

BETH C. DRAIN, CA CSR NO. 7152

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

LOCATION: VIA ZOOM

DATE: NOVEMBER 20, 2020
9 A.M.

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

FILE NO.: 2020-19

**133 HENNA COURT, SANDPOINT, IDAHO 83864
208-920-3543 DRAIBE@HOTMAIL.COM**

BETH C. DRAIN, CA CSR NO. 7152

I N D E X

ITEM DESCRIPTION	PAGE NO.
OPEN SESSION:	
1. PLEDGE OF ALLEGIANCE	3
2. CALL TO ORDER AND ROLL CALL	4
3. OPENING STATEMENT	5
ACTION:	
4. ADOPT MINUTES OF THE AUGUST 23, 2019, CFAOC MEETING	9
INFORMATION:	
5.	
A. PRESENTATION OF THE 2018-19 INDEPENDENT FINANCIAL AUDIT BY MACIAS, GINI & O'CONNELL, LLP (MGO)	11
B. CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE (CIRM) AUDIT RESPONSE	15
C. STATE CONTROLLER'S OFFICE AUDIT REVIEW REPORTS FOR 2018-19	15
6. STATUS UPDATE OF CIRM FINANCIAL PERFORMANCE CURRENT BUDGET (19/20 FINALS; 20/21YTD), UPDATE OF GRANTS AWARDED, CHANGES IN PROGRAM DUE TO COVID-19, CLINICAL TRIALS, AND CIRM FUTURE	
MS. LEWIS	19
DR. MILLAN	34
7. PUBLIC COMMENT	NONE
8. BOARD MEMBER COMMENT	94
9. ADJOURNMENT	102

BETH C. DRAIN, CA CSR NO. 7152

FRIDAY, NOVEMBER 20, 2020

9 A.M.

1
2
3
4 CONTROLLER YEE: GOOD MORNING AND WELCOME,
5 EVERYONE. IT IS THE HOUR JUST A LITTLE PAST 9 A.M.
6 ON FRIDAY, NOVEMBER 20, 2020. AND WE'RE GATHERED
7 HERE REMOTELY FOR THE CITIZENS FINANCIAL
8 ACCOUNTABILITY OVERSIGHT COMMITTEE MEETING. BEFORE
9 WE GET STARTED, FOR THOSE OF YOU WHO ARE ABLE, I
10 WOULD ASK THAT YOU PLEASE RISE AND JOIN ME IN THE
11 PLEDGE OF ALLEGIANCE.

12 (THE PLEDGE OF ALLEGIANCE.)

13 CONTROLLER YEE: THANK YOU. BEFORE WE
14 PROCEED, I'D JUST LIKE TO WELCOME A NEW MEMBER WHO'S
15 JOINING US TODAY, DR. CATHERINE SARKISIAN. VERY
16 HAPPY TO HAVE HER JOINING THE COMMITTEE. IN
17 ACCORDANCE WITH ARTICLE 20, SECTION 3 OF THE
18 CALIFORNIA CONSTITUTION, SHE MUST TAKE HER OFFICIAL
19 OATH AS A NEW MEMBER OF OUR BOARD. SO, DR.
20 SARKISIAN, WELCOME. AND IF I COULD ASK YOU JUST
21 WHERE YOU ARE TO RAISE YOUR RIGHT HAND AND REPEAT
22 AFTER ME.

23 (THE OATH OF OFFICE WAS THEN DULY
24 ADMINISTERED BY THE CONTROLLER.)

25 CONTROLLER YEE: THANK YOU.

BETH C. DRAIN, CA CSR NO. 7152

1 CONGRATULATIONS. WE WELCOME YOU TO THE COMMITTEE.
2 AND WHAT I'D LIKE TO DO NOW IS JUST TO OFFICIALLY
3 CALL THIS MEETING TO ORDER.

4 DR. SARKISIAN: THANK YOU VERY MUCH.

5 CONTROLLER YEE: THANK YOU AND WE'LL HAVE
6 AN OPPORTUNITY TO HEAR FROM YOU SHORTLY.

7 MS. DRAIN, WOULD YOU PLEASE CALL THE ROLL?

8 THE REPORTER: I'M SORRY, CONTROLLER YEE.
9 THAT'S NOT SOMETHING THAT I'VE BEEN PREPARED TO DO.

10 CONTROLLER YEE: I CAN DO THAT.

11 THE REPORTER: THANK YOU.

12 CONTROLLER YEE: NO PROBLEM. OKAY. SO
13 LET ME CALL THE ROLL. MR. FISCHER-COLBRIE.

14 MR. FISCHER-COLBRIE: PRESENT.

15 CONTROLLER YEE: MR. LOTT.

16 MR. LOTT: HERE.

17 CONTROLLER YEE: DR. QUICK.

18 DR. QUICK: PRESENT.

19 CONTROLLER YEE: DR. SADANA.

20 DR. SADANA: PRESENT.

21 CONTROLLER YEE: AND DR. SARKISIAN.

22 DR. SARKISIAN: HERE.

23 CONTROLLER YEE: THANK YOU. ALL MEMBERS
24 OF THE COMMITTEE PRESENT. THIS MEETING IS
25 OFFICIALLY CALLED TO ORDER.

BETH C. DRAIN, CA CSR NO. 7152

1 LET ME FIRST WELCOME ALL OF YOU HERE.
2 THANK YOU FOR SPENDING THE TIME WITH US HERE TODAY
3 AS WE CONVENE THIS MEETING, WHICH, UNDER THE
4 PROVISIONS OF PROPOSITION 71, IS TO PROVIDE A VERY
5 IMPORTANT OVERSIGHT FUNCTION OVER THE WORK OF THE
6 CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE,
7 WHICH WE WILL REFER TO AS CIRM THROUGHOUT THE
8 MEETING, AND THE STATE CONTROLLER'S OFFICE REVIEW OF
9 THE EXTERNAL AUDITOR'S ANNUAL AUDIT OF THE FINANCIAL
10 PRACTICES OF CIRM.

11 WHAT I'D LIKE TO DO IS JUST TO GIVE EACH
12 OF THE COMMITTEE MEMBERS AN OPPORTUNITY TO INTRODUCE
13 THEMSELVES. SO LET'S START WITH OUR NEWEST MEMBER,
14 DR. SARKISIAN. WELCOME.

15 DR. SARKISIAN: THANK YOU VERY MUCH,
16 CONTROLLER YEE. AND THANK YOU FOR THIS OPPORTUNITY.
17 I FEEL REALLY HONORED. I'M A FOURTH GENERATION
18 CALIFORNIAN AND A GERIATRICIAN AND A HEALTH SERVICES
19 RESEARCHER AT UCLA AND THE DIRECTOR OF THE UCLA
20 VALUE-BASED CARE RESEARCH CONSORTIUM, AND AN
21 NIH-FUNDED COMMISSIONED SCIENTIST. THANK YOU VERY
22 MUCH FOR THIS OPPORTUNITY.

23 CONTROLLER YEE: THANK YOU. WELCOME.
24 MARK FISCHER-COLBRIE.

25 MR. FISCHER-COLBRIE: I'M THE CEO OF

BETH C. DRAIN, CA CSR NO. 7152

1 STRATEOS, INC. THAT SEEKS TO ACCELERATE DRUG
2 DISCOVERY IN SYNTHETIC BIOLOGY ACTIVITIES IN ORDER
3 TO ADVANCE THAT DRAMATICALLY USING CLOUD LABS AND
4 FULL-SCALE AUTOMATION TO DEMOCRATIZE SCIENCE TO
5 TOOLS AND EQUIPMENT FOR DISCOVERY AND FORMALLY ALSO
6 CHAIRMAN OF THE JUVENILE DIABETES RESEARCH
7 FOUNDATION. THANK YOU.

8 CONTROLLER YEE: THANK YOU. THANK YOU FOR
9 YOUR SERVICE.

10 MR. JIM LOTT.

11 MR. LOTT: GOOD MORNING, EVERYONE. I,
12 ALONG WITH DR. SADANA, AM I THINK ONE OF THE
13 ORIGINAL MEMBERS OF THE CFAOC BACK TO WHEN THE WHOLE
14 THING FIRST GOT STARTED BACK IN 2004/2005. IT'S
15 REALLY GOOD TO SEE NEW BLOOD. DR. SARKISIAN,
16 WELCOME. IT WILL BE GOOD TO HAVE A FRESH FACE AND
17 NEW IDEAS AND A NEW CRITICAL EYE ON WHAT WE ARE
18 DOING.

19 I'M A PSYCHOLOGIST BY TRAINING. MY CAREER
20 HAS BEEN IN HEALTHCARE POLICY AND ADVOCACY FOR WELL
21 OVER 25, 30 YEARS. I'VE BEEN IN THE BUSINESS TOO
22 LONG. I REALLY KIND OF GOT OUT OF THAT. I'M NOW A
23 COLLEGE PROFESSOR.

24 AND I'LL MAKE ONE COMMENT, IF I MAY, MADAM
25 CHAIR, ABOUT AN E-MAIL WE ALL GOT, I KNOW I GOT

BETH C. DRAIN, CA CSR NO. 7152

1 YESTERDAY. IT OBSCURES THE WORST THING I'M GOING TO
2 BE CALLED. I WANT YOU TO TALK TO MY STUDENTS. THEY
3 CALL ME A LOT ROUGHER THINGS THAN THAT.

4 CONTROLLER YEE: THANK YOU, MR. LOTT.

5 DR. QUICK.

6 DR. QUICK: GOOD MORNING, EVERYONE. GOOD
7 TO SEE YOU ALL AGAIN. DR. SARKISIAN, WELCOME TO THE
8 COMMITTEE. MY NAME IS MICHAEL QUICK. I'M A
9 PROFESSOR OF BIOLOGICAL SCIENCES AT THE UNIVERSITY
10 OF SOUTHERN CALIFORNIA. MY FIELD IS NEUROSCIENCE
11 WHERE WE INVESTIGATE DRUGS OF ABUSE AND ADDICTION.
12 AND I RECENTLY STEPPED DOWN AS THE PROVOST OF THE
13 UNIVERSITY, AND I'M NOW BACK ON THE LAB BENCH AND IN
14 THE CLASSROOM AND VERY MUCH ENJOYING IT.

15 CONTROLLER YEE: THANK YOU. DR. GURBINDER
16 SADANA.

17 DR. SADANA: GOOD MORNING, EVERYONE. AND
18 WELCOME, DR. SARKISIAN. AND THANK YOU, MADAM
19 CONTROLLER, FOR ALLOWING ME, AND IT'S AN HONOR TO BE
20 PARTICIPATING IN THIS. I'M PURELY A CLINICIAN AND
21 ALSO OVERSIGHT OF MANAGEMENT OF ESPECIALLY CRITICAL
22 CARE UNITS AS WELL AS ESPECIALLY IN THE CURRENT ERA
23 OF THE COVID 19. WE ARE DOING A LOT OF WORK IN THAT
24 AS WELL AS ALSO PROTOCOLS DEVELOPMENT, SHARING
25 INFORMATION THROUGHOUT THE NATION. AND BASICALLY

BETH C. DRAIN, CA CSR NO. 7152

1 THAT'S WHAT I STILL DO.

2 CONTROLLER YEE: THANK YOU, DR. SADANA,
3 VERY MUCH.

4 I JUST WANTED TO GIVE A QUICK WELCOME TO
5 THE ATTENDEES WHO ARE FROM CIRM: DR. MARIA MILLAN,
6 WHO'S THE PRESIDENT AND CEO; JENNIFER LEWIS, WHO IS
7 THE ACTING DIRECTOR OF FINANCE AND THE DIRECTOR OF
8 GRANTS MANAGEMENT; CHILA SILVA-MARTIN, WHO WE'LL
9 HEAR FROM, WHO IS THE VICE PRESIDENT OF FINANCE;
10 JONATHAN THOMAS, WHO IS THE CHAIRMAN OF THE
11 INDEPENDENT CITIZENS OVERSIGHT COMMITTEE; AND ART
12 TORRES, WHO'S VICE PRESIDENT OF THAT COMMITTEE; AND
13 MARIA BONNEVILLE, WHO'S VERY HELPFUL WITH OUR OFFICE
14 TO COORDINATE THIS MEETING HERE TODAY, THE EXECUTIVE
15 DIRECTOR OF THE CIRM GOVERNING BOARD.

16 SO I'M STATE CONTROLLER BETTY YEE, AND I
17 HAVE THE DISTINCT HONOR OF CHAIRING THIS COMMITTEE,
18 WHICH IS THE CITIZENS FINANCIAL OVERSIGHT COMMITTEE.
19 SO WE ARE DISCHARGING THE DUTIES THAT HAVE BEEN
20 ASCRIBED TO US BY PROPOSITION 71, AND OUR MAIN
21 CHARGE IS TO DISCUSS THE INDEPENDENT ANNUAL AUDIT OF
22 EXPENDITURES OF THE AVAILABLE BOND FUNDING FROM
23 PROPOSITION 71 AND THE RESULTS OF THE ANNUAL
24 FINANCIAL AUDIT OF CIRM.

25 WHAT WE WILL DO IS HEAR FIRST FROM CIRM'S

BETH C. DRAIN, CA CSR NO. 7152

1 ACTING DIRECTOR OF FINANCE, JENNIFER LEWIS. AND WE
2 THEN WILL BE LOOKING AT WELCOMING OUR CIRM PRESIDENT
3 AND CEO, DR. MILLAN, WHO WILL PROVIDE AN UPDATE OF
4 CIRM'S WORK LATER IN THE AGENDA.

5 I KNOW THAT IN LIGHT OF THE RECENT PASSAGE
6 OF PROPOSITION 14 IN ADDITION TO THE AUDIT REVIEWS
7 AND THE REVIEWS OF THE ACTIVITIES SINCE OUR MEETING
8 LAST AUGUST, DR. MILLAN WILL BE PROVIDING AN UPDATE
9 ABOUT CIRM'S LONG-TERM PLANS AS WELL. SO FAIRLY
10 FULL AGENDA, BUT AN EXCITING AGENDA.

11 AND WHAT I'D LIKE TO DO IS NOW JUST TURN
12 TO THE FIRST ACTION ITEM ON THE AGENDA, ACTUALLY
13 PROBABLY THE ONLY ACTION ITEM ON THE AGENDA; THAT
14 IS, THE ADOPTION OF THE MINUTES FROM THE AUGUST 23,
15 2019, COMMITTEE MEETING. AND I BELIEVE, LET'S SEE,
16 MR. FISCHER-COLBRIE, MR. LOTT, AND DR. QUICK AND I
17 WERE THE ATTENDEES IN THAT MEETING. SO ANY
18 QUESTIONS ABOUT THE MEETING MINUTES FROM THOSE
19 MEMBERS?

20 MR. LOTT: NO, MA'AM. I MOVE ACCEPTANCE
21 OF THE MINUTES.

22 CONTROLLER YEE: WE HAVE A MOTION BY MR.
23 LOTT TO ADOPT THE MINUTES FROM THE AUGUST 23, 2019,
24 MEETING. IS THERE A SECOND?

25 DR. QUICK: SECOND.

BETH C. DRAIN, CA CSR NO. 7152

1 CONTROLLER YEE: THANK YOU, DR. QUICK.

2 SECOND BY DR. QUICK.

3 LET ME JUST CALL THE ROLL VERY QUICKLY.

4 SO WE HAVE MR. FISCHER-COLBRIE.

5 MR. FISCHER-COLBRIE: AYE.

6 CONTROLLER YEE: MR. LOTT.

7 MR. LOTT: AYE.

8 CONTROLLER YEE: DR. QUICK.

9 DR. QUICK: AYE.

10 CONTROLLER YEE: DR. SADANA.

11 DR. SADANA: AYE.

12 CONTROLLER YEE: DR. SADANA, I DON'T KNOW
13 THAT YOU WERE PRESENT AT THAT MEETING. SO I WANT TO
14 BE SURE --

15 DR. SADANA: NO, I WAS NOT PRESENT.

16 CONTROLLER YEE: DO YOU WISH TO ABSTAIN
17 FROM THAT THEN?

18 DR. SADANA: I COULD ABSTAIN.

19 CONTROLLER YEE: OKAY. DR. SARKISIAN,
20 THIS IS YOUR FIRST MEETING, SO WE'LL MARK YOU AS AN
21 ABSTENTION. AND I WILL VOTE AYE AS WELL. OKAY.
22 MINUTES HAVE PASSED OR HAVE BEEN ADOPTED ON A VOTE
23 OF FOUR ZERO. THANK YOU.

24 OUR NEXT ORDER OF BUSINESS IS THE MAIN
25 INFORMATIONAL ITEM; THAT IS, TO RECEIVE THE

BETH C. DRAIN, CA CSR NO. 7152

1 INDEPENDENT FINANCIAL AUDIT PRESENTATION BY OUR
2 INDEPENDENT AUDITOR MACIAS, GINI & O'CONNELL, ALSO
3 KNOWN AS MGO, WHICH WILL BE THEN FOLLOWED BY THE
4 AUDIT RESPONSE BY JENNIFER LEWIS, AND THEN WE WILL
5 HAVE THE STATE CONTROLLER'S AUDIT REVIEW OF THE
6 REPORTS THAT WILL BE PRESENTED BY OUR ASSISTANT
7 AUDIT DIVISION CHIEF.

8 SO, FIRST, LET ME JUST WELCOME MR. HARNER
9 WHO IS HERE WITH HIS PRESENTATION. GOOD MORNING.

10 MR. HARNER: GOOD MORNING. THANK YOU,
11 MADAM CONTROLLER. AND THANK YOU TO ALL THE MEMBERS
12 OF THE COMMITTEE FOR GIVING US THE OPPORTUNITY TO
13 PRESENT THE RESULTS OF OUR AUDIT.

14 CONTROLLER YEE: MR. HARNER, BEFORE YOU
15 START, I BELIEVE ALL OF OUR MEMBERS HAVE A COPY OF
16 THE MGO/CIRM AUDIT TO REFER TO.

17 MR. HARNER: SO WE ARE HERE TO PRESENT THE
18 RESULTS OF OUR AUDIT OF THE CIRM FINANCIAL
19 STATEMENTS THROUGH THE YEAR ENDED JUNE 30, 2019. AS
20 PART OF OUR AUDIT, WE HAVE THREE DELIVERABLES, THREE
21 REPORTS, TWO OF WHICH ARE FOUND WITHIN THE FINANCIAL
22 STATEMENTS, AND THEN THERE'S ANOTHER ONE WE CALL
23 REQUIRED COMMUNICATIONS THAT GOES TO THE ICOC OR THE
24 INDEPENDENT CITIZENS OVERSIGHT COMMITTEE, OR THE
25 COMMITTEE CHARGED WITH GOVERNANCE, WHICH WE

BETH C. DRAIN, CA CSR NO. 7152

1 PRESENTED TO THEM LAST WEEK.

2 THE TWO REPORTS THAT ARE IN THE FINANCIAL
3 STATEMENTS ARE THE INDEPENDENT AUDITOR'S REPORT, AND
4 THEN OUR INDEPENDENT AUDITOR'S REPORT ON INTERNAL
5 CONTROLS OVER FINANCIAL REPORTING AND NONCOMPLIANCE
6 AND OTHER MATTERS BASED ON OUR AUDIT PERFORMED IN
7 ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS. I'LL
8 GO OVER THAT IN A SECOND WHAT THAT MEANS.

9 SO THE FINANCIAL STATEMENTS BEFORE YOU ARE
10 PREPARED BY CIRM'S MANAGEMENT IN ACCORDANCE WITH
11 WHAT WE CALL U.S. GAP, U.S. GENERALLY ACCEPTED
12 ACCOUNTING PRINCIPLES, AND THEN US AS THE
13 INDEPENDENT AUDITORS, WE PERFORMED OUR AUDIT IN
14 ACCORDANCE WITH GENERALLY ACCEPTED AUDITING
15 STANDARDS AND ALSO THE GOVERNMENT AUDITING
16 STANDARDS, WHICH ADDS ON A LITTLE EXTRA LAYER OF
17 THINGS THAT WE HAD TO CONSIDER IN OUR AUDIT.

18 SO FOR THE OPINION ON THE FINANCIAL
19 STATEMENTS, WE ISSUED OUR OPINION ON OCTOBER 15,
20 2019, AND WE ARE HAPPY TO SAY WE ISSUED AN
21 UNMODIFIED OPINION ON THOSE FINANCIAL STATEMENTS.
22 AN UNMODIFIED OPINION IS ALSO KNOWN AS A CLEAN
23 OPINION, AND IT'S THE HIGHEST LEVEL OF ASSURANCE
24 THAT AN INDEPENDENT AUDITOR CAN GIVE AN ORGANIZATION
25 REGARDING THE FAIR PRESENTATION OF THE FINANCIAL

BETH C. DRAIN, CA CSR NO. 7152

1 STATEMENTS AND OF THE AMOUNTS AND DISCLOSURES THERE.

2 WE ALSO ISSUED OUR INDEPENDENT AUDITOR'S
3 REPORT ON THE INTERNAL CONTROLS AND ON COMPLIANCE,
4 WHICH IS THE LAST TWO PAGES OF THE FINANCIAL
5 STATEMENTS. THIS IS A REPORT THAT WE HAVE TO ISSUE
6 WHEN WE PERFORM AN AUDIT IN ACCORDANCE WITH
7 GOVERNMENT AUDITING STANDARDS. AND WHAT THIS REPORT
8 IS IS IF DURING OUR AUDIT WE BECOME AWARE OF ANY
9 DEFICIENCIES OR WEAKNESSES IN INTERNAL CONTROLS THAT
10 RISE TO A CERTAIN LEVEL, WE'RE REQUIRED TO REPORT
11 THOSE TO THOSE CHARGED WITH GOVERNING. SO THE TWO
12 COMMITTEES. AND WE'RE HAPPY TO SAY THAT WE DIDN'T
13 HAVE ANY SUCH INSTANCES OR DEFICIENCIES IN ANY
14 INTERNAL CONTROLS.

15 AND THE SECOND PART OF THAT REPORT, WHICH
16 IS PROBABLY MORE IN TUNE WITH CIRM, IS US HAVING TO
17 CONSIDER COMPLIANCE WITH LAWS, REGULATIONS, GRANTS,
18 CONTRACTS, AND AGREEMENTS, AND IF THERE'S ANY
19 NONCOMPLIANCE THAT COULD CAUSE MATERIAL
20 MISSTATEMENTS IN THE FINANCIAL STATEMENTS. SO WITH
21 THIS THE BIGGEST AREA OF COMPLIANCE WOULD HAVE BEEN
22 COMPLIANCE WITH PROP 71 AT THE TIME AND US REVIEWING
23 THE EXPENDITURES AND WHATNOT. WE DID NOT. AND,
24 AGAIN, WE'RE HAPPY TO SAY WE DIDN'T HAVE ANY
25 INSTANCES OF NONCOMPLIANCE WITH LAWS, CONTRACTS, OR

BETH C. DRAIN, CA CSR NO. 7152

1 GRANTS.

2 AND THEN, LASTLY, I'LL JUST BRIEFLY
3 SUMMARIZE THE LETTER THAT WE GAVE TO THE ICOC. IT'S
4 A RECAP OF THE AUDIT, SUMMARIZES CERTAIN
5 COMMUNICATIONS WE'RE REQUIRED TO MAKE TO INFORM
6 THOSE IN CHARGE DURING THE AUDIT IF WE HAD ANY
7 DIFFICULTIES AND WHATNOT. WE ARE HAPPY TO SAY WE
8 DIDN'T HAVE ANY DIFFICULTIES IN PERFORMING OUR
9 AUDIT, WE DIDN'T HAVE ANY MISSTATEMENTS, CORRECTED
10 OR UNCORRECTED, WE HAD NO DISAGREEMENTS WITH
11 MANAGEMENT, AND NO ISSUES WITH MANAGEMENT SIGNING
12 OUR REPRESENTATION LETTER AND PROVIDING THAT BACK TO
13 US FOR US TO BE ABLE TO ISSUE OUR AUDIT.

14 AND SO WITH THAT SAID, I'LL OPEN UP TO ANY
15 QUESTIONS.

16 CONTROLLER YEE: THANK YOU, MR. HARNER,
17 FOR THE PRESENTATION. LET ME JUST TURN TO THE
18 MEMBERS OF THE COMMITTEE. ARE THERE ANY QUESTIONS
19 OR COMMENTS? FEEL FREE JUST TO CHIME IN. WE'RE A
20 SMALL COMMITTEE, SO I'LL DISPENSE WITH THE HAND
21 RAISING. NO QUESTIONS? GREAT. THANK YOU,
22 MR. HARNER, FOR THE REPORT.

23 LET ME NOW TURN TO JENNIFER LEWIS TO SEE
24 IF CIRM HAS ANYTHING IN RESPONSE TO THE AUDIT BY
25 MGO. GOOD MORNING, JENNIFER.

BETH C. DRAIN, CA CSR NO. 7152

1 MS. LEWIS: MORNING, CONTROLLER YEE. AT
2 CIRM WE HAVE MANY INTERNAL CONTROLS IN PLACE TO
3 ENSURE THE RESULTS OF THE AUDIT, AND WE CONCUR WITH
4 THE FINDINGS AND RESULTS OF THIS AUDIT.

5 CONTROLLER YEE: THANK YOU. AND THEN FOR
6 THE QUALITY CONTROL REVIEW OF THE INDEPENDENT AUDIT
7 BY MGO, WE DO HAVE THE AUDITS DIVISION OF THE STATE
8 CONTROLLER'S OFFICE THAT CONDUCTS THAT QUALITY
9 CONTROL REVIEW. LET ME NOW TURN TO MIKE REEVES, WHO
10 IS THE ASSISTANT AUDITS DIVISION CHIEF, TO PRESENT
11 THAT REVIEW. GOOD MORNING, MIKE.

12 MR. REEVES: GOOD MORNING, COMMITTEE
13 MEMBERS. THANK YOU FOR ALLOWING THE STATE
14 CONTROLLER'S OFFICE TO PRESENT OUR REVIEW RESULTS.

15 THE REPORTER: I'M SORRY, MR. REEVES. THE
16 REPORTER CAN'T HEAR YOU.

17 MR. REEVES: UNDER THE AUTHORITY OF HEALTH
18 AND SAFETY CODE SECTION 125290.3 --

19 THE REPORTER: I'M SORRY, MR. REEVES. CAN
20 YOU SPEAK A LITTLE LOUDER? I CAN'T HEAR YOU.

21 MR. REEVES: WOULD YOU LIKE ME TO START
22 OVER OR --

23 CONTROLLER YEE: WHY DON'T YOU START FROM
24 THE TOP, MIKE.

25 MR. REEVES: UNDER THE AUTHORITY OF HEALTH

BETH C. DRAIN, CA CSR NO. 7152

1 AND SAFETY CODE SECTION 125290.3, THE SCO CONDUCTED
2 A QUALITY CONTROL REVIEW OF MGO'S WORKPAPERS
3 RELATING TO ITS FINANCIAL AUDIT OF THE CALIFORNIA
4 INSTITUTE FOR REGENERATIVE MEDICINE AS OF JUNE 30,
5 2019. THE SCO DETERMINED THAT THE FINANCIAL AUDIT
6 WAS PERFORMED IN ACCORDANCE WITH APPLICABLE AUDITING
7 STANDARDS AND THE CALIFORNIA BUSINESS AND
8 PROFESSIONAL CODE REQUIREMENTS.

9 WE ISSUED OUR REPORT ON NOVEMBER 30, 2020,
10 AND I'M AVAILABLE TO ANSWER ANY QUESTIONS YOU HAVE
11 REGARDING THE REPORT.

12 CONTROLLER YEE: THANK YOU VERY MUCH. ARE
13 THERE QUESTIONS FROM COMMITTEE MEMBERS?

14 MR. LOTT: JUST TO CONFIRM, I READ YOUR
15 SHORT REPORT. YOU FOUND EVERYTHING TO BE OKAY.
16 THERE WAS NO ISSUES WITH THE WAY THE AUDIT WAS
17 CONDUCTED; IS THAT CORRECT? I JUST WANT TO GET THAT
18 ON THE RECORD. THERE WERE NO ISSUES WITH THE WAY
19 THE AUDIT WAS CONDUCTED?

20 MR. REEVES: YES, THAT'S CORRECT.

21 CONTROLLER YEE: THANK YOU. ANY OTHER
22 QUESTIONS FROM COMMITTEE MEMBERS? THANK YOU, MIKE.
23 AND THANK YOU, JENNIFER. THANK YOU, MR. HARNER.
24 I'LL JUST SAY THIS IS GREAT NEWS AND A GREAT OUTCOME
25 OF THIS ANNUAL AUDIT. I JUST AM REALLY PLEASED

BETH C. DRAIN, CA CSR NO. 7152

1 THAT, WITH THE COMPLEXITY OF THE FINANCES OF CIRM,
2 TO HAVE THIS KIND OF AN OUTCOME OF AN AUDIT IS
3 SOMETHING WE SHOULD BE VERY PROUD OF AND THE WORK OF
4 THE FINANCIAL TEAM AT CIRM. SO THANK YOU ALL VERY
5 MUCH, AND WE WILL RECEIVE THOSE REPORTS AND REVIEWS
6 AS A COMMITTEE. THANK YOU.

7 ALL RIGHT. SO LET'S MOVE ON TO ITEM NO.
8 6. THIS IS A STATUS UPDATE OF CIRM'S FINANCIAL
9 PERFORMANCE, AND WE'LL ALSO HEAR AN UPDATE ON THE
10 GRANTS AWARDED AND THE GRANT PROCESS AS WELL.

11 BEFORE WE GET INTO THE DETAILS, LET ME
12 JUST SAY, WHEN I TOOK OVER AS CHAIR OF THIS
13 COMMITTEE, OBVIOUSLY IT'S A TREMENDOUS HONOR TO
14 CHAIR THIS COMMITTEE BECAUSE OF THE OVERSIGHT
15 RESPONSIBILITIES ACCORDED TO THE COMMITTEE IN
16 PROPOSITION 71, BUT ALSO ONE OF THE GREATEST
17 BENEFITS IS OBVIOUSLY BEING KEPT APPRISED OF ALL THE
18 TREMENDOUS PROGRESS CIRM HAS HELPED ENGINEER FOR
19 SOME VERY RARE AND COMPLICATED ILLNESSES.

20 PROGRESS HOPEFULLY WILL CONTINUE TO BE
21 MADE, AND I KNOW THAT SOMETIMES OVERSIGHT IS JUST
22 ABOUT THE NUMBERS; BUT BECAUSE WE MEET PUBLICLY AS A
23 COMMITTEE, I FELT IT WAS IMPORTANT TO HAVE IT BE
24 MUCH MORE THAN JUST RECEIVING AN AUDIT REPORT AND
25 ONE OF OUR INTANGIBLES ASSOCIATED WITH THE SUCCESS

BETH C. DRAIN, CA CSR NO. 7152

1 OF AN ENDEAVOR LIKE THIS. SO I THINK THE THING TO
2 REMEMBER FOR ALL OF US HERE IS THAT THE TRUE
3 ECONOMIC IMPACT WILL BE DOWN THE ROAD IN THE FORM OF
4 THE DRAMATIC HEALTHCARE SAVINGS, WHICH IS GOING TO
5 BE REALLY THE BIG-TICKET PART OF THE WHOLE THING.
6 SO JUST REALLY PLEASED THAT WE COULD BE HERE.

7 I KNOW THERE ARE SEVERAL MEMBERS OF THE
8 COMMITTEE WHO HAVE EXPRESSED CONCERNS ABOUT JUST
9 WANTING TO HAVE CERTAIN EMPHASES ON CERTAIN TYPES OF
10 ASPECTS OF THE WORK AT CIRM. AND I'LL JUST SAY
11 WE'LL ALL HAVE AN OPPORTUNITY TO ASK QUESTIONS OF
12 THE PRESENTERS. JUST AS AN EXAMPLE, I IN THE PAST
13 HAVE EXPRESSED A DESIRE TO HEAR HOW CIRM IS
14 SUCCESSFULLY ENDEAVORING TO ENSURE ACCESS TO THE
15 CLINICAL TRIALS THAT SUPPORTS IN A CONCERTED EFFORT
16 TO BREAK DOWN HEALTHCARE BARRIERS AND TO BE SURE
17 THAT THOSE BARRIERS, WHICH HAVE UNFORTUNATELY
18 EXISTED FOR TOO LONG, FOR UNDERSERVED, LOW INCOME,
19 AND MINORITY COMMUNITIES IN THE STATE ARE NOT
20 FURTHERED BY THE WORK OF CIRM.

21 SO I WANT TO COMMEND CIRM FOR ITS SPARK
22 AND BRIDGES PROGRAMS, BOTH OF WHICH I KNOW YOU'RE
23 GOING TO HEAR A LITTLE BIT MORE ABOUT AS THESE ARE
24 PROGRAMS THAT ARE ENGAGING YOUNG ADULTS IN THE
25 UNDERSERVED COMMUNITIES TO ENCOURAGE CAREERS IN THE

BETH C. DRAIN, CA CSR NO. 7152

1 SCIENCE AND MEDICAL FIELD.

2 WITHOUT FURTHER ADO, I'D LIKE TO WELCOME
3 CIRM'S CEO, DR. MARIA MILLAN.

4 DR. MILLAN: THANK YOU VERY MUCH,
5 CONTROLLER YEE. DID YOU WANT JENNIFER LEWIS TO GO
6 AHEAD AND GIVE THE FINANCIAL PRESENTATION, OR WOULD
7 YOU LIKE THE PROGRAM UPDATE FIRST?

8 CONTROLLER YEE: WHY DON'T WE DO THE
9 FINANCIAL PRESENTATION, THEN THE PROGRAMMATIC ASPECT
10 WILL PROBABLY --

11 DR. MILLAN: THANK YOU SO MUCH. I'LL TURN
12 IT OVER, THEN, TO JENNIFER LEWIS, WHO'S BOTH IN
13 CHARGE OF OUR GRANTS MANAGEMENT TEAM, BUT ALSO HAS
14 BEEN WORKING WITH CHILA SILVA-MARTIN, WHO YOU KNOW,
15 WHO'S KINDLY SERVED AS OUR RETIRED ANNUITANT
16 ADVISING US DURING THIS TRANSITION. SO JENNIFER
17 WILL PRESENT THE FINANCIAL UPDATE TODAY. THANK YOU
18 VERY MUCH.

19 CONTROLLER YEE: GREAT. THANK YOU.

20 MS. LEWIS: THANK YOU. AGAIN, MY NAME IS
21 JENNIFER LEWIS, AND I AM THE DIRECTOR OF GRANTS
22 MANAGEMENT AT CIRM AND CURRENTLY ACTING AS THE
23 DIRECTOR OF FINANCE. THANK YOU VERY MUCH FOR THE
24 OPPORTUNITY TO PRESENT OUR FINANCIAL UPDATE TO YOU
25 TODAY.

BETH C. DRAIN, CA CSR NO. 7152

1 SO AT CIRM WE ALWAYS START WITH OUR
2 MISSION, WHICH IS TO ACCELERATE STEM CELL TREATMENTS
3 TO PATIENTS WITH UNMET MEDICAL NEEDS. AS DR. MILLAN
4 MENTIONED, SHE WILL BE GIVING AN UPDATE ON SOME OF
5 THE PROGRESS WE'VE MADE TO DATE UNDER PROPOSITION
6 71.

7 FIRST TODAY I WANT TO REVIEW THE AGENDA
8 WITH YOU. I DID WANT TO NOTE THAT THE PRESENTATION
9 THAT YOU RECEIVED IN YOUR MATERIALS HAS A FEW EXTRA
10 SLIDES THAT I WILL NOT COVER IN THIS PRESENTATION
11 WHICH WAS SUBMITTED PRIOR TO THE PASSAGE OF
12 PROPOSITION 14, BUT I DID WANT TO REVIEW OUR AGENDA,
13 WHICH IS, FIRST, I'LL BE PRESENTING THE FINANCIAL
14 RESULTS FOR THE 19/20 FISCAL YEAR, WHICH ENDED ON
15 JUNE 30TH. I WILL REVIEW WHAT WE WERE ALLOCATED TO
16 SPEND DURING THAT PERIOD, WHAT THE ACTUAL FINANCIAL
17 RESULTS WERE, AND THE MAJOR DRIVERS THAT IMPACTED
18 THOSE FINANCIAL RESULTS. THEN I'LL COVER THE
19 2020/2021 FISCAL YEAR BUDGET THAT WAS APPROVED BY
20 OUR GOVERNING BOARD, THE ICOC, IN JUNE OF THIS YEAR.
21 AND FINALLY, DUE TO THE PASSAGE OF PROPOSITION 14, I
22 WILL SHARE AND UPDATE WITH YOU ON OUR 2020/2021
23 BUDGET AND PLAN TO PROPOSE A REVISED BUDGET TO OUR
24 BOARD LATER THIS YEAR.

25 SO, FIRST, LET'S DISCUSS THE 19/20 FISCAL

BETH C. DRAIN, CA CSR NO. 7152

1 YEAR AND THOSE FINANCIAL RESULTS. LOOKING AT THE
2 CHART ON THE SLIDE, THIS REPRESENTS THE BUDGET BY
3 CATEGORICAL LEVEL. THE FIRST COLUMN OF NUMBERS
4 REPRESENTS WHAT OUR BOARD APPROVED FOR US TO SPEND
5 DURING THE 19/20 FISCAL YEAR. AS YOU CAN SEE, IT IS
6 JUST ABOVE 15.6 MILLION.

7 THE SECOND COLUMN REPRESENTS THE ACTUAL
8 EXPENDITURES IN THE 19/20 FISCAL YEAR, WHICH ARE
9 JUST OVER 13.9 MILLION. AND THE LAST COLUMN
10 DISPLAYS THE VARIANCE, WHETHER SAVINGS OR OVERRUN.
11 AND AS YOU CAN SEE, WE HAD A SAVINGS OF ABOUT 1.7
12 MILLION DURING THE FISCAL YEAR.

13 THERE ARE A COUPLE OF AREAS WHERE WE HAD
14 SIGNIFICANT SAVINGS, AND I'D LIKE TO COVER THOSE
15 AREAS AND TALK A LITTLE BIT ABOUT WHY THOSE SAVINGS
16 OCCURRED.

17 DURING THE 19/20 FISCAL YEAR, THE AGENCY
18 HAD BEEN ANTICIPATING THE OUTCOME OF THE NOVEMBER
19 2020 ELECTION. THUS, WE HAVE MAINTAINED EFFICIENT
20 OPERATIONS AND PRODUCTIVITY WITH THE RESOURCES WE
21 HAD BY NOT BACK-FILLING POSITIONS, AND INSTEAD
22 CROSS-TRAINING STAFF OR USING OUTSIDE SERVICES AS
23 NEEDED. ADDITIONALLY, THE IMPACT OF COVID-19 ON OUR
24 OPERATIONS REDUCED OUR IN-PERSON MEETINGS SUCH AS
25 REVIEWS WHILE AT THE SAME TIME INCREASING OUR AWARD

BETH C. DRAIN, CA CSR NO. 7152

1 VOLUME AS OUR BOARD REDEPLOYED RESEARCH FUNDS TO
2 GRANTS FOCUSED ON COVID-19.

3 THIS PIE CHART OUTLINES THE THREE MAJOR
4 AREAS WHERE WE HAD THE MOST SAVINGS. AND THAT WOULD
5 BE IN EMPLOYEE EXPENSES, EXTERNAL SERVICES, AND OUR
6 REVIEWS, MEETINGS, AND WORKSHOPS. I'LL GO INTO
7 DETAIL A LITTLE BIT ABOUT EACH ONE IN THE NEXT FEW
8 SLIDES.

9 SO THE FIRST AREA I'D LIKE TO DISCUSS IS
10 EMPLOYEE EXPENSES AS THIS IS THE AREA WE HAD THE
11 MOST SAVINGS AT ALMOST \$1 MILLION. AND WHY DID THIS
12 OCCUR? IN THE 19/20 BUDGET WE HAD BUDGETED
13 SUPPORTING 40 POSITIONS. AND WE STARTED OUT THE
14 FISCAL YEAR WITH 40 POSITIONS; BUT AS OF JUNE 30,
15 2020, WE HAD 33 POSITIONS. SO OVER THE COURSE OF
16 THE FISCAL YEAR, WE HAD SEVEN VACANCIES. AND
17 INSTEAD OF FILLING THOSE VACANCIES, WE LEFT THEM
18 UNFILLED, AND WE TOOK WORK FROM THESE POSITIONS AND
19 REDIRECTED THEM TO OUR EXISTING STAFF. THIS
20 RESULTED IN ABOUT AN 8-PERCENT SAVINGS OF ALMOST A
21 MILLION DOLLARS WHILE ALSO PROVIDING OPPORTUNITIES
22 FOR EXISTING STAFF TO GAIN SKILLS AND CROSS-TRAIN.
23 SO FOR US IT WAS AN ALL AROUND WIN-WIN FOR THE
24 ORGANIZATION IN LOWERING OUR EXPENSES IN THIS
25 CATEGORICAL AREA AS WELL AS GAINING NEW EXPERIENCES

BETH C. DRAIN, CA CSR NO. 7152

1 FOR THE TEAM.

2 ANOTHER AREA WHERE WE HAD FAIRLY
3 SIGNIFICANT SAVINGS WAS IN EXTERNAL SERVICES.
4 TYPICALLY WE HAVE MANY CONTRACTS IN PLACE TO SUPPORT
5 OUR OPERATIONS LIKE SCIENTIFIC REVIEWS AND OUR ICOC
6 BOARD MEETINGS. SO WHEN WE HOLD IN-PERSON MEETINGS
7 AT OUR OFFICES, WE INCUR VARIOUS EXPENSES SUCH AS
8 AUDIOVISUAL SERVICES. HOWEVER, DURING 19/20 FISCAL
9 YEAR, AS WE ALL KNOW, WE WERE FACED WITH THE
10 COVID-19 PANDEMIC. AND WHEN THAT HIT, WE HAD TO
11 FIND NEW WAYS OF CONDUCTING OUR REGULAR OPERATIONS
12 WITHOUT IN-PERSON MEETINGS. AND ALL THE TEAMS
13 ACROSS THE ORGANIZATION SUCCESSFULLY DEVELOPED AND
14 IMPLEMENTED NEW PROCESSES FOR HOLDING MEETINGS
15 REMOTELY, WHICH ALLOWED OUR OPERATIONS TO REALLY
16 CONTINUE TO MOVE SMOOTHLY.

17 AS A RESULT, SOME OF THE EXTERNAL SERVICES
18 THAT WE NORMALLY INCURRED DID NOT MATERIALIZE FOR
19 THESE TELEPHONIC AND VIDEO MEETINGS. SO NOT ONLY
20 WERE THESE PROCESSES EFFECTIVE, BUT IT RESULTED IN
21 SAVINGS.

22 ANOTHER AREA THAT CONTRIBUTED TO THE
23 SAVINGS IN EXTERNAL SERVICES WAS FROM OUR LEGAL
24 OFFICE. OVER THE COURSE OF THE PAST FEW YEARS, OUR
25 LEGAL TEAM HAS REDUCED IN SIZE FROM A FAIRLY

BETH C. DRAIN, CA CSR NO. 7152

1 ADEQUATE SIZE TEAM TO JUST ONE PERSON. THUS, IN THE
2 19/20 BUDGET, WE BUDGETED CONTINGENCY FUNDS IN
3 CASE -- TO ENSURE THAT THE LEGAL TEAM HAD THE
4 APPROPRIATE RESOURCES IN CASE SOME KIND OF
5 SPECIALIZED LEGAL SERVICES WERE REQUIRED TO MANAGE
6 OUR AWARD PORTFOLIO.

7 MOST OF THE CONTINGENT EXPENSES THAT WE
8 BUDGETED FOR DID NOT MATERIALIZE DURING THE 19/20
9 FISCAL YEAR, WHICH ALSO CONTRIBUTED TO SAVINGS IN
10 THIS CATEGORICAL AREA. AND SO OVERALL WE HAD ABOUT
11 12 PERCENT SAVINGS IN EXTERNAL SERVICES OF \$177,000.

12 AND THEN, LASTLY, THE LAST AREA I'D LIKE
13 TO COVER IS OUR REVIEWS, MEETINGS, AND WORKSHOPS.
14 WHEN WE CREATED THE 19/20 BUDGET, WE ANTICIPATED
15 THAT WE WOULD HAVE SOME MEETINGS IN PERSON AND THAT
16 WE WOULD HOLD SOME OF THE MEETINGS ALSO
17 TELEPHONICALLY. AGAIN, DUE TO THE PANDEMIC, THIS
18 WAS ANOTHER AREA THAT WAS DRAMATICALLY IMPACTED.
19 REVIEWS THAT WE NORMALLY HELD IN PERSON COULD NO
20 LONGER TAKE PLACE BECAUSE OF TRAVEL RESTRICTIONS AND
21 SOCIAL DISTANCE REQUIREMENTS, BUT THAT DIDN'T STOP
22 OUR OPERATIONS AND OUR TEAM.

23 NOT ONLY DID WE HOLD ALL OUR SCHEDULED
24 REVIEWS AND ADVISORY PANELS, BUT, ADDITIONALLY, OUR
25 GOVERNING BOARD APPROVED ADDITIONAL FUNDING FOR

BETH C. DRAIN, CA CSR NO. 7152

1 COVID-19 PROJECTS, WHICH RESULTED IN NEW,
2 UNANTICIPATED REVIEWS IN THE FISCAL YEAR, CREATING
3 MORE FUNDED PROJECTS, BUT ALSO SAVING MONEY.

4 ADDITIONALLY, WE DID BUDGET FOR SOME
5 MEETINGS AND WORKSHOPS THAT BECAUSE, AGAIN, OF THE
6 PANDEMIC DID NOT MATERIALIZE DURING THE YEAR. AND
7 THEY TOO CONTRIBUTED TO THE SAVINGS OF ABOUT 35
8 PERCENT OR \$292,000 IN THIS AREA.

9 SO THAT'S THE 19/20 FISCAL BUDGET. I'D
10 LIKE TO MOVE ON TO THE 20/21 FISCAL YEAR BUDGET THAT
11 WAS APPROVED BY OUR BOARD EARLIER THIS YEAR IN JUNE.

12 CONTROLLER YEE: JENNIFER, CAN I HAVE YOU
13 PAUSE JUST A MOMENT. LET ME JUST SEE IF THE
14 COMMITTEE MEMBERS HAVE ANY QUESTIONS ABOUT THE
15 PRESENTATION THUS FAR. OKAY.

16 DR. QUICK: SO THANK YOU, JENNIFER. MAYBE
17 WE'LL TALK ABOUT THIS MORE AS WE TALK ABOUT THE
18 PROGRAMMATIC STUFF GOING FORWARD, BUT IT'S ALWAYS A
19 TRADE-OFF. YOU'RE TRYING TO ALWAYS MAKE SURE YOU'RE
20 SPENDING THE STATE'S RESOURCES WISELY. BUT, YOU
21 KNOW, THERE'S ALWAYS THE TRADE-OFF OF BEING
22 PRODUCTIVE.

23 SO DID WE LEARN ANYTHING FROM, FOR
24 EXAMPLE, HAVING TO GO TO ONLINE MEETINGS AND
25 WORKSHOPS AND THINGS LIKE THAT THAT YOU MIGHT BE

BETH C. DRAIN, CA CSR NO. 7152

1 ABLE TO TAKE FORWARD INTO COMING YEARS THAT WILL
2 BALANCE THAT QUESTION OF PRODUCTIVITY VERSUS
3 SAVINGS?

4 MS. LEWIS: I THINK SO. DR. MILLAN, FEEL
5 FREE TO SHARE ANYTHING.

6 DR. MILLAN: I CAN TAKE THAT, JENNIFER.
7 THANK YOU SO MUCH. WE DEFINITELY, ALONG WITH THE
8 REST OF THE WORLD, LEARNED WHAT WE'RE ABLE TO DO
9 VIRTUALLY, BUT ALSO ACKNOWLEDGE WHAT WE CAN'T
10 OPTIMALLY DO VIRTUALLY. AS AN ORGANIZATION, WE HAVE
11 A VERY CRITICAL ROLE IN NOT ONLY FUNDING AND
12 PARTNERING AND PROBLEM SOLVING ALONG THE WAY IN
13 THESE INNOVATIVE AREAS OF RESEARCH AND CLINICAL
14 TRIALS, BUT ALSO BEING ABLE TO PROVIDE THE FORUM FOR
15 SIGNIFICANT INPUT SCIENTIFIC AND OTHERWISE.

16 SO THIS PLATFORM WE'RE USING TODAY, THE
17 VIDEOCONFERENCE, DOES ALLOW US TO REACH A BROAD
18 RANGE OF PARTICIPANTS ACROSS TIME ZONES AND
19 GEOGRAPHIES, AND THAT'S FANTASTIC. BUT I BELIEVE
20 AND I THINK WE ALL BELIEVE THAT ONE OF THE GREATEST
21 ADVANTAGES WE HAD AT CIRM IS WE ALREADY HAD VERY
22 MUCH A WELL-OILED MACHINE IN TERMS OF CONVENING
23 THESE PARTIES, VERY ESTABLISHED PROCESSES AND
24 PROCEDURES THAT TAKE INTO ACCOUNT COMPLIANCE AS WELL
25 AS EFFICIENCIES. BUT ALSO WE HAD AN ADVANTAGE THAT

BETH C. DRAIN, CA CSR NO. 7152

1 THERE WERE ESTABLISHED ADVISORS, SCIENTIFIC
2 REVIEWERS, AND MEMBERS WHO ARE VERY MUCH FAMILIAR
3 WITH ALL OF THIS.

4 AND AS A MAINTENANCE LEVEL AND DURING A
5 CRISIS MANAGEMENT, IT SERVED US WELL FOR WHAT WE HAD
6 AND THE SHRINKING BUDGET THAT WE WERE DEPLOYING. I
7 THINK IT'S GOING TO BE A COMBINATION OF USING THE
8 PRINCIPLES AND LESSONS LEARNED FROM THAT. AS WE
9 SAFELY REOPEN IN THE NEAR FUTURE, WE WILL, OF
10 COURSE, RELY ON WHAT COMES FROM THE INTERACTIONS
11 THAT WE'RE USED TO IN THE PRE-COVID TIMES TO MAKE
12 SURE THAT WE HAVE THE MOST OPTIMAL APPROACHES TO
13 ACCOMPLISHING SOME PRETTY BOLD GOALS GOING FORWARD
14 WITH PROPOSITION 14, NOT JUST CONTINUING TO DEVELOP
15 A ROBUST PIPELINE OF THE INNOVATIVE TECHNOLOGIES,
16 BUT DETERMINING HOW TO WORK WITH ALL OF THE
17 STAKEHOLDERS IN DELIVERING THOSE TO PATIENTS AND ALL
18 COMMUNITIES. THANK YOU SO MUCH.

19 CONTROLLER YEE: THANK YOU, DR. MILLAN.
20 THANK YOU, DR. QUICK, FOR THE QUESTION.

21 ARE THERE OTHER QUESTIONS FROM COMMITTEE
22 MEMBERS BEFORE WE PROCEED? IF NOT, I HAVE ONE
23 QUESTION, JENNIFER. AND THAT IS REALLY APPRECIATIVE
24 OF THE SAVINGS AND PROBABLY JUST EVEN SOME POTENTIAL
25 ONGOING EFFICIENCIES AS WE MOVE FORWARD GIVEN THE

BETH C. DRAIN, CA CSR NO. 7152

1 EXPERIENCE THAT YOU JUST TALKED ABOUT. JUST WANTED
2 TO GET A FLAVOR OF HOW MUCH OF THE SAVINGS ARE GOING
3 TO BE ONGOING VERSUS MORE OF THE ONE TIME BECAUSE OF
4 THE CIRCUMSTANCES THAT AROSE DURING THE FISCAL YEAR.

5 MS. LEWIS: I THINK, AGAIN, AND YOU'LL SEE
6 THIS WHEN I TOUCH ON THE 20/21 BUDGET, ALREADY IN
7 19/20 WE WERE OPERATING IN KIND OF A WIND-DOWN
8 MENTALITY FOR THE ORGANIZATION, AND YOU WILL SEE
9 THAT REFLECTED AS I MOVE FORWARD. AND SO AS AN
10 AGENCY, WE WILL, I THINK, WANT TO MAINTAIN
11 EFFICIENCIES WHILE ALSO MAINTAINING PERSONNEL,
12 RIGHT, AND MAKE SURE WE CAN CONTINUE THE OPERATIONS
13 SMOOTHLY AS THE PORTFOLIO AND AWARD MAKING AND
14 GRANTING WILL PICK UP AS WELL.

15 CONTROLLER YEE: GREAT. THANK YOU.

16 MS. LEWIS: ARE THERE ANY OTHER QUESTIONS?

17 CONTROLLER YEE: I DON'T SEE ANY OTHERS.

18 OKAY.

19 MS. LEWIS: SO NOW I'LL TOUCH ON THE
20 2020/2021 FISCAL YEAR BUDGET THAT WAS APPROVED BY
21 OUR BOARD THIS YEAR. BEFORE I REVIEW THE BUDGET IN
22 DETAIL, I WANTED TO TALK A LITTLE BIT ABOUT THE
23 STRUCTURE OF THIS BUDGET AS IT'S DIFFERENT THAN ONES
24 THAT MAY HAVE BEEN PRESENTED IN THE PAST AS I WAS
25 ALLUDING TO.

BETH C. DRAIN, CA CSR NO. 7152

1 AT THE TIME THIS BUDGET WAS APPROVED IN
2 JUNE, WE HAD UNDER \$50 MILLION FOR NEW AWARDS
3 AVAILABLE AND WHETHER CIRM WOULD BE REFUNDED UNDER
4 PROP 14 WAS UNKNOWN AT THAT TIME. THUS, THIS BUDGET
5 WAS PHASED IN TWO PARTS TO SUPPORT A WIND-DOWN OF
6 OUR OPERATIONS.

7 THE ADMINISTRATIVE BUDGET FOR THE FIRST
8 HALF OF THE YEAR, JULY THROUGH DECEMBER, WAS
9 DESIGNED TO SUPPORT OPERATIONS TO SUPPORT THE
10 COVID-19 AWARDS, THE CURE SICKLE CELL PROGRAM WITH
11 OUR REMAINING FORWARD FUNDS, AND THEN AS WELL AS
12 OPERATIONS FOR FUNDING NEW AWARDS WITH ANY RETURNED
13 FUNDS AS THE ICOC APPROVED USE OF THOSE, AND AT THE
14 SAME TIME MAINTAINING CURRENT STAFF LEVELS TO MANAGE
15 THESE RESEARCH OPERATIONS.

16 THE SECOND HALF OF THIS BUDGET FROM
17 JANUARY THROUGH JUNE OF THE FISCAL YEAR SUPPORTS A
18 WIND-DOWN OF OUR ORGANIZATION. AND THE WIND-DOWN
19 THAT WE HAD PLANNED WOULD OCCUR IN TWO PHASES, WHICH
20 WOULD HAVE BEEN A SMALL WIND-DOWN AT THE END OF
21 DECEMBER AND THEN AN ADDITIONAL WIND-DOWN IN JUNE OF
22 2021, WHICH WOULD HAVE RESULTED IN THE CORE STAFF
23 REMAINING TO MANAGE SCIENTIFIC PROGRESS AND
24 COMPLIANCE OF ACTIVE AWARDS THROUGH 23/24 WITH A
25 LIMITED PART-TIME OPERATION SUPPORT OF THE SUPPORT

BETH C. DRAIN, CA CSR NO. 7152

1 TEAM.

2 SO JUST REALLY QUICKLY I WANTED JUST TO
3 GIVE YOU A FLAVOR OF THE CONSIDERATIONS WE TOOK IN
4 DEVELOPING OUR WIND-DOWN COSTS, AS I MENTIONED. DUE
5 TO THE PASSAGE OF PROPOSITION 14, WE WILL NOT BE
6 ENACTING THIS WIND-DOWN PLAN; HOWEVER, I WANTED TO
7 HIGHLIGHT WHAT WE TOOK INTO CONSIDERATION IN
8 DEVELOPING THIS BUDGET. ONE MAJOR COST OF THIS PLAN
9 AND THE BUDGET WAS TO INCUR FUNDS FOR LEAVE BUYOUT
10 WHICH WAS BUDGETED IN ACCORDANCE WITH THE STATE OF
11 CALIFORNIA ANNUAL LEAVE PROGRAM, WHICH WOULD ALLOW
12 CASH PAYMENT OF LEAVE BALANCES UPON SEPARATION OR
13 RETIREMENT FROM THE STATE.

14 ANOTHER COST THAT WE ACCOUNTED FOR WAS
15 ASSET DISPOSAL IN COMPLIANCE WITH THE STATE OF
16 CALIFORNIA'S POLICIES IF WE HAD TO CLOSE OUR
17 OFFICES, RETURN FURNITURE, AND RETURN EQUIPMENT TO
18 THE STATE.

19 AND, FINALLY, WE HAD TO RETAIN SOME STAFF
20 TO MANAGE THE VARIOUS ASPECTS OF THESE WIND-DOWN
21 ACTIVITIES TO TRANSITION TO STATE AGENCIES TO ENSURE
22 THAT OUR DATA AND RECORDS AND PORTFOLIO WAS HANDED
23 OFF IN AN ORDERLY FASHION. SO YOU WILL SEE SALARIES
24 AND ASSOCIATED BENEFITS FOR THESE KEY POSITIONS AS
25 PART OF THE WIND-DOWN BUDGET AS WELL.

BETH C. DRAIN, CA CSR NO. 7152

1 HERE'S OUR CURRENT 2020/2021 FISCAL YEAR
2 BUDGET. THIS CHART DISPLAYS THE BUDGET IN TWO
3 HALVES. AS I DESCRIBED BEFORE, THE FIRST HALF IS
4 THE FISCAL YEAR FROM JULY THROUGH DECEMBER, WHICH
5 MAINTAINS STAFF LEVELS TO SUPPORT OUR OPERATIONS
6 WITH AN APPROVED BUDGET OF JUST UNDER 7.2 MILLION.
7 AGAIN, OUR PLAN WAS TO HAVE A SMALL WIND-DOWN AT THE
8 END OF DECEMBER, AND THEN FROM JANUARY THROUGH JUNE,
9 WE WOULD BE PERFORMING WIND-DOWN ACTIVITIES. THUS,
10 WE BUDGETED UNDER 5.2 MILLION FOR THE SECOND HALF OF
11 THE FISCAL YEAR, GIVING A TOTAL APPROVED BUDGET OF
12 12.3 MILLION FOR THE FISCAL YEAR.

13 AGAIN, BRIEFLY, I JUST WANTED TO SHARE
14 WHAT ARE SOME OF THE MAJOR COSTS IN THIS CURRENT
15 BUDGET. AS MENTIONED EARLIER, ONE OF THE BIGGEST
16 COSTS ARE FUNDS FOR WIND-DOWN ACTIVITIES THAT CIRM
17 WOULD HAVE TO UNDERTAKE IF PROPOSITION 14 WAS NOT
18 PASSED TO MANAGE AWARDS THROUGH 2023/2024. IN THE
19 20/21 FISCAL YEAR, WE ALSO ANTICIPATED THAT WE'D
20 HAVE AN INCREASE IN OUR FACILITIES COSTS DUE TO AN
21 INCREASE IN LEASE EXPENSES IN THE SECOND QUARTER OF
22 2021. AND, FINALLY, WE BUDGETED SOME CONTINGENCY
23 FUNDING FOR REVIEWS WHICH HAVE MATERIALIZED OVER THE
24 YEAR WITH REDEPLOYING RECOVERED FUNDS TO NEW
25 AWARDEES AS WELL AS, SINCE WE HAVE A SMALL LEGAL

BETH C. DRAIN, CA CSR NO. 7152

1 STAFF, WE DID ANTICIPATE SOME ADDITIONAL LEGAL
2 SERVICES TO HELP WITH THE WIND-DOWN AND CONTINUING
3 ACTIVITIES.

4 FORTUNATELY FOR CIRM, PROPOSITION 14
5 PASSED, WHICH EXTENDS OUR AGENCY'S LIFE SPAN. AND,
6 THEREFORE, WE WILL BE BRINGING A REVISED PROPOSED
7 BUDGET TO OUR BOARD ON DECEMBER 21ST OF THIS YEAR,
8 SO IN ABOUT A MONTH, TO RETAIN STAFF AND SUPPORT THE
9 CORE OPERATIONS OF OUR PROGRAMS. AND ONCE THIS
10 REVISED BUDGET HAS BEEN APPROVED, WE WOULD BE HAPPY
11 TO SHARE AN UPDATE TO YOU WITH THE APPROVED BUDGET
12 AS WELL AS AT A FUTURE MEETING. BUT THIS CONCLUDES
13 MY PRESENTATION. AT THIS TIME, IF THERE ARE ANY
14 ADDITIONAL QUESTIONS REGARDING THE BUDGET, I'D BE
15 HAPPY TO TAKE THEM.

16 MR. LOTT: MADAM CHAIR, IF I MAY.

17 CONTROLLER YEE: THANK YOU, JENNIFER.
18 PLEASE, MR. LOTT.

19 MR. LOTT: THANK YOU, MS. LEWIS. ON THAT
20 LAST POINT YOU MADE, JUST FOR CLARIFICATION, IF AND
21 WHEN YOUR BOARD DOES APPROVE YOUR BUDGET, CAN YOU
22 SEND US WHAT THEY APPROVED THEN AND NOT WAIT UNTIL
23 OUR NEXT MEETING?

24 MS. LEWIS: ABSOLUTELY.

25 MR. LOTT: THANK YOU.

BETH C. DRAIN, CA CSR NO. 7152

1 CONTROLLER YEE: I WAS GOING TO MAKE THE
2 SAME REQUEST, MR. LOTT. THANK YOU. OTHER QUESTIONS
3 FROM MEMBERS?

4 MR. FISCHER-COLBRIE: JUST A QUICK
5 QUESTION. I ASSUME THAT PART OF THIS BUDGET WILL
6 POSSIBLY ADD TO HEAD COUNT IN THE CONTEXT OF THERE
7 HAD BEEN A CONSOLIDATION OF JOB OPERATIONS IN THE
8 CONTEXT OF A WIND-DOWN, AND NOW WITH THE RAMP-UP,
9 THAT THERE MAY BE ADDITIONAL NEED TO RESTORE SOME OF
10 THE PREVIOUS HEAD COUNT?

11 MS. LEWIS: THAT IS A CONSIDERATION WE ARE
12 TAKING IS TO NOT HIRE ANY NEW POSITIONS BEYOND WHAT
13 WE WERE PREVIOUSLY STAFFED AT, BUT ANYTHING THAT
14 WOULD REESTABLISH POSITIONS THAT WERE ANTICIPATED IN
15 A WIND-DOWN OR, AS I MENTIONED PREVIOUSLY, WE DID
16 HAVE VACANT FOR SOME TIME.

17 MR. FISCHER-COLBRIE: GREAT. THANK YOU.

18 CONTROLLER YEE: THANK YOU. OTHER
19 QUESTIONS, MEMBERS? OKAY. JENNIFER, THANK YOU VERY
20 MUCH. WE LOOK FORWARD TO RECEIVING THE REVISED
21 BUDGET ONCE IT'S BEEN PRESENTED TO THE BOARD.

22 DR. MILLAN.

23 DR. MILLAN: THANK YOU VERY MUCH,
24 CONTROLLER YEE. JENNIFER, IF YOU WOULD KINDLY
25 DISPLAY THE NEXT PRESENTATION.

BETH C. DRAIN, CA CSR NO. 7152

1 I WANT TO THANK YOU, CONTROLLER YEE, AND
2 MEMBERS OF THE CFAOC FOR THE IMPORTANT WORK YOU DO
3 IN PROVIDING OVERSIGHT FOR CIRM. AND IT'S MY GREAT
4 PLEASURE TO PROVIDE A PROGRAM UPDATE TODAY.

5 YOU SAW THIS A LITTLE BIT EARLIER, BUT
6 IT'S JUST A MAJOR OVERVIEW OF CIRM THAT WAS FORMED
7 IN 2004 BY PROP 71 AND \$3 BILLION IN BOND FUNDING.
8 IT WAS CREATED BY PATIENT ADVOCATES AND CALIFORNIA
9 STAKEHOLDERS THROUGH THE ELECTION PROCESS.

10 JUST AS A BIG OVERVIEW OF WHERE WE ARE
11 TODAY AND THE WIND-DOWN OF PROP 71 AND THE RAMP-UP
12 THROUGH THE NEW BOND INITIATIVE THROUGH PROP 14,
13 THAT THE MAJORITY OF THESE \$3 BILLION HAVE BEEN
14 EXPENDED TO FUND OVER A THOUSAND AWARDS, 1030 TO BE
15 EXACT, AND OVER 200 ARE STILL UNDER ACTIVE
16 MANAGEMENT FOR CUTTING-EDGE INNOVATION, RESEARCH,
17 AND FIRST-IN-HUMAN CLINICAL TRIALS. IN FACT, CIRM
18 HAS DIRECTLY FUNDED 68 CLINICAL TRIALS TO DATE, SOME
19 RECENTLY JUST APPROVED BY OUR BOARD, AND OVER 2700
20 PATIENTS IN CALIFORNIA HAVE PARTICIPATED AND
21 ENROLLED IN THESE TRIALS THUS FAR.

22 THROUGH THE COURSE OF THESE YEARS WITH
23 CIRM, ITS GROWTH, AND ALL OF THE DIFFERENT PHASES
24 THAT HAS GOTTEN US TO WHERE WE ARE TODAY, CIRM HAS
25 CREATED WHAT WE CALL VALUE PROPOSITION. IT HAS A

BETH C. DRAIN, CA CSR NO. 7152

1 DEFINED ACCELERATION-BASED FUNDING PARTNERSHIP MODEL
2 THAT'S THE ENVY OF MANY FUNDING AGENCIES AND
3 INVESTORS IN TERMS OF BEING ABLE TO IDENTIFY
4 TOPNOTCH, HIGH RISK, BUT HIGH REWARDS PROJECTS AND
5 BEING ABLE TO DEPLOY THE FINANCES THAT ARE NECESSARY
6 TO GET THESE PROGRAMS TO CRITICAL STAGES IN ORDER TO
7 SUPPORT THEM EVEN WHERE IN THE PAST THERE WAS WHAT
8 WAS CALLED THE VALLEY OF DEATH WHERE PROMISING
9 SCIENCE MAY DIE ON THE VINE BECAUSE THERE IS
10 INADEQUATE FUNDING EITHER FOR TRADITIONAL FUNDERS OR
11 FROM INVESTORS.

12 SO WE CALL THAT DERISKING, WHICH IS THAT,
13 BASED ON A VERY DEEP AND EXTENSIVE EXPERT DUE
14 DILIGENCE, SCIENTIFIC REVIEW, BY A BODY CALLED THE
15 GRANTS WORKING GROUP, THAT WE CAN TAKE IN PROPOSALS
16 OF PROMISING SCIENCE AND EVALUATE THEM FOR THEIR
17 POTENTIAL AND THEIR RIGOR.

18 BECAUSE OF THIS PROCESS AND THE QUALITY OF
19 THE PROGRAMS THAT WE FUND, THAT PROVIDES THE
20 OPPORTUNITY TO SET UP THE PROGRAMS VERY PROACTIVELY
21 IN MAKING SURE THAT WE CAN APPLY MILESTONE-BASED AND
22 ADVISORY AS WELL AS OVERSIGHT TO THESE PROGRAMS.
23 BECAUSE OF THIS, THE PROGRAMS HAVE BEEN INCREASINGLY
24 PROGRESSING THROUGH TO THE NEXT STAGES, AND THEN
25 LATER ON HAVE ATTRACTED INDUSTRY FUNDING. IN FACT,

BETH C. DRAIN, CA CSR NO. 7152

1 TO DATE OF WHAT'S PUBLICLY DISCLOSED, THERE HAVE
2 BEEN OVER \$12 BILLION IN INDUSTRY INVESTMENT TO
3 BRING THE PROGRAMS, WHICH WE DERISKED AND SUPPORTED
4 EARLIER, TO TAKE THEM TOWARD COMMERCIALIZATION.
5 CIRM COULD NOT POSSIBLY TAKE THIS ALL THE WAY
6 THROUGH THE MARKETPLACE. SO THIS IS A CRITICAL NEED
7 TO HAVE ATTRACT THE RIGHT PARTNERS, INDUSTRY
8 PARTNERS, AND COMMERCIALIZATION ENTITIES.

9 AND MOST OF THIS INVESTMENT ACTUALLY HAS
10 OCCURRED JUST OVER THE PAST THREE TO FOUR YEARS, AND
11 I'LL DESCRIBE A LITTLE BIT OF HOW THIS HAS BEEN
12 HAPPENING.

13 IN ADDITION, WE HAVE BEEN VERY MUCH CLOSE
14 TO THE FDA'S EVOLVING REGULATORY PARADIGM. IN FACT,
15 WE AND OUR GRANTEES HAVE BEEN VERY INSTRUMENTAL IN
16 SHAPING HOW THESE NOVEL TECHNOLOGIES ARE BEING
17 EVALUATED BY THE FDA SO THAT THEY MAINTAIN THAT
18 QUALITY AND SAFETY STANDARD, BUT ACKNOWLEDGE THAT
19 THESE ARE NEW TECHNOLOGIES AND MAY NEED NEW
20 PARADIGMS TO FIGURE OUT HOW TO BEST GET THEM TO
21 PATIENTS IF THEY MEET ALL THE REQUIREMENTS TO DO SO.

22 CIRM HAS ALSO FUNDED SPECIALIZED
23 INFRASTRUCTURE, FIRST-IN-KIND INFRASTRUCTURE, SUCH
24 AS STEM CELL REGENERATIVE MEDICINE FOCUSED ON
25 CLINICAL -- COMPOSED OF TOP ACADEMIC CENTERS AROUND

BETH C. DRAIN, CA CSR NO. 7152

1 THE STATE THAT ALSO HAVE RELATIONSHIPS WITH THEIR
2 NETWORK OF COMMUNITY AND OTHER CENTERS. AND THEY
3 ARE SPECIALIZED IN CONDUCTING STEM CELL REGENERATIVE
4 MEDICINE CLINICAL TRIALS AND ALL OF THE COMPLEXITIES
5 THAT ARE INVOLVED.

6 WE'VE ALSO ESTABLISHED, AND I'LL DESCRIBE
7 A LITTLE BIT MORE OF THIS LATER, A GENOMICS DATA HUB
8 AS WELL AS A TRANSLATIONAL HUB. TRANSLATION IS WHAT
9 IS NEEDED TO TAKE THE SCIENCE TO DO ALL OF THE
10 TESTING AND ALL OF THE PAPERWORK AND ALL OF THE
11 DOCUMENTATION INVOLVED TO GET FDA TO AGREE THAT THIS
12 IS NOW READY TO GO INTO CLINICAL TESTING.

13 WE FUNDED EDUCATION AND TRAINING PROGRAMS
14 TO BUILD THE WORKFORCE OF TOMORROW AND THE LEADERS
15 IN THE FIELD, AND I'LL DESCRIBE A LITTLE BIT MORE OF
16 THAT LATER ON IN THE PRESENTATION, AS WELL AS
17 EMBEDDED AND ENGRAINED IN CIRM ARE THE PATIENT
18 ADVOCATE LEADERSHIP. IN FACT, THE PATIENTS AND THE
19 COMMUNITY ADVOCATES AND STAKEHOLDERS ARE THE REASON
20 THAT CIRM EXISTS AT ALL. SO THEY'RE EMBEDDED WITHIN
21 ALL OUR SYSTEMS. THEY SERVE ON OUR BOARD, THEY
22 SERVE ON OUR ADVISORY PANELS, AND THEY ARE VERY MUCH
23 INVOLVED WITH US AS PARTNERS TO ADVISE US ON THE
24 BEST WAY TO COMMUNICATE WITH THE PUBLIC AND BE
25 INVOLVED IN A REAL-WORLD WAY AS WE ADVANCE THESE

1 TECHNOLOGIES.

2 SO JENNIFER GAVE YOU A MUCH MORE DETAILED
3 VERSION OF OUR CURRENT FINANCES; BUT JUST AS A BIG
4 PICTURE, TOTAL INVESTMENTS SINCE 2004 UNDER PROP 71
5 ARE SUMMARIZED IN THE BELOW SET OF IMAGES WITH
6 APPROXIMATELY \$480 MILLION INTO INFRASTRUCTURE, BOTH
7 BUILDING INFRASTRUCTURE AS WELL AS PROGRAMMATIC
8 INFRASTRUCTURES LIKE THE CLINICAL NETWORK AND THE
9 GENOMICS HUB THAT I MENTIONED. OVER \$200 MILLION IN
10 EDUCATIONAL PROGRAMS WHICH I'LL DESCRIBE LATER.
11 ALMOST A BILLION DOLLARS IN DISCOVERY BECAUSE
12 THERAPEUTICS, REAL MEDICINE, STARTS WITH TRUE AND
13 RIGOROUS SCIENCE. SO THE PIPELINE STARTS WITH
14 DISCOVERY AND EARLY STAGE SCIENCE. AND 360 MILLION
15 APPROXIMATELY IN THIS AREA OF RESEARCH CALLED
16 TRANSLATION, WHICH ARE THE PRACTICAL ASPECTS OF
17 TAKING THE SCIENCE INTO THE CLINICS, AND NOW OVER
18 730 MILLION IN CLINICAL TRIALS THEMSELVES. AND I
19 WON'T GO INTO DETAIL ABOVE, BUT THE BREAKDOWN,
20 ACCORDING TO WHAT WAS EXPENDED IN THE 2019/2020
21 PERIOD IS SUMMARIZED ABOVE.

22 PRIMARILY MOST OF THE INVESTMENT WENT INTO
23 CLINICAL STAGE AND LATE STAGE PROGRAMS. WE HAD TO
24 WIND DOWN OUR DISCOVERY PROGRAMS. THE EDUCATION
25 PROGRAM IS, THANKFULLY, STILL CONTINUING TO TRAIN

BETH C. DRAIN, CA CSR NO. 7152

1 OUR GRADUATE STUDENTS AND HIGH SCHOOL STUDENTS.
2 WITH THE RECENT PANDEMIC ISSUES, THEY STILL HAVE
3 CONTINUED TO DO WHAT THEY CAN IN THE MEANWHILE TO
4 CONTINUE THOSE PROGRAMS, AND THEY WILL RESTART ONCE
5 WE REOPEN. INFRASTRUCTURE IS A HOLDOVER FROM
6 PREVIOUS INVESTMENT, SO THERE WERE NO NEW
7 INFRASTRUCTURE PROGRAMS FUNDED THIS YEAR.

8 I'M HAPPY TO TAKE ANY QUESTIONS, AND
9 PLEASE STOP ME ANYTIME ALONG THE WAY. AND IF
10 THERE'S A TIME CRUNCH, I'M ALSO HAPPY TO WIND IT UP
11 AND BE MORE BRIEF.

12 CONTROLLER YEE: DR. MILLAN, YOU'RE DOING
13 FINE ON TIME. LET ME JUST DO A QUICK CHECK WITH THE
14 MEMBERS TO SEE IF THERE ARE ANY QUESTIONS THUS FAR.

15 DR. QUICK: MARIA, YOU MENTION YOU'RE
16 GOING TO GO INTO THIS LATER, BUT I THOUGHT I'D JUST
17 ASK THIS QUESTION. OF THAT 12 BILLION OF INDUSTRY
18 INVESTMENT, DO YOU HAVE A BREAKDOWN OF HOW MUCH OF
19 THAT IS IN THE STATE OF CALIFORNIA? I WOULD ASSUME
20 IT'S A FAIRLY SIGNIFICANT AMOUNT.

21 DR. MILLAN: DR. QUICK, THAT IS A VERY
22 GOOD QUESTION, AND WE HAVEN'T BROKEN IT DOWN THAT
23 WAY BECAUSE OFTEN WHAT HAPPENS IS THAT THEY MADE THE
24 INVESTMENT INTO THE PROGRAM BY LARGER COMPANIES
25 OUTSIDE OF CALIFORNIA, BUT THE ISSUE IS THAT THEY

BETH C. DRAIN, CA CSR NO. 7152

1 ARE INVESTING INTO THE PROGRAM WHICH EITHER EMANATED
2 FROM THIS AND FROM A CALIFORNIA COMPANY OR AN
3 INVESTIGATOR.

4 BUT I WILL SAY THAT ONE OF THE PROMINENT
5 EVENTS ALL INVOLVED CALIFORNIA, AND THAT'S THE 47
6 INC. CORPORATE DEAL BECAUSE THE SCIENCE STARTED AT
7 STANFORD. IT WAS SPUN OUT INTO A COMPANY,
8 CALIFORNIA COMPANY, 47 INC., AND THEN ACQUIRED BY
9 GILEAD, A CALIFORNIA COMPANY. SO THAT'S ONE OF THE
10 EXAMPLES THAT MAINTAIN ITS CALIFORNIA PRESENCE
11 THROUGH THAT TRANSITION.

12 DR. QUICK: THANK YOU.

13 MR. LOTT: MADAM CHAIR, IF I MAY, AND YOU
14 MAY GET TO THIS AT SOME POINT LATER, AND I'M LOOKING
15 AT THE SLIDE HERE AND IT'S MAKING ME THINK THIS
16 QUESTION. THIS IS NOT REALLY QUITE YOUR WHEELHOUSE,
17 BUT I WANT TO ASK THE QUESTION ANYWAY. ARE THERE
18 ANY SYNERGIES THAT CAN BE HAD BETWEEN WHAT YOU DO
19 AND THE ADVANCEMENTS IN THE CRISPR-CAS9 TECHNOLOGY?
20 ARE THERE ANY OPPORTUNITIES FOR CROSSOVER OR
21 FERTILIZATION OF THAT? CRISPR-CAS9 IS VERY
22 PROMISING, AS I THINK WE ALL KNOW.

23 DR. MILLAN: ABSOLUTELY.

24 MR. LOTT: IS THERE SOMETHING IN WHAT
25 YOU'RE THINKING ABOUT NOW THAT WE HAVE PROP 14 IN

BETH C. DRAIN, CA CSR NO. 7152

1 PLACE AND MOVING FORWARD THAT MIGHT INVOLVE THAT
2 EFFORT?

3 DR. MILLAN: THANK YOU SO MUCH FOR THE
4 VERY IMPORTANT QUESTION BECAUSE, AS YOU STATED,
5 CRISPR-CAS9 IS A GENE EDITING TECHNOLOGY THAT'S
6 EXTREMELY PROMISING. IN FACT, WE ACTUALLY FUND
7 CRISPR-CAS9 PROGRAMS. OUR CIRM BOARD HAD DEEMED
8 THAT GENE THERAPY, GENE EDITING APPROACHES ARE
9 WHAT'S CALLED VITAL RESEARCH OPPORTUNITIES UNDER
10 PROP 71. AND THE BOARD HAD DECIDED THAT GENE
11 THERAPY, WHETHER IT'S ON STEM CELLS OR OTHER CELLS,
12 HOWEVER DEPLOYED, IS A VITAL RESEARCH OPPORTUNITY
13 THAT'S COMPATIBLE WITH THE MISSION THAT WAS DEPLOYED
14 BY PROP 71.

15 I WILL DESCRIBE SOME OF THOSE PROGRAMS.
16 IN FACT, TWO OF OUR PROGRAMS IN THE SICKLE CELL
17 ARENA ARE CRISPR-CAS9 BASED, AND THEY'RE PROGRESSING
18 ALONG TOWARD THE CLINICS. AS YOU KNOW, JENNIFER
19 DOUDNA IS IN CALIFORNIA, AND WE'RE VERY MUCH,
20 BETWEEN HER AND HER GROUPS AND ALL THE SCIENTISTS IN
21 THIS ECOSYSTEM, THERE'S A LOT OF OVERLAP, CROSSOVER,
22 AND DIRECT COLLABORATION. SO THE ANSWER IS, YES,
23 IT'S ALREADY SOMETHING THAT'S BEING DEVELOPED WITHIN
24 OUR PORTFOLIO CURRENTLY, AND WE ANTICIPATE THAT IT
25 WILL CONTINUE TO BE A BIG PART OF OUR SCIENTIFIC

1 PROGRAMS.

2 MR. LOTT: THANK YOU. THANK YOU VERY
3 MUCH.

4 MR. FISCHER-COLBRIE: JUST A QUICK KIND OF
5 QUESTION. THIS IS ONE WHERE CIRM HAS BEEN EXTREMELY
6 EFFECTIVE IN STRATEGIC PLANNING AND RELEASING
7 DOCUMENTS ASSOCIATED WITH THAT. DO YOU ANTICIPATE
8 DEVELOPING AN UPDATED OR NEW STRATEGIC PLAN?

9 DR. MILLAN: THANK YOU SO MUCH. EARLY
10 THIS YEAR AND IN JUNE OF THIS YEAR, WE WENT THROUGH
11 A PROCESS WITH THE BOARD OF LOOKING AT WHAT WE CALL
12 STRATEGIC CONCEPTS AND STARTING EVEN PRIOR TO THE
13 PASSAGE OF PROP 14 DOING KIND OF A LANDSCAPE
14 ANALYSIS, HISTORICAL ANALYSIS, AND TAPPING INTO ALL
15 OF THE INTERACTIONS WE HAVE WITH THE NATIONAL
16 ACADEMIES, SCIENTIFIC COMMUNITIES WHERE WE HAVE A
17 VERY BROAD AND DEEP KIND OF INTERACTION WITH ALL
18 THESE STAKEHOLDERS. AND WE TOOK THAT AND IDENTIFIED
19 CERTAIN AREAS THAT WE BELIEVE WOULD BE A STRONG
20 BASIS FOR A FUTURE STRATEGIC PLAN.

21 THE TEAM, IN ADDITION TO MAINTAINING
22 OPERATIONS AND DOING WHAT WE CAN WITH THE MONEY TO
23 CONTINUE TO ADVANCE THE SCIENCE, HAS BEEN ENGAGED IN
24 OUR INTERNAL EVALUATION OF POTENTIAL STRATEGIC
25 DIRECTIONS THAT COULD LEAD TO FUTURE CONCEPTS. SO

BETH C. DRAIN, CA CSR NO. 7152

1 THE STEPS OF THAT IS THAT BY EARLY TO MID NEXT YEAR
2 WE HOPE TO BE ABLE TO BRING A DRAFT STRATEGIC PLAN
3 TO THE ICOC. AND THE AREAS THAT WILL BE IDENTIFIED,
4 AND THIS IS SOMETHING WE CAN SHARE WITH YOU, THE
5 JUNE 2020 PRESENTATION OUTLINES FOUR AREAS THAT WE
6 BELIEVE WE WILL DEVELOP IN THE STRATEGIC PLAN
7 RELATED TO ADVANCING WORLD-CLASS SCIENCE, INCREASING
8 ACCESS TO PATIENTS, OVERCOMING HURDLES TO
9 COMMERCIALIZATION, AND THEN, OF COURSE, DEPLOYING
10 THE NEXT GENERATION OF OPERATIONAL ENHANCEMENTS AND
11 EXCELLENCE IN ORDER TO DO ALL THAT, AGAIN, IN THE
12 SPIRIT OF ACCELERATION AND EXCELLENCE.

13 CONTROLLER YEE: THANK YOU, DR. MILLAN.

14 CHAIRMAN THOMAS: MARIA, CAN I JUST ADD ON
15 TO THAT REAL QUICKLY, CONTROLLER?

16 CONTROLLER YEE: YES, OF COURSE, WELCOME,
17 MR. THOMAS.

18 CHAIRMAN THOMAS: SO THE PROP 14 HAS IN IT
19 A NUMBER OF NEW ELEMENTS THAT ARE ABOVE AND BEYOND
20 WHAT WERE IN PROP 71. AND THOSE NEW ELEMENTS ARE
21 PART AND PARCEL OF THE THINGS THAT WILL BE
22 CONSIDERED IN THE DEVELOPMENT OF THIS NEW STRATEGIC
23 PLAN WHICH, AS DR. MILLAN POINTS OUT, WILL BE THE
24 SUBJECT MATTER DISCUSSION LIKELY LATE Q1, EARLY Q2
25 AT THE BOARD IN THE FORM OF A BOARD RETREAT ACTUALLY

BETH C. DRAIN, CA CSR NO. 7152

1 TO DETERMINE THE PRIORITIES FOR THE DIFFERENT
2 ELEMENTS THAT ARE IN PROP 14. AND THAT WILL, IN
3 ADDITION TO ALL OF THE THINKING THAT'S GONE ON OVER
4 THE COURSE OF THIS YEAR THAT DR. MILLAN REFERRED TO,
5 WILL FORM THE BASIS FOR THAT STRATEGIC PLAN, WHICH
6 WILL BE APPROVED BY THE BOARD SOMEWHERE PROBABLY
7 Q3-ISH NEXT YEAR.

8 SO STAY TUNED FOR THAT, AND IT WILL FACTOR
9 IN A LOT OF NEW AND EXCITING THINGS THAT BUILD OFF
10 OF THE PROGRAMS THAT WE HAVE CURRENTLY IN PLACE
11 WHICH HAVE BEEN, AS DR. MILLAN SAYS, SO SUCCESSFUL
12 TO THIS POINT. THANK YOU.

13 CONTROLLER YEE: THANK YOU, MR. THOMAS. I
14 THINK WHAT I'LL ALSO REITERATE TO THE MEMBERS OF THE
15 COMMITTEE, WE'LL BE TRACKING THE PARALLEL EFFORTS OF
16 THOSE DISCUSSIONS SO THAT THIS COMMITTEE RECEIVES
17 INFORMATION MORE TIMELY. SO WE HAVE THE CONTEXT
18 ALREADY BUILT ALONG THE WAY BEFORE WE MEET FOR OUR
19 NEXT OVERSIGHT COMMITTEE MEETING. THANK YOU.

20 DR. MILLAN: THANK YOU, CONTROLLER YEE.
21 HOW MUCH TIME DO WE HAVE FOR THE -- JUST SO I KNOW
22 HOW TO PACE?

23 CONTROLLER YEE: I THINK ACTUALLY WE ARE
24 SCHEDULED TO -- YOU'RE DOING FINE ON TIME.

25 DR. MILLAN: OKAY. GREAT. SO WITHOUT

BETH C. DRAIN, CA CSR NO. 7152

1 GOING INTO DETAIL, AS YOU CAN SEE FROM THIS PIE
2 CHART, THE RESEARCH AND DEVELOPMENT PORTFOLIO BUILT
3 BY WHAT I HAD JUST SUMMARIZED IS VERY BROAD, BUT
4 EACH OF THESE AREAS ALSO HAVE WITHIN THE DISEASE
5 AREA OR THE ORGAN AREA DIFFERENT TECHNOLOGIES,
6 WHETHER IT BE GENE EDITING, CRISPR-CAS9, TISSUE
7 ENGINEERING, STEM CELL TRANSPLANT, WHAT HAVE YOU.

8 SO I'LL JUST NOW GO ON TO THE NEXT SLIDE
9 TO DESCRIBE HERE'S KIND OF A -- IF WE FAST FORWARD
10 TO WHAT THE OUTPUT IS IN TERMS OF TYPES OF THERAPIES
11 OR AT LEAST THOSE THAT ARE MAKING THEIR WAY TOWARD
12 CLINICAL TRIALS, YOU CAN SEE THIS IS -- I'M NOT
13 GOING TO GO THROUGH EACH OF THEM, BUT I'VE LISTED
14 JUST SOME KIND OF BROAD AREAS OF THESE 68 CLINICAL
15 TRIALS AND 25 TRANSLATIONAL PROGRAMS MAKING THEIR
16 WAY TO THE TRIALS INVOLVING LARGE DISEASE
17 INDICATIONS SUCH AS TYPE 1 DIABETES WAS ONE OF OUR
18 MORE PROMINENT PROGRAMS FROM A COMPANY CALLED
19 VIACYTE TO DEVELOP A STEM CELL-BASED THERAPY FOR
20 TYPE 1 DIABETES, KIND OF A LIVING MEDICINE, TO VERY
21 RARE INDICATIONS.

22 ONE OF THE RECENT PROGRAMS THAT WAS FUNDED
23 BY THE BOARD IS FOR SPINA BIFIDA, WHICH RESULTS IN
24 PARALYSIS AND BABIES ARE BORN WITH THIS DEFECT IN
25 THE COVERING OF THEIR SPINAL CORD. AND THAT

BETH C. DRAIN, CA CSR NO. 7152

1 TECHNOLOGY INVOLVES A STEM CELL-BASED APPROACH TO,
2 COMBINED WITH FETAL SURGERY, TO RESTORE THE BARRIER
3 AND INCREASE THE DOWNSTREAM CLINICAL OUTCOME OF
4 THOSE PATIENTS.

5 YOU CAN SEE HERE NEURODEGENERATION. WE
6 HAVE -- I'LL DESCRIBE ONE OF THESE IN PARKINSON'S
7 USING GENE THERAPY JUST, AGAIN, TO THE SPECIFIC
8 QUESTION OF THE ROLE OF GENE THERAPY IN OUR
9 PROGRAMS.

10 UNLESS THERE ARE SPECIFIC QUESTIONS HERE,
11 I'M GOING TO GO AHEAD AND PROCEED WITH JUST GOING
12 THROUGH SOME HIGHLIGHTS TO REPRESENT WHAT TYPE OF
13 PROGRAMS. I WANT TO PLEASE ENCOURAGE, AND WE'LL
14 SEND THE LINK TO THIS, WE HAVE A DASHBOARD ON OUR
15 CIRM WEBSITE WHICH IS UPDATED CONTINUALLY. AND
16 ANYBODY WHO IS INTERESTED IN IT CAN GO STRAIGHT
17 THERE. IT LISTS ALL OF OUR PROGRAMS, AND THEN IT
18 ALSO LISTS OUR CLINICAL TRIALS WITH DETAILS THAT
19 LINK TO THE CLINICALTRIALS.GOV UPDATES IN TERMS OF
20 ANY RELEASES OR COMPANY INFORMATION IF THEY'RE
21 COMPANIES.

22 SO WITH ALL THAT, I THINK THAT ONE OF THE
23 VALUE DEMONSTRATIONS OF THIS CIRM FUNDING PROGRAM
24 AND HOW WE DO BUSINESS IS OUR RESPONSE TO THE
25 COVID-19 CRISIS. SHORTLY AFTER WE ALL LOCKED DOWN

BETH C. DRAIN, CA CSR NO. 7152

1 AND MOVED TO REMOTE WORK, WE REALIZED THAT THERE
2 WERE MANY OF OUR SCIENTISTS AND PROGRAMS THAT WE HAD
3 FUNDED THAT HAD SCIENCE AND POTENTIAL THERAPEUTICS
4 THAT COULD BE DEPLOYED TO TARGET COVID-19. WHILE
5 THE FEDERAL GOVERNMENT HAD INVESTED OVER \$10 BILLION
6 INTO VACCINE DEVELOPMENT, IN THIS CRISIS WE ALSO
7 KNEW THAT THERE WERE ISSUES REGARDING HOW TO DEAL
8 WITH PATIENTS WHO ALREADY WERE SICK.

9 SO IN ADDITION TO OUR EVENTUAL GOAL OF
10 CREATING IMMUNITY TO THIS AS A COMMUNITY, WE KNOW
11 THAT THERE ARE SOME ILLNESSES RESULTING FROM THIS.
12 AND SO IN ADDITION AND PARALLEL TO OPERATION WARP
13 SPEED OF THE FEDERAL GOVERNMENT, CIRM, WITH THE
14 MODEST AMOUNT OF FUNDING WE HAD, DEPLOYED A COVID
15 FUNDING ROUND. AND WE WERE AMAZED WITH HOW MANY
16 TOPNOTCH PROGRAMS CAME IN FOR THIS.

17 JUST TO HIGHLIGHT MY STATEMENT ABOUT HOW
18 THIS DEPLOYED THE VALUE PROPOSITION, WE WERE ABE TO
19 LAUNCH THIS PROGRAM LITERALLY WITHIN A SPAN OF
20 WEEKS. THAT INCLUDED ALL THE PROCESSES THAT WE GO
21 THROUGH IN TERMS OF CONCEPT DEVELOPMENT, MAKING SURE
22 THAT IT'S DOABLE WITHIN OUR SYSTEM, TAKING IT TO THE
23 BOARD, HAVING THE BOARD APPROVE IT UNDER AN
24 EMERGENCY MEETING. AND THEN WE HAD A FREQUENT
25 REVIEW OF THESE PROGRAMS WITH BI-WEEKLY REVIEWS AND

BETH C. DRAIN, CA CSR NO. 7152

1 OUR BOARD MET BI-WEEKLY. SO IT WAS A CONTINUOUS
2 PROCESS. AND THROUGH ALL THAT, 17 AWARDS WERE
3 APPROVED AND LAUNCHED.

4 AND IN ADDITION TO THIS, TO THE TOPIC OF
5 HOW WE REACHED THE UNDERSERVED POPULATIONS AND THOSE
6 DISPROPORTIONATELY AFFECTED, WE ADDED TO THIS
7 PROGRAM ANNOUNCEMENT AND THEN ADOPTED IT INTO OUR
8 GENERAL FUNDING MECHANISM A REQUIREMENT THAT OUR
9 RESEARCHERS INCLUDE A PLAN FOR HOW THEY'RE GOING TO
10 DO OUTREACH IN TERMS OF CLINICAL TRIALS OR EVEN IN
11 EARLY STAGE RESEARCH HOW THEY ACCOUNT FOR AND
12 INCLUDE CONSIDERATIONS OF UNDERSERVED COMMUNITIES.

13 AND A VERY CONCRETE EXAMPLE OF THAT IS IN
14 ONE OF OUR EARLY STAGE PROGRAMS, LOOKING AT WAYS TO
15 DEVELOP THERAPIES AND EVEN VACCINES. SOME OF THE
16 CELL MODELS THAT WERE USED HAD A LIMITED HLA TYPE
17 THAT MAY HAVE BEEN MORE REPRESENTATIVE -- TISSUE
18 TYPE THAT'S MORE REPRESENTATIVE OF MAYBE THE
19 EUROPEAN BACKGROUND. AND OUR CIRM FUNDING WAS ABLE
20 TO EXPAND THAT IN ORDER TO MAKE SURE THAT THE TYPES
21 OF TISSUES THAT WERE USED IN THE SCIENCE REFLECTED
22 MORE DIVERSE POPULATIONS THAT WOULD BE RELEVANT TO
23 THIS RESEARCH.

24 WE BELIEVE, NOT ONLY IS THIS A POINT OF
25 INCLUSION, BUT IT'S JUST GOOD SCIENCE BECAUSE TO

BETH C. DRAIN, CA CSR NO. 7152

1 DEVELOP THERAPIES EARLY ON THAT TARGET A CERTAIN
2 POPULATION, AND THEN WHEN YOU TAKE IT LATER ON AND
3 IT'S ACTUALLY BEING APPLIED TO A DIFFERENT SET OF
4 CIRCUMSTANCES, IT MAY NOT BE AS SUCCESSFUL AS ONE
5 HAD PREDICTED. SO NEXT SLIDE PLEASE.

6 CHAIRMAN THOMAS: MARIA, CAN I JUST ADD
7 ONE QUICK THING THERE FOR BENEFIT OF THE COMMISSION?
8 SO AS I'VE SAID ON A NUMBER OF DIFFERENT CALLS IN
9 RECENT WEEKS, I THINK THIS COVID ROUND REALLY WAS
10 CIRM AT ITS FINEST HOUR. WE HAD OBVIOUSLY A VERY
11 SERIOUS HEALTH CONCERN DEVELOPING IN THE SPRING
12 WHICH WAS TRIGGERING AN UNPRECEDENTED WORLDWIDE
13 COLLABORATION TO TRY TO DEVELOP TREATMENTS AND
14 CURES. AND WE DECIDED BACK IN MARCH THAT WE NEEDED
15 TO BE A PART OF THAT TO DO WHAT WE COULD TO
16 CONTRIBUTE.

17 AND SO, AS MARIA SAID, FROM THE FIRST
18 INSTANCE THAT THE SUGGESTION WAS MADE TO GET
19 INVOLVED HERE TO THE ACTUAL PROCESS OF MAKING
20 GRANTS, THINGS MOVED INCREDIBLY QUICKLY SUCH THAT
21 THERE WERE OVER 3+ MONTHS. THERE WERE SEVEN PEER
22 REVIEW MEETINGS ON PROJECTS AND TEN SEPARATE BOARD
23 MEETINGS, ALL OF WHICH WERE DRIVEN BY THE TEAM IN
24 EXPERT FASHION IN A WAY THAT REFLECTED THE REALLY
25 WELL-OILED FUNDING APPARATUS THAT CIRM HAS IN PLACE,

BETH C. DRAIN, CA CSR NO. 7152

1 ALL OF IT OBVIOUSLY DONE REMOTELY. THERE WERE
2 LITERALLY NO GLITCHES IN THE PROCESS. WE GOT
3 THROUGH IT, MADE 17 BEST-IN-CLASS AWARDS, AND WERE
4 ABLE TO DO SO JUST HIGHLY EFFICIENTLY.

5 AND WE'RE VERY, VERY PROUD OF THAT AS I
6 HOPE YOU FOLKS WILL BE AS WELL BECAUSE IF YOU GO TO
7 OTHER MAJOR FUNDING AGENCIES, IT TAKES WEEKS, IF NOT
8 MONTHS, TO GET FUNDED. AND THIS GOT DONE IN
9 EXTREMELY SHORT ORDER. AND WE HAVE THESE PROJECTS
10 OUT THERE AS A RESULT THAT CALIFORNIANS CAN TAKE
11 PRIDE IN CONTRIBUTING TO. SO I JUST WANTED TO ADD
12 THAT LITTLE EDITORIAL COMMENT ON BEHALF OF THE
13 BOARD, AND TO THANK MARIA AND THE TEAM FOR PULLING
14 THIS ALTOGETHER IN JUST VERY, VERY SHORT ORDER. SO
15 THANK YOU.

16 CONTROLLER YEE: THANK YOU, MR. THOMAS.
17 THAT WAS A VERY IMPRESSIVE PIVOT. NOT ONLY
18 IMPRESSIVE, BUT JUST THE COMPREHENSIVENESS AND
19 THOUGHTFULNESS OF ALL OF THE CONSIDERATIONS BEING
20 INCLUDED SO THAT WE ARE NOT HAVING TO MAKE THOSE
21 CONSIDERATIONS AT LATTER STAGES, BUT REALLY UP-FRONT
22 AS WE'RE THINKING ABOUT HOW TO DEPLOY THE FUNDS FOR
23 THESE VARIOUS PROJECTS. OTHER COMMENTS FROM MEMBERS
24 BEFORE WE ASK DR. MILLAN TO CONTINUE?

25 DR. MILLAN: THANK YOU VERY MUCH. THANK

BETH C. DRAIN, CA CSR NO. 7152

1 YOU, CHAIRMAN THOMAS, FOR THOSE COMMENTS.

2 ONE OF THE THINGS I WANTED TO KIND OF
3 HIGHLIGHT IS, OF COURSE, \$5 MILLION, THAT WAS NOT A
4 SIGNIFICANT AMOUNT OF MONEY COMPARED TO WHAT WE
5 SUPPORTED IN THE PAST, BUT WE WERE ABLE WITH THAT
6 AND WITH OUR SCIENTIFIC STAKEHOLDERS, EVERYBODY JUST
7 DID WHAT THEY COULD TO OPTIMIZE THE OPPORTUNITIES
8 WITH THEIR SCIENCE. AND WE WERE ABLE TO THEN FUND
9 THESE RESEARCH PROGRAMS THAT ACTUALLY HAD A UNIQUE
10 ASPECT TO THEM VERSUS THOSE THAT ARE BEING PURSUED
11 ELSEWHERE.

12 AND I JUST WANT TO REMIND EVERYBODY THAT
13 OUR GRANTS WORKING GROUP HAVE (BREAK IN AUDIO). WE
14 DEPLOYED A SPECIALTY PANEL, AND IT HAD TO GO THROUGH
15 THESE STEPS TO MAKE SURE THAT THEY WERE TRULY
16 SCIENTIFICALLY MEANINGFUL. AND WITH THAT, 17
17 PROGRAMS WERE FUNDED. I'M LISTING SOME OF THESE
18 HERE. THEY INVOLVE STEM CELL TECHNOLOGIES TO
19 IDENTIFY NOVEL THERAPIES, BUT ALSO TO DEPLOY NOVEL
20 VACCINE DEVELOPMENT. WE ALL KNOW WE ARE LEARNING
21 MORE AND MORE ABOUT COVID. THIS IS JUST THE START.
22 WE ARE IN CRISIS MANAGEMENT, BUT THERE'S SO MUCH
23 JUST TO ADDRESS THIS VIRUS AND WHAT WE CAN LEARN
24 FROM THIS FOR FUTURE INFECTIOUS DISEASE AS WELL AS
25 OTHER POTENTIAL FOR CELL THERAPIES AND GENE

BETH C. DRAIN, CA CSR NO. 7152

1 THERAPIES THAT ARE BEING DEVELOPED TODAY.

2 IN TERMS OF CLINICAL STAGE PROGRAMS, I'D
3 LIKE TO JUST, I THINK, SPEND A LITTLE BIT MORE TIME,
4 BUT NOT EXTENSIVE AMOUNTS OF TIME. I'M HAPPY TO
5 TAKE QUESTIONS.

6 I'M SURE YOU'VE HEARD OF THE CONVALESCENT
7 PLASMA PROGRAM. IT'S KIND OF A PASSIVE IMMUNITY,
8 TAKING PLASMA FROM RECOVERED PATIENTS WHO HAD COVID,
9 AND THEN PASSIVELY USING THAT PLASMA INTO PATIENTS
10 WHO ARE SICK WITH COVID USING THAT PASSIVE IMMUNITY
11 AS A TREATMENT.

12 THIS IS CURRENTLY AUTHORIZED UNDER THE
13 FDA'S EMERGENCY USE AUTHORIZATION, SO IT'S MORE
14 WIDELY APPLIED. THE MAYO CLINIC, JOHN'S HOPKINS,
15 MANY OTHERS HAVE BEEN INVOLVED. BUT I WANT TO POINT
16 OUT WHAT MAKES THE CIRM FUNDING INTO THIS UNIQUE.
17 SO IT'S NOT JUST THE USE OF THE PLASMA, BUT THE CITY
18 OF HOPE, JOHN ZAIA, CITY OF HOPE, AND HIS
19 COLLABORATORS AT T-GEN AND OTHERS ARE LOOKING AT
20 WHAT ACTUALLY COULD BE THE ACTIVE INGREDIENTS WITHIN
21 THE PLASMA BECAUSE IT STILL LOOKS PROMISING, BUT IN
22 TERMS OF WHAT IS IT, WHAT ARE THE USEFUL COMPONENTS,
23 AND WHAT ARE THOSE THAT ACTUALLY CAN GET IN THE WAY
24 OF RECOVERY. SO THAT'S BEING ELUCIDATED IN A VERY
25 SOPHISTICATED MANNER, INCLUDING GENOMICS ANALYSIS,

BETH C. DRAIN, CA CSR NO. 7152

1 AS WELL AS IMMUNOLOGIC ANALYSIS. SO THAT'S ONE OF
2 THE PROGRAMS.

3 THE OTHER PROGRAM IS A STEM CELL-DERIVED
4 IMMUNE CELL CALLED NATURAL KILLER CELLS. AND THE
5 SIGNIFICANCE OF THAT IS THAT NATURAL KILLER CELLS,
6 WHICH ARE IN OUR NATURAL IMMUNE SYSTEM, TYPICALLY GO
7 AROUND AND SURVEY AND HELP FIGHT VIRUS. IT'S
8 KNOCKED DOWN IN COVID. IT'S KNOCKED DOWN IN LEVELS
9 IN THE ELDERLY WHO ARE VERY SUSCEPTIBLE TO COVID.
10 THIS PROGRAM IS A CELL THERAPY THAT ESSENTIALLY
11 PROVIDES THESE NATURAL KILLER CELLS AS A DIRECT
12 ANTIVIRAL APPROACH.

13 AND THEN THE THIRD PROGRAM WE ARE FUNDING
14 IS OUT OF UCSF, DR. MATTHAY'S PROGRAM, WHO'S A
15 LEADER IN THE FIELD OF RESPIRATORY DISTRESS, A LUNG
16 INJURY THAT RESULTS FROM COVID. AND THROUGH THIS
17 PROGRAM, HE WAS ABLE TO EXPAND IT INTO UC DAVIS, AND
18 IT'S ALSO PART OF THE NATIONAL COLLABORATIVE EFFORT.
19 MSC, BASED ON PREVIOUS DATA, HAS BEEN SHOWN TO BE
20 NOT ONLY ANTI-INFLAMMATORY, BUT PROMOTE THE REPAIR
21 OF THE DAMAGED LUNG TISSUES. SO THAT'S SOMETHING
22 THAT'S BEING INVESTIGATED, AND THERE ARE OTHER
23 EFFORTS IN THIS FIELD. DR. MATTHAY IS ONE OF THE
24 ACADEMIC LEADERS IN THIS, SO WE ARE PLEASED THAT
25 WE'RE ABLE TO ENABLE HIM TO EXPAND THAT EFFORT.

BETH C. DRAIN, CA CSR NO. 7152

1 ANY QUESTIONS ON THAT? NEXT SLIDE PLEASE.

2 SO ONE OF THE OTHER HIGHLIGHTS IS A
3 DEMONSTRATION OF WHAT THE MULTIPLIER EFFECT IS OF
4 CIRM AS A HUB FOR COLLABORATION. LAST YEAR I
5 BELIEVE WE HAD COVERED THAT CIRM HAD A LANDMARK MOU
6 WITH NHLBI, THE HEART LUNG BLOOD INSTITUTE OF THE
7 NIH, TO CURE SICKLE CELL. AND WE WERE CHOSEN FOR
8 THIS PARTNERSHIP BECAUSE THE NHLBI AND THE NIH
9 RECOGNIZED OUR ACCELERATION MODEL AND KIND OF THE
10 UNIQUE VALUE WE BRING INTO TRANSLATIONAL RESEARCH
11 AND THE TYPES OF PROGRAMS WE ALREADY HAD IN OUR
12 PORTFOLIO. SO IT LEVERAGED CIRM'S PROCESS. THEY
13 USED OUR APPLICATION FORMAT AS THE BASIS OF THEIR
14 OWN FUNDING AND WERE ABLE TO DEPLOY A SYSTEM WITHIN
15 THAT'S USED BY THE NIH IN ORDER FOR THEM TO MAKE A
16 RAPID FUNDING DECISION.

17 SO AS SOON AS OUR CIRM GWG MAKES A FUNDING
18 RECOMMENDATION, IN LESS THAN TWO WEEKS THE NIH WILL
19 LET US KNOW IF THEY'LL CO-FUND WITH US. WE'VE
20 ALREADY FUNDED TWO PROGRAMS UNDER THIS MECHANISM AND
21 MORE ARE IN THE PIPELINE. AND I'D LIKE TO JUST KIND
22 OF GO INTO THAT A LITTLE BIT MORE.

23 SO JUST BY WAY OF BACKGROUND, MANY OF YOU
24 KNOW THAT SICKLE CELL DISEASE IS A FATAL DISEASE
25 AFFECTING MAINLY BLACK AFRICAN-AMERICAN POPULATIONS,

BETH C. DRAIN, CA CSR NO. 7152

1 BUT ALSO OTHERS. IT RESULTS -- AND WE'VE KNOWN
2 SINCE THE 1940S IT'S DUE TO A MOLECULAR DEFECT. AND
3 SINCE THEN, IT'S BEEN SHOWN THAT IT'S DUE TO A POINT
4 MUTATION. IT'S SIMPLY A TYPO IN THE GENES THAT
5 LEADS TO A DEFECT IN THE RED BLOOD CELLS. SO
6 INSTEAD OF BEING PLIABLE, OXYGEN DELIVERING DISKS
7 THAT RED BLOOD CELLS USUALLY ARE, THESE NORMAL
8 CELLS, IN THE CASE OF SICKLE CELL, WHEN THEY'RE
9 EXPOSED TO LOW OXYGEN OR STRESS, BECOME SICKLE
10 SHAPED, RIGID, AND BLOCK OFF BLOOD VESSELS. AND
11 THAT CAUSES PAIN CRISES, MINI STROKES, ORGAN DAMAGE,
12 AND RESULT IN A LIFE SPAN OF APPROXIMATELY 40 YEARS
13 EVEN IN THE U.S. AND THOSE IN SUB-SAHARAN AFRICA,
14 THE BABIES DON'T SURVIVE PAST INFANCY OR EARLY
15 CHILDHOOD.

16 SO NEXT SLIDE PLEASE. THE GOOD NEWS IS
17 WITH THE ADVANCEMENT IN THE FIELD, INCLUDING WHAT WE
18 SPOKE OF EARLIER, CRISPR-CAS9 AND OTHER GENE EDITING
19 TECHNIQUES, THERE ARE NOW PRECISE WAYS TO TARGET
20 SICKLE CELL. AND SO THIS COLLABORATION SEEKS TO
21 FUND CELL AND GENE THERAPY APPROACHES TO THIS. AND
22 IN ADDITION, CIRM IS ALSO FUNDING PROGRAMS THAT WILL
23 SUPPORT OTHER APPROACHES IN STEM CELL TRANSPLANT FOR
24 SICKLE CELL. I'LL JUST GO THROUGH SOME OF THESE IN
25 VERY HIGH LEVEL, BUT HAPPY TO TAKE QUESTIONS.

BETH C. DRAIN, CA CSR NO. 7152

1 SO THE APPROACHES CAN INCLUDE GENE EDITING
2 THROUGH ADDITION, GENE ADDITION, ADDING HEMOGLOBIN
3 THAT WOULD NOT SICKLE, TARGETING FETAL HEMOGLOBIN
4 BECAUSE IT'S BEEN SHOWN THAT IN SOME CASES WHERE
5 PEOPLE HAVE THE PERSISTENCE OF THE FETAL FORM OF
6 HEMOGLOBIN, THAT IT'S ACTUALLY PROTECTIVE AGAINST
7 THIS SICKLING. SO THERE ARE SOME EFFORTS IN TERMS
8 OF JUST -- USUALLY WE PUT OUR HEMOGLOBIN GENE TO
9 SLEEP ONCE WE ARE BORN AND WE START TO MATURE. AND
10 THE APPROACH IS TO WAKE UP THAT FETAL HEMOGLOBIN
11 GENE BECAUSE IT ACTS BETTER THAN THE MATURE MUTATED
12 FORM THAT'S IN THE RED BLOOD CELLS, AND THEN
13 CORRECTION.

14 NEXT SLIDE PLEASE. DON KOHN OUT OF UCLA
15 HAS BEEN A LEADER IN THE FIELD OF GENE THERAPY. I
16 PRESENTED IN THE LAST MEETING SOME OF HIS
17 ADVANCEMENTS IN ADA-SCID AND OTHER CHILDHOOD AND
18 GENE DISEASES. HE ALSO HAS A PROGRAM, A CLINICAL
19 TRIAL, WITH A GENETIC MODIFICATION OF THE PATIENT'S
20 BLOOD-FORMING STEM CELLS, USES A VIRAL DELIVERY.
21 NOW, THIS VIRUS IS TOTALLY -- IS NOT INFECTIOUS. IT
22 DOESN'T HARM ANYTHING, BUT IT'S USED AS KIND OF THE
23 SHUTTLE TO PUT IT -- TO INTRODUCE A GENE THAT'S AN
24 ANTI-SICKLING RED BLOOD CELL FROM SICKLING. SO THAT
25 PROGRAM IS STILL UNDER WAY.

BETH C. DRAIN, CA CSR NO. 7152

1 NEXT SLIDE PLEASE. ANOTHER APPROACH WHICH
2 IS A RESULT OF THIS NIH COLLABORATION IS A
3 PARTNERSHIP BETWEEN HARVARD AND BOSTON CHILDREN'S
4 HOSPITAL AND OUR CALIFORNIA INVESTIGATORS IN AN
5 APPROACH THAT'S LED BY DAVID WILLIAMS AT BOSTON
6 CHILDREN'S HOSPITAL WHERE THERE'S A GENETIC
7 MODIFICATION OF THE PATIENT'S OWN BLOOD-FORMING STEM
8 CELLS TO INCREASE THE EXPRESSION OF THAT FETAL
9 HEMOGLOBIN THAT I JUST SPOKE OF. AND USES IT
10 THROUGH THIS TECHNOLOGY CALLED SHRNA, SHORT HAIRPIN
11 RNA. SO IT'S KIND OF A MOLECULAR TOOL TO DO THIS.
12 AND OUR CIRM BOARD JUST APPROVED THIS PROGRAM, AND
13 THE NIH/NHLBI IS CO-FUNDING THIS PHASE 1
14 TRANSITIONING TO A PHASE 2 CLINICAL TRIAL. SO
15 THAT'S JUST BEING LAUNCHED SHORTLY, AND WE ARE VERY
16 EXCITED ABOUT THAT. IT WILL ALSO INCLUDE
17 MANUFACTURING AS WELL AS CLINICAL SITES IN
18 CALIFORNIA.

19 NEXT SLIDE PLEASE. DR. WALTERS AT UCSF
20 BENIOFF CHILDREN'S HOSPITAL IS USING THE CRISPR-CAS9
21 TECHNOLOGY AND THE NONVIRAL DELIVERY TO CORRECT THAT
22 TYPE OR THAT MUTATION THAT LEADS TO SICKLE CELL
23 DISEASE. AND THAT'S IN WHAT'S CALLED THE
24 IND-ENABLING PHASE, WHICH IS CIRM IS FUNDING UNDER
25 THIS COLLABORATIVE FUNDING OPPORTUNITY WITH THE NIH.

BETH C. DRAIN, CA CSR NO. 7152

1 AND IT'S NOW GETTING READY TO PREPARE FOR A CLINICAL
2 TRIAL STAGE. SO STAY TUNED. BY THE TIME WE NEXT
3 SPEAK, THAT WILL BE PROBABLY FURTHER ALONG.

4 AND SIMILARLY, MATT PORTEUS OF STANFORD IS
5 ALSO USING CRISPR-CAS9 TO FIX THIS MUTATION. HE'S
6 USING A DIFFERENT TECHNOLOGY TO MARK WALTERS. WE
7 DON'T KNOW WHICH ONE IS GOING TO BE THE WINNER. AND
8 IN SOME WAYS, THEY CAN BOTH BE WINNERS BECAUSE OF
9 WHAT WE KNOW FROM OTHER TYPES OF TREATMENTS IS THAT
10 CERTAIN SUBSETS OF PATIENTS AND CERTAIN SITUATIONS,
11 ONE APPROACH MAY BE MORE SUCCESSFUL THAN ANOTHER
12 APPROACH. SO THIS ILLUSTRATES KIND OF THE ROBUST
13 PIPELINE THAT IS ALREADY BEING BUILT AT CIRM AND
14 WITH THIS COLLABORATION.

15 AND THIS IS -- JUST KIND OF ON THE
16 SURFACE, THIS PROGRESS IS ALREADY INCREDIBLE, BUT
17 THE INCREDIBLE THING IS HOW OUR TEAM AND THE NIH IN
18 A VERY COMPLEX, HUGE ORGANIZATION ARE WORKING SO
19 EFFICIENTLY TOGETHER THAT THE PI'S ARE SO EXCITED.
20 THEY'VE NEVER SEEN THE NIH MOVE SO FAST. SO IT'S
21 BEEN REALLY FUN FOR BOTH SIDES.

22 NEXT SLIDE PLEASE. I'LL JUST GO THROUGH
23 QUICKLY. STEM CELL TRANSPLANT IS SOMETHING THAT'S
24 ALREADY DONE. THERE'S SOME LIMITATIONS WITH THAT,
25 BUT CIRM HAS FUNDED PROGRAMS TO KIND OF OPTIMIZE THE

BETH C. DRAIN, CA CSR NO. 7152

1 RESULTS OF JUST STEM CELL WITHOUT ANY GENE THERAPY,
2 WITHOUT ANYTHING ELSE TRANSPLANT BECAUSE, ALTHOUGH
3 WE ARE PUSHING FORWARD THESE NOVEL APPROACHES, WE
4 ALSO HAVE PROGRAMS THAT ARE SEEKING TO FIND
5 INNOVATIVE WAYS TO IMPROVE RESULTS WITH ALREADY
6 ESTABLISHED APPROACHES, SUCH AS BLOOD STEM CELL
7 TRANSPLANTS.

8 NEXT SLIDE PLEASE. AND THAT'S PART OF
9 THAT SAME CATEGORY.

10 NEXT SLIDE PLEASE. AND AS I STARTED THE
11 CONVERSATION, OUR PATIENT ADVOCATES ARE INTEGRAL TO
12 THIS ENTIRE PROCESS. THEY ARE INVOLVED IN THESE
13 TRIALS AND SPECIFICALLY IN SICKLE SILL. SO ADRIENNE
14 SHAPIRO, WHO YOU MAY KNOW, HAS A DAUGHTER WITH
15 SICKLE CELL, IS A STAUNCH ADVOCATE, BUT A HIGHLY
16 EDUCATED AND INFORMED AND PROACTIVE VOICE IN TERMS
17 OF NOT JUST ADVOCACY, BUT JUST THE LOGISTICS, THE
18 TECHNICAL ASPECT, AND THE SCIENCE EVEN. SO THEY
19 ASSIST US AND OUR GRANTEES WITH TALKING ABOUT STUDY
20 ENDPOINTS, CONSIDERATIONS AND INFORMED CONSENT,
21 CONSIDERATIONS IN PATIENT RECRUITMENT, SOCIAL
22 DETERMINANTS, THINGS THAT ARE NOT SO OBVIOUS THAT
23 CAN GET IN THE WAY. AND THINGS THAT ARE OBVIOUS IN
24 TERMS OF TRUST OF THE COMMUNITY TO THE SCIENTIFIC
25 COMMUNITY AND THESE TYPES OF TRIALS BECAUSE THERE'S

BETH C. DRAIN, CA CSR NO. 7152

1 HISTORY FOR THAT AS WELL AS RELEVANT STUDY
2 ENDPOINTS.

3 NEXT SLIDE PLEASE. SO THAT'S IT IN TERMS
4 OF KIND OF A DEMONSTRATION CASE OF HOW COLLABORATION
5 KIND OF LEVERAGES THE CALIFORNIA INVESTMENT AND THEN
6 ALSO INCREASES ITS PROBABILITY OF SUCCESS BY
7 PARTNERING WITH OTHERS WHO ARE BOTH FUNDING AND
8 COMMITTED TO THIS FIELD.

9 CONTROLLER YEE: LET ME HAVE YOU JUST TAKE
10 A PAUSE HERE FOR A MOMENT. I JUST WANT TO SEE IF
11 THE COMMITTEE MEMBERS HAD ANY QUESTIONS OR COMMENTS
12 JUST ON THAT LAST PRESENTATION.

13 MR. FISCHER-COLBRIE: INCREDIBLY EXCITING.

14 CONTROLLER YEE: AND IT'S VERY IMPRESSIVE.
15 GO AHEAD, DR. SARKISIAN, PLEASE.

16 DR. SARKISIAN: CONGRATULATIONS. THIS IS
17 SO EXCITING TO SEE THE HUGE IMPACT YOU'RE HAVING.
18 AND SOME OF THE THINGS THAT JUMP OUT AT ME, I THINK,
19 ARE PARTICULARLY EXCITING IS THE WAY YOU WERE ABLE
20 TO PIVOT ON COVID SO QUICKLY. AND I LOVE THAT YOU
21 HAVE USED THE COVID OPPORTUNITY TO EVEN -- IT'S NOT
22 LIKE YOU CHANGED YOUR REQUIREMENTS FOR ALL OF YOUR
23 GRANTS TO REQUIRE A LARGER COMMITMENT TO MAKING SURE
24 THAT THE TRIALS GET OUT TO THE COMMUNITY.

25 ONE QUESTION I HAVE MOVING FORWARD, I

BETH C. DRAIN, CA CSR NO. 7152

1 NOTICE THAT ALL FIVE, THIS IS SOMETHING WE WORK ON
2 AT UCLA, LIKE MOST PEOPLE ARE REALLY ESPECIALLY
3 TRYING TO WORK ON THIS NOW IS ALL FIVE OF THE PI'S
4 YOU SHOWED ARE WHITE MEN. WHAT EFFORTS ARE YOU
5 MAKING, ARE YOU PLANNING TO MAKE TO INCREASE
6 DIVERSITY, NOT SOME OF THE PATIENTS IN THE TRIALS,
7 BUT THE SCIENTISTS AND THE LABS THAT ARE BEING
8 SUPPORTED BY THIS IMPORTANT WORK, IMPORTANT
9 INVESTMENT?

10 DR. MILLAN: THAT'S A VERY GOOD QUESTION.
11 THEY HAPPEN -- YOU'RE RIGHT. IN THIS PARTICULAR
12 CASE THEY DO HAPPEN TO BE ALL WHITE MEN. WE
13 DEFINITELY HAVE FEMALE INVESTIGATORS, I ASSURE YOU.
14 BUT I THINK IT'S A REALLY EXCELLENT QUESTION AND IN
15 FACT IS SOMETHING THAT, YOU KNOW -- FRANCIS COLLINS
16 AT THE NIH, HE HAS THIS TERMINOLOGY CALLED A
17 "MANAL." IT'S A PANEL OF ALL MALES. SO HE WILL NOT
18 PARTICIPATE IN ANY MEETING THAT HAS MANALS. I THINK
19 IT'S A CULTURE THAT WE NEED TO EMBED NOT, JUST AS
20 YOU SAY, WITH THE PARTICIPANTS AND RESEARCH
21 THEMSELVES, BUT THE RESEARCHERS THEMSELVES.

22 AND I DON'T HAVE AN ANSWER TO THAT RIGHT
23 NOW, BUT WE HAVE NOT HAD ANYTHING DELIBERATE IN
24 TERMS OF HOW WE CHOOSE OUR INVESTIGATORS. IT'S
25 PURELY ON SCIENTIFIC MERIT, BUT WE DEFINITELY HAVE

BETH C. DRAIN, CA CSR NO. 7152

1 FOSTERED WHERE WE CAN IN OUR EDUCATIONAL PROGRAMS
2 DIVERSITY AND BACKGROUNDS AS WELL. AND THEN WHEN WE
3 HAVE SCIENTIFIC CONFERENCES, INCLUDING THE GRANTEE
4 MEETING, WHICH I WOULD HIGHLY ENCOURAGE. IT'S SUCH
5 A GREAT -- WE'LL SEND YOU THAT LINK AS WELL. IT'S A
6 RECENT MEETING. IT WAS A TWO-DAY MEETING OF ALL OF
7 OUR -- NOT ALL OF OUR, BUT MANY OF THE
8 INVESTIGATORS, MALE AND FEMALE, OF DIVERSE
9 BACKGROUNDS PRESENTING THEIR WORK. WE MAKE SURE
10 THAT WHERE WE CAN WE HAVE FAIR REPRESENTATION IN
11 THESE SPEAKING ENGAGEMENTS AS WELL. BUT THERE'S
12 DEFINITELY MORE THAT WE CAN DO.

13 MR. LOTT: DR. MILLAN, ON THAT POINT --

14 MR. TORRES: ON THAT POINT I JUST WANT TO
15 MAKE SURE THAT MARIA PUT FORWARD TO THE COMMITTEE
16 NOW THE LANGUAGE THAT WE ADOPTED DURING THE GRANTS
17 REVIEW PROCESS AND HOW WE HAVE SENT A MESSAGE, A
18 CLEAR MESSAGE, TO RESEARCHERS ABOUT DIVERSITY, NOT
19 ONLY IN TERMS OF THEIR CLINICAL TRIALS, BUT ALSO IN
20 TERMS OF THEIR RESEARCH. MARIA, IF YOU WANT TO
21 ARTICULATE THAT, THAT WOULD BE GREAT.

22 DR. MILLAN: YES, ART. SO I DON'T HAVE
23 THE EXACT LANGUAGE, BUT WHAT HAPPENS IS THAT IN THE
24 REVIEW PROCESS, WHEN THEY KIND OF LAY OUT WHAT THEIR
25 PLAN IS, THEY'RE REQUIRED TO PUT TOGETHER DETAILS OR

BETH C. DRAIN, CA CSR NO. 7152

1 AS MUCH AS THEY CAN OF HOW THEY WILL REACH OUT TO
2 THE DIVERSE AND UNDERREPRESENTED POPULATIONS. AND
3 THEN THAT'S CAPTURED INTO THINGS SUCH AS HOW WE
4 CRAFT MILESTONES WHERE IT'S FEASIBLE, LIKE
5 ENROLLMENT, MAKING SURE THAT THEY'RE NOT ALL COMING
6 FROM PRIVILEGED, HIGH-END COMMUNITY CENTERS IN THE
7 ENROLLMENT, BUT THAT IT TRULY DOES INVOLVE PATIENTS
8 OUTSIDE.

9 I WILL SAY THAT FOR THE CONVALESCENT
10 PLASMA, THAT IS SOMETHING THAT IS A VERY, VERY
11 IMPORTANT PART OF HOW THE OPERATIONS ARE BEING
12 CARRIED OUT. IN FACT, CIRM THEN ALSO FUNDED A
13 SUPPLEMENT TO THAT CONVALESCENT PLASMA WHERE THAT
14 ALLOWS UCI TO DEPLOY ITS RIVERSIDE KIND OF
15 COLLABORATIONS TO MAKE SURE THAT MORE OF THOSE
16 POPULATIONS IN RIVERSIDE HAVE ACCESS TO THIS
17 RESEARCH. WE HAVE MEMBERS OF THE ADVISORY PANEL,
18 SUCH AS SHEILA YOUNG WHO VERY MUCH IS INVOLVED IN
19 ALL OF THESE AND IS VERY VOCAL ABOUT WHAT IT WOULD
20 TAKE TO GAIN THE TRUST OF THE COMMUNITIES.

21 SO THESE TYPES OF PLANS ARE PUT IN, BUT
22 THEN WE FOLLOW UP ON IT IN ADVISORY PANELS, AND WE
23 ACTUALLY HAVE WHERE WE CAN EMBED IT IN TERMS OF THE
24 EXPECTATIONS WITHIN THE MILESTONES AND THE SUCCESS
25 MEASURES THAT WE FOLLOW AT CIRM.

BETH C. DRAIN, CA CSR NO. 7152

1 MR. LOTT: SENATOR TORRES STOLE MY THUNDER
2 THERE, BUT I'M GLAD HE DID. HE GAVE YOU A GOOD
3 SAVE. IT REALLY ISN'T WHAT YOU ASK FOR. AND YOU
4 SOUND LIKE YOU'RE DOING IT, BUT IT MIGHT BE GOOD TO
5 TAKE A STRONGER REVIEW OF HOW YOU APPROACH YOUR
6 PROPOSALS, YOUR SOLICITATIONS, BECAUSE YOU CAN, YOU
7 HAVE A VERY POWERFUL FORUM HERE. AND IF YOU
8 SPECIFY, IF YOU MAKE IT REALLY CLEAR IN THE
9 STANDARDS AND THE REQUIREMENTS WHAT YOU NEED YOUR
10 CONTRACTORS TO DO, WE'VE DONE THIS IN LOCAL
11 GOVERNMENT. THERE'S ALL KINDS OF LANGUAGE SETS THAT
12 YOU CAN LOOK AT TO MAKE CERTAIN THAT MINORITY AND
13 DIVERSE COMMUNITIES ARE INCLUDED IN
14 GOVERNMENT-FUNDED PROJECTS.

15 SO THIS IS NOT SOMETHING THAT NEEDS TO BE
16 REINVENTED. I'M NOT TRYING TO CHASTISE YOU.

17 DR. MILLAN: ABSOLUTELY NOT.

18 MR. LOTT: IT'S JUST SOMETHING THAT HAS TO
19 BE PAID ATTENTION TO.

20 MR. TORRES: I THINK IT'S IMPORTANT, JIM,
21 TO SEND YOU THE LANGUAGE THAT WE PROVIDE ALL
22 APPLICANTS BECAUSE IT'S NEW LANGUAGE THAT WE
23 INSTITUTED TO MAKE SURE THAT DIVERSITY IS PARAMOUNT
24 IN TERMS OF THIS RESEARCH BECAUSE, AS YOU KNOW WITH
25 SICKLE CELL, IT AFFECTS LATINOS AS WELL AS

BETH C. DRAIN, CA CSR NO. 7152

1 AFRICAN-AMERICANS. IN THE ABSOLUTE HORRIBLE
2 MISBALANCE OF COVID PATIENTS ALSO WHICH IS WHY DR.
3 MILLAN WAS CITING DR. ZAIA'S CLINICAL TRIAL AT CITY
4 OF HOPE TO MAKE SURE THAT THERE'S DIVERSITY OUTREACH
5 BECAUSE WE ARE NOT REACHING ENOUGH OF OUR OWN PEOPLE
6 TO MAKE SURE WE KNOW WHAT TO DO NEXT.

7 DR. MILLAN: IT IS A WORK IN PROGRESS.
8 BUT AS YOU SAY, ABSOLUTELY. WE'RE LEVERAGING WHAT
9 ALREADY IS OUT THERE, BUT I THINK AS A COMMUNITY, AS
10 A SCIENTIFIC COMMUNITY, IN OUR CONVERSATIONS WITH
11 NATIONAL ACADEMIES, NIH, WE STILL HAVE SOME WORK TO
12 DO. SO THE INPUT FROM THIS GROUP AND OTHER KIND OF
13 FUTURE ADVISORY GROUPS TO CIRM AND OUR BOARD
14 MEMBERS, SENATOR TORRES, YSABEL DURON, WHO'S ON OUR
15 BOARD, THEY'RE JUST GREAT LEADERS. THEY ARE HOOKED
16 INTO OTHER ASPECTS OF HOW TO DRIVE THESE INITIATIVES
17 FORWARD. SO WE'RE VERY FORTUNATE FOR THAT. BUT WE
18 ARE JUST STARTING. THIS IS JUST THE START, BUT'S IT
19 AN IMPORTANT START.

20 CHAIRMAN THOMAS: MARIA, ONE LAST THING ON
21 THIS POINT.

22 MR. TORRES: WE ALSO HAVE A PROVISION FOR
23 THE ESTABLISHMENT OF A 17-MEMBER WORKING GROUP ON
24 AFFORDABILITY AND ACCESSIBILITY. AND THAT WAS
25 SPECIFICALLY TIED TO PROVIDE MUCH MORE SUBSTANTIVE

BETH C. DRAIN, CA CSR NO. 7152

1 OUTREACH TO COMMUNITIES OF COLOR AND DIVERSITY WHICH
2 HAVEN'T RECEIVED THAT.

3 WITH MY OTHER HAT AS A MEMBER OF THE BOARD
4 OF COVER CALIFORNIA, WE'RE LOOKING AT THAT IN TERMS
5 OF AFFORDABILITY AND ACCESSIBILITY, ESPECIALLY AS
6 THESE NEW TREATMENTS EMERGE. THANK YOU.

7 CONTROLLER YEE: BEFORE, CHAIRMAN THOMAS,
8 I TURN TO YOU, DR. SARKISIAN'S QUESTION SPECIFICALLY
9 RELATED TO THE DIVERSITY AMONG INVESTIGATORS. AND I
10 HOPE, DR. MILLAN, YOU WILL TALK A LITTLE BIT ABOUT
11 SOME OF THE EDUCATIONAL PROGRAMS AND WHAT WE'RE
12 DOING WITH SOME OF OUR YOUNG PEOPLE AND REALLY
13 EXPOSING THEM, HOW WE'RE BUILDING A PIPELINE, I
14 GUESS, OF JUST PROFESSIONALS IN THIS FIELD.

15 IN SOME RESPECTS I LOOK AT THIS WHERE
16 WE'RE VERY FOCUSED ON CERTAINLY THE COMMUNITY SIDE,
17 THE PATIENT SIDE, HOW WE'RE DOING THE OUTREACH TO BE
18 SURE THAT WE ARE CAPTURING THE DISPROPORTIONATELY
19 AFFECTED COMMUNITIES AND ALL THAT GREAT WORK THAT
20 CIRM HAS DONE, INCLUDING THE LANGUAGE THAT SENATOR
21 TORRES JUST TALKED ABOUT, BUT I DO THINK WE'RE
22 PROBABLY LEADING UP TO JUST HOW WHEN DOORS OF
23 OPPORTUNITIES HAVE BEEN CLOSED IN THE PAST, THERE'S
24 A MANIFESTATION TO THAT; AND THAT IS THAT WE'RE NOT
25 SEEING NECESSARILY THE BROAD COMMUNITY OF

BETH C. DRAIN, CA CSR NO. 7152

1 INVESTIGATORS THAT WE WOULD LIKE TO SEE REPRESENTING
2 OUR MORE DIVERSE COMMUNITIES AT THIS POINT. BUT
3 IT'S NOT TO SAY IT'S NOT DEVELOPED, AND I THINK CIRM
4 IS DOING A GOOD JOB OF AT LEAST GETTING OUR YOUNG
5 PEOPLE EARLY ON EXPOSED TO THESE DISCIPLINES.

6 CHAIRMAN THOMAS.

7 CHAIRMAN THOMAS: THAT IS EXACTLY WHAT I
8 WAS ABOUT TO SAY. SO I WOULD STRONGLY RECOMMEND THE
9 BRIDGES PROGRAM, WHICH IS MEANT TO GET GRADUATE
10 STUDENT LEVEL EXPOSURE TO STEM CELL WORK BY TAKING
11 STUDENTS AND HAVING THEM DO INTERNSHIPS AT
12 UNIVERSITIES THAT HAVE STEM CELL PROGRAMS ON THE ONE
13 HAND AND EVEN BELOW THAT OUR HIGH SCHOOL SUMMER
14 PROGRAMS, WHICH ARE MEANT TO TAKE TYPICALLY AP BIO
15 LEVEL STUDENTS AND HAVE THEM -- WHO HAD SOME
16 EXPOSURE TO STEM CELLS AND HAVE THEM DO CRASH
17 COURSES OVER EIGHT WEEKS AT A NUMBER OF OUR ACADEMIC
18 INSTITUTIONS THROUGHOUT THE STATE AFTER WHICH THEY
19 LITERALLY COME OUT SOUNDING LIKE PH.D.'S. IT'S VERY
20 FUNNY TO SEE AND INCREDIBLY REWARDING.

21 BUT IF YOU TAKE THOSE TWO PROGRAMS, BOTH
22 OF THOSE ARE HIGHLY DIVERSE. AND WHAT THEY'RE BOTH
23 DOING IS REALLY GENERATING TREMENDOUS INTEREST IN
24 THE FIELD OF REGENERATIVE MEDICINE AND SENDING THESE
25 STUDENTS ON THEIR WAY TO ULTIMATELY BEING

BETH C. DRAIN, CA CSR NO. 7152

1 PROFESSIONALS IN THE FIELD, WHETHER IT'S AS
2 ACADEMICIANS OR PART OF THE WORKFORCE OR WHATEVER.

3 BUT GETTING TO DR. SARKISIAN'S INITIAL
4 QUESTION, MANY OF THESE PEOPLE -- WE'VE NOW HAD
5 THESE PROGRAMS FOR A NUMBER OF YEARS. AND SHOUT OUT
6 TO SENATOR TORRES WHO WAS THE INSPIRATION FOR THESE
7 A NUMBER OF YEARS AGO. THESE KIDS ARE GOING TO BE
8 THE DOCTORS OF TOMORROW AND THE SCIENTISTS OF
9 TOMORROW WHO WILL BE INVOLVED IN AWARDS SUCH AS
10 THOSE THAT WE ARE DISCUSSING HERE.

11 SO WE ARE VERY, VERY MINDFUL OF THAT ISSUE
12 OF FILLING THE PIPELINE AND SETTING THE TABLE FOR A
13 DIVERSE GROUP OF RESEARCHERS AND PHYSICIANS IN THIS
14 FIELD GOING FORWARD. THANK YOU.

15 CONTROLLER YEE: THANK YOU, CHAIRMAN
16 THOMAS.

17 DR. SARKISIAN: THAT'S GREAT. I REALLY
18 APPRECIATE, AND I DIDN'T MEAN IT SO MUCH AS A
19 CRITICISM BECAUSE IT'S SOMETHING THAT WE STRUGGLE
20 WITH AT UCLA. EVERY ACADEMIC CENTER STRUGGLES WITH
21 THIS. ONE THING THAT -- I'LL LOOK FORWARD TO SEEING
22 THE RESULT OF THAT. BUT AS YOU KNOW, 40 PERCENT OF
23 M.D./PH.D. STUDENTS NEVER END UP DOING RESEARCH,
24 NEVER GET A GRANT, AN INDEPENDENT GRANT FROM NIH.
25 THERE'S SO MANY OPPORTUNITIES FOR PEOPLE TO FALL

1 OFF.

2 ONE OF THE THINGS WE'VE BEEN TALKING ABOUT
3 AT UCLA IS WE NEED TO REPLACE THE PIPELINE MODEL
4 WITH A VERY L.A. MODEL, AN ON-RAMPS MODEL, SO TO
5 GIVE PEOPLE LIKE YOU'RE DOING AT THE HIGH SCHOOL, AT
6 THE POST-DOC, AT THE GRADUATE STUDENT, WE NEED TO
7 JUST KEEP BUILDING THESE OPPORTUNITIES FOR ON-RAMPS
8 SO THAT IF YOU MISS THE START OF THE PIPELINE IN
9 HIGH SCHOOL OR YOUR FIRST YEAR AT UCLA YOU GET A C
10 IN AN IMPORTANT CLASS, THAT SHOULDN'T BE THE END OF
11 THE LINE. THERE SHOULD BE OTHER OPPORTUNITIES TO
12 COME BACK. THAT'S GREAT. KEEP UP THE FABULOUS
13 WORK.

14 CONTROLLER YEE: THANK YOU, DR. SARKISIAN.
15 GREAT POINT. DR. MILLAN.

16 DR. MILLAN: DR. SARKISIAN, THESE ARE ALL
17 EXCELLENT POINTS, AND WE LOOK FORWARD TO INTERACTING
18 WITH YOU AND THE OTHER MEMBERS HERE ON THESE OTHER
19 TOPICS BECAUSE I KNOW IT'S A FINANCIAL MEETING, BUT
20 ALL OF WHAT YOU BRING UP ARE ABSOLUTELY CRITICAL, ON
21 OUR MIND, LOVE THE ONRAMP, AND THE OPPORTUNITIES IN
22 CREATING PATHWAYS BECAUSE WE HAVE SEEN SUCCESSES OUT
23 THERE OF OUR BRIDGES AND SPARKS PROGRAMS FOR SURE
24 AND I'LL POINT THAT OUT. HOWEVER, WE CAN DO EVEN
25 MORE IN TERMS OF CREATING THESE RAMPS AND THESE

BETH C. DRAIN, CA CSR NO. 7152

1 PATHWAYS THAT MAKES IT NOT AS -- ORGANIC IS GREAT,
2 BUT IT'S ALWAYS GREAT WHEN YOU HAVE MORE SHOTS ON
3 GOAL FOR FOLKS BEING ABLE TO MOVE FORWARD.

4 SO NOW, AND I WILL GO THROUGH THESE RATHER
5 QUICKLY. I APOLOGIZE, BUT I DID WANT TO POINT OUT
6 THE INNOVATION AND THE EARLY STAGE PROGRAMS THAT WE
7 CAN START LOOKING FORWARD TO SEEING HOW THESE PLAY
8 OUT IN THE NEAR FUTURE WITH THE NEW PROP 14, FOR
9 INSTANCE, MECHANISM.

10 SO SOME OF THE PROGRAMS THAT WE'RE
11 CURRENTLY FUNDING, ONE OF THEM IS IN PARKINSON'S
12 DISEASE. WE HAVE A VARIETY OF PROGRAMS WE'VE FUNDED
13 IN PARKINSON'S DISEASE. THIS ONE I POINT OUT
14 BECAUSE IT'S ALSO A GENE THERAPY APPROACH THAT USES
15 AN AAV, ADENO-ASSOCIATED VIRUS -- IT'S, AGAIN, A
16 NONINFECTIOUS FORM OF THE VIRUS -- TO DELIVER GLIAL
17 DERIVED NEUROTROPHIC WHICH IS KIND OF A GROWTH
18 FACTOR. THE INTENT OF THIS IS THAT THE CELL BECOMES
19 KIND OF THE SHUTTLE TO BRING THIS FACTOR INTO THE
20 AREAS OF THE BRAIN THAT SAVE THE NEURONS AND THAT
21 RESTORE THE PRODUCTION OF DOPAMINE THAT ARE ALL
22 RELATED TO KIND OF THE UNDERLYING PATHOPHYSIOLOGY
23 FOR PARKINSON'S.

24 I JUST WANT TO SAY, WITHOUT GOING INTO
25 DETAIL ON THIS, IN GENERAL TERMS, FOR PROGRAMS LIKE

BETH C. DRAIN, CA CSR NO. 7152

1 THIS TO GET FUNDED, THEY HAVE TO HAVE VERY STRONG
2 DATA, PRECLINICAL DATA, TO COME IN AND A FEASIBLE
3 PLAN AND THEN ALSO DEMONSTRATE THAT THIS IS
4 SOMETHING THAT COULD BE DONE WITH A PATHWAY IN THE
5 REGULATORY SPACE. AND ONE OF THE THINGS WITH THIS
6 PROGRAM, AS CUTTING-EDGE AS IT IS, IS THEY HAD JUST
7 RECENTLY ANNOUNCED THE DOSING, THE SAFE DOSING OF
8 THE FIRST PATIENT. SO, AGAIN, IT'S EARLY DAYS AND
9 NEEDS TO START WITH UNTIL YOU TEST THIS IN THE
10 SAFEST WAY POSSIBLE WITH THE BEST PLAN, WE DON'T
11 KNOW HOW IT WILL TURN OUT. BUT, AGAIN, IT JUST
12 POINTS TO ONE OF THE PROGRAMS WITHIN THE DISEASE OF
13 THE BRAIN, NEURODEGENERATION, AGAIN, ONE OF THE
14 FOCUSES THAT'S MENTIONED IN THE PROP 14.

15 NEXT SLIDE PLEASE. AND IN ANOTHER NEURAL
16 INDICATION, THIS PROGRAM THAT'S BEING DEVELOPED IN
17 AN EARLIER STAGE CALLED TRANSLATIONAL SEEKS TO USE
18 CELL THERAPY TO CONTROL RECALCITRANT SEIZURES THAT
19 COULD BE FATAL. AND THIS WORK SUPPORTS EARLY WORK
20 BY DR. KRIEGSTEIN AT UCSF AND HAS SPUN IT OUT TO A
21 COMPANY, AND THE COMPANY NEURONA IS BEING FUNDED BY
22 CIRM.

23 SO THIS KIND OF ILLUSTRATES A MODEL THAT
24 IS DEFINITELY A MODEL THAT WE'VE SEEN WITH MANY OF
25 OUR PROGRAMS WHERE SOME OF THE EARLY WORK IS

BETH C. DRAIN, CA CSR NO. 7152

1 SUPPORTED WITHIN THE UNIVERSITY, BUT ALSO WE FUND
2 THE START-UP, AND THE SCIENTISTS ARE MARKEDLY
3 INVOLVED. SO THIS IDEA OF INDUSTRY/ACADEMIC
4 PARTNERSHIP IS ALSO EMBEDDED INTO HOW WE FUND THESE
5 PROGRAMS BECAUSE WE KNOW THAT WITH THESE COMPLEX
6 THERAPIES, THE SCIENCE IS THE DRIVER. AND SO THE
7 WAY OF ENABLING THIS WORK IS MAKING SURE THAT WE
8 TAKE THAT INTO CONSIDERATION IN HOW WE FUND THE
9 PROGRAMS.

10 NEXT SLIDE. AND THIS PROGRAM IS RELATED
11 TO SPINAL CORD INJURY AND RESTORING THE PATHWAYS IN
12 THE SPINAL CORD. I BRING IT UP BECAUSE THERE IS A
13 LATER STAGE PROGRAM THAT WE HAVE FUNDED. JAKE
14 JAVIER IS ONE OF THE VISIBLE PATIENT ADVOCATES AND
15 WAS ONE OF THE EARLY PATIENTS ENROLLED IN THIS
16 TRIAL. SO YOU MAY HAVE SEEN HIM. THAT WAS WITH A
17 TRIAL PERFORMED BY ASTERIAS, NOW TAKEN ON BY A
18 COMPANY CALLED LINEAGE.

19 BUT IN ADDITION TO THAT MOVING ALONG WITH
20 THEIR CELL PRODUCT, WE ALSO FUND A PROGRAM OUT OF UC
21 SAN DIEGO AT AN EARLY STAGE TRIAL. JUST WANTED TO
22 POINT OUT THAT THIS IS ALL BASED ON SCIENCE. SO
23 THIS STEM CELL CLINICAL TRIAL OR THE ATTEMPT TO
24 BRING THIS TO CLINICAL TRIAL IS BASED ON THINGS SUCH
25 AS THIS. THIS IS A PICTURE OF ACTUALLY AXONS BEING

BETH C. DRAIN, CA CSR NO. 7152

1 REESTABLISHED ACROSS A DAMAGED SPINAL CORD. AND
2 THAT IS A HUGE DEAL BECAUSE WHEN YOU'RE TALKING
3 ABOUT BEING ABLE TO TAKE A CELL THERAPY -- MY
4 BACKGROUND IS AS A TRANSPLANT SURGEON. SO WHEN WE
5 HAVE DISEASED LIVERS, KIDNEYS, ORGANS, WE SIMPLY
6 REPLACE IT, A GROSS MEANING DEMONSTRATION IN ITS
7 MOST ULTIMATE SENSE OF REPLACING SOMETHING THAT'S
8 DYSFUNCTIONAL OR NO LONGER WORKING. WHEN YOU'RE
9 TALKING ABOUT CELL THERAPY, YOU'RE TRYING TO
10 REESTABLISH THESE EITHER MOLECULAR OR MICROSCOPIC
11 EVENTS. AND SO THIS IS A REALLY EXCITING PROGRAM
12 THAT WE FUNDED, AND IT WILL BE IN OUR PIPELINE, AND
13 WE EXPECT TO SEE MORE PROGRESS IN THAT.

14 NEXT SLIDE PLEASE. AND THEN ALSO ON THE
15 HORIZON IS OUR PRODUCTS RELATED TO WHAT'S CALLED
16 IPSC CELLS, INDUCED PLURIPOTENT STEM CELLS, WHICH IS
17 YOU'VE HEARD OF IT BECAUSE IT WAS A SUBJECT OF A
18 NOBEL PRIZE TO SHINYA YAMANAKA AND OTHERS, ONE OF
19 OUR INVESTIGATORS HERE IN SAN FRANCISCO WHO ALSO IS
20 IN JAPAN, BUT THE IPSC TECHNOLOGY TAKES SKIN CELLS
21 OR BLOOD CELLS, REPROGRAMS THEM SO THEY ARE
22 EMBRYONIC STEM CELL-LIKE, MEANING THAT THEY CAN THEN
23 DIFFERENTIATE INTO ANY CELL OR ORGAN UNDER THE RIGHT
24 CONDITIONS. SO TAKING THIS TECHNOLOGY AND MARRYING
25 IT WITH GENE THERAPY, SO TAKING ALL OF THE -- JUST

BETH C. DRAIN, CA CSR NO. 7152

1 STEM CELL BIOLOGY WAS A BIG DEAL IN 2004 WITH THE
2 INITIAL PROPOSITION. AND THERE WAS THEN PROGRESS IN
3 TERMS OF, WELL, YOU CAN ACTUALLY REPROGRAM CELLS
4 THAT ARE ALREADY MATURE LIKE THE SKIN AND OUR BLOOD
5 CELLS AND MAKE THEM EMBRYONIC STEM CELL-LIKE. AND
6 NOW THE PROGRESS IS TAKING THOSE IPSC AND THEN GENE
7 MODIFYING THEM TO CREATE POTENTIAL PIPELINES.

8 SO IN THIS PARTICULAR CASE, IT'S TARGETING
9 THIS CONDITION CALLED DYSTROPHIC EPIDERMOLYSIS
10 BULLOSA WHICH IS A HORRIBLE DISEASE. IT'S CAUSED BY
11 A MUTATION IN THE BASEMENT MEMBRANE. SO THESE
12 BABIES, CHILDREN, AND ADULTS WHO HAVE THIS HAVE
13 CONTINUOUS SLOUGHING OF THEIR SKIN BECAUSE ANY EVEN
14 LIGHT FRICTION WOULD CAUSE THE SKIN TO JUST DENUDE.
15 ONE CAN IMAGINE IT'S LIKE LIVING WITH THIRD-DEGREE
16 BURNS WHERE THERE'S ALREADY A HIGH MORTALITY WITH
17 YOUR SKIN NOT THERE. SO YOU'RE EXPOSED TO
18 INFECTIONS AND THE PAIN. THIS IS A CHRONIC
19 CONDITION AND HIGH COST OF MEDICAL CARE AS WELL AS
20 AN INCREDIBLY AWFUL QUALITY OF LIFE.

21 SO THIS PROGRAM AT STANFORD SEEKS TO USE
22 GENE THERAPY TO CORRECT THE DEFECT IN THE BASEMENT
23 MEMBRANE CONNECTIVE TISSUES, AND THAT'S UNDER WAY.
24 IT'S IN WHAT'S CALLED TRANSLATIONAL STAGE. THEY'RE
25 DOING THE TYPE OF RESEARCH NEEDED TO GET TO AN IND

1 SUCCESS IN THE CLINICS.

2 NEXT SLIDE PLEASE. THOSE ARE JUST SOME
3 EXAMPLES. TO TRY TO GO THROUGH THIS PORTFOLIO OF
4 250 PROGRAMS WOULD BE IMPOSSIBLE. SO I JUST WANTED
5 TO HIGHLIGHT THOSE. THEY'RE ALL OUR FAVORITES.
6 IT'S NOT JUST BECAUSE THEY'RE OUR FAVORITES, THEY
7 ARE OUR FAVORITES, BUT THEY'RE ALL OUR FAVORITES.
8 IT'S BECAUSE IT ILLUSTRATES KIND OF THE VALUE
9 PROPOSITION AND OF HOW WE DERISK THIS AMAZING
10 SCIENCE AND GET IT THROUGH WHAT IT NEEDS TO GET
11 THROUGH, THIS VERY COMPLEX AND WINDY ROAD, TO GET TO
12 THE CLINICS AND THEN BEYOND.

13 I'M JUST GOING TO GO THROUGH THESE PARTS
14 VERY, VERY QUICKLY. WE'VE SET UP INFRASTRUCTURES
15 SUCH AS CREATING THE LARGEST REPOSITORY OF THESE
16 TYPES OF CELLS THAT REPRESENT THE VARIETY OF
17 DIFFERENT DISEASE INDICATIONS SO THEN SCIENTISTS AND
18 DEVELOPERS CAN TAKE THE PLURIPOTENT STEM CELLS FROM
19 VARIOUS DISEASE TARGETS, DIFFERENTIATE THEM, LET'S
20 SAY, INTO A BRAIN TISSUE, WHICH IS REALLY HARD TO
21 TAKE A BRAIN BIOPSY, AND THEN ONE CAN USE THAT FOR
22 THINGS SUCH AS DRUG DISCOVERY OR MECHANISTIC STUDIES
23 THAT THEN LEAD TO OTHER TYPES OF THERAPIES. IT
24 DOESN'T NECESSARILY NEED TO BE A CELL THERAPY, BUT
25 THE CELLS THEMSELVES, THE STEM CELLS THEMSELVES

BETH C. DRAIN, CA CSR NO. 7152

1 ENABLE THE DISCOVERY OF THERAPIES.

2 SO THIS IPSC REPOSITORY IS COMPOSED OF
3 2600 CIRM LINES. IT'S USED BY ACADEMIC AND
4 INDUSTRY. IT HAS BEEN THE REASON FOR COLLABORATIONS
5 WITH ENTITIES SUCH AS THE BROAD INSTITUTE, MIT,
6 HARVARD, THE CHAN ZUCKERBERG INITIATIVE IN TERMS OF
7 SINGLE CELL TYPE ANALYSIS THROUGH OUR GENOMICS
8 PROGRAM.

9 NEXT SLIDE. AND HERE IN THE RIGHT-HAND
10 CORNER IS ALL OF THE INSTITUTIONS THAT WERE
11 INVOLVED. IT'S A MULTI-INSTITUTIONS EFFORT.

12 NEXT SLIDE PLEASE. AND IN ADDITION TO THE
13 IPSC BANK, WE HAD PREVIOUSLY FUNDED A GENOMICS
14 PROGRAM WHICH CREATED THIS HUB FOR DATA SHARING OF
15 THIS ROBUST EXPLOSION OF GENOMICS DATA THAT WILL
16 ENABLE KIND OF THE FUTURE OF HOW WE ADVANCE
17 PRECISION MEDICINE AND REGENERATIVE MEDICINE.

18 NEXT SLIDE. SO HERE'S OUR TOPIC,
19 EDUCATION, TRAINING THE NEXT GENERATION. SO THIS IS
20 A PICTURE OF ONE OF THE GRADUATES OF THE BRIDGES
21 STUDENT AT HER -- SHE WORKS NOW FOR NOVO. AND WE
22 HAVE A BRIDGES MEETING THAT J.T. HAD TALKED ABOUT.
23 ART TORRES AND J.T. ATTEND EVERY SINGLE ONE OF THESE
24 MEETINGS. IT'S KIND OF ONE OF THE PRIDE AND JOYS OF
25 CIRM WHERE OUR STUDENTS PRESENT WHAT THEY'VE BEEN UP

BETH C. DRAIN, CA CSR NO. 7152

1 TO AND THEY ALSO LEARN FROM THE OTHER SCIENTISTS.
2 AND THIS STUDENT CAME TO ME AND WAS SO EXCITED. SHE
3 WAS BUBBLING WITH ENTHUSIASM TALKING ABOUT HER WHOLE
4 JOURNEY AND HOW YOUNG SHE WAS IN TERMS OF WHAT
5 EXPOSURE SHE GOT AT ALL THE VARIOUS BOTH COMPANY AND
6 ACADEMIC LABS THROUGH THE CIRM PROGRAM. AND THEN
7 NOW SHE WAS OFFERED A JOB RIGHT OUT OF SCHOOL WITH A
8 COMPANY THAT'S DEVELOPING EMBRYONIC STEM CELL
9 SOLUTIONS FOR DIABETES.

10 AND THEN THE OTHER ASPECT OF IT IS PATIENT
11 ENGAGEMENT AND COMMUNITY OUTREACH AS PART OF OUR
12 EDUCATIONAL PROGRAM. SHE SAID THAT THAT REALLY
13 NAILED IT FOR HER IN TERMS OF WHY SHE CHOSE THIS.
14 SHE WAS INFUSED WITH THIS MISSION BECAUSE SHE
15 REALIZED THROUGH THOSE INTERACTIONS WHAT THIS MEANT,
16 WHAT HER PLACE COULD BE IN THIS WORLD TO IMPACT
17 THOSE COMMUNITIES AND THOSE PATIENTS.

18 NEXT SLIDE PLEASE. SO THE BRIDGES PROGRAM
19 IS A PROGRAM THAT BRIDGES THE OPPORTUNITIES OF
20 STUDENTS WHO ARE OFTEN FROM UNDERPRIVILEGED
21 BACKGROUNDS OR UNDERREPRESENTED BACKGROUNDS IN THE
22 CAL STATE UNIVERSITIES AROUND CALIFORNIA. AND THE
23 PROGRAMS HAVE A CURRICULUM THAT, AS J.T. DESCRIBED,
24 EXPOSES THEM TO THE SUBJECT OF SCIENCE, BUT ALSO
25 GIVES THEM PRACTICAL EXPERIENCE AND PARTNERED WITH

BETH C. DRAIN, CA CSR NO. 7152

1 LABS IN TOP ACADEMIC INSTITUTIONS THAT HAVE VERY
2 ESTABLISHED PROGRAMS, SUCH AS STANFORD AND UCSD.

3 NEXT SLIDE PLEASE. AND THIS HAS LED TO
4 OVER 1600 TRAINEES COMING OUT OF THIS PROGRAM, 51
5 PERCENT OF THEM FIRST GENERATION COLLEGE STUDENTS.
6 IT'S INVOLVED OVER 200 MENTORS. AND THE MENTORS
7 THEMSELVES, WHENEVER WE ARE AT THESE MEETINGS, COME
8 UP TO ME AND SAY THAT'S ONE OF THE MOST -- BEST
9 INVESTMENTS CIRM HAS MADE BECAUSE WHEN THESE
10 STUDENTS COME INTO MY LAB, THEY ARE SO PRODUCTIVE
11 AND CONTRIBUTE SO MUCH. AND THEN OFTEN THEY HIRE
12 THEM OR THEY'RE NABBED BY OTHER ENTITIES BECAUSE
13 THEY GET THE SPECIALIZED EXPOSURE AND SPECIALIZED
14 SKILL SETS.

15 IT INVOLVES 60 HOST INSTITUTIONS AND IT'S
16 GROWING. 33 PERCENT ARE BIOTECH COMPANIES AND
17 APPROXIMATELY 70 PERCENT ARE ACADEMIC AND NONPROFIT.
18 AS YOU SEE THE PIE CHART, THE RESULT IS THAT THERE
19 ARE MANY THAT GO ON TO POSTGRADUATE WORK EVEN AFTER
20 THIS PROGRAM.

21 NEXT SLIDE PLEASE. ABOUT 60 PERCENT OF
22 THEM END UP GETTING JOBS IN R&D, 70 PERCENT ACADEMIC
23 NONPROFIT, AND 33 PERCENT IN BIOTECH. AND 35
24 PERCENT PURSUE GRADUATE PROGRAMS, PH.D.,
25 PROFESSIONAL, MEDICAL SCHOOL, AND OTHER GRADUATE

BETH C. DRAIN, CA CSR NO. 7152

1 PROGRAMS. THEY'VE CONTRIBUTED TO OVER 300
2 PUBLICATIONS IN SCIENTIFIC JOURNALS.

3 THERE ARE SO MANY STORIES, PERSONAL
4 STORIES, OF THESE STUDENTS. AND EVEN NOW,
5 ESPECIALLY WITH THE PASSAGE OF PROP 14, MANY ARE
6 COMING OUT OF THE WOODWORK SAYING I WAS A STUDENT
7 AND NOW I'M ON FACULTY. THEY'RE FOLKS WHO COME WITH
8 ALL OF THESE ACCOLADES AND AWARDS NOW AND SAID I
9 GREW UP UNDER THE CIRM PROGRAMS. AND IT'S AMAZING.
10 ALSO REMINDS ME I'M NOT AS YOUNG AS I THOUGHT I WAS.
11 BUT THEY WERE HERE. THEY PRECEDED ME IN TERMS OF
12 BEING INVOLVED IN THESE PROGRAMS BEFORE I WAS AT
13 CIRM. I WAS STILL PROBABLY IN THE OR AT THAT TIME.
14 BUT IT'S REALLY JUST SO AMAZING TO HEAR THEIR
15 STORIES.

16 AND THEN THERE'S ALSO A PROGRAM CALLED THE
17 SPARK PROGRAM THAT'S GEARED TO OUR HIGH SCHOOL
18 STUDENTS WITH EXPOSURE TO THIS FIELD, AND MANY OF
19 THESE STUDENTS ARE STILL IN HIGH SCHOOL. BUT OF
20 THOSE WHO HAVE ATTENDED THIS PROGRAM, 50 PERCENT ARE
21 IN THE UC SYSTEM, 20 PERCENT ARE EITHER IN PRIVATES
22 OR IN THE CAL STATE SYSTEM, AND OTHERS HAVE ATTENDED
23 SOME LESS KNOWN INSTITUTIONS LIKE YALE, COLUMBIA,
24 HARVARD, HOPKINS, AND DUKE. JUST KIDDING. SO THEY
25 VENTURE BOTH -- STAY IN CALIFORNIA AND INTEGRATE

BETH C. DRAIN, CA CSR NO. 7152

1 HERE, BUT ALSO GO OUT TO THE OUTSIDE WORLD AND THEN
2 SOME OF THEM COME BACK. AND THAT'S IT, I THINK, FOR
3 THE EDUCATION PROGRAM.

4 NEXT SLIDE. SO WITH ALL THIS, I'M JUST
5 GOING TO END WITH SAYING WHAT'S OUR REPORT CARD
6 LIKE. IN 2016 WE LAUNCHED AN EXTREMELY BOLD
7 STRATEGIC PLAN. SO AS MANY OF YOU HAD NOTED, WE'RE
8 GOING TO NEED A NEW STRATEGIC PLAN, BUT I'D LIKE TO
9 GIVE AN UPDATE BECAUSE BY THE END OF THIS YEAR, WE
10 WILL BE FINISHED WITH THAT STRATEGIC PLAN.

11 WE CHOSE EXTREMELY BOLD GOALS. IN FACT,
12 MOST OF THESE WERE STRETCH GOALS, ESPECIALLY THE
13 CLINICAL TRIALS. WHEN WE FIRST STARTED, THERE WERE
14 17 CLINICAL TRIALS THAT CIRM HAD FUNDED. WHEN WE
15 FIRST STARTED, MOST PROGRAMS WEREN'T PARTNERED WITH
16 INDUSTRY, AND THERE WAS MAYBE A COUPLE HUNDRED
17 MILLION DOLLARS OF INVESTMENT INTO OUR PROGRAMS FROM
18 INDUSTRY.

19 SO WHERE ARE WE TODAY? WE SET A GOAL OF
20 DISCOVERING 50 NEW CANDIDATES AND THERE ARE 46
21 LIMITED ONLY BECAUSE WE WERE RUNNING OUT OF FUNDS.
22 THERE ARE A LOT MORE PROGRAM THAT COULD HAVE BEEN
23 FUNDED, BUT WE COULDN'T BECAUSE WE WERE RUNNING OUT
24 OF PROP 71 FUNDS. WE INCREASED -- BECAUSE OF THE
25 QUALITY OF THE PROGRAMS IN OUR SYSTEM, THE

BETH C. DRAIN, CA CSR NO. 7152

1 PROGRESSION OF PROGRAMS GOING FROM ONE STAGE TO THE
2 NEXT, FROM GOING FROM DISCOVERY TO THE TRANSLATIONAL
3 STAGE, FROM GOING FROM TRANSLATIONAL TO THE STAGE
4 RIGHT BEFORE CLINICAL TRIAL, CLIN1, AND GOING FROM
5 THAT STAGE TO CLINICAL TRIALS, AND EVEN WITHIN THE
6 CLINICAL TRIAL, GOING FROM PHASE 1 TO THE LATER
7 STAGE TRIALS, WE INCREASED THAT BY A HUNDRED PERCENT
8 IN THESE PAST FIVE YEARS.

9 AND IN TERMS OF THE REGULATORY PARADIGM,
10 EVEN FIVE YEARS AGO IT WASN'T AS CLEAR HOW THE FDA
11 WAS GOING TO MAKE SENSE OF ALL THESE OPPORTUNITIES
12 THAT WERE BEING DEVELOPED IN THIS INNOVATIVE FIELD.
13 AND SO UNDER THE 21ST CENTURY CURES ACT, THERE WAS A
14 REVAMP OF THE FDA TO CREATE PLATFORMS AND MECHANISMS
15 SO THAT THEY COULD CONSIDER THESE NOVEL REGENERATIVE
16 MEDICINE PROGRAMS. AND THEY CREATED AN EXPEDITED
17 PATHWAY CALLED RMAT, REGENERATIVE MEDICINE ADVANCED
18 THERAPY PATHWAY. ONE OF THE CIRM PROGRAMS WAS THE
19 VERY FIRST TO ACHIEVE THIS RMAT DESIGNATION. EVEN
20 TODAY THE CIRM PROGRAMS MAKE UP A GOOD PROPORTION OF
21 THE RMAT DESIGNATIONS OUT THERE. SO WE HAVE AT
22 LEAST EIGHT RMAT'S, AND ONE WAS JUST ANNOUNCED
23 TODAY, COMPOSING ABOUT 15 PERCENT OF THE TOTAL OUT
24 THERE IN THE U.S.

25 AND WHAT THIS REPRESENTS IS THAT THIS IS

BETH C. DRAIN, CA CSR NO. 7152

1 AN EVOLVING REGULATORY PARADIGM. THE CIRM PROGRAMS
2 ARE NOT ONLY ALIGNED WITH AND DEPLOYING THESE
3 PARADIGMS, BUT ARE ACTUALLY CONTRIBUTING TO WHAT'S
4 ALLOWING THE AGENCY TO DEVELOP ITS APPROACHES FOR
5 REGENERATIVE MEDICINE.

6 WE'VE SHORTENED TIME TO CLINICAL TESTING
7 FROM THINGS GOING FROM THE EARLIER STAGE TO CLINICAL
8 TRIALS. AND WE EXCEEDED THE GOAL. WE HAD A GOAL OF
9 59 NEW CLINICAL TRIALS IN FIVE YEARS. AND WITH THE
10 RECENT BOARD APPROVALS, WE HAVE NOW EXCEEDED IT TO
11 51 NEW CLINICAL TRIALS, BRINGING OUR TOTAL TO 68
12 TOTAL TRIALS DIRECTLY FUNDED BY CIRM WITH OVER 2700
13 PATIENTS OR SUBJECTS ENROLLED IN THOSE TRIALS.

14 I'LL GO INTO THIS AND END THE CONVERSATION
15 TODAY ON THIS TOPIC WITH INDUSTRY PULL. WHEN WE
16 FIRST LAUNCHED THE STRATEGIC PLAN, THERE WAS VERY
17 LITTLE UPTAKE FROM INDUSTRY, AND WE WERE CONCERNED
18 THAT WE CAN PUSH THE SCIENCE AND HAVE THESE
19 PROMISING PROGRAMS GO FORWARD; BUT UNLESS WE HAVE
20 THE INDUSTRY INVESTMENT, IT WOULD BE REALLY
21 DIFFICULT TO GET IT INTO COMMERCIALIZATION. AND
22 THAT'S WHAT'S REQUIRED TO GET TO PATIENTS MORE
23 WIDELY.

24 SO WE HAD A GOAL OF PARTNERING 50 PERCENT
25 OF OUR PROGRAMS, AND NOW 59 PERCENT OF THEM ARE

BETH C. DRAIN, CA CSR NO. 7152

1 PARTNERED, AND THERE HAVE BEEN 72 PARTNERING EVENTS
2 OVER THE COURSE OF THESE FIVE YEARS, CULMINATING IN
3 OVER \$12 BILLION OF INVESTMENT INTO OUR PROGRAMS.
4 JUST \$8.6 BILLION JUST THIS YEAR ALONE YEAR TO DATE
5 IN 2020.

6 NEXT SLIDE. THIS JUST KIND OF SHOWS THAT
7 TRAJECTORY. BECAUSE OF THAT DERISKING FUNCTION THAT
8 WE PLAY, CIRM PROGRAMS HAVE ENABLED THE SPINOUT OF
9 45 COMPANIES FROM ACADEMIA, AND THREE OF OUR
10 COMPANIES HAVE ISSUED IPO'S OR THREE OF THE
11 COMPANIES THAT WE FUNDED HAVE ISSUED IPO'S. WE
12 DON'T WANT TO ACTUALLY OWN THE COMPANIES. SO IF YOU
13 CAN SEE THE AMOUNT OF INVESTMENT, AS YOU SEE HERE,
14 BEFORE WE LAUNCHED THE STRATEGIC PLAN 2014/2015,
15 INVESTMENT INTO OUR PROGRAMS WERE IN THE 40 MILLION
16 RANGE. AND WITH EACH YEAR, THIS IS EACH YEAR'S
17 INVESTMENTS, YOU CAN SEE IT CONTINUALLY INCREASING
18 MARKEDLY, LEADING TO THIS \$12 BILLION INVESTMENT TO
19 DATE.

20 NEXT SLIDE PLEASE. HERE'S SOME OF THE --
21 I'M NOT GOING TO GO INTO EVERY SINGLE ONE OF THOSE,
22 BUT IT JUST GIVES YOU A SENSE OF WHAT TYPES OF
23 PROGRAMS MAKE UP THIS INDUSTRY INVESTMENT. 47 INC.
24 FOR CANCER. THERE'S QUITE A BIT IN THE CANCER
25 FIELD, BUT ALSO IN THE BLINDING EYE DISEASE WITH

BETH C. DRAIN, CA CSR NO. 7152

1 JCYTE LICENSING SANTEN PHARMACEUTICAL, WHICH IS A
2 GLOBAL EYE DISEASE COMPANY, AS WELL AS SOME OTHER
3 PROGRAMS. AGAIN, HERE'S GRAPHITE BIO WHICH LICENSED
4 THE CRISPR TECHNOLOGY OUT OF STANFORD THAT JUST
5 RECENTLY LAUNCHED.

6 NEXT SLIDE PLEASE. AND HERE'S SOME
7 SPINOUTS THAT RESULTED FROM CIRM-FUNDED EARLY STAGE
8 PROGRAMS.

9 NEXT SLIDE. AND WE HAVE CREATED WHAT'S
10 CALLED AN INDUSTRY ALLIANCE PROGRAM. SO NOT ONLY
11 DOES IT RAISE VISIBILITY TO OUR PORTFOLIO PROGRAMS
12 FROM STRATEGIC INVESTORS AND COMPANIES SUCH AS THOSE
13 LISTED HERE WHO ARE INDUSTRY ALLIANCE PARTNERS, BUT
14 THESE INDUSTRY ALLIANCE PARTNERS ALSO GIVE US
15 FEEDBACK TO HELP US AND TO HELP THE GRANTEES FIGURE
16 OUT HOW TO ADDRESS CERTAIN CHALLENGES EVEN EARLY ON
17 IN THEIR DEVELOPMENT PROGRAMS, AGAIN, IN THE SPIRIT
18 OF ACCELERATION AND INCREASING PROBABILITY OF
19 SUCCESS.

20 NEXT SLIDE. AND HERE'S MY ENDING SLIDE.
21 WHAT'S THE OVERALL IMPACT? SO, IN CONCLUSION, CIRM
22 HAS FUNDED 68 CLINICAL TRIALS, OVER 2700 PATIENTS
23 ENROLLED. NOW WITH THE NEW PROPOSITION, WE EXPECT
24 THAT THAT WILL CONTINUE TO GROW. WE'VE CREATED A
25 SPECIALIZED INFRASTRUCTURE SUCH AS THE CLINICAL

BETH C. DRAIN, CA CSR NO. 7152

1 NETWORKS, THE GENOMICS HUB, AND THE STEM CELL BANKS
2 FOR RESEARCH, DEVELOPED A SPECIALIZED WORKFORCE FOR
3 THIS NEW FIELD. THIS IS, AGAIN, SOMETHING THAT WE
4 ENVISION WE WILL BUILD UPON TO CREATE EVEN MORE
5 OPPORTUNITIES, THE ONRAMPS AND SUCCESSFUL OFFRAMPS
6 FOR THE DIVERSE WORKFORCE OF THE FUTURE. CREATED A
7 ROBUST ECOSYSTEM HUB FOR PARTNERSHIP. NOT ONLY DOES
8 IT INCREASE FUNDING OPPORTUNITIES, BUT AN ALIGNMENT
9 FOR EXTREMELY CRITICAL ISSUES SUCH AS DIVERSITY AND
10 INCLUSION IN THESE RESEARCH PROGRAMS, AND A THOUSAND
11 PROGRAMS HAVE BEEN FUNDED FOR TRANSFORMATIVE
12 SOLUTIONS.

13 YOU ALL ARE AWARE OF THE ECONOMIC IMPACT
14 REPORT THAT WAS CONDUCTED. AS CONTROLLER YEE SAID,
15 THAT THE REAL IMPACT IS GOING TO BE DOWN THE ROAD
16 WHEN THESE THERAPIES MAKE IT BROADLY TO THE CLINICS
17 IN TERMS OF COST SAVINGS. BUT IN TERMS OF JUST KIND
18 OF A BENCHMARK AND SURROGATE MARKER FOR THE TYPE OF
19 IMPACT, WHAT WE CERTAINLY SEE IS FOR THIS \$3 BILLION
20 INVESTMENT BY THE CITIZENS OF CALIFORNIA, THERE'S
21 BEEN NOT ONLY THE INDUSTRY INVESTMENT OF \$12 MILLION
22 THAT WAS NOTED, BUT ALMOST \$11 BILLION IN SALES
23 REVENUE HAD BEEN GENERATED, \$650 MILLION IN TAXES,
24 AND CREATION OF ALMOST 60,000 NEW JOBS BECAUSE OF
25 THE PROGRAMS THAT WERE FUNDED THROUGH CIRM.

BETH C. DRAIN, CA CSR NO. 7152

1 THANK YOU SO MUCH FOR YOUR ATTENTION. I
2 KNOW IT WAS A LONG PRESENTATION. IT WAS REALLY
3 WONDERFUL TO HAVE SUCH AN INTERACTIVE DISCUSSION.
4 THERE'S SO MANY MORE TOPICS, I'M SURE, WE COULD
5 COVER, BUT I'D LIKE TO GO AHEAD AND TURN IT OVER TO
6 CONTROLLER YEE. I'M HAPPY TO ANSWER ANY OTHER
7 QUESTIONS.

8 CONTROLLER YEE: THANK YOU VERY MUCH, DR.
9 MILLAN, TO CHAIRMAN THOMAS, AND SENATOR TORRES,
10 OTHERS WHO COMMENTED DURING THIS SECTION. IT'S
11 VERY, VERY EXCITING AND A BIT OF JUST KIND OF A
12 MARKER WITH RESPECT TO WHERE WE ARE BEFORE WE LAUNCH
13 INTO THIS NEXT CHAPTER WITH THE ADDITIONAL RESOURCES
14 GENEROUSLY APPROVED BY THE VOTERS OF CALIFORNIA.

15 LET ME TURN TO THE MEMBERS OF THE
16 COMMITTEE TO SEE IF THERE ARE ANY QUESTIONS OR
17 COMMENTS.

18 DR. SADANA: I'D LIKE TO, MADAM CHAIR.

19 CONTROLLER YEE: YES, PLEASE, DR. SADANA.

20 DR. SADANA: I'D LIKE TO CONGRATULATE, AND
21 THIS IS THE FIRST TIME WE HAVE SEEN SO MUCH PROGRESS
22 AS WELL AS CLINICAL APPLICATIONS THAN IN THE PAST.
23 WHILE I MISSED THE LAST MAYBE TWO MEETINGS, BUT THIS
24 IS GREAT. THANK YOU, DR. MILLAN, FOR ALL THESE AND
25 MR. THOMAS AS WELL FOR YOUR PRESENTATIONS.

BETH C. DRAIN, CA CSR NO. 7152

1 CONTROLLER YEE: THANK YOU.

2 MR. LOTT: MADAM CHAIR, IF I MAY, I WANT
3 TO ALSO APPLAUD EVERYONE'S EFFORTS. DR. MILLAN,
4 YOUR PRESENTATION WAS STELLAR. I REALLY APPRECIATE
5 ALL THE INFORMATION.

6 A COUPLE OF YEARS BACK I ASKED TO GET MORE
7 INFORMATION, MORE NEWS ABOUT WHAT'S GOING ON. THIS
8 MAY HAVE BEEN BEFORE YOUR TIME. I'VE BEEN GETTING
9 IT. I'VE BEEN GETTING LOADS OF IT. AND I'M SURE
10 YOU GUYS ARE WONDERING IF I REALLY EVEN READ THIS
11 STUFF. I READ EVERY BIT OF IT. I WANT YOU TO KNOW
12 I APPRECIATE YOUR KEEPING US ALL UP TO DATE. I GET
13 TWO, THREE, FOUR E-MAILS A WEEK WITH THE NEWS AND
14 WHAT'S GOING ON. AND I'M A BIT BORING. AS MY
15 CHILDREN TELL ME, DAD, YOU'RE A NICE GUY, BUT YOU'RE
16 BORING. BUT I'M A NERD. I LIKE TO SEE THE FACTS.
17 I LIKE TO SEE THE INFORMATION. I LIKE TO SEE THE
18 DATA. I LIKE TO SEE WHAT YOU GUYS ARE DOING. SO I
19 JUST WANT TO TELL YOU GUYS GREAT WORK, AND I'M
20 READING WHAT YOU SEND. SO KEEP ON SENDING THIS
21 STUFF TO ME. THANK YOU.

22 DR. MILLAN: WE WILL. THANK YOU SO MUCH.

23 CONTROLLER YEE: THANK YOU, MR. LOTT.

24 OTHER COMMENTS? DR. QUICK.

25 DR. QUICK: THANK YOU ALL AND

BETH C. DRAIN, CA CSR NO. 7152

1 CONGRATULATIONS AND THANKS --

2 MR. TORRES: I THINK BETTY WILL APPRECIATE
3 WHAT JIM JUST SAID BECAUSE ALL OF US ARE FORMER
4 SENATE STAFFERS OR LEGISLATIVE STAFFERS. YES, JIM,
5 YOU ARE A GREAT NERD BECAUSE YOU WERE ONE OF THE
6 BEST CONSULTANTS THE SENATE COMMITTEE ON HEALTH EVER
7 HAD WHEN I SERVED ON IT. SO I JUST WANTED TO THANK
8 YOU FOR ALL THE YEARS OF SERVICE YOU AND BETTY HAVE
9 PROVIDED. BUT THOSE OF US THAT WERE STAFFERS BEFORE
10 REALLY APPRECIATE THE WORK OF OTHER STAFFERS, LIKE
11 DR. MILLAN AND OTHERS, WHO PARTICIPATED IN THIS
12 PRESENTATION. THANK YOU.

13 CONTROLLER YEE: DR. QUICK.

14 DR. QUICK: THANK YOU. CONGRATULATIONS TO
15 THE TEAM, THE ENTIRE CIRM TEAM. JUST WONDERFUL.

16 I'M JUST WONDERING, DR. MILLAN, WHEN YOU
17 STARTED YOUR PRESENTATION, YOU SORT OF DIVIDED SOME
18 OF THE MONEY INTO FIVE BUCKETS, INFRASTRUCTURE,
19 EDUCATION. I WONDER AS YOU LOOK BACK, SO I'M GOING
20 TO ASK YOU TO GET YOUR CRYSTAL BALL OUT, AS YOU LOOK
21 BACK OVER THOSE FIRST 16 YEARS, WOULD YOU HAVE
22 PREDICTED THAT THAT'S WHERE THE MONEY WOULD HAVE
23 FALLEN INTO THOSE BUCKETS, HOW MUCH INTO EACH
24 BUCKET? AND NOW GOING FORWARD, DO YOU HAVE ANY
25 SPECULATION, I KNOW YOU HAVE TO PUT TOGETHER A

BETH C. DRAIN, CA CSR NO. 7152

1 STRATEGIC PLAN TO KNOW THIS, BUT OF WHERE MONEY MAY
2 FALL INTO THOSE VARIOUS BUCKETS. I GUESS MY FINAL
3 POINT OF THIS QUESTION IS, AND I HOPE I'M NOT BIASED
4 BECAUSE I'M A BASIC SCIENTIST, I WOULD LIKE TO
5 CONTINUE TO SEE THAT DISCOVERY IS WHERE -- A BIG
6 BUCKET HERE BECAUSE, AS WE CAN SEE FROM THE ORIGINAL
7 PROP 71, IT'S REALLY DISCOVERY THAT IS DRIVING SO
8 MUCH OF WHAT ENDS UP HAPPENING IN THESE EMERGING
9 FIELDS. SO I'D HATE TO THINK THAT GOING FORWARD ONE
10 MIGHT BIAS TOWARD FOCUSING ON CLINICAL TRIALS, WHICH
11 IS CERTAINLY IMPORTANT, BUT MAKING SURE THAT THAT
12 HUGE BUCKET OF DISCOVERY IS PRIMED AND READY TO
13 SERVE.

14 DR. MILLAN: THANK YOU, DR. QUICK. AND
15 THE ANSWER IS YES TO YOUR QUESTION OF COMMITMENT TO
16 THE BASIC RESEARCH. THAT'S ANTICIPATED TO CONTINUE
17 AND, IN FACT, IS CRITICAL TO WHAT WE ARE ENVISIONING
18 FOR THE STRATEGIC PLAN.

19 AND THE CONCEPT PROPOSALS, WHICH I'LL
20 FORWARD TO YOU IF YOU HAVE NOT SEEN IT, THE JUNE
21 ICOC MEETING PROPOSAL REALLY HIGHLIGHTS HOW IT'S NOT
22 ONLY INVESTING IN THIS IMPORTANT FOUNDATIONAL
23 RESEARCH AND THEN ALL OF THE DOWNSTREAM EFFECTS OF
24 IT, BUT HOW DO WE DO THAT IN A WAY SO THAT SUCCESS
25 OF EACH OF THE PROGRAMS ACTUALLY LEADS TO SUCCESS OF

BETH C. DRAIN, CA CSR NO. 7152

1 THE ENTIRE ENTERPRISE. SOME OF THE THINGS WE ARE
2 LOOKING AT THROUGH MECHANISMS SUCH AS A ROBUST
3 KNOWLEDGE SHARING CAPACITY WITH DATA BEING BEST
4 UTILIZED AND ALSO MARRYING THAT WITH THE ABILITY TO
5 TRANSLATE THAT INTO SOMETHING THAT WILL BE USEFUL
6 FOR INFORMING THE COMMUNITIES AND THE PUBLIC SO THAT
7 THEY CAN NAVIGATE THROUGH THE PROGRESS AND THEIR
8 HEALTHCARE CHOICES.

9 SO THOSE ARE THE TYPES OF THINGS WE'RE
10 LOOKING AT, BUT ABSOLUTELY AS AN UNDERPINNING BASIC
11 RESEARCH IS A MAJOR PART OF THAT. IN FACT, WHAT WE
12 PROPOSED TO THE BOARD IS THAT THE BASIC PILLARS THAT
13 YOU HAD ALLUDED TO THOSE FIVE AREAS WOULD BE A
14 STRONG AND VETTED AND PROVEN FOUNDATION FOR WHAT WE
15 CAN DO GOING FORWARD.

16 SO MORE ON THAT, BUT I'LL CERTAINLY MAKE
17 SURE THAT YOU RECEIVE AT LEAST THE CONCEPT OF -- THE
18 BIG PICTURE CONCEPT PROPOSALS THAT ARE BEING
19 CURRENTLY DEVELOPED ALONG WITH OUR BOARD.

20 CHAIRMAN THOMAS: DR. QUICK, JUST TO ADD
21 ON THAT A LITTLE ANECDOTE I THINK THE GROUP HERE
22 WOULD APPRECIATE. AS YOU SAW ON DR. MILLAN'S
23 PRESENTATION, WE DEVOTED ABOUT A THIRD OF OUR
24 FUNDING THUS FAR TO BASIC RESEARCH, RECOGNIZING
25 EXACTLY WHAT YOU SAY, WHICH IT'S THE DRIVING FORCE

BETH C. DRAIN, CA CSR NO. 7152

1 THAT GETS EVERYTHING STARTED AND FROM WHICH COMES
2 ALL THAT FOLLOWS. AS IT HAPPENS, THE VERY LAST PEER
3 REVIEW SESSION THAT WE HAD BEFORE THE ELECTION WAS
4 ON BASIC RESEARCH AWARDS. WE CALL THEM DISCOVERY
5 AWARDS. AT THAT POINT, OF COURSE, THERE WAS NO
6 GUARANTEE PROP 14 WAS GOING TO PASS. AND OUR
7 REVIEWERS, AS THEY ALWAYS DO, WERE EXCEPTIONALLY
8 DILIGENT, PROFESSIONAL, AND SO ENERGIZED ABOUT BASIC
9 RESEARCH, AS THEY'VE BEEN SINCE CIRM'S INCEPTION,
10 AND THEY WENT THROUGH AND THEY REVIEWED ALL THESE
11 PROJECTS, AND WE CAME THROUGH WITH A SLATE OF THAT
12 MEETING OF TEN PROJECTS THAT THE BOARD ULTIMATELY
13 ADOPTED AND ARE NOW BEING FUNDED.

14 BUT THE ANECDOTE I WANTED TO SHARE WITH
15 YOU ALL IS AT THE VERY END OF THIS SESSION, WHICH
16 COULD HAVE BEEN THE LAST PEER REVIEW SESSION ON
17 BASIC RESEARCH CIRM EVER HAD, THERE WAS SORT OF A
18 REFLECTION BY MEMBERS OF THE GROUP WHERE IT WAS
19 ALMOST SORT OF A WISTFUL EXCHANGE WHERE THEY WERE
20 SAYING THAT THEY SO APPRECIATED THE OPPORTUNITY TO
21 SERVE AS PEER REVIEWERS OVER THE YEARS ON CIRM'S
22 BASIC RESEARCH PROJECTS, AS IT HAPPENED TO HAVE BEEN
23 THE SUBJECT MATTER THERE, AND THAT, THEY SAID, YOU
24 KNOW, WE ALL DO THIS FOR NIH AS WELL, AND THAT'S
25 GREAT AND WE LIKE DOING THAT, BUT WHAT WE REALLY

BETH C. DRAIN, CA CSR NO. 7152

1 LOVE IS GETTING THE PHONE CALLS FROM CIRM TO COME
2 OUT AND WORK ON THEIR PROJECTS BECAUSE THERE'S
3 SOMETHING ABOUT THE CUTTING-EDGE, THE FRONTIER, THE
4 AMENABILITY TO TAKE RISK THAT THEY SO ENJOY AND THE
5 DYNAMICS.

6 MANY OF THESE RESEARCHERS HAVE BEEN PEER
7 REVIEWING TOGETHER FOR CIRM FOR YEARS. SO IT'S A
8 LITTLE COMMUNITY THAT'S FORMED WHERE THEY'RE ALL
9 FRIENDS AND THEY ALL CONTRIBUTE MIGHTILY. BUT THE
10 FACT THAT THEY SINGLED OUT THE FACT THAT THE CALL
11 FROM CIRM WAS THE THING THEY LOOKED FORWARD TO THE
12 MOST WAS REALLY TELLING TO US. AND, AGAIN,
13 PRE-ELECTION WAS QUITE A POIGNANT THING TO HEAR
14 BECAUSE WE MAY NOT HAVE HAD ANOTHER ONE. SO I JUST
15 THOUGHT MEMBERS OF THE COMMITTEE WOULD APPRECIATE
16 THAT AS A REFLECTION OF HOW IMPORTANT BASIC RESEARCH
17 IS TO WHAT WE DO, BUT HOW IMPORTANT WHAT WE DO IS TO
18 THE FIELD AND THE RESEARCHERS IN IT. SO ANYWAYS.

19 DR. MILLAN: I WANTED TO JUST ADD TO THAT
20 WHAT CHAIRMAN THOMAS SAID AND TO SAY THAT WE HAVE A
21 DIVERSE REVIEW PANEL, REVIEWERS, JUST TO OUR TOPIC.
22 AND ALSO, IN ADDITION TO THOSE WHO ARE MORE
23 ACCUSTOMED TO EACH OTHER, WHAT'S ALWAYS FUN IS NEW
24 MEMBERS ARE CONTINUOUSLY BEING BROUGHT ON WHO ARE
25 USED TO KIND OF THE TRADITIONAL APPROACHES TO

BETH C. DRAIN, CA CSR NO. 7152

1 RESEARCH WHERE OFTEN YOU NEED TO HAVE PUBLISHED SO
2 MANY THINGS THAT BY THE TIME YOU ACTUALLY GET THE
3 GRANT, IT'S NO LONGER NOVEL. SO THEY LOVED THAT WE
4 ARE TAKING THE RISK.

5 AND ALSO WHAT'S GREAT ABOUT IT THESE
6 SCIENTIFIC DISCUSSIONS ARE AMAZING. IT'S JUST SUCH
7 A GREAT VALUE THAT EVERYBODY COME AWAY LEARNING SO
8 MUCH MORE BECAUSE THE SPECIALISTS IN THE VARIOUS
9 AREAS COME IN AND THERE'S THIS CROSS-FERTILIZATION
10 AND CROSSTALK. SO THERE ARE PEOPLE WHO, YES, WHO
11 ARE FAMILIAR WITH EACH OTHER, BUT MANY NEW MEMBERS
12 AND REVIEW SPECIALISTS WHO MAY NOT ALWAYS AGREE. SO
13 THERE'S A REALLY VERY, VERY VIGOROUS EXCHANGE AT ALL
14 THESE MEETINGS.

15 AND ONE OF THE INTERESTING THINGS IS THAT
16 EVEN IF REVIEWERS ARE HIGHLY SUPPORTIVE OF A
17 PROGRAM, THEY WILL ALWAYS BRING UP THE WEAKNESSES
18 AND THE CRITICISMS UP FRONT. SO IT'S REALLY, REALLY
19 BENEFICIAL TO EVERYBODY TO HAVE KIND OF EYES WIDE
20 OPEN AS WE TAKE THESE RISKS, RISKS WORTH TAKING, BUT
21 NEVERTHELESS JUST BE ABLE TO UNDERSTAND WHAT
22 POTENTIALLY OVERCOMES SOME OF THESE BETTER. THANK
23 YOU.

24 CONTROLLER YEE: THANK YOU, DR. MILLAN.
25 OTHER QUESTIONS FROM COMMITTEE MEMBERS?

BETH C. DRAIN, CA CSR NO. 7152

1 SEEING NONE, WHAT I'D LIKE TO DO NOW IS
2 TURN TO THE PUBLIC COMMENT SECTION OF THE AGENDA.
3 JUST LET MEMBERS OF THE PUBLIC KNOW WHO ARE
4 LISTENING, IF YOU WISH TO MAKE A COMMENT, YOU MAY
5 RAISE YOUR HAND AND WE WILL ACKNOWLEDGE YOU, AND YOU
6 WILL GET TO SPEAK FOR TWO MINUTES ADDRESSING THE
7 COMMITTEE ONCE YOU'RE RECOGNIZED. JUST CHECK WITH
8 OUR TECHNICAL STAFF. TODD, I DON'T SEE ANYONE WITH
9 A HAND RAISED, DO YOU?

10 TODD: I DO NOT EITHER.

11 CONTROLLER YEE: VERY WELL. THANK YOU.

12 THEN LET ME JUST LOOK FOR CONCLUDING BOARD
13 COMMENTS IF THERE ARE ANY. MAYBE I'LL START.

14 THANK YOU VERY MUCH FOR A VERY ROBUST
15 PRESENTATION. THANK YOU FOR FULFILLING OUR CHARGE
16 OF RECEIVING THE INDEPENDENT FINANCIAL AUDIT AND THE
17 ATTENDANT REVIEWS OF THEM, THE QUALITY CONTROL
18 REVIEW WHERE WE HAVE DISCHARGED THE RESPONSIBILITY
19 OF THE COMMITTEE.

20 BUT MORE IMPORTANTLY, JUST APPRECIATE THE
21 ROBUST DISCUSSION TODAY, ALL OF YOU JUST BRINGING
22 YOUR RESPECTIVE DISCIPLINES AND PERSPECTIVES TO THIS
23 COMMITTEE AND THE WORK OF CIRM GOING FORWARD.

24 I JUST WANTED TO SAY THAT ONE OF THE
25 THINGS I HOPE IS PART OF THE STRATEGIC THINKING

BETH C. DRAIN, CA CSR NO. 7152

1 GOING FORWARD IS HOW DO WE TELL OUR STORY BETTER.
2 AND I THINK YOU ARE DOING A GREAT JOB OF TELLING THE
3 STORY, BUT THERE'S SO MUCH. I THINK FOR MANY WHO
4 ARE SKEPTICAL ABOUT THIS PARTICULAR FIELD, ABOUT THE
5 LENGTHY PROCESSES WHICH ACTUALLY CIRM, I THINK, DOES
6 A REMARKABLE JOB OF EXPEDITING AND ACCELERATING A
7 LOT OF THE TRADITIONAL PROCESSES, BUT THAT AS WE ARE
8 SEEING ALL THESE VARIOUS RESEARCH EFFORTS AND
9 CLINICAL TRIALS ON THEIR WAY, THAT WE STILL ARE
10 GETTING SOME BENEFIT. TO YOUR POINT, DR. MILLAN,
11 THE ECONOMIC IMPACT IS SOMETHING THAT WE SHOULD NOT
12 TURN OUR BACK TO. THIS IS DEFINITELY GENERATING
13 BENEFIT FOR THE CALIFORNIA ECONOMY. SO TO BE ABLE
14 TO KEEP THAT ON THE FRONT BURNER AND CERTAINLY
15 LOOKING AT HOW WE TRANSLATE SOME OF THIS WORK, THAT
16 MAYBE AT AN EARLIER STAGE GETS TO MEMBERS OF THE
17 PUBLIC, AND I THINK PARTICULARLY GIVEN THE SIGHT OF
18 AWARENESS TIME OF THE PUBLIC HEALTH PANDEMIC WHERE
19 SO MANY ARE VERY FOCUSED ON HEALTH RIGHT NOW. JUST
20 WANTED TO PUT THAT ON THE TABLE.

21 AND THEN, LASTLY, WHAT I WOULD SAY IS THIS
22 COMMITTEE WILL CONVENE AGAIN FOR THE NEXT REVIEW OF
23 THE INDEPENDENT AUDIT, THAT REALLY I WELCOME JUST
24 OUR ABILITY TO BE ABLE HAVE MORE INFORMATION SHARED
25 WITH US DURING THE COURSE OF THE YEAR SO THAT WE

BETH C. DRAIN, CA CSR NO. 7152

1 HAVE THAT CONTEXT BUILT DURING THE COURSE OF THE
2 YEAR AS WE LEAD UP TO THE NEXT ACCEPTANCE AND REVIEW
3 OF THE INDEPENDENT FINANCIAL AUDIT. SO THAT WOULD
4 BE ANOTHER ASPECT THAT I WOULD BE LOOKING FOR.

5 AND THEN, FINALLY, I WANT TO JUST SAY
6 THANK YOU. THIS IS WORK THAT REALLY IS AGAINST A,
7 TO SOME EXTENT, A DEGREE OF UNCERTAINTY AS WELL.
8 AND TO BE ABLE TO JUST STAY THE COURSE TO BE ABLE TO
9 JUST CONTINUE TO HAVE INTEGRITY WITH RESPECT TO THE
10 PROCESSES THAT HAVE ESTABLISHED.

11 AND MY LAST QUESTION FOR YOU IS REALLY
12 ABOUT THIS NEW ADMINISTRATION COMING IN IN
13 WASHINGTON. AND I KNOW THAT CIRM HAS INFORMED A LOT
14 OF THE EVOLUTION OF THE FDA PARADIGM. JUST WANTED
15 TO KIND OF GET YOUR SENSE OF ANY POTENTIAL CHANGES A
16 NEW ADMINISTRATION. SOMETIMES WITH AN
17 ADMINISTRATION TRANSITION, THINGS ARE IN A STATE OF
18 FLUX. AND SO JUST KIND OF WHAT YOU'RE ANTICIPATING
19 AROUND THOSE EVENTS.

20 CHAIRMAN THOMAS: ART, DO YOU WANT TO TAKE
21 THAT ONE?

22 MR. TORRES: AS BETTY KNOWS, I'M VERY
23 CLOSE TO THE VICE PRESIDENT ELECT AND ALSO WITH THE
24 PRESIDENT WHO I MET 40 YEARS AGO. AND SO A LOT OF
25 THE ENERGY THAT WE'RE COMPILING AS AN ORGANIZATION

BETH C. DRAIN, CA CSR NO. 7152

1 IS TO INTERACT WITH THE PRESIDENT AND THE VICE
2 PRESIDENT ELECTS AS THEY MOVE FORWARD IN THE
3 HEALTHCARE FIELD. ALL OF US KNOW THE RELATIONSHIP
4 THAT THE PRESIDENT HAD WITH BRAIN CANCER AND BRAIN
5 TUMOR BECAUSE OF BEAU BIDEN, BUT ALSO BECAUSE HE WAS
6 HEADING THIS NEW INITIATIVE THAT WAS STARTED WHEN HE
7 WAS STILL VICE PRESIDENT UNDER PRESIDENT OBAMA. SO
8 I THINK HE WANTS TO CONTINUE THAT, AND I THINK IT'S
9 STILL EARLY TO DECIPHER WHO ARE THE MAIN PLAYERS SO
10 FAR AS HE BEGINS TO NOT EVEN HAVE A TRANSITION
11 BECAUSE OF THE IRRESPONSIBILITY OF THE CURRENT
12 INCUMBENT.

13 I THINK AS WE MOVE FORWARD, WE WILL KEEP
14 YOU ABREAST, ESPECIALLY YOU, CONTROLLER YEE, AS TO
15 THE KINDS OF EFFORTS THAT WE'RE GOING TO EMBARK ON
16 IN A COOPERATIVE BASIS. AND CLEARLY A LOT OF THAT
17 IS GOING TO HAVE TO DEAL WITH NEW TREATMENTS AND HOW
18 THEY'RE GOING TO BE FINANCED FOR PATIENTS. AND
19 THAT'S GOING TO INVOLVE, AS JIM LOTT WELL KNOWS,
20 MEDICARE, MEDICAID, AND IN OUR OWN STATE MEDI-CAL.
21 LUCKILY THE SUPREME COURT HAS RULED, SO FAR ANYWAY,
22 AT LEAST PRELIMINARILY, THAT WE'RE GOING TO BE OKAY
23 WITH COVER CALIFORNIA. THEY HAVEN'T ISSUED THE
24 FINAL DECISION, BUT OUR HOPES ARE THAT IT WILL BE
25 POSITIVE SO THAT WE CAN CONTINUE OUR WORK AND

BETH C. DRAIN, CA CSR NO. 7152

1 CONTINUE TO INSURE THOSE THAT HAVE BEEN UNINSURED.
2 THAT'S GOING TO HAVE A LOT OF IMPACT ON
3 ACCESSIBILITY TO HEALTHCARE AND THE AFFORDABILITY OF
4 MANY OF THESE TREATMENTS. SO, IN SHORT, THAT'S
5 WHERE WE ARE AT. THANK YOU.

6 CHAIRMAN THOMAS: I'D LIKE TO ADD, JUST IF
7 I MIGHT, TO THAT, THAT AS WE KNOW, THE CURRENT
8 ADMINISTRATION HAS NOT BEEN ONE THAT PUT A LOT OF
9 FAITH OR EMPHASIS ON SCIENCE. THE INCOMING
10 ADMINISTRATION IS EXACTLY THE OPPOSITE, AND I'M
11 CERTAIN THAT THE OPPORTUNITIES FOR COLLABORATION AS
12 LEADERS IN THE FIELD THAT CIRM, THAT WE ALL ARE OUT
13 HERE, WILL HAVE A GREAT CHANCE TO FURTHER
14 COLLABORATE AND JOINTLY ADVANCE THE BALL ACROSS MANY
15 DIFFERENT DISEASES AND CONDITIONS.

16 SO WE ARE VERY OPTIMISTIC ABOUT THE NEW
17 ADMINISTRATION COMING IN AND THE POSSIBILITIES THAT
18 HOLDS FOR ADVANCEMENT.

19 CONTROLLER YEE: THANK YOU, CHAIRMAN
20 THOMAS. MARK, YOU HAD A COMMENT?

21 MR. FISCHER-COLBRIE: JUST A QUICK ONE.
22 I'D LIKE TO GET A SORT OF A SUMMARY OF THE NEW
23 REQUIREMENTS OF PROP 14 SOMEWHERE ALONG THE WAY IN
24 ORDER TO MAP OVER TO ENSURE THAT WE ARE OVERSEEING
25 THAT ACTIVITY AS WE GET INTO THE NEXT YEAR.

BETH C. DRAIN, CA CSR NO. 7152

1 AND, SECOND, JUST IMPRESSIVE PROGRESS
2 ACROSS THE BOARD. IT'S PRETTY AMAZING AND, AS
3 MENTIONED EARLIER, INCREDIBLY EXCITING. SO JUST
4 KEEP UP THE FABULOUS WORK. SO THANK YOU.

5 CHAIRMAN THOMAS: IF I COULD SEND TO
6 MEMBERS OF THE COMMITTEE, WE HAVE A ONE-PAGER WHICH
7 OUR COUNSEL, JAMES HARRISON, PUT TOGETHER WHICH
8 DESCRIBES THE NEW ELEMENTS OF PROP 14 THAT ARE ABOVE
9 AND BEYOND PROP 71 SO THAT YOU WILL BE ABLE TO TRACK
10 EXACTLY WHAT WE DO. A NUMBER OF THESE HAVE BEEN
11 ALLUDED TO ALREADY, BUT I THINK THAT THIS MEMO WILL
12 GIVE YOU SORT OF SUMMARIZED CHAPTER AND VERSE TO
13 TRACK AS THINGS PROCEED FROM HERE. THANK YOU.

14 CONTROLLER YEE: THANK YOU, CHAIRMAN
15 THOMAS. GREAT. THANK YOU. OTHER COMMENTS,
16 MEMBERS? OKAY.

17 MR. LOTT: MADAM CHAIR, I DO HAVE ONE LAST
18 COMMENT, IF I MAY. AND THAT HAS TO DO WITH YOU.
19 OUR SPECIFIC TASK AND CHARGE IS VERY CLEAR. AND
20 WHAT YOU BROUGHT IN YOUR LEADERSHIP AS CONTROLLER
21 AND AS CHAIR OF OUR COMMITTEE HAS MADE OUR ABILITY
22 TO DISCHARGE THAT TASK AND THAT RESPONSIBILITY JUST
23 THAT MUCH MORE EASY. SO I WANT TO THANK YOU FOR
24 YOUR LEADERSHIP AND YOUR CHAIRMANSHIP,
25 CHAIRPERSONSHIP, EXCUSE ME, OF THIS COMMITTEE, AND

BETH C. DRAIN, CA CSR NO. 7152

1 KEEPING US ON TRACK AND MAKING CERTAIN THAT WE DO
2 WHAT THE PEOPLE OF CALIFORNIA HAVE ASKED US TO DO.

3 CONTROLLER YEE: THANK YOU, MR. LOTT.
4 THANK YOU VERY MUCH. IT IS AS WITH MY DAY JOB AS
5 CONTROLLER, NUMBERS HAVE LOTS OF STORIES BEHIND
6 THEM. AND I THINK REALLY TO UNDERSTAND THEM FULLY
7 IT IS ABOUT EXACTLY WHAT WE'VE LEARNED TODAY FROM
8 DR. MILLAN AND THE TEAM. SO VERY MUCH APPRECIATE
9 THE PATIENCE OF THE MEMBERS OF THIS COMMITTEE. AND
10 I WOULD AGREE WITH YOU. I THINK WE ARE MORE ABLE TO
11 SUCCESSFULLY FULFILL OUR CHARGE AND PUT IT IN PROPER
12 CONTEXT SO WE HAVE THE BROADER PERSPECTIVE. I
13 REALLY APPRECIATE THE COMMENT.

14 SEEING NO OTHER BUSINESS COME BEFORE THE
15 COMMITTEE, I BELIEVE A MOTION TO ADJOURN IS IN
16 ORDER.

17 MR. FISCHER-COLBRIE: I MOVE THAT WE
18 ADJOURN.

19 CONTROLLER YEE: OKAY. MOTION BY
20 MR. COLBRIE TO ADJOURN. SECOND?

21 DR. QUICK: SECOND.

22 CONTROLLER YEE: OKAY. SECOND BY DR.
23 QUICK. WITHOUT OBJECTION, THIS COMMITTEE IS HEREBY
24 ADJOURNED. THANK YOU ALL VERY MUCH FOR YOUR TIME
25 THIS MORNING. DR. MILLAN, YOU AND YOUR TEAM, THANK

BETH C. DRAIN, CA CSR NO. 7152

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

YOU.

DR. MILLAN: THANK YOU SO MUCH.

CONTROLLER YEE: EVERYONE STAY SAFE.

(THE MEETING WAS THEN CONCLUDED AT 11:23 A.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 CITIZENS FINANCIAL ACCOUNTABILITY OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON NOVEMBER 20, 2020, WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CA CSR 7152
133 HENNA COURT
SANDPOINT, IDAHO
(208) 920-3543