOMAS: BEFORE WE CLOSE HERE, I PUT ANOTHER INFORMATIONAL ITEM ON THE AGENDA. EVERY YEAR WE HAVE THE STEM CELL MEETING ON THE MESA, WHICH YOU ALL HEAR ABOUT. MOST OF YOU REALLY DON'T KNOW A LOT OF DETAILS TO WHAT THAT'S ABOUT. AND SO I'VE ASKED NEIL LITTMAN TO GIVE US A BRIEF OVERVIEW. THAT'S COMING UP IN BETWEEN NOW AND OUR NEXT BOARD MEETING, SO I THOUGHT IT WOULD BE HELPFUL FOR THE BOARD TO HEAR A LITTLE DETAIL.

MR. LITTMAN: THANK YOU, CHAIRMAN THOMAS, MEMBERS OF THE BOARD, MEMBERS OF THE PUBLIC. AS CHAIRMAN THOMAS INDICATED, I JUST WANT TO PROVIDE YOU A BRIEF OVERVIEW OF STEM CELL MEETING ON THE MESA. THIS EVENT IS COMING UP OCTOBER 7TH TO 9TH IN LA JOLLA, CALIFORNIA. IT WILL BE TAKING PLACE AT THE ESTANCIA HOTEL. IT'S A THREE-DAY EVENT.

THE FIRST TWO DAYS CONSIST OF A PARTNERING FORUM. THE THIRD DAY CONSISTS OF THE SCIENTIFIC SYMPOSIUM. THE GOAL OF THE EVENT IS REALLY TO BRING TOGETHER SENIOR LEADERS AND EXECUTIVES IN THE FIELD OF REGENERATIVE MEDICINE WITH THE SCIENTIFIC COMMUNITY IN THE HOPES OF SHARING INFORMATION AND BUILDING RELATIONSHIPS TO ESTABLISH FUTURE COLLABORATIONS. THIS IS REALLY THE ONLY REGENERATIVE MEDICINE FOCUSED EVENT. LAST YEAR THERE WERE OVER 800 ATTENDEES. THERE ARE OVER 500 101 MEETINGS. SO THIS IS A GREAT OPPORTUNITY FOR US TO GET IN FRONT OF INDUSTRY FOR SOME OF OUR GRANTEES TO PRESENT. WE HAVE A TOTAL OF 12 GRANTEES WHO WILL BE PRESENTING THIS YEAR AT THE MEETING.

JUST TO GIVE YOU A LITTLE FLAVOR OF SOME OF THE DISCUSSIONS AND SOME OF THE PANELS THAT WILL BE TAKING PLACE, THERE WILL BE A CELL THERAPY PRODUCT DEVELOPMENT PANEL, THERE WILL BE A PANEL DISCUSSING PAYOR PERSPECTIVES, THERE WILL BE A PANEL THAT'S DISCUSSING HOW TO SUSTAIN INVESTOR INTEREST IN THE REGENERATIVE MEDICINE SPACE. THERE WILL BE TWO WORKSHOPS, ONE FOCUSED ON REIMBURSEMENT AND ONE FOCUSED ON MANUFACTURING SCALE-UP TECHNOLOGIES. AND THEN THERE WILL ALSO BE PANELS DISCUSSING THE REGULATORY ENVIRONMENT BOTH IN THE U.S. AND

INTERNATIONALLY, AND THERE WILL ALSO BE A FEW DIFFERENT PANELS DISCUSSING DIFFERENT TYPES OF TECHNOLOGIES SUCH AS GENE AND GENE MODIFIED CELL THERAPIES.

SO WITH THAT, BE HAPPY TO ANSWER ANY QUESTIONS ABOUT THE MEETING.

CHAIRMAN THOMAS: OKAY. I JUST WANT EVERYBODY TO KNOW THIS HAS BEEN A GROWING EVENT EVERY YEAR THAT'S INCREASINGLY SUBSCRIBED, AND THERE'S AN AWFUL LOT OF GOOD STUFF THAT HAPPENS AT THIS. AND PEOPLE COME FROM ALL OVER THE WORLD TO HEAR WHAT'S GOING ON, TO ARRANGE MEETINGS, AND TO DRIVE STRATEGIC RELATIONSHIPS THAT REALLY ARE MOVING THE FIELD AHEAD. SO WE'RE VERY PLEASED WITH THIS. THIS IS A -- CIRM AND ARM TOGETHER PUT THIS TOGETHER OVER THE YEARS WITH THE GREAT HELP OF UCSD AND THE FOLKS WHO ARE MEMBERS OF THE SANFORD CONSORTIUM DOWN THERE.

DR. LUBIN: SO I WANTED TO ACTUALLY THANK ELLEN WHO AT ONE OF THOSE MEETINGS INTRODUCED ME TO PEOPLE FROM BLUEBIRD BIO, AND WE ARE NOW STARTING OUR FIRST GENE THERAPY FOR THALASSEMIA THAT'S NOT FUNDED BY CIRM, BUT WENT THROUGH CIRM, BUT IT'S FUNDED INDEPENDENTLY. AND THE FIRST PATIENT IS BEING TREATED RIGHT NOW AS WE SPEAK, AND TWO MORE ARE LINED UP FOR THE NEXT TRIALS. AND IT ALL CAME OUT OF THAT.

SHE HAD ME MEET ABOUT EIGHT PEOPLE IN TWO DAYS. SO SHE'S A GREAT NETWORKER, BUT THE MEETING WAS AN IDEAL FORMAT, AND IT LED EVENTUALLY TO COMMUNICATIONS THAT EVENTUALLY LED TO THIS STUDY. SO I STRONGLY SUPPORT THAT AS AN OPPORTUNITY FOR US.

CHAIRMAN THOMAS: ANY COMMENTS, OTHER COMMENTS FROM MEMBERS OF THE BOARD? THANKS VERY MUCH, NEIL.

MR. LITTMAN: THANK YOU.

CHAIRMAN THOMAS: WE NOW COME TO THE PUBLIC COMMENT PART OF THE AGENDA. YES, HOLD ON ONE SECOND.

MS. WINOKUR: I WOULD LIKE TO ASK KEVIN A QUESTION. IS HE STILL HERE? KEVIN, I'M JUST CURIOUS. I WONDER IF ANY OF THE PUBLICITY AROUND THE ICE BUCKET CHALLENGE HAS BEEN REFLECTED IN INQUIRIES OR ANYTHING AT CIRM.

MR. MC CORMACK: NOT THAT I'VE SEEN OF. NO. WE DID A STORY ABOUT IT A NUMBER OF WEEKS AGO. BEFORE IT WAS HIP, WE GOT THERE. AND I SUBMERGED MYSELF WEARING MY SUIT AND TIE, OF COURSE. BUT WE HAVEN'T REALLY SEEN THAT MUCH. WE GOT SOME RESPONSE, BUT I THINK IT'S BECOME SO VIRAL THAT IT'S BECOME ALMOST COMMONPLACE. SO PEOPLE AREN'T COMMENTING ON IT ANYMORE IN THE WAY THAT THEY DID TO BEGIN WITH. I MEAN IT'S BEEN REMARKABLE. I WISH I'D COME UP WITH

THAT IDEA, TO BE ABLE TO RAISE $100 MILLION JUST BY THROWING WATER OVER MY HEAD.

MS. WINOKUR: IT'S A HUNDRED TWO NOW.

MR. MC CORMACK: IT'S REMARKABLE.

MS. WINOKUR: IT WAS AN IDEA OF A PATIENT.

MR. MC CORMACK: IT'S THE WONDERFUL THING ABOUT SOMETHING LIKE THAT. IT'S SUCH A SIMPLE THING, AND I THINK IT JUST CONNECTED WITH SO MANY PEOPLE IN A VERY KIND OF OBVIOUS WAY BECAUSE IT'S FUNNY TO KIND OF NOMINATE THE PRESIDENT TO DUMP A BUCKET OF WATER OVER HIS HEAD.

DR. LUBIN: WE VOTING ON THAT?

MR. MC CORMACK: JUST BRILLIANT. IT'S INTERESTING TO SEE NOW A NUMBER OF OTHER ORGANIZATIONS AND NON-PROFITS ARE TRYING TO DO SIMILAR THINGS, BUT I THINK THE CAT'S OUT OF THAT BAG.

MS. WINOKUR: THANK YOU.

CHAIRMAN THOMAS: JENNIFER.

DR. BRASWELL: THANK YOU. MY NAME IS JENNIFER BRASWELL. I'M THE EXECUTIVE DIRECTOR OF THE SANFORD STEM CELL CLINICAL CENTER AT UCSD. AND I'M HERE ON BEHALF OF MY COLLEAGUES AND OUR INDUSTRY PARTNERS TO TELL YOU SOME NEWS OF VITAL INTEREST TO CALIFORNIA AND TO YOU AS MEMBERS OF THE BOARD OF THE

INDEPENDENT CITIZENS OVERSIGHT COMMITTEE. AND I APOLOGIZE THAT I'M GOING TO READ MY COMMENTS, BUT IN RESPECT FOR YOUR TIME, I WANT TO MAKE SURE I SAY WHAT I MEAN TO SAY AND NOT SOMETHING ELSE.

THE SUBJECT IS THE START OF CLINICAL TRIALS TO TEST THE SAFETY OF NEW THERAPIES DEVELOPED WITH CIRM FUNDING. UC SAN DIEGO HAS A TRACK RECORD OF TRANSLATING CIRM-FUNDED DISCOVERIES TO CLINICAL APPLICATION IN PHASE I TRIALS, AND I WANT TO BE AS CLEAR AS I CAN SO YOU HAVE THE DETAILS THAT YOU CAN USE ABOUT YOUR OWN SUCCESS.

THIS MORNING YOU'VE HEARD THAT UC SAN DIEGO SANFORD STEM CELL CLINICAL CENTER WILL BE THE SITE OF THE FIRST-IN-HUMAN SAFETY TRIAL FOR THE VIACYTE STEM CELL-DERIVED CELL PRODUCT FOR TYPE 1 DIABETES. CIRM HAS BEEN A FUNDING PARTNER FOR THE SAN DIEGO DEVELOPED VIACYTE PRODUCT, AND THE SAFETY TRIAL WILL BE INITIATED AT THE SANFORD STEM CELL CLINICAL CENTER.

WE ARE ALSO PLEASED TO ANNOUNCE THAT UC SAN DIEGO WILL TEST ANOTHER CELL PRODUCT FOR SAFETY THIS MONTH, THE NEURALSTEM CELL PRODUCT FOR REPAIR OF SPINAL CORD INJURY. SIGNIFICANT TECHNOLOGICAL IMPROVEMENT PRECLINICAL STUDY AND DEVELOPMENT OF SURGICAL TECHNIQUE FOR THIS CELL PRODUCT WAS CARRIED

OUT BY MARTIN MARSALA OF UC SAN DIEGO WHO HAS BEEN FUNDED IN THE PAST BY CIRM UNDER THE EARLY TRANSLATIONAL AWARD PROGRAM.

THE NEURALSTEM CELL PRODUCT WILL BE TESTED FOR SAFETY IN THE FIRST SPINAL CORD INJURY PATIENT THIS MONTH.

NEXT, AND JUST YESTERDAY, A SOPHISTICATED, INNOVATIVE DRUG TARGETING CANCER STEM CELLS IN DEADLY BLOOD CANCER WAS PROVIDED TO THE FIRST PARTICIPANT IN A SAFETY TRIAL AT THE SANFORD STEM CELL CLINICAL CENTER FOR THE ROR1 MONOCLONAL ANTIBODY, A DRUG DEVELOPED IN PART WITH FUNDING FROM A CIRM DISEASE TEAM AWARD TO THOMAS KIPPS AT UC SAN DIEGO. THE INDUSTRY PARTNER THERE IS CELGENE.

THE THREE CLINICAL TRIALS INITIATED THIS MONTH FOLLOW A CLINICAL TRIAL OF A DRUG DEVELOPED WITH RESEARCH FUNDED BY CIRM, THE JAK2 INHIBITOR DRUG AGAINST BLOOD CANCER.

I'M BRINGING YOU THIS NEWS TO EMPHASIZE THAT THE PACE OF DEVELOPMENT FOR THESE FOUR STEM CELL THERAPEUTICS WAS ACCELERATED BY CIRM FUNDING. CIRM FUNDING HAS ENABLED UC SAN DIEGO, AN ACADEMIC INSTITUTION, TO MOVE FAST WHEN WE ARE PARTNERED WITH INDUSTRY. THE ACADEMIC SETTING PROVIDES STABILITY, THE BEST SCIENCE, AND THE BEST DOCTORS TO TRANSLATE

DISCOVERIES TO PEOPLE. WE BELIEVE OUR PATIENTS IN CALIFORNIA, OUR PATIENTS THROUGHOUT THE WORLD, OUR PATIENTS DESERVE THE BEST SCIENCE WE CAN OFFER. WE'RE ENORMOUSLY GRATEFUL FOR CIRM FUNDING, FOR CIRM STAFF, AND FOR THE INDEPENDENT CITIZENS OVERSIGHT COMMITTEE. THANK YOU VERY MUCH.

(APPLAUSE.)

MR. REED: THIS IS A HARD DAY FOR THE REED FAMILY. THIS IS THE 20-YEAR ANNIVERSARY OF THE DAY MY SON BROKE HIS NECK AND WAS PARALYZED ON A COLLEGE FOOTBALL FIELD. BUT IT'S ALSO A TREMENDOUS DAY BECAUSE TODAY IS THE FIRST RELEASE OF A BOOK CALLED *INEVITABLE COLLISION* BY TORY WILLIAMS, AND IT'S ABOUT THE FIRST PERSON TO RECEIVE EMBRYONIC STEM CELLS IN HIS BODY, T.J. ATCHISON, LITTLE BITTY GUY, AND HE TOLD HIS CHURCH, SOUTHERN BAPTIST CHURCH, THAT HE WAS GOING TO DO EMBRYONIC STEM CELLS. HE STOOD BY HIS GUNS.

ROMAN WORKED WITH HIM ON SETTING UP THE T.J. ATCHISON PROGRAM, SIMILAR TO THE ROMAN REED ACT. HE ALSO WORKED WITH THE ALABAMA INSTITUTE -- TO MAKE THE ALABAMA INSTITUTE OF MEDICINE, AND HE'S STILL ON THE BOARD OF DIRECTORS OF THAT. SO THIS IS A SAD DAY FOR HIM, BUT IT'S ALSO A DAY OF HOPE. AND YOU ARE ALL PART OF THE DAY WHEN HE WILL FULFILL HIS PROMISE

THAT HE WILL WALK AGAIN. THANK YOU VERY MUCH.

(APPLAUSE.)

DR. BAXTER: GOOD AFTERNOON. MY NAME IS SUSAN BAXTER. I'M THE EXECUTIVE DIRECTOR OF THE CALIFORNIA STATE UNIVERSITY SYSTEMWIDE PROGRAM FOR BIOTECHNOLOGY. I'M HERE TODAY ON BEHALF OF THE CALIFORNIA STATE UNIVERSITY, CSU, TO RESPECTFULLY ASK THE ICOC TO DISCUSS THE BRIDGES TO STEM CELL RESEARCH PROGRAM AT YOUR MEETING IN OCTOBER. THE BRIDGES PROGRAM IS THE MAJOR PLANNING IN CIRM'S STRATEGIC PUBLIC COMMITMENT TO OFFER OPPORTUNITIES TO STUDENTS REPRESENTING THE DIVERSITY OF CALIFORNIA'S POPULATION WHO ARE HOPING TO PURSUE A CAREER IN SCIENCE AND RESEARCH.

TODAY 14 CSU CAMPUSES HOST BRIDGES PROGRAMS. TOGETHER THEY'VE TRAINED OVER 750 STUDENT RESEARCHERS SINCE 2009. WORKFORCE DEVELOPMENT ISN'T AN ADD-ON, BUT RATHER ONE OF THE INTEGRAL PARTS OF CIRM'S MISSION DATING BACK TO THE SEPTEMBER 2006 STRATEGIC PLAN. CSU FIRST PROPOSED THE BRIDGES PROGRAM AS A WORKFORCE DEVELOPMENT PROGRAM BACK IN 2007. WE WROTE THAT WORKFORCE DEVELOPMENT AIMED AT PROVIDING SCIENTISTS, ENGINEERS, AND TECHNICIANS AT ALL DEGREE LEVELS WITH PARTICULAR FOCUS ON RESEARCH TRANSLATION AND PRODUCT DEVELOPMENT IS VITAL TO

SUPPORTING THE EMERGENT STEM CELL INDUSTRY IN CALIFORNIA.

WE ALSO RECOGNIZE THAT INCREASED EXPOSURE AND UNDERSTANDING OF STEM CELLS ADVANCES BIOLOGY, AND TECHNOLOGIES WILL SET FUTURE PRODUCT DEVELOPMENT TEAMS UP FOR SUCCESS WHETHER THEY GAIN HANDS-ON EXPERIENCE IN A STEM CELL LAB OR LEARN ABOUT THE EXCITEMENT AND PROMISE AROUND STEM CELL RESEARCH AS PART OF THEIR GENERAL EDUCATION.

WORKING WITH BAY BIO AND BIOCOM ON THEIR INSTITUTE BOARDS, I KNOW THE NO. 1 WORKFORCE NEED IN THIS INDUSTRY IS HANDS-ON PRACTICE AND PARTICIPATION IN MULTIDISCIPLINARY TEAM-BASED RESEARCH PROJECTS. RESEARCH EXPERIENCE IS BAKED INTO THE BRIDGES PROGRAM; AND AS A RESULT, GRADUATES HAVE MANY CAREER OPTIONS. DESPITE THE GREAT RECESSION, BRIDGES GRADUATES HAVE SUCCEEDED IN LANDING JOBS AND GAINING ADMITTANCE TO GRADUATE AND MEDICAL SCHOOLS AT MUCH HIGHER RATES THAN THEIR PEER GROUPS.

CSU SAN MARCOS STUDENTS GAIN EXPOSURE TO REGULATORY AFFAIRS, PROJECT MANAGEMENT, AND CLINICAL TRIALS MANAGEMENT AS PART OF THEIR BRIDGES PROGRAM. AS A RESULT, COMPANIES IN SAN DIEGO REGION HAVE HIRED NEARLY ALL OF THEM. THEY WORK AT COMPASS DERMA PATHOLOGY, GENOPTIX, GENMARK DIAGNOSTICS, MILLCORE,

ILLUMINA, CONCEPTION SCIENCES; AND THERMO FISHER. AND, IN FACT, THERMO FISHER HAS HIRED FOUR BRIDGES GRADUATES FROM SAN MARCOS.

IN JANUARY CSU SACRAMENTO STUDENTS WON CSC'S BIOTECHNOLOGY COMMERCIALIZATION CHALLENGE FOR THE STEM CELL MANUFACTURING-RELATED IDEA. TEAM LEADER, MANMET SINGH, AN UNDERGRADUATE BIOLOGY SCIENCES MAJOR, WENT ON TO WIN AN INNOVATION CORPS TEAM GRANT, THAT'S THE I-CORPS FROM THE NATIONAL SCIENCE FOUNDATION. THE GRANT ALLOWED THEM TO DEVELOP THEIR COMMERCIALIZATION PLAN FURTHER AND ATTEND AN ENTREPRENEURSHIP PROGRAM OFFERED BY THE UNIVERSITY OF MICHIGAN'S I-CORPS NODE.

AT THE END OF THE PROGRAM LAST WEEK, INDUSTRY-BASED COURSE INSTRUCTORS GAVE OUT ONE AWARD. THE TEAM THAT BEST EMBODIES THE SPIRIT OF I-CORPS AND A COMMERCIALIZATION PLAN THAT WOULD WORK. THEY GAVE THE AWARD TO MS. SINGH AND THE SACRAMENTO STATE TEAM.

I'M HERE TODAY BECAUSE CIRM HAS NOT MADE A DECISION ABOUT THE FUTURE OF THE BRIDGES PROGRAM. CSU SAN MARCOS AND ITS PARTNER COMMUNITY COLLEGE, MIRACOSTA COLLEGE, ARE NOT MAKING PLANS TO RECRUIT ANOTHER BRIDGES STUDENT COHORT THIS FALL. THIS SCENARIO IS PLAYING OUT ACROSS CALIFORNIA AS PROGRAMS STATEWIDE ARE FORCED TO SUSPEND OUTREACH,

RECRUITMENT, AND COURSE OFFERINGS THIS FALL.

BY MAKING NO DECISION, CIRM WILL LOSE SIGNIFICANT MOMENTUM IN ITS EFFORTS TO BUILD AND INSPIRE A PROFESSIONAL STEM CELL-RELATED WORKFORCE IN CALIFORNIA. WE URGE CIRM AND THE ROOM TODAY TO CONSIDER EXTENDING AND CONTINUING THE BRIDGES TO STEM CELL RESEARCH PROGRAM. WE WELCOME THE OPPORTUNITY TO DISCUSS THE IMPACTS OF THIS PROGRAM WITH YOU FURTHER. THERE'S NO BETTER INVESTMENT YOU CAN MAKE FOR THE STATE OF CALIFORNIA.

(APPLAUSE.)

CHAIRMAN THOMAS: THANK YOU. OTHER COMMENTS FROM MEMBERS OF THE PUBLIC? WE HAVE ONE OTHER THING I'D LIKE TO MENTION. I'M GOING TO PUT HER ON THE SPOT HERE. LAUREN, SINCE BETWEEN NOW AND THE NEXT BOARD MEETING, WE HAVE A BIG EVENT THAT YOU ARE INVOLVED IN, COULD YOU JUST GIVE A LITTLE BRIEF DESCRIPTION OF THAT FOR THE BOARD, PLEASE?

MS. MILLER: LOVE TO. CLARITY FOR CHARITY HAS AN EVENT THAT WE HOLD CALLED OUR HILARITY FOR CHARITY LOS ANGELES VARIETY SHOW, AND IT'S OUR BIG FUND RAISER FOR THE YEAR, WHICH IS REALLY IMPORTANT BECAUSE WE'RE STARTING A PROGRAM IN WHICH WE'RE GOING TO BE PROVIDING AT-HOME CARE FOR INDIVIDUALS STRUGGLING WITH ALZHEIMER'S DISEASE, WHICH IS VERY

EXCITING. AND THE EVENT IS COMING UP ON OCTOBER 17TH IN L.A. AT THE PALLADIUM. AND IF ANYONE IS INTERESTED IN GOING, TICKETS ARE ON SALE. IT IS, I CANNOT TELL YOU, SUCH A FUN NIGHT. IT IS A VERY ANTICHARITY GALA. THERE'S NO RUBBER CHICKENS. IT'S ALL TACOS AND BAD LANGUAGE, AND IT'S A REALLY BIG, FUN PARTY.

THE THEME THIS YEAR IS A PROM. SO BIG DRESSES AND RUFFLED SHIRTS, AND IT'S GOING TO BE A GREAT TIME, AND EVERYONE IS INVITED. THANK YOU.

CHAIRMAN THOMAS: THANK YOU. ANY OTHER COMMENTS FROM MEMBERS OF THE BOARD ON ANYTHING THEY CARE TO TALK ABOUT?

DR. LUBIN: THE GIANTS OR THE A'S? WHICH ONE?

CHAIRMAN THOMAS: OKAY. I WAS A LITTLE OVERLY BROAD. THANK YOU. AND MEETING STANDS ADJOURNED. WE WILL SEE YOU IN OCTOBER.

(THE MEETING WAS THEN CONCLUDED AT 1:53 P.M.)

REPORTER'S CERTIFICATE

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

CLAREMONT HOTEL
41 TUNNEL ROAD
BERKELEY, CALIFORNIA
ON
SEPTEMBER 10, 2014

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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