BEFORE THE

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

REGULAR MEETING

LOCATION: VIA ZOOM

DATE: OCTOBER 19, 2021
9 A.M.

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

FILE NO.: 2021-21

I N D E X

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I N D E X (CONT'D.)

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OCTOBER 19, 2021; 9:05 A.M.

CHAIRMAN THOMAS: OKAY. THANK YOU. GOOD MORNING, EVERYBODY, AND WELCOME TO THE OCTOBER 2021 REGULAR MEETING OF THE ICOC AND THE APPLICATION REVIEW SUBCOMMITTEE. MARIA, WILL YOU PLEASE CALL THE ROLL.

MS. BONNEVILLE: HAIFAA ABDULHAQ. DAN BERNAL.

MR. BERNAL: PRESENT.

MS. BONNEVILLE: GEORGE BLUMENTHAL.

DR. BLUMENTHAL: HERE.

MS. BONNEVILLE: LINDA BOXER.

DR. BOXER: HERE.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: HERE.

MS. BONNEVILLE: ALLISON BRASHEAR.

DR. BRASHEAR: HERE.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.

DR. CLARK HARVEY: HERE.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: HERE.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: HERE.

MS. BONNEVILLE: YSABEL DURON.

MS. DURON: HERE.
MS. BONNEVILLE: MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: HERE.
MS. BONNEVILLE: LEON FINE. FRED FISHER.
DR. FISHER: HERE.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: HERE.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: HERE.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: HERE.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: HERE.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: PRESENT.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: HERE.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: HERE.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: HERE.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: HERE.
MS. BONNEVILLE: CHRISTINA MIASKOWSKI.
LAUREN MILLER-ROGEN.

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MS. MILLER-ROGEN: HERE.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: HERE.
MS. BONNEVILLE: JOE PANETTA. AL ROWLETT.
MR. ROWLETT: HERE.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: HERE.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: HERE.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: HERE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: HERE.
MS. BONNEVILLE: KAROL WATSON. KEITH YAMAMOTO.
DR. YAMAMOTO: HERE.
MS. BONNEVILLE: THANK YOU.
CHAIRMAN THOMAS: THANK YOU, MARIA.
SO WE HAVE -- THE MAIN EARLY EVENT HERE IS GOING TO BE HEARING FROM DR. MILLAN ON THE DRAFT STRATEGIC PLAN, BUT A FEW COMMENTS FROM THE CHAIR'S POSITION TO START US OFF HERE.
FIRST WOULD LIKE TO INTRODUCE MICHAEL BOTCHAN TO EVERYBODY, WHO IS CHANCELLOR CAROL CRIST'S ALTERNATE. MICHAEL, COULD YOU JUST SAY A

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FEW WORDS FOR EVERYONE ABOUT YOUR BACKGROUND?

DR. BOTCHAN: YEAH. I GOT MY PH.D. HERE AT UC BERKELEY IN 1972, THEN WENT OFF TO COLD SPRING HARBOR, AND THEN CAME BACK TO CAL. IN 1979 AS AN ASSOCIATE PROFESSOR. I'VE BEEN HERE EVER SINCE. BEEN A PROFESSOR OF BY BIOCHEMISTRY, BIOPHYSICS, AND STRUCTURAL BIOLOGY. AND I'M PRESENTLY THE DEAN OF BIOLOGICAL SCIENCES AND GLAD TO BE HERE.

CHAIRMAN THOMAS: THANK YOU. AND VERY, VERY HAPPY TO HAVE YOU ABOARD. SO WELCOME.

ALLISON, WOULD YOU LIKE TO SAY A FEW WORDS? WE HAVE SOME SAD CIRM BOARD NEWS FROM A DEPARTURE STANDPOINT. ALLISON, COULD YOU TELL EVERYBODY ABOUT YOUR IMPENDING PLANS HERE?

DR. BRASHEAR: IMPENDING PLANS THAT ARE BECOMING MORE REAL EVERY MINUTE. SO I'M ALLISON BRASHEAR. I'M THE DEAN AT UNIVERSITY OF CALIFORNIA DAVIS SCHOOL OF MEDICINE. YESTERDAY I ANNOUNCED THAT I'M TAKING A POSITION AS THE VP OF HEALTH SCIENCES AT THE UNIVERSITY OF BUFFALO AND THE DEAN OF THE JACOB SCHOOL OF MEDICINE AND BIOMEDICAL SCIENCES. SO I WILL BE LEAVING SUNNY CALIFORNIA FOR THIS ROLE AT THE UNIVERSITY OF BUFFALO.

IN THAT ROLE I WILL BE HELPING LEAD THE FIVE SCHOOLS OF HEALTH AND THEN THE JACOB SCHOOL OF

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MEDICINE IN ADDITION. SO I'M EXCITED, SADDENED TO LEAVE CALIFORNIA, BUT OUR TWO ADULT CHILDREN ARE ON THE EAST COAST. AS WE ALL KNOW, COVID HAS PUT A BRIGHT LIGHT ON FRIENDS AND FAMILY. BUT I'M GOING TO BE WATCHING FROM AFAR AND HAVE BEEN SO PROUD TO BE ASSOCIATED WITH CIRM DURING THIS LAST COUPLE OF YEARS.

CHAIRMAN THOMAS: THANK YOU, ALLISON. AND JUST THANK YOU SO MUCH FOR ALL OF YOUR HARD WORK FOR CIRM THESE PAST TWO YEARS. WE'VE GREATLY ENJOYED HAVING YOU AS A COLLEAGUE AND BENEFITED VERY MUCH FROM YOUR PARTICIPATION AND WISH YOU ONLY THE BEST OF LUCK GOING FORWARD.

AS EVERYONE MAY RECALL, ALLISON, AMONG OTHER THINGS, WAS ONE OF THE BOARD MEMBERS TO BE ON OUR ACCESSIBILITY AND -- OUR AAWG, AS YOU RECALL. AND ALLISON HAS A LOT OF EXPERIENCE IN THAT REGARD; AND WE HOPE, ALLISON, THAT WE CAN KEEP IN TOUCH WITH YOU TO GET YOUR INPUT ON THESE VERY IMPORTANT ISSUES AS WE LAUNCH INTO THAT EFFORT. SO THANK YOU AGAIN FOR ALL YOUR HARD WORK.

DR. BRASHEAR: ABSOLUTELY. MY PLEASURE.

MR. TORRES: AS A CAL AGGIE, WE'RE GOING TO MISS YOU. SO YOU TAKE CARE AND BE WELL.

DR. BRASHEAR: THANK YOU. THANK YOU. I

WAS WATCHING FOOTBALL LAST NIGHT TO WATCH THE BUFFALO BILLS SADLY LOSE. SO THANK YOU SO MUCH.

CHAIRMAN THOMAS: THEY'RE PRETTY GOOD, SO I THINK YOU'RE IN PRETTY GOOD SHAPE FOR THE FORESEEABLE FUTURE AS FAR AS THAT GOES.

SEGUEING --

MR. TORRES: 49ERS.

CHAIRMAN THOMAS: WELL, YES, THAT'S CORRECT, ART. DID YOU SAY SOMETHING ABOUT THE GIANTS, ART? I'M NOT SURE I HEARD THAT.

MR. TORRES: I STILL THINK IT'S A GREAT TEAM, AND THEY DID THE BEST THEY COULD GIVEN THAT STUPID CALL BY THE FIRST BASE UMPIRE.

CHAIRMAN THOMAS: FAIR ENOUGH. FAIR ENOUGH.

SO WITH RESPECT TO THE ACCESSIBILITY AND AFFORDABILITY WORKING GROUP, AS YOU KNOW, THAT BODY WILL CONSIST OF SEVEN BOARD MEMBERS CHAIRED BY ART AND TEN NON-BOARD MEMBERS WHO BRING SPECIFIC ELEMENTS OF EXPERTISE TO THE TABLE. WE'VE SPENT MOST OF THE YEAR, ART, MARIA B. AND I, IN IDENTIFYING FOLKS TO FILL OUT THOSE TEN SLOTS. I'M HAPPY TO REPORT THAT WE HAVE SUCCESSFULLY IDENTIFIED OUR FULL COMPLEMENT NOW AND WILL BE HAVING THE FIRST MEETING OF THAT BODY -- WE'LL GET TO IT LATER IN THE

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AGENDA ON THIS TOPIC -- BUT FIRST MEETING OF THAT BODY SOMETIME IN THE NEXT FEW WEEKS TO START ADDRESSING THE GAME PLAN FOR THAT WORKING GROUP ON THIS EXTREMELY IMPORTANT TOPIC GOING FURTHER.

OKAY. ANOTHER THING SPECIFICALLY FOR THE NEWER MEMBERS. YOU MAY NOT BE FAMILIAR WITH THIS. THE PRINCIPAL BODY THAT WE AS CIRM REPORT TO IN THE STATE GOVERNMENT IS SOMETHING CALLED THE CITIZENS FINANCIAL ACCOUNTABILITY OVERSIGHT COMMITTEE OR THE CFAOC, WHICH IS CHAIRED BY THE STATE CONTROLLER BETTY YEE, AND MEETS ANNUALLY TO GET AN UPDATE ON CIRM'S FINANCES, BUDGETS, EVERYTHING DEALING WITH HOW WE ARE DEPLOYING OUR FUNDS, AS WELL AS TO GET AN UPDATE ON ALL OF THE BEST-IN-CLASS RESEARCH THAT WE HAVE FUNDED UP TO THAT POINT WITH A PARTICULAR LOOK AT WHAT'S HAPPENED THE PRECEDING YEAR FROM THE LAST REPORT.

THAT COMMITTEE HAS FIVE MEMBERS AND HAS MET ANNUALLY FOR THE DURATION SINCE CIRM STARTED BACK IN '04 AND IS A GREAT OPPORTUNITY FOR US TO SHOWCASE TO THE STATE GOVERNMENT ALL OF THE EXCEPTIONALLY FINE WORK THAT EVERYBODY AT CIRM IS DOING AND THE FANTASTIC RESEARCH THAT CIRM IS ENABLING. THAT MEETING IS COMING UP IN NOVEMBER AND, WE HAVE HAD A VERY GOOD RELATIONSHIP WITH THE

CONTROLLER AND WITH THIS COMMITTEE AND, AS ALWAYS, ARE LOOKING FORWARD TO THE OPPORTUNITY TO SHARE WHAT'S GOING ON AT CIRM WITH THE STATE GOVERNMENT. DR. MILLAN WILL BE GIVING THE KEYNOTE ON THE PROGRESS OF THE RESEARCH, WHICH IS SOMETHING THEY ALWAYS REALLY LOOK FORWARD TO BECAUSE IT'S NOT A SUBJECT MATTER THEY TYPICALLY GET TO HEAR A LOT ABOUT. AND SO THIS IS A VERY GOOD CHANCE FOR THEM TO FAMILIARIZE THEMSELVES WITH WHAT WE DO. SO WE'RE LOOKING FORWARD TO THAT AND WILL REPORT BACK IN DECEMBER ABOUT HOW THAT GOES.

THE LAST NOTE JUST WANTED TO MAKE HERE IS, AS YOU KNOW, LATER IN THE AGENDA IS THE PERFORMANCE AUDIT WHICH WILL BE PRESENTED BY OUR AUDITORS, MOSS ADAMS. AS YOU WILL HEAR, IT'S A VERY POSITIVE AUDIT. THEY DO -- THESE AUDITORS NEED TO, PER THE PROPOSITIONS, NEED TO DO THIS EVERY THREE YEARS, AND IT'S A GOOD WAY TO CHECK ON ALL THE PERFORMANCE ELEMENTS THAT GO INTO WHAT WE DO ON A DAILY BASIS. AND THIS AUDIT IS VERY, VERY POSITIVE. I THINK YOU'LL BE VERY PLEASED WHEN YOU GET THE REPORT.

WANT TO DO A SHOUT-OUT TO MARIA B. WHO SORT OF SPEARHEADED THIS WHOLE EFFORT TOGETHER WITH MANY OTHER MEMBERS OF THE TEAM AND PUT IN MANY, MANY HOURS IN WORKING TO HELP MOSS ADAMS GET ALL THE

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INFORMATION THEY NEEDED TO PERFORM THIS AUDIT.

SO WITH THAT, LET ME TURN IT OVER TO DR. MILLAN TO TALK ABOUT THE PRESIDENT'S REPORT.

DR. MILLAN: THANK YOU, CHAIRMAN THOMAS. DR. PATEL IS GOING TO ADVANCE MY SLIDES FOR ME, SO I'M GOING TO GIVE HIM A CHANCE TO PROJECT THAT. I WANT -- ONE SECOND. I'M JUST NOT SEEING THINGS ON MY SCREEN.

DR. GOLDSTEIN: I HAVE A QUICK QUESTION PLEASE. DO YOU WANT US TO ASK QUESTIONS DURING YOUR PRESENTATION OR HOLD THEM TILL THE END?

DR. MILLAN: I THINK THAT'S -- WE CAN -- WHAT I'LL DO IS I'LL TEE IT UP SO THAT I'LL LET YOU KNOW WHEN I'M GOING START GOING INTO THE SUBSTANCE. AND THEN WHAT WE'LL DO DURING THAT SECTION, WHICH IS WHEN WE'RE TALKING ABOUT THE PROPOSED STRATEGIC PLAN ITSELF, I WILL PAUSE BETWEEN EACH SECTION TO GIVE YOU AN OPPORTUNITY FOR Q AND A AND DISCUSSION BECAUSE THE PURPOSE OF THIS PRESENTATION IS REALLY TO HAVE THE OPPORTUNITY FOR THE BOARD TO DISCUSS THIS ALTOGETHER. MANY OF YOU HAVE BEEN INVOLVED IN VARIOUS ASPECTS OF THIS. SO I HOPE THAT PLAN WORKS FOR YOU.

DR. GOLDSTEIN: THANK YOU.

DR. MILLAN: ALL RIGHT. HERE'S THE

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PRESENTATION. MR. CHAIRMAN, MEMBERS OF THE BOARD, THE PUBLIC, AND CIRM TEAM, FOR THIS MEETING, FOR THE PRESIDENT'S REPORT, I WILL BE FOCUSING PRIMARILY AND EXCLUSIVELY ON THE DRAFT STRATEGIC PLAN FOR CIRM IN THE PROPOSITION 14 ERA. I WILL BE PRESENTING A HIGH LEVEL OVERVIEW. THERE WILL BE NO SPECIFIC CONCEPTS AND NO DETAILS PRESENTED AT THIS MEETING. IT'S INTENDED TO GENERATE DISCUSSION AND PROVIDE AVENUES FOR YOUR INPUT TO GUIDE US TOWARD BRINGING THE PLAN FOR FINAL APPROVAL BY THE BOARD IN DECEMBER. NEXT SLIDE PLEASE.

SO JUST BY WAY OF BACKGROUND AND SUMMARY, AND THIS IS A VERY BRIEF SUMMARY, MANY OF YOU KNOW THAT CIRM WAS CREATED BY PROPOSITION 71, A $3 BILLION BOND INITIATIVE IN 2004. AND THANKFULLY IN THE MIDST OF THE CHALLENGES IN 2020, CALIFORNIA CITIZENS SUPPORTED THE PASSAGE OF PROPOSITION 14 IN NOVEMBER REAUTHORIZING CIRM WITH $5.5 BILLION IN BOND FUNDING.

BEFORE PRESENTING THE PROPOSED STRATEGIC PLAN UNDER PROPOSITION 14, I'D LIKE TO TAKE A FEW MOMENTS TO REVIEW CIRM'S EXPERIENCE AND ACCOMPLISHMENTS UNDER PROP 71 AS THEY SERVE AS A SOLID FOUNDATION FOR ANY STRATEGY MOVING FORWARD. NEXT SLIDE PLEASE, SHYAM.

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MAYBE GO BACK. I FORGOT TO GIVE YOU THE MOUTHFUL DESCRIPTION OF WHO WE ARE. SO IN THE MIDDLE BUBBLE, THESE ARE KIND OF DESCRIPTORS OF CIRM'S ROLE AND WHAT DISTINGUISHES US. IT'S AN ACCELERATING PATIENT-CENTRIC FUNDER, PARTNER, AND DERISKER FOR BASIC, TRANSLATIONAL, AND CLINICAL RESEARCH, AND FUNDER OF INFRASTRUCTURE AND EDUCATION PROGRAMS. AND IN THE NEXT FEW SLIDES, I'M GOING TO SO CALL UNPACK THAT STATEMENT A LITTLE BIT. NEXT SLIDE PLEASE, SHYAM.

FIRST, CIRM IS AN ACCELERATING PATIENT-CENTRIC FUNDER. PATIENTS ARE THE HEART OF OUR MISSION. THEREFORE, THE IMPACT THAT WE HAVE IS REALLY SOMETHING WE CAN MEASURE WHEN WE HAVE AN IMPACT ON PATIENTS. SO THAT'S OUR STRONGEST SIGNAL. CIRM HAS FUNDED OVER A THOUSAND PROGRAMS, INCLUDING OVER 75 CLINICAL TRIALS NOW, ACROSS A BROAD RANGE OF DISEASE INDICATIONS AND INCLUDING FIRST-IN-HUMAN SMALL CLINICAL PHASE 1 TRIALS ALL THE WAY TO LATER STAGE PIVOTAL TRIALS IN COMMON DISEASES SUCH AS DIABETES TO RARE DISEASES SUCH AS INHERITED IMMUNE DEFICIENCIES AND SICKLE CELL DISEASE.

OVER 2700 PATIENTS HAVE BEEN ENROLLED IN THE VARIETY OF CIRM TRIALS THAT HAVE BEEN FUNDED TO DATE. AND PICTURED HERE ARE TWO PATIENTS WHO ARE

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OVER FIVE YEARS OUT FROM BEING ENROLLED IN CIRM CLINICAL TRIALS.

BRANDON ON YOUR LEFT HOLDING THE CIRM GAME BALL WAS CURED OF X-LINK CHRONIC GRANULOMATOUS DISEASE, WHICH IS AN INHERITED DEVASTATING CONDITION WHERE HE WAS BORN WITHOUT THE ABILITY TO FIGHT OFF INFECTIONS. SO THIS DISEASE IS MARKED BY RECURRENT HOSPITALIZATIONS AND INFECTIONS THAT BECOME RESISTANT TO ANTIBIOTICS AND REALLY EXPOSE THOSE AFFECTED TO LIFE-THREATENING CONDITIONS ON A CONTINUAL BASIS. HE RECEIVED A GENE-MODIFIED BLOOD STEM CELL TRANSPLANT TO CORRECT THE UNDERLYING CONDITION. AND IN CLINICAL TRIAL ONE OF THE FIRST PATIENTS TO DEMONSTRATE SIGNAL AND THAT HIS DISEASE WAS REVERSED. HE'S OVER FIVE YEARS OUT AND CURED OF X-LINKED CGD.

EVIE ON THE RIGHT, VERY FAMILIAR TO YOU, I THINK THIS IS FROM HER 7TH BIRTHDAY, IS ONE OF THE DOZENS OF PATIENTS WHO HAVE BEEN CURED FROM THE SO-CALLED BUBBLE BABY DISEASE. THE FORM SHE HAS IS CALLED ADA-SCID, ADENOSINE DEAMINASE SEVERE COMBINED IMMUNO DEFICIENCY, WHICH IS A GENETIC-BASED DISEASE.

IN A RECENT PUBLICATION IN *BLOOD*, DR. KOHN AND HIS TEAM HAVE REPORTED THAT 90 PERCENT OF PATIENTS WHO ARE OUT EIGHT TO ELEVEN YEARS HAVE HAD

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DURABLE CURE. SO ESSENTIALLY THIS CELL/GENE THERAPY APPROACH HAS DEMONSTRATED THAT CURES ARE POSSIBLE. NEXT SLIDE PLEASE, SHYAM.

CIRM FUNDS BASIC RESEARCH. GOOD MEDICINE STARTS WITH STRONG SCIENCE. BASIC RESEARCH IS THE FOUNDATION AND THE STARTING POINT FOR ANYTHING THAT COULD BE DEVELOPED INTO THERAPIES. SO CIRM HAS FUNDED RESEARCH ACROSS CALIFORNIA UNIVERSITIES AND RESEARCH ORGANIZATIONS IN CALIFORNIA, GENERATING OVER 3,000 PEER-REVIEW PUBLICATIONS. CIRM HAS ALSO FUNDED THE CREATION OF DEDICATED LABS FOR STEM CELL RESEARCH AS WELL AS SHARED LABS, SHARED RESOURCES, SUCH AS THE WORLD'S LARGEST INDUCED PLURIPOTENT STEM CELL BANK OF 2400 LINES USED FOR RESEARCH, DISEASE MODELING, AND DRUG DISCOVERY. CIRM HAS ENABLED INVENTIONS AND DISCOVERIES, SUPPORTED GENOMICS-BASED APPROACHES IN STEM CELL SCIENCE. NEXT SLIDE PLEASE.

IN TERMS OF THERAPY DEVELOPMENT AND CLINICAL TRIALS, CIRM IS DIFFERENTIATED FROM OTHER FUNDING AGENCIES FOR ITS SUPPORT OF TRANSLATIONAL AND THERAPEUTIC DEVELOPMENT WORK. WE'VE SUPPORTED RESEARCH THAT HAS LED TO OVER 90 CANDIDATES ADVANCING TO THE CLINICS FOR TRIAL AND THEN BEYOND. ESTABLISHED THE FIRST IN-KIND STEM CELL AND REGENERATIVE CLINICAL NETWORK, THE SO-CALLED ALPHA

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CLINICS NETWORK, WHICH YOU WILL HEAR ABOUT LATER ON IN THIS PRESENTATION. AND CIRM PORTFOLIO PROGRAMS ACTIVELY PARTICIPATED AND ENACTED THE NEW REGULATORY PARADIGM INTRODUCED BY THE 21ST CENTURY CURES ACT OF 2016 WHERE THE FDA HAD PROVIDED MECHANISMS TO UNIQUELY EVALUATE STEM CELL REGENERATIVE MEDICINE PROJECTS. THERE WAS AN EXPEDITED PATHWAY DESIGNATION CALLED RMAT, REGENERATIVE MEDICINE ADVANCED THERAPY, DESIGNATIONS FOR CELL AND GENE THERAPIES. AND CIRM PROGRAMS WERE AMONG THE FIRST TO RECEIVE THIS DESIGNATION. AND CURRENTLY CIRM PORTFOLIO PROGRAMS ACCOUNT FOR 15 PERCENT OF THE RMATS THAT HAVE BEEN ISSUED BY THE FDA. THESE PROVIDE EXPEDITED PATHWAYS AND FREQUENT COLLABORATIVE ASSOCIATION WITH THE FDA TO LEARN TOGETHER AND TO DEVELOP THESE INNOVATIVE AND NOVEL TYPES OF THERAPIES.

ALL THROUGH ITS FUNDING AND PARTNERSHIP PROGRAMS, CIRM HAS INCREASED THE PROGRESSION OF THERAPIES FROM EARLY STAGE RESEARCH INTO FDA REGULATED CLINICAL TRIALS WITH NOTABLY SHORT TIMELINES. A VERY IMPORTANT EXAMPLE OF THAT IS THE SICKLE CELL PROGRAM THAT'S BEING CONDUCTED BY MARK WALTERS AT UCSF. IT'S IN COLLABORATION WITH DON KOHN AT UCLA AND WITH IGI AT BERKELEY WITH JENNIFER

DABNO'S LAB. IT'S A CRISPR BASED CELL/GENE THERAPY APPROACH FOR CURE SICKLE CELL. AND THIS IS BEING CO-FUNDED WITH THE NIH, THE HEART LUNG BLOOD INSTITUTE, WHO WE HAVE A KIND OF A LANDMARK MOU AND CO-FUNDING PARTNERSHIP FOR CURE SICKLE CELL. NEXT SLIDE PLEASE.

IN TERMS OF BUILDING AN ECOSYSTEM, CIRM HAS BUILT A REGENERATIVE MEDICINE ECOSYSTEM IN CALIFORNIA THAT'S UNPARALLELED WORLDWIDE. WE'VE TRAINED OVER 3,000 STUDENTS, STIMULATED THE CALIFORNIA ECONOMY WITH TAX REVENUE AND JOB CREATION AND, ATTRACTED INDUSTRY INVESTMENT INTO CIRM PROGRAMS. MANY OF YOU WHO WERE HERE FOR THE PRESENTATION OF THE LAST STRATEGIC PLAN, THE 2016 TO 2020 STRATEGIC PLAN, YOU KNOW THAT ONE OF THE MAJOR GOALS WAS TO INCREASE INDUSTRY PULL BECAUSE AT THAT TIME THERE WAS VERY LITTLE INDUSTRY INVESTMENT. IT WAS JUST TOO RISKY.

ALONG WITH THE PROGRESSION OF THE FIELD, CIRM HAS ALSO BEEN INVOLVED IN INCREASING THIS PULL WITH OVER $18 BILLION IN INDUSTRY INVESTMENT BY WAY OF PARTNERSHIP, IPO'S, FOLLOW-ON FINANCING, AND LICENSING EVENTS. $18 BILLION JUST OVER THE PAST FIVE YEARS ALONE. NEXT SLIDE PLEASE.

SO THAT'S KIND OF A VERY, VERY LIGHTNING

ROUND OVERVIEW OF WHAT'S BEEN ACCOMPLISHED TO DATE UNDER CIRM PROP 71 ERA. GIVEN WHAT CIRM HAS DONE UNDER PROP 71 AND THE FUNDING PROVIDED BY PROP 14, CIRM IS UNIQUELY POSITIONED TO DESIGN A STRATEGIC PLAN TO USHER IN THE NEXT ERA FOR REGENERATIVE MEDICINE.

IN EARLY 2020, EVEN BEFORE WE KNEW IF THE PROPOSITION WOULD MAKE IT ON THE BALLOT, LET ALONE PASS, CIRM HAD ALREADY STARTED THE STRATEGIC PLANNING PROCESS ALONG WITH THE BOARD. IT ASSEMBLED INTERNALLY INTO FOUR STRATEGY PROJECT TEAMS TO EXPLORE GAPS IN OPPORTUNITIES IN THE FOLLOWING AREAS: ADVANCING WORLD-CLASS SCIENCE, PATHWAYS TO COMMERCIALIZATION, ADDRESS HURDLES TO PATIENT ACCESS, AND EVALUATE HOW CIRM CAN BRING ITS ENGINE, ITS CIRM FUNDING OPERATIONAL ENGINE, TO EVEN AN HIGHER LEVEL TO ADDRESS THE NEEDS GOING FORWARD. NEXT SLIDE PLEASE, SHYAM.

WE ENGAGED IN INTELLIGENCE GATHERING, COLLECTED VALUABLE STAKEHOLDER INPUT, WE GATHERED, EXAMINED, SORTED AND TESTED IN THE FOLLOWING WAYS: WE CONTINUED TO BE INVOLVED IN NATIONAL AND INTERNATIONAL MEETINGS TO REMAIN CURRENT WITH ISSUES, TRENDS, ADVANCES, AND BEST PRACTICES ACROSS THE FOUR STRATEGIC THEMES AND WORKING GROUPS. AND

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WE OURSELVES ORGANIZED PRESENTATIONS, WORKSHOPS, PANELS, AND MEETINGS AND KOL, KEY OPINION LEADER, GATHERINGS TO ENGAGE THE BOARD, PATIENT AND GENERAL PUBLIC, SCIENTISTS, INDUSTRY LEADERS, AND EXTERNAL KEY OPINION LEADERS.

NOTABLY YOU WILL RECALL THAT IN FEBRUARY THE PRESIDENT OF CIRM -- THE CIRM PRESIDENT, CHAIR, AND JOINT SCIENTIFIC STRATEGY ADVISORY PANEL MEETING WAS CONDUCTED WHERE WE ASSEMBLED THE TOP LEADERS IN THE FIELD TO ADVISE US. AND FROM THAT WE BROUGHT THAT BACK TO THE BOARD IN MARCH. THAT HAS GUIDED US IN TERMS OF THE STRATEGIC FOCUS FOR OUR SCIENCE.

IN ADDITION, WE HELD A STAKEHOLDER TOWN HALL MEETING FOR CALIFORNIA SCIENTISTS AND LEADERS AND STUDENTS WHERE WE GAINED EXTREMELY IMPORTANT FEEDBACK. AND WE ACTUALLY CONDUCTED A SURVEY THAT HAS ALSO UNCOVERED SOME NEEDS THAT YOU WILL HEAR ABOUT IN A LITTLE BIT. WE ENGAGED POLICY LEADERS, PATIENT COMMUNITIES, PATIENT NAVIGATION SPECIALISTS, AND PATIENT ACCESS PROFESSIONALS FROM REGENERATIVE MEDICINE COMPANIES AND THE COMMUNITY TO DISCUSS COMMUNITY ENGAGEMENT, PATIENT NAVIGATION, AND HURDLES TO PATIENT ACCESS.

WE EXPLORED SPECIFIC TOPIC AREAS SUCH AS DATA SHARING, INDUSTRY ENGAGEMENT, MANUFACTURING,

COMMERCIALIZATION ISSUES WITH ACADEMIC ENTITIES, INDUSTRY, AND THE COMMUNITY.

SO FROM THIS I WILL NOW PRESENT THE INFORMATION AS WE HAVE ASSEMBLED IT, HAVE BEEN GUIDED BY OUR BOARD, IN THE VARIOUS TOPIC AREAS AND WILL BE PRESENTING A PROPOSED FIRST MISSION STATEMENT AND DRAFT STRUCTURE FOR OUR STRATEGIC PLAN. NEXT SLIDE PLEASE, SHYAM.

FIRST, THE MISSION STATEMENT. AND I WILL PAUSE AFTER THIS MISSION STATEMENT ONLY TO SAY THAT AFTER DISCUSS THE MISSION STATEMENT, I WILL EXPLAIN HOW THIS FITS AND IS ALIGNED WITH THE PROPOSED STRATEGIC PLAN.

AS YOU RECALL, OUR CURRENT MISSION STATEMENT IS ACCELERATING STEM CELL TREATMENTS TO PATIENTS WITH UNMET MEDICAL NEEDS. WE ARE PROPOSING THAT WE SHOULD EVOLVE THIS MISSION STATEMENT BASED ON THE INFORMATION GATHERING AND DISCUSSIONS WE'VE HAD OVER THE PAST TWO YEARS TO ACCELERATING WORLD-CLASS SCIENCE, TO DELIVER TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENTS TO CALIFORNIA AND WORLDWIDE. WE BELIEVE THIS IS MORE CURRENT AND WILL LEAD US FORWARD AS A GUIDING LIGHT AS WE'VE ALWAYS USED OUR MISSION STATEMENT. NEXT SLIDE PLEASE.

SO TO BREAK THIS DOWN, THE ANATOMY OF THE

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MISSION STATEMENT. ACCELERATING, WE KEPT THE WORD "ACCELERATING." THIS IS FUNDAMENTAL TO CIRM'S IDENTITY AND VALUE PROPOSITION. WE ACCELERATE THROUGH OUR FUNDING MODEL, PARTNERSHIPS AND PROMOTING A CULTURE OF COLLABORATION AND TEAM SCIENCE, AND WE WOULD LIKE TO EVEN BUILD AND STRENGTHEN THAT FURTHER.

WE CHOSE WORLD-CLASS SCIENCE AND REGENERATIVE MEDICINE IN THE DESCRIPTORS HERE IN THE FIRST AND SECOND LINE OF THE MISSION STATEMENT TO REPLACE STEM CELL TREATMENTS BECAUSE IT REFLECTS A BROADER REMIT OF WHAT CIRM HAS BEEN FUNDING OF THE TRANSFORMATIVE APPROACHES IN CELL AND GENE THERAPY AND OTHER FUTURE VITAL RESEARCH OPPORTUNITIES, ALL SUPPORTED AND ACCOUNTED FOR UNDER PROP 14.

DELIVER. DELIVER IS A VERB AND WAS DELIBERATELY CHOSEN TO REFLECT SPECIFIC ACTIONS THAT CIRM WOULD TAKE TO BRING THESE TRANSFORMATIVE ADVANCEMENTS TO BEYOND THE BENCH, BEYOND THE CONTROLS AND LIMITED SETTING OF CLINICAL TRIALS TO THE REAL WORLD. THE REAL WORLD INCLUDES DIVERSE, UNDERREPRESENTED, AND OFTEN DISPROPORTIONATELY AFFECTED COMMUNITIES.

DELIVERING, THE FINAL LINE, TO CALIFORNIA AND WORLDWIDE. DELIVERING TO A DIVERSE CALIFORNIA

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WILL DELIVER A MORE COMPLETE UNDERSTANDING OF BIOLOGY, MORE COMPLETE REPRESENTATION OF THE INTENDED PATIENT POPULATIONS FOR WHICH WE ARE DEVELOPING THESE THERAPIES. DELIVERING TO A DIVERSE CALIFORNIA INCREASES THE BENEFIT TO OUR DIVERSE WORLDWIDE COMMUNITY.

SO THAT IS THE BREAKDOWN AND THE EXPLANATION FOR THE PROPOSED NEW MISSION STATEMENT. I'M HAPPY TO TAKE QUESTIONS AND INPUT AT THIS TIME BEFORE WE MOVE ON. CHAIRMAN THOMAS, IF YOU WANTED TO MODERATE ANY Q AND A HERE. I DON'T SEE ANY HANDS RAISED OR ANYTHING.

MS. BONNEVILLE: KEITH HAS HIS HAND RAISED.

DR. MILLAN: THANK YOU, MARIA.

DR. YAMAMOTO: THANKS, MARIA, FOR THIS.

I HAVE A COMMENT ON ONE OF THE VERY FIRST SLIDES THAT YOU SHOWED WHEN YOU NOTED THAT CIRM IS A PATIENT CENTRIC ORGANIZATION AND, THEREFORE, WE MEASURE OUR IMPACT BY -- I'M NOT SURE WHAT YOU SAID HERE -- BY MEASURING IMPROVEMENT IN PATIENT LIVES, SOMETHING LIKE THAT. AND I THINK THAT I HAVE TWO CONCERNS ABOUT FRAMING IT IN THAT WAY. ONE, OF COURSE, IS THE IMPACTS OF BASIC, TRANSLATIONAL, CLINICAL, AND POPULATION RESEARCH ARE NOT PARALLEL

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OF IMPACTS ON PATIENT LIVES. THEY ARE NOT PARALLEL; THEY'RE NOT ON PARALLEL TRAJECTORIES. AND SO MAKING A SIMPLE STATEMENT THAT MEASURE IMPACT BY LOOKING AT IMPROVEMENT OF PATIENT LIVES CAN BE MISLEADING IN THAT SENSE AND JUDGING WHAT THE IMPACTS OR IMPORTANCE OF THE DIFFERENT TYPES OF RESEARCH ARE THAT CIRM SUPPORTS.

AND, SECONDLY, THE IMPACTS ARE NOT LINEAR IN THE SENSE THAT BOLD IDEAS ARE BOLD BECAUSE THEY HAVE A RELATIVELY HIGH POTENTIAL FOR FAILURE. BUT CIRM FUNDING BOLD IDEAS THAT FAIL IS NOT EVIDENCE OF POOR JUDGMENT IN MAKING FUNDING DECISIONS OR ANYTHING OF THE SORT. IT'S JUST THE NATURE OF FUNDING BOLD IDEAS, AND IT'S IMPORTANT THAT CIRM BE WILLING TO TAKE THOSE KINDS OF RISKS TO ADVANCE THINGS IN A NONLINEAR WAY.

SO I JUST THOUGHT THAT IT WAS A BIT SIMPLISTIC TO SAY BECAUSE WE ARE A PATIENT CENTRIC ORGANIZATION, WE MEASURE OUR IMPACT BY MEASURING THE EFFECT OF WHAT WE DO ON PATIENT LIVES.

DR. MILLAN: THANK YOU, DR. YAMAMOTO. AND PERHAPS I WAS OVERLY SIMPLISTIC TO MAKE A VERY STRONG STATEMENT. WHAT I INTENDED TO SAY WAS THAT IMPACTS ON PATIENTS IS A VERY STRONG SIGNAL OF THE VALUE OF CIRM. BUT CERTAINLY ALL ASPECTS OF CIRM

FROM BASIC DISCOVERY ALL THE WAY THROUGH, WHETHER PROJECTS SEEMINGLY DON'T WORK OUT INITIALLY TO WHERE IT DOWN THE ROAD DOES BECOME RELEVANT AND DOES IMPACT IN OTHER WAYS IS ABSOLUTELY SOMETHING THAT'S EMBEDDED INTO HOW WE ARE THINKING, FIRST OF ALL, AND HOW WE HAVE RUN CIRM AND HOW WE'RE THINKING OF CIRM GOING FORWARD.

SO IT MAY HAVE BEEN MISLEADING FOR ME TO OVEREMPHASIZE THAT, BUT IN EFFECT CALIFORNIA CITIZENS HAVE SUPPORTED US BECAUSE THEIR BELIEF THAT IT WILL IMPACT THEIR LIVES. SO I ACTUALLY FEEL THAT IT'S REALLY IMPORTANT THAT WE FOLLOW THOSE SIGNALS AND MAKE SURE THAT THEY ARE IN FRONT OF US STRONGLY BECAUSE, WHILE WE ARE PUSHING THE SCIENCE FORWARD AND WHILE WE UNDERSTAND THAT THE PROCESS OF SCIENCE DOESN'T ALWAYS HAVE VISIBLE, IMMEDIATE IMPACT, WE ACTUALLY DO NEED TO HAVE SOME INDICATION THAT WE'RE GOING THE RIGHT DIRECTION. SO THAT'S WHAT I INTENDED, AND I APOLOGIZE IF IT SEEMED MISLEADING.

MS. BONNEVILLE: LINDA ACTUALLY HAD HER HAND UP AND I LOWERED IT BY ACCIDENT.

DR. BOXER: I WONDERED WHO DID THAT.

MS. BONNEVILLE: ABSOLUTELY.

DR. BOXER: MARIA, I REALLY LIKE THE NEW MISSION STATEMENT. I THINK IT'S REALLY MUCH BROADER

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AND EXCITING. THE ONE QUESTION I HAVE ABOUT IT IS IS IT REALLY CLEAR THAT THE EDUCATIONAL COMPONENT IS SO IMPORTANT TO THE MISSION OF CIRM? AND I SEE YOU'VE ADDED IN "AND A TRAINED WORKFORCE," BUT IT'S JUST A QUESTION. WHEN I READ IT, IT DOESN'T IMMEDIATELY STRIKE ME THAT WAY, ALTHOUGH CERTAINLY KNOWING THE HISTORY OF CIRM AND KNOWING THE PLANS, THAT IS THE CASE.

DR. MILLAN: DR. BOXER, THANK YOU SO MUCH FOR THAT QUESTION. IN FACT, THAT IS SOMETHING THAT WE WERE TRYING TO CAPTURE. SO DELIVER AND TRANSFORMATIVE KIND OF EMBEDDED IN THERE. WE CAN'T DELIVER IT WITHOUT A TRAINED WORKFORCE. WE CAN'T PRODUCE A PRODUCT WITHOUT A TRAINED WORKFORCE IN MANUFACTURING. WE CAN'T TREAT PATIENTS WITHOUT A TRAINED FORCE, AND THE MEDICAL FIELD CAN'T ADVANCE THIS WITHOUT A TRAINED WORKFORCE AND LEADERSHIP IN THE SCIENTIFIC ARENA.

SO DELIVER AS A STRONG VERB HAS THAT ALL -- IN ORDER TO BE ABLE TO DELIVER, THESE ARE ALL THE THINGS THAT NEED TO BE IN PLACE. IF YOU RECALL -- SHYAM, IF YOU CAN BACK UP ONE SLIDE -- IN THE OLD, IN THE PREVIOUS, OUR CURRENT MISSION STATEMENT, WHAT WE NOTED AS ACCELERATING STEM CELL TREATMENTS TO PATIENTS WITH UNMET MEDICAL NEEDS, WE

SAID ACCELERATING, SO YOU ACCELERATE. BUT WHEN YOU SAY TO, WHAT DOES THAT MEAN "TO"? SO WE REALLY NEEDED TO UNDERSTAND WHAT IS THE -- TO IS NOT A VERB, RIGHT, SO WHAT DOES THAT MEAN? THAT'S WHAT WE TRIED TO CAPTURE BY THE WORD "DELIVER."

AND AS MANY OF YOU KNOW WHO HAVE BEEN INVOLVED IN STRATEGIC PLANNING AND MISSION STATEMENT CRAFTING, IT IS AN IMPERFECT SCIENCE. WE TRIED TO CAPTURE THAT, BUT WHAT WE DO HOPE IS THAT IN OUR STRATEGIC PLAN THAT THAT IS MORE FULLY DEVELOPED. AND AS WE HAVE BEEN DEVELOPING THE PLAN, WE HAVE BEEN LINKING IT BACK TO THE MISSION STATEMENT AND MAKING SURE THAT EVERYTHING THAT WE ARE TALKING ABOUT IN THE PLAN LINKS SOMEHOW TO A WORD OR TO THE SPIRIT OF THE WORD OR WORDS IN THE MISSION STATEMENT.

BUT IF YOU HAVE ANY RECOMMENDATIONS TO ADD TO THIS, THE IDEA IS FOR THE BOARD TO GIVE US ADDITIONAL INPUT. AND WE ARE REALLY HAPPY TO LOOK THROUGH THIS. WE ACTUALLY HAD CHANGED DIFFERENT THINGS. INSTEAD OF TRANSFORMATIVE, WE HAD HIGH IMPACT IN THE PAST, AND THE IMPACT WAS ALSO GOING TO -- THE IMPACT WAS ON THE IMPACT IN TERMS OF THE ECOSYSTEM. WE TOOK THAT OUT AND REPLACED IT WITH TRANSFORMATIVE BECAUSE OF SOME FEEDBACK WE HAD

GOTTEN IN TERMS OF MAKING SURE THAT WE REALLY CAPTURE WHAT THIS MEANS, WHAT THE IMPACT OF CIRM IS AS TRANSFORMATIVE.

DR. MARTIN: I WOULD JUST ADD TO WHAT LINDA SAID WITH A SLIGHTLY DIFFERENT EMPHASIS. AND THAT IS EDUCATION IS OBVIOUSLY KEY. AND THERE WAS A QUESTION ASKED AT ONE OF OUR MEETINGS RECENTLY WITH OUTSIDE ADVISORS WHAT -- THE QUESTION WAS WHAT WILL BE THE LEGACY OF CIRM. AND I FIRMLY BELIEVE THAT THE LEGACY IS GOING TO BE THE EFFECT OF OUR EDUCATIONAL PROGRAMS. THAT WILL HAVE THE GREATEST EFFECT.

WE'RE ADVANCING SCIENCE, ET CETERA, AND OTHERS ARE AS WELL. AND I THINK THAT'S REALLY CRITICAL IN TREATING PATIENTS. BUT EDUCATING SCIENTISTS OR EVEN JUST OTHER STAKEHOLDERS, EDUCATED POPULATION ON THE SCIENCE OF STEM CELLS AND REGENERATIVE MEDICINE IS GOING TO BE OF EXTRAORDINARY VALUE 15, 20 YEARS FROM NOW. THAT'S WHERE I THINK THE GREATEST IMPACT WILL BE, THE GREATEST LEGACY.

MS. BONNEVILLE: PAT, YOU HAVE YOUR HAND UP. YOU'RE NEXT.

DR. LEVITT: MARIA, THIS IS ALWAYS MY LEAST FAVORITE EXERCISE, HAVING TO COME UP WITH A

MISSION STATEMENT BECAUSE THE AUDIENCE -- BECAUSE SOMETIMES THE MISSION STATEMENT IS FOR THOSE WHO ARE WITHIN THE INSTITUTION, RIGHT, SO THAT THEY UNDERSTAND WHAT OUR MISSION IS. AND SOMETIMES IT'S DIRECTED OUTWARD, AND IT'S HARD TO COME UP WITH A CHIMERIC MISSION STATEMENT THAT SATISFIES ALL.

SO I'M JUST WONDERING. I'M CERTAIN THIS HAS BEEN LOOKED AT BY PATIENTS AND OTHERS TO GET THEIR IMPACT. DELIVER TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENT IS A MOUTHFUL, RIGHT. AND REGENERATIVE MEDICINE IS ALWAYS -- IS ALREADY IN THE TITLE OF THE ORGANIZATION, CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE. SO I'M WONDERING WHAT WERE THE RESPONSES TO THIS? WAS THERE A CLEAR UNDERSTANDING OF WHAT THIS MEANS FOR THIS PATIENT-CENTRIC ORGANIZATION?

DR. MILLAN: THANK YOU FOR THAT COMMENT, DR. LEVITT. SO REGENERATIVE MEDICINE WAS A TOPIC OR WAS PULLED OUT OF THE MISSION STATEMENT AND ASKED WHY THIS? WHY DID YOU REPLACE STEM CELLS? WHY REGENERATIVE MEDICINE? YES, IT'S A PATIENT-CENTRIC ORGANIZATION, BUT THE REGENERATIVE MEDICINE WAS IN THERE PROBABLY FOR THE RESEARCHERS TO REALIZE THAT IT'S BROADER THAN STEM CELLS, THAT IT ALSO INCLUDES GENE THERAPY, IT ALSO INCLUDES WHATEVER THE NEXT

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GENERATION IS, TECHNOLOGIES AND VITAL RESEARCH OPPORTUNITIES.

SO THE TREATMENTS WERE THERE FOR THE PATIENTS. THE TRANSFORMATIVE WAS THERE FOR THE COMMUNITY. AND REGENERATIVE MEDICINE IS THERE FOR THE SCIENTISTS. I GUESS IT'S SIMPLY HOW WE TRIED TO MAKE SURE THAT IT SPOKE TO ALL AUDIENCES.

DR. LEVITT: OKAY. THANKS.

MS. BONNEVILLE: FRED, YOU'RE NEXT.

DR. FISHER: GOOD MORNING, EVERYONE. SO WHEN I WAS LISTENING TO THE DISCUSSION ABOUT EDUCATION AND MISSION STATEMENTS AND FROM MY EXPERIENCE, I DON'T NECESSARILY TALK ABOUT HOW YOU'RE GOING TO ACHIEVE THE OUTCOME. THE MISSION STATEMENT IS THE OUTCOME. IT'S HOW YOU KNOW YOU'RE DONE. HOW YOU KNOW YOU'VE ACHIEVED THE 30,000 FOOT GOAL OF THE ORGANIZATION. HOW YOU'RE GOING TO GO ABOUT THAT THROUGH EDUCATION AND SCIENTIFIC PROGRAMS AND ALL THE REST. THAT'S THE HOW, WHICH REALLY ISN'T THE MISSION.

AND SO I WANT TO JUST CONGRATULATE AND THANK THE GROUP THAT NOODLED ON THIS FOR COUNTLESS HOURS. BUT FOR ME ALL THE PROGRAMS THAT ARE GOING TO BE NECESSARY TO ACHIEVE THIS OVERARCHING GOAL, THEY'RE ALL IMPORTANT, THEY'RE ALL ESSENTIAL. THEY

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SHOULDN'T BE IN A MISSION STATEMENT BECAUSE THAT'S REALLY ABOUT THE HOW, NOT ABOUT THE WHAT. AND THIS IS THE 30,000 FOOT. WHAT ARE WE ABOUT AND HOW WILL WE KNOW WHEN WE'RE DONE? THAT'S THE ONLY CONTEXT I WOULD ADD IN RESPONSE TO THE OTHER COMMENTS.

DR. MILLAN: THANK YOU, DR. FISHER. SO DO YOU BELIEVE THAT THIS CAPTURES THAT IN TERMS OF MAKING CLEAR WHAT WE'RE ABOUT AND HOW WE KNOW WE ARE DONE?

DR. FISHER: I THINK IT DOES. THE OTHER THING THAT IT DOES IN LISTENING TO THE QUESTIONS BOUT ABOUT TRANSFORMATIVE REGENERATIVE MEDICINE, I DON'T KNOW IF IT'S THE INTENTION, BUT IN MY MIND IT KIND OF CREATES SOME GUIDE RAILS SO THAT IF SOMEBODY COMES UP WITH SOME GREAT IDEA THAT'S CONNECTED TO A SMALL MOLECULE, WELL, I DON'T KNOW IF THE REGENERATIVE MEDICINE NOTION SUGGESTS THAT, YEAH, THAT'S REALLY FOR A DIFFERENT ORGANIZATION, A DIFFERENT FUNDING SOURCE OTHER THAN CIRM.

SO I'M COMFORTABLE WITH IT. AND SOMEONE ELSE, YOU'LL TELL ME IF I'M RIGHT OR WRONG ABOUT THE GUIDE RAILS THAT, INCLUDING REGENERATIVE MEDICINE, KIND OF PUTS UP BECAUSE IT HELPS NARROW THE DECISION-MAKING PROCESS FROM A GRANTS POINT OF VIEW OF WHAT KIND OF GRANTS ARE WE OPEN TO LOOKING AT AND

WHAT KIND OF GRANTS, ALTHOUGH MAY BE TERRIFIC IDEAS, ARE NOT APPROPRIATE FOR CIRM FUNDING.

DR. MILLAN: THANK YOU SO MUCH.

MS. BONNEVILLE: ELENA.

DR. FLOWERS: HI, EVERYONE. I REALLY LIKE A LOT OF THESE COMMENTS AND PARTICULARLY THAT THE TRAINING PROGRAMS HAVE A POTENTIAL TO REALLY BE THE LEGACY THAT WILL HAVE THIS LASTING IMPACT.

I'M ALSO WONDERING IF THERE WAS SOME DISCUSSION ABOUT SORT OF JUST CALLING OUT A LITTLE BIT MORE AT THE FOREFRONT THE COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION, PARTICULARLY WITH REGARDS TO THE POPULATION OF CALIFORNIA AND WORLDWIDE. I THINK ALL INSTITUTIONS ARE REALLY GRAPPLING RIGHT NOW WITH HOW TO DO THAT MEANINGFULLY AND HOW TO HAVE THAT REALLY INTEGRATED AND EMBEDDED FROM START TO FINISH WHEN WE'RE CONCEIVING OF IDEAS, DEVELOPING THINGS, EVALUATING PROGRAMS, ET CETERA. AND IF THAT'S SOMETHING THAT WAS DISCUSSED OR MAYBE COULD BE CONSIDERED TO BE INCLUDED IN JUST A REALLY UP-FRONT WAY.

DR. MILLAN: THANK YOU SO MUCH. WE ACTUALLY HAD -- SO AS YOU PROBABLY CAN IMAGINE, WE HAD ALMOST 50 VARIATIONS OF THIS MISSION STATEMENT, AND ONE OF THEM DID HAVE TO A DIVERSE CALIFORNIA, TO

ALL CALIFORNIANS. AND THEN THERE WAS A STATEMENT, WELL, THE IMPACT IS BEYOND CALIFORNIA, AND IT'S TRUE. AND SO THE EXPLANATION THAT I HAD I THINK MAYBE FALLS INTO THE CATEGORY OF WHAT DR. FISHER TALKED ABOUT, WHICH IS THAT THE HOW-TOS, RIGHT, IN TERMS OF HOW WE'RE GOING TO ACCOMPLISH THIS, IF WE DELIVER THIS TO CALIFORNIA, TO ALL CALIFORNIANS, TO A DIVERSE CALIFORNIA COMMUNITY, ALL OF THESE THINGS WILL HAVE HAD TO BE IN THE HOW-TOS IN ORDER TO ACHIEVE THIS. IN ORDER TO SUCCESSFULLY DELIVER IT, THEN THE PRINCIPLES OF DEI, DIVERSITY, EQUITY, AND INCLUSION, AND ALL THE PROBLEM STATEMENTS RELATED TO HOW YOU BEST DELIVER THIS, BOTH FROM AN ACCESS AND EQUITY PERSPECTIVE, FROM THE CHALLENGE OF SCIENTIFIC AND HEALTHCARE DELIVERY, EVERYTHING HAS TO FALL IN PLACE ON ORDER FOR THIS TO HAPPEN.

SO IT FALLS IN THE CATEGORY OF MISSION STATEMENT. IT'S ALREADY A MOUTHFUL OF TRYING TO CAPTURE IT ALL AND USE IT AS KIND OF THE NUCLEUS FOR THE REST OF HOW THIS PLAYS OUT AND HOW-TOS AND THE DOWNSTREAM KIND OF PROGRAMS RELATED TO IT. I HOPE THAT THAT'S ANSWERS YOUR QUESTION, BUT IT DEFINITELY IS EXTREMELY IMPORTANT. AND YOU WILL SEE THAT PLAYED OUT A LITTLE BIT MORE WHEN I PRESENT THE REST OF THE STRATEGIC PLAN.

DR. FLOWERS: THAT'S GREAT. I WAS GOING TO SAY IT'S NOT IN THIS MOUTHFUL OF A SENTENCE WHICH I COMPLETELY ACKNOWLEDGE THAT CHALLENGE, THAT IT REALLY IS CALLED TO THE FOREFRONT KIND OF THROUGHOUT AS THE PLAN UNFOLDS.

DR. MILLAN: THANK YOU SO MUCH.

MS. BONNEVILLE: KRISTINA.

DR. VUORI: SO I ALSO WANTED TO CONGRATULATE MARIA AND THE WHOLE TEAM. AS, I THINK, PAT SAID EARLIER, COMING UP WITH MISSION STATEMENTS IS NOT NECESSARILY EITHER FUN, NOR ALWAYS A VERY SORT OF CLEAR OBJECTIVE, BUT I THINK YOU HAVE DONE A GREAT JOB IN CAPTURING LOTS OF, IF NOT ALL OF THE SENSE WHAT CIRM HOPEFULLY WILL BE ABOUT UNDER THE PROP 14.

I WAS ALSO LISTENING TO THE CONVERSATION ABOUT THE EDUCATION AND ABSOLUTELY AGREE THAT THAT IS ONE OF THE MANY LEGACIES THAT I HOPE THAT CIRM WILL LEAVE. IT'S A VERY UNIQUE PROGRAM THAT NOBODY ELSE REALLY HAS IN THE WORLD AT THE LEVEL WHAT CIRM IS DOING.

BUT SIMILAR TO FRED, I ALSO THINK THAT THE MISSION STATEMENT SHOULD NOT REALLY FOCUS ON HOW WE DO THINGS, BUT TO WHAT END WE ARE DOING THOSE. AND I THINK THE DELIVERABLE FROM MY PERSPECTIVE FOR

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EDUCATION IS THAT THROUGH EDUCATION WE WILL ACCELERATE WORLD-CLASS SCIENCE, DELIVER THE TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENTS REALLY TO ALL THE DIVERSE POPULATION OF CALIFORNIA AND IMPACT ALSO GLOBALLY. SO YOU HAVE CAPTURED IT REALLY QUITE NICELY. THERE ARE PROBABLY MANY OTHER WORDS THAT WE COULD ADD HERE, BUT I ALSO THINK THAT THE WAY YOU HAVE EXPLAINED THE WORDS IN THE MISSION STATEMENT COULD BE A VERY NICE DISCUSSION TOOL FOR ALL OF US, ICOC MEMBERS AND OTHERS, TO REALLY HAVE CONVERSATION ABOUT THE MISSION STATEMENT WITH OTHER FOLKS AND THEN SIMPLY GO ABOUT, WELL, LET ME EXPLAIN WHAT THIS MEANS. I THINK THAT'S ONE WAY TO COMMUNICATE THE IMPORTANCE OF CIRM. SO GREAT JOB.

MR. MILLAN: THANK YOU, DR. VUORI.

MS. BONNEVILLE: DEBORAH.

DR. DEAS: YES. I REALLY APPRECIATE HOW THOUGHTFUL THE TEAM HAS BEEN IN FORMING THE NEW MISSION STATEMENT. I WOULD LIKE TO GO BACK TO WHAT ELENA SAID IN TERMS OF THE DIVERSITY. IT REALLY DOESN'T STAND OUT, AND I KNOW THAT IT'S IMPLIED IN MANY ASPECTS. AND AS YOU'VE STATED, IN ORDER FOR US TO DO THIS, WE HAVE TO INTEGRATE DIVERSITY. HOWEVER, IT DOESN'T COME -- IT'S NOT RAISED TO THE LEVEL THAT IS FRONT AND CENTERED OR FULLY INTEGRATED

ON THE FRONT END. IT'S NOT OUTWARD FACING.

SO WHAT I WOULD SUGGEST IS THAT IT'S EASY TO ADD A FEW WORDS WHEN I READ THIS, ACCELERATING WORLD-CLASS SCIENCE, TO DELIVER TRANSFORMATIVE REGENERATIVE MEDICINE TREATMENTS TO CALIFORNIA AND WORLDWIDE IN A DIVERSE AND EQUITABLE MANNER. I THINK IF WE ADD A FEW WORDS LIKE THAT IN A DIVERSE AND EQUITABLE MANNER, YOU CAN WORDSMITH IT SOME MORE, THAT IT PUTS DIVERSITY AND EQUITY UP FRONT AND IT DOESN'T CHANGE ANYTHING. I THINK IT ONLY ENHANCES.

DR. MILLAN: THANK YOU, DR. DEAS. ONE OF THE CONSIDERATIONS COULD BE TO A DIVERSE CALIFORNIA AND WORLDWIDE WHICH IS SOMETHING WE HAD. BUT ANYWAY, WE CAN FOLLOW UP WITH YOU AND OTHERS AND FURTHER WORK ON THAT ASPECT OF THE MISSION STATEMENT.

I THINK DR. HARVEY HAS HER HAND UP.

DR. CLARK-HARVEY: YES. THANK YOU. ACTUALLY JUST ONE POINT ON THAT. I DO SUPPORT WHAT DR. DEAS SAID BECAUSE I THINK THAT'S DIFFERENT. SO BY SAYING THE TREATMENT AND THE FOCUS IS ON PROVIDING THESE FOR A DIVERSE CALIFORNIA IS DIFFERENT THAN SAYING THAT THERE IS ALMOST LIKE AN UNDERLYING EQUITY AND DIVERSE APPROACH THAT'S GOING

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TO BE TAKEN. IT CALLS OUT COMPETENCY, CULTURAL COMPETENCY, BY SAYING IN A DIVERSE AND EQUITABLE MANNER OR SOMETHING TO THAT EFFECT. I JUST THINK IT'S SEMANTICS, RIGHT, BUT THEY'RE IMPORTANT.

AND SO I WOULD SUPPORT FOCUSING ON THE UNDERLYING PRINCIPLE OF DIVERSITY AND EQUITY INFUSED THROUGHOUT THE APPROACH RATHER THAN FOCUSED ON A DIVERSE POPULATION BECAUSE WE WANT TO MAKE SURE THAT THE TREATMENTS, THE MODALITIES IN THEMSELVES ARE CULTURALLY COMPETENT AND FOCUSED ON EQUITY. I HOPE THAT MAKES SENSE.

DR. MILLAN: IT DOES. THANK YOU SO MUCH FOR EXPLAINING THE DIFFERENCE BETWEEN THE TWO.

MS. BONNEVILLE: FRED, YOU HAD ANOTHER QUESTION?

DR. FISHER: IT'S AN INTERESTING DISCUSSION, AND I'M WONDERING WHAT THE VOTERS CHARGED US WITH BECAUSE I DON'T KNOW THAT THAT WAS THE CHARGE OF THE VOTERS. IT DOESN'T MEAN THAT I DON'T VALUE IT. IT JUST MEANS THE MISSIONS STATEMENT OF THE ENTITY IS TIED DIRECTLY TO LEGISLATION OR IN THIS CASE INITIATIVE THAT THE VOTERS PASSED. AND SO I THINK WE'D WANT TO BE CAREFUL THAT THE MISSION, AGAIN SEPARATING THE MISSION FROM THE METHODOLOGIES, THAT THE MISSION IS

COMPLETELY IN ALIGNMENT WITH WHAT THE VOTERS HAVE CHARGED US TO DO WITH THEIR MONEY.

AND SO I WOULD GO BACK TO THE INITIATIVE LANGUAGE TO SEE WHERE THAT COMES IN BECAUSE I DON'T THINK WE -- I'M NOT SURE THAT WE ARE IN A POSITION, FRANKLY, TO MODIFY WHAT THE VOTERS APPROVED US DOING.

AND THE OTHER CHALLENGE WITH DEI INITIATIVES, IF WE ARE SUCCESSFUL IN CREATING THERAPIES, ACCESS TO THOSE THERAPIES ARE LARGELY OUTSIDE OF THE PURVIEW OF CIRM. THEY WILL BE IN THE HANDS OF THE COMPANIES THAT ADVANCE THOSE TO MARKET IN A COMMERCIAL SPACE. AND WE KNOW THE CHALLENGES ASSOCIATED WITH MAKING SURE EVERYONE WHO NEEDS ACCESS TO A TREATMENT HAS IT.

SO I'VE JUST RAISED THOSE QUESTIONS AGAIN AS PART OF THIS CONVERSATION.

THE OTHER PIECE THAT I'LL JUST THROW IN BECAUSE I'M NOODLING ON IT MYSELF IS IS THERE REDUNDANCY IN CALIFORNIA AND WORLDWIDE? OR MAYBE YOU CAN EXPLAIN KIND OF SINCE CALIFORNIA IS PART OF THE WORLD --

DR. MILLAN: WHY. OKAY.

DR. FISHER: A GLOBAL PATIENT POPULATION. IS THERE REDUNDANCY THERE OR MAYBE NOT? I DON'T

KNOW.

DR. MILLAN: THANK YOU FOR THAT QUESTION. THE REASON WHY CALIFORNIA WAS SPECIFICALLY MENTIONED IS THAT THAT IS THE TARGET STAKEHOLDER GROUP THAT IS BEING SERVED THROUGH PROP 14, BUT BY DOING SO, IT HAS ITS IMPACT WORLDWIDE. SO IT IS INTENDED TO BE A PRIORITY TYPE STATEMENT BECAUSE IT IS, AFTER ALL, THE VOTERS OF CALIFORNIA WHO HAVE SUPPORTED AND FUNDED THIS INITIATIVE. SO OUR POLICIES AND LEGISLATION RELATED TO THIS ARE COMPATIBLE WITH THAT, THAT THERE ARE RESTRICTIONS ON WHAT WE CAN FUND, AND THEY'RE VERY MUCH BASED ON THE CALIFORNIA PRESENCE OR ACTIVITIES WITHIN CALIFORNIA.

MS. BONNEVILLE: YSABEL.

MS. DURON: THANK YOU VERY MUCH. I APPRECIATE FRED'S COMMENTS, BUT I DO BELIEVE THAT IF YOU LOOK AT THE BREAKOUT OF THE CALIFORNIA VOTER, YOU WILL SEE THAT MEMBERS OF COMMUNITIES OF COLOR ALSO VOTED FOR THIS INITIATIVE WITH AN EXPECTATION THAT IT WOULD, IN FACT, IMPACT, HAVE SOME EVENTUAL IMPACT ON THEIR INDIVIDUAL FAMILY OR COMMUNITY OVER TIME. AND I THINK THAT PART OF THE PROBLEM OBVIOUSLY HAS BEEN IN OUTWARD COMMUNICATION AND AN UNDERSTANDING BY ALL COMMUNITIES THAT THIS IS MEANT TO SERVE THEM AS WELL WITH THE RIGHT MEDICINE AT THE

RIGHT TIME. WE HOPE AT THE RIGHT TIME.

SO I WOULD EXTRAPOLATE THAT IT IS BOTH OUR MORAL AND ETHICAL DUTY TO RECOGNIZE EQUITY AND INCLUSION FOR OUTWARD COMMUNICATION. AND I LIKE THE IDEAS THAT DEBORAH, ELENA, AND EVERYBODY ELSE HAS MENTIONED, THAT IT SHOULD BE VERY OBVIOUS AND VERY OUTWARD FOR OUR PURPOSES OF COMMUNICATIONS TO THESE COMMUNITIES THAT THIS IS INCLUSIVITY OF ALL COMMUNITIES BECAUSE THEY VOTED FOR IT, AND IT'S MEANT TO IMPACT THEIR COMMUNITY.

SO I DO APPRECIATE, EVEN AS I NOODLED OVER THIS SOME TIME BACK, ABOUT TRYING TO GET THAT MESSAGE ACROSS, AND I APPRECIATE HOW ELENA AND DEBORAH DEAS AND OTHERS HAVE PUT THOSE LAST TWO WORDS ON IT. THAT MAKES MY HEART SING. I THINK THAT THAT IS A WAY TO MAKE SURE THAT WE, CIRM, AND THE STATE OF CALIFORNIA ARE LEADING THE CHARGE ON EQUITY AND INCLUSION. AND I DON'T THINK THAT THE PEOPLE OF CALIFORNIA AND EVEN THOSE WHO VOTED FOR THIS WILL COME BACK AND SAY, "TAKE THOSE WORDS AWAY." I THINK THAT THEY WILL SUPPORT THIS BECAUSE IT MEANS ME, IT MEANS MY FAMILY, IT MEANS MY COMMUNITY. AND SO I DO LIKE THE ADDITION OF THOSE TWO WORDS, MARIA, OR THOSE THREE WORDS. YOU'LL HAVE TO REPEAT IT FOR ME EXACTLY, DEBORAH, BUT I DO LIKE

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THOSE. THANK YOU.

DR. MILLAN: THANK YOU SO MUCH. THE WORDS WERE TO ADD "IN A DIVERSE AND EQUITABLE MANNER."

MS. BONNEVILLE: CORRECT. ART, YOU'RE NEXT.

MR. TORRES: YES. THE CAVEAT IS THAT I WORKED ON THE CAMPAIGN ON MY OWN TIME AND MY VACATION TIME. AND PROBABLY I'M THE ONLY ONE ON THIS CALL THAT ACTUALLY WORKED IN THIS CAMPAIGN AND HELPED WRITE THE INITIATIVE, PROP 14, WHICH INCLUDED THE AFFORDABILITY AND ACCESSIBILITY WORKING GROUP THAT HAS BEEN MENTIONED.

ACCESSIBILITY FOR US BEGINS AT CIRM IN THE SUBMISSION OF GRANTS BY PI'S AND GRANTEES. WE HAVE STRESSED CONSISTENTLY WITH OUR REVIEW WORKING GROUP THAT WE WANT TO LOOK FOR DIVERSITY. DIVERSITY WILL BE A HANDLE UPON WHICH WE LOOK TO SEE WHETHER OR NOT WE'RE GOING TO REACH OUT TO THOSE COMMUNITIES THAT ARE UNDERSERVED AND TRADITIONALLY IGNORED.

SECONDLY, CIRM ALSO OPERATES WITH ACCESSIBILITY IN MAKING SURE THAT THE GRANTEES ARE CHOOSING A DIVERSE POOL OF PATIENTS FOR THEIR CLINICAL TRIALS. RIGHT NOW THEY ARE NOT. AND I THINK THAT, AS WE GET CLOSER TO INCREASING OUR NUMBER OF CLINICAL TRIALS, WE'RE GOING TO HAVE TO BE

MUCH MORE REFLECTIVE AND MUCH MORE MICROSCOPIC ABOUT THE NATURE OF THE CLINICAL TRIAL PARTICIPANTS TO MAKE SURE THAT THEY ARE DIVERSE SO THAT WE REACH POPULATIONS ACROSS THE STATE, ESPECIALLY THE NATIVE AMERICAN POPULATION, API AND LATINO-X AND, OF COURSE, AFRICAN AMERICAN COMMUNITIES.

THE OTHER DYNAMIC THAT WE HAVE TO BE COGNIZANT OF IS THAT USUALLY WHEN BONDS GO OUT FOR SALE, AND I'M FAMILIAR WITH THIS HAVING SERVED ON VARIOUS JURISDICTIONAL COMMITTEES IN THE LEGISLATURE, THE BONDS ARE USUALLY FOR INFRASTRUCTURE FOR THE MOST PART, AND THEY'RE BOUGHT BY RETIREMENT FUNDS. THEY'RE BOUGHT BY LARGE INSTITUTIONS.

WHEN OUR BONDS FIRST WENT OUT FOR SALE, WE WERE ASTONISHED THAT 80 PERCENT OF THE PURCHASERS WERE SINGLE PEOPLE. IN OTHER WORDS, SINGLE BUYERS, NOT INSTITUTIONS, NOT RETIREMENT FUNDS. AND WE REALIZED THAT THE REASON FOR THAT THERE WAS AN AFFINITY AND A CLOSENESS AND A NEXUS TO A PARTICULAR DISEASE, A SPOUSE, A FAMILY MEMBER, A FRIEND, A CHILD. AND SO THAT INCREASED THE POTENTIAL, NOT ONLY IN CALIFORNIA, BUT, AS YOU KNOW, BONDS CAN BE BOUGHT BY ANYONE IN THE U.S. OR WORLDWIDE. SO THERE WAS AN INITIAL REACTION ON OUR PART WAS, WOW, THIS

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IS VERY INTERESTING BECAUSE THEY WILL FORM THE BASIS FOR ANY FUTURE CAMPAIGNS.

WHEN WE DID MESSAGES OUT TO VARIOUS COMMUNITIES, IT WAS DIFFICULT. IT WAS DIFFICULT IN THE AFRICAN AMERICAN COMMUNITY BECAUSE OF TRADITIONAL PROBLEMS AND BIASES AND DISCRIMINATION IN THE PAST. IT WAS DIFFICULT IN THE LATIN-X COMMUNITY BECAUSE OF FEAR OF GOVERNMENT INTRUSION. WHAT ARE WE GOING TO GET? VERY SIMILAR TO REACTIONS THAT PEOPLE HAVE HAD IN MY COMMUNITY IN RESPECT TO THE VACCINE. AND THERE ARE OTHER CULTURAL ISSUES THAT WERE NOT RELIGIOUS, BUT BASICALLY BASED UPON WHY ARE WE SPENDING SO MUCH MONEY FOR THIS TYPE OF RESEARCH.

AT THE END THE MARGIN WAS CLOSER THAN IT WAS IN 2004, BUT NONETHELESS WE WON. WHY DID WE WIN? WE WON NOT BECAUSE WE HAD MORE MONEY, BECAUSE WE HAD MORE MONEY IN 2004. WE WON BECAUSE WE RELIED UPON THE NETWORK OF PATIENT ADVOCATES WHO TOOK THEIR EFFORT AND VOLUNTEERISM TO A NEW HEIGHT, REACHING OUT TO THEIR FAMILY MEMBERS, TO THEIR FELLOW PATIENT ADVOCATES, TO THIS TREE OF WONDERFUL TREASURES OF PEOPLE WHO REALLY WENT OUT. AND HOW DID THEY COME OUT? THEY CAME OUT BY COLLECTING SIGNATURES FIRST. WHEN COVID CAME IN, OUR SIGNATURE GATHERING STOPPED.

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WE HAD TO FIND NEW WAYS TO COLLECT SIGNATURES IN ORDER TO EVEN QUALIFY.

OF COURSE, ONCE THE DIRECT MAIL ISSUE CAME OUT, WE HAD TO REACH OUT TO VOTERS AGAIN IN A VERY DIFFERENT WAY, NOT THROUGH TRADITIONAL TELEVISION, ALTHOUGH WE DID SOME OF THAT, BUT MORE NONTRADITIONAL, EMAIL, TEXT, RELYING UPON COMMUNITY GROUPS. SO WHEN WE LOOK AT THIS INITIATIVE AND SEE WHO VOTED FOR IT, THERE ARE A NUMBER OF STAKEHOLDERS, AND A LOT OF THEM ARE DIVERSITY STAKEHOLDERS. THEY'RE EXPECTING RESULTS AND THEY'RE EXPECTING FOR OUR PARTICIPATION IN THOSE RESULTS. AND THEY START NOT AFTER THE TREATMENT IS FOUND AND READY TO GO TO THE PUBLIC. NO, IT'S FOUND AT THE VERY BEGINNING OF HOW OUR PROCESS BEGINS. THANK YOU.

MS. BONNEVILLE: ALLISON.

DR. BRASHEAR: THANK YOU. SO I JUST WANT TO SUPPORT SENATOR TORRES AND DEAN DEAS' COMMENTS. AS SOMEONE WHO'S BEEN TRAVELING ACROSS THE COUNTRY MULTIPLE TIMES OVER THE LAST MONTH, CALIFORNIA SPEAKS THE WORD DIVERSITY AND ACCESS ARE THINGS THAT CALIFORNIA IS KNOWN ABOUT ACROSS THE COUNTRY AND WORLDWIDE. AND SO ONE OF THE THINGS ABOUT CIRM IS MAKING SURE THAT THESE TREATMENTS ARE GOING TO GET

TO THE PEOPLE THAT NEED THEM REGARDLESS OF THEIR ABILITY TO PAY. AND SO I WOULD REALLY CHAMPION DEAN DEAS' ADDITIONS. AND SOMEWHERE IF THE WORD "ACCESS" COULD BE ADDED, I THINK THAT WOULD SEND A BIG MESSAGE.

MS. BONNEVILLE: J.T.

CHAIRMAN THOMAS: SO DR. MILLAN AND THE TEAM PREVIEWED THIS MISSION STATEMENT WITH ART AND ME. AND ONE OF THE THINGS THAT WE FOCUSED ON AS IT WAS PRESENTED, IT ONLY HAD "TO CALIFORNIA," WHICH, OF COURSE, FIRST AND FOREMOST IS THE MOST IMPORTANT THING HERE SINCE THE TAXPAYERS OF THE STATE ARE PAYING FOR THIS RESEARCH. HOWEVER, IT WAS OUR FEELING THAT LIMITING IT TO CALIFORNIA WOULD WHEN IN FACT THE WORLD WOULD BENEFIT SENT SORT OF AN EXCLUSIONARY MESSAGE AND THAT IT WOULD BE BETTER NOTING IN THE MISSION STATEMENT THAT THIS WAS GOING TO BE FOR THE BENEFIT OF THE ENTIRE WORLD OBVIOUSLY INCLUDING BUT WELL BEYOND THE STATE BOUNDARIES.

SO THAT, FRED, IS WHERE THAT CHANGE CAME FROM.

SECONDLY, I DO WANT TO ECHO WHAT EVERYBODY HAS BEEN SAYING ABOUT THE ADDITIONAL WORDS THAT DEAN DEAS SUGGESTS AND I WAS GOING TO SECOND, IF ART HAD NOT MADE THE POINT ALREADY WHICH HE DID VERY

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ELOQUENTLY, THAT IF YOU'RE LOOKING FOR A TEXTUAL HOOK TO HANG ON, THE ADVENT OF THE AAWG DEALS DIRECTLY WITH THESE ISSUES AND UNAMBIGUOUSLY SHOWS THAT THE STATE INTENDS TO HAVE DIVERSITY, EQUITY, AND INCLUSION FRONT AND CENTER. SO I THINK THAT THAT IS SOMETHING THAT WOULD BE VERY HELPFUL TO ADD IN THE FASHION DEAN DEAS SUGGESTS. THANK YOU.

MS. BONNEVILLE: MARIA, I BELIEVE THAT'S ALL THE COMMENTS. SO IF YOU'D LIKE TO CONTINUE.

MR. TORRES: I FORGOT TO THANK DR. GOLDSTEIN FOR HIS CONTRIBUTIONS AND EFFORTS DURING THE CAMPAIGN. SO, LARRY, FORGIVE ME.

DR. FISHER: AS A HOPEFULLY NEWLY APPOINTED MEMBER OF THE GRANTS WORKING GROUP AND AS A PATIENT ADVOCATE WHERE A DEI SCORE IS REALLY WHERE MY INFLUENCE COMES IN, HAVING THAT IN THE MISSION STATEMENT IS GOING TO -- I DON'T KNOW IF THAT WILL CHANGE THE WEIGHTING OF THE WAY DEI SCORES INFLUENCE THE OUTCOME OF A FUNDING REQUEST, BUT HAVING IT IN THE MISSION STATEMENT WOULD CERTAINLY LEND WEIGHT TO THAT SCORE, AT LEAST THEORETICALLY. MAYBE NOT, BUT IT WILL BE INTERESTING TO FIND OUT.

DR. MILLAN: THANK YOU SO MUCH, EVERYBODY. THIS WAS A REALLY AMAZING DISCUSSION AND VERY HELPFUL TO US. WE WILL COME BACK WITH A REVISED

MISSION STATEMENT BASED ON TODAY'S CONVERSATION.

AND IF IT'S OKAY, I'M GOING TO GO AHEAD AND MOVE ON. CHAIRMAN THOMAS, IS THAT OKAY? YES. I ASSUME IT'S YES.

CHAIRMAN THOMAS: SORRY. THAT WAS A MUTED YES. YES.

DR. MILLAN: SHYAM, PLEASE ADVANCE THE SLIDE.

SO WITH THE MISSION STATEMENT OR THE REVISED MISSION STATEMENT AS OUR GUIDING LIGHT, THE OVERALL GOAL OF THE NEW STRATEGY AND THE STRATEGIC PLAN IS TO ADDRESS THE CHALLENGES AND OPPORTUNITIES OF THIS RAPIDLY ADVANCING REGENERATIVE MEDICINE FIELD THAT HAS BEEN VERY MUCH INFLUENCED BY CIRM WHO'S PLAYED A LEADERSHIP ROLE AND WILL CONTINUE TO PLAY A LEADERSHIP ROLE IN THIS FIELD.

SO I JUST WANTED TO INTRODUCE KIND OF THE ORGANIZATIONAL WAY WE LOOK AT OUR STRATEGIC GOALS INTO THREE OVERARCHING THEMES. NOW IT'S THREE VERSUS FOUR THAT WE STARTED OFF WITH THE WORKING GROUPS BECAUSE OPERATIONAL EXCELLENCE IS EMBEDDED IN EVERYTHING IN MAKING THIS HAPPEN. BUT THE THEMES ARE TO ADVANCE WORLD-CLASS SCIENCE, DELIVER REAL-WORLD SOLUTIONS, PROVIDE OPPORTUNITY FOR ALL. THE THIRD ONE IS THE THEME THAT WE SPENT A LOT OF

TIME ON MAKING SURE WE INCORPORATE MORE OF THAT INTO THE MISSION STATEMENT. SO WE'LL TAKE THAT UNDER CONSIDERATION AS WE REVISE THAT PIECE.

SO I'M GOING TO GO AHEAD. IN THE NEXT FEW SLIDES WE DESCRIBE THE THINKING, AND THEN WE'LL START TO GO INTO SOME BROAD IDEAS OF CONCEPTS, CONTOURS OF CONCEPTS THAT WOULD HELP GUIDE US THROUGH ACHIEVING THE STRATEGIC GOALS. NEXT SLIDE PLEASE.

SO IN THE FIRST PART OF THIS PRESENTATION, I REVIEWED THE OUTCOMES AND THE POWER OF THE CIRM FUNDING PROGRAM AND MODEL AND GROWING AN ECOSYSTEM AND FUNDING PROGRAM ACROSS THESE PILLARS. THEY'RE ESTABLISHED CORE OFFERINGS OF CIRM: EDUCATION PROGRAMS, INFRASTRUCTURE, DISCOVERY, TRANSLATION, AND CLINICAL AWARDS. MANY OF THESE HAVE ALREADY BEEN BROUGHT IN FRONT OF YOU. AFTER THE PASSAGE OF PROP 14, WE IMMEDIATELY RESTARTED MANY OF THESE PROGRAMS AS SOON AS PROPOSITION 14 PASSED. IT'S A SO-CALLED ENGINE, AND THOSE HAVE BEEN A PROVEN FUNDING MECHANISM, FUNDING MODEL, AND THE NEW STRATEGIC PLAN IS DESIGNED TO ENHANCE, ORGANIZE, AND INTERCONNECT THE COMPONENTS OF THE CURRENT FUNDING MODEL TO ACHIEVE THE OVERARCHING GOALS ACROSS THESE THREE THEMES: ADVANCE WORLD-CLASS SCIENCE, DELIVER

REAL-WORLD SOLUTIONS, AND PROVIDE OPPORTUNITY FOR ALL.

SO IN THE UPCOMING SLIDE, I'LL BE DESCRIBING GENERAL CONCEPTS AROUND THESE THREE THEMATIC GOALS, OPPORTUNITIES, AND PROPOSE NEAR-TERM, MEASURABLE, FIVE-YEAR GOALS RELATED TO THESE STRATEGIC THEMES. AND AFTER EACH ONE, IT WOULD BE GREAT TO CONTINUE TO HAVE THE CONVERSATION AS WE HAD WITH THE MISSION STATEMENT. NEXT SLIDE PLEASE.

SO THEME ONE, ADVANCE WORLD-CLASS SCIENCE. WE THOUGHT WE'D START OFF WITH A PROBLEM STATEMENT. SO THE REGENERATIVE MEDICINE FIELD IS ADVANCING RAPIDLY, GENERATING MASSIVE AMOUNTS OF INFORMATION, SCIENTIFIC DATA, BUT EFFECTIVE TREATMENTS ARE STILL LIMITED FOR DEVASTATING DISEASES. A MAJOR HURDLE IDENTIFIED BY OUR SCIENTIFIC COMMUNITY IS THAT WE HAVE AN INCOMPLETE OR WEAK UNDERSTANDING OF THE SCIENTIFIC BIOLOGY AND FOUNDATIONAL BASIS OF THE DISEASE ITSELF.

CIRM HAS FUNDED PROMISING SCIENCE AND CONTINUES TO DO SO THROUGH ITS CORE PILLAR OFFERINGS. THE NEW CHALLENGE FOR CIRM, AND IT'S STATED BY OUR ADVISORS AND STAKEHOLDERS, IS TO BE A LEADER IN A PARADIGM SHIFT THAT OPTIMIZES THE

COLLECTIVE OUTPUT FROM THESE INDIVIDUAL PROJECTS THAT WE FUND TO LEAD TO BETTER UNDERSTANDING OF DISEASE BIOLOGY, PROMOTE NOVEL INSIGHT AND DISCOVERIES THAT, IN TURN, CAN LEAD TO MORE SUCCESSFUL THERAPEUTIC APPROACHES SO THAT WE CAN PUT IT INTO MACHINERY, THE TRANSLATIONAL MACHINERY, THAT PROVEN MACHINERY THAT WE HAVE TO ADVANCE PROGRAMS TO THE CLINIC.

CIRM CAN PLAY AN INSTRUMENTAL LEADERSHIP ROLE IN INCENTIVIZING COLLABORATIVE SCIENCE, INTEGRATING DATA SHARING INTO CIRM'S SYSTEM, MAKING TECHNOLOGICAL AND ENABLING RESOURCES BROADLY AVAILABLE. WE KNOW THAT THERE'S A WEALTH OF EXPERTISE AND VERY UNIQUE INNOVATIONS ACROSS CALIFORNIA. WHAT IF WE WERE ABLE TO FIND A WAY TO MAKE THIS ACCESSIBLE FOR MORE SCIENTISTS TO ACCELERATE THE RESEARCH?

TURNING RESULTS AND DATA INTO KNOWLEDGE, KNOWLEDGE NETWORKS, AND PROMOTING THE PRINCIPLES OF DIVERSITY, EQUITY, AND INCLUSION IN EVERY ASPECT OF THE SCIENCE, THE APPROACH TO SCIENTISTS, TO SCIENTISTS THEMSELVES, AND HAVING THAT IN MIND AS SCIENCE IS TRANSLATED TOWARD CLINICAL APPLICATION. NEXT SLIDE PLEASE.

WE FIRMLY BELIEVE THAT WE CAN DEVELOP A

SYSTEMIC APPROACH TO OUR FUNDING PROMISE AND FORMAT THAT WILL POSITION US TO MEET THIS CHALLENGE. WE COULD FOSTER A CULTURE OF COLLABORATION TO STRENGTHEN AND POWER THE SCIENTIFIC OUTPUT OF OUR BASIC, TRANSLATIONAL, AND CLINICAL RESEARCH PROGRAMS BY ENABLING RESEARCHERS TO SHARE UNIQUE COMPETENCIES IN SO-CALLED COMPETENCY HUBS AND PROVIDE A RELIABLE APPROACH FOR DATA SHARING TO CREATE VALUABLE KNOWLEDGE NETWORKS, INCREASING THE PROBABILITY AND MULTIPLIER EFFECTS DOWNSTREAM.

THIS INTEGRATED APPROACH WOULD INCREASE THE CHANCES OF DELIVERING FOUNDATIONAL INSIGHTS AND BASIC DISEASE MECHANISMS, INCREASE DISCOVERY OUTPUT, AND ENABLE THE MORE DIRECTED AND INFORMED DEVELOPMENT OF TREATMENTS AND CURES. NEXT SLIDE PLEASE.

WE PROPOSE THAT IN FIVE YEARS WE COULD LEVERAGE COLLECTIVE SCIENTIFIC KNOWLEDGE THROUGH BROAD CONCEPTS OF DEVELOPING TECHNOLOGY COMPETENCY HUBS THAT BROADLY EMPOWER AND CONNECT CALIFORNIA, THE CALIFORNIA RESEARCH ECOSYSTEM. ONE SUCH COMPETENCY HUB WOULD BE NEXT GENERATION SHARED LABS, A CATEGORY STIPULATED IN PROPOSITION 14.

THE SECOND PART, CIRM ALREADY REQUIRES DATA SHARING AND DATA SHARE PLANS FROM OUR GRANTEES,

AND BOARD MEMBERS WHO SERVE ON THE GWG KNOW THAT THIS IS A COMPONENT OF THE REVIEW. THE PROBLEM IS THAT WE DON'T HAVE A DELIBERATE AND ORGANIZED WAY TO REALLY LEVERAGE THAT DATA SHARING. WE CAN EMPOWER OUR SCIENTISTS AND THE BROADER SCIENTIFIC COMMUNITY IF WE PROVIDE A WELL-DESIGNED DATA SHARING AND ANALYSIS PLATFORM THAT ALLOWS THEM TO STORE AND ANALYZE THE DATA, BUT ALSO COMBINE AND CONNECT WITH OUR DATA POOLS. SETTING UP THIS TYPE OF DATA INFRASTRUCTURE COULD LEAD TO MEANINGFUL AND POTENTIALLY GAME CHANGING MULTIPLIER EFFECTS AND SCIENTIFIC PROGRESS.

SO I THINK THOSE ARE TWO BROAD CONCEPTS. IN THE BACKGROUND THESE ARE BEING WORKED OUT, ASSUMPTIONS ARE BEING TESTED, DUE DILIGENCE IS BEING DONE, KOL'S ARE BEING ASSEMBLED, BROADER STAKEHOLDER DISCUSSIONS ARE BEING PLANNED. BUT I WANTED TO OPEN IT UP FOR THE BOARD TO COMMENT, ASK QUESTIONS, AND PROVIDE INPUT TO THESE TWO BROAD CONCEPTS. CHAIRMAN THOMAS.

MS. BONNEVILLE: J.T., YOU'RE ON MUTE.

CHAIRMAN THOMAS: SORRY. I WAS TRYING TO KEEP THE BARKING DOG OFF THE DISCUSSION AS MUCH AS POSSIBLE. THANK YOU VERY MUCH, MARIA, FOR LAYING THIS OUT. YOU AND I HAD AN E-MAIL EXCHANGE ON THE

FOLLOWING QUESTION, BUT I THOUGHT IT MIGHT BE HELPFUL FOR THE BOARD TO HEAR, WHICH WAS ON THE SUBJECT OF COMPETENCY HUBS. BEYOND THE DATA SHARING IDEA, WHAT OTHER NOTIONS MIGHT WE EXPECT TO SEE DOWN THE ROAD?

DR. MILLAN: I'LL JUST GIVE SOME EXAMPLES. AND BECAUSE WE'RE NOT BRINGING SPECIFIC CONCEPTS TO THE BOARD, I JUST WANTED TO JUST MAKE SURE THAT THE BOARD KNOWS THAT THESE ARE STILL UNDER DISCUSSION. WE INTEND TO CONTINUE TO ENGAGE WITH YOU AS WE DEVELOP THE CONCEPTS.

SOME OPPORTUNITIES THAT ARE IMMEDIATELY KIND OF VISIBLE IS THE NEXT GENERATION SHARED LABS CONCEPT. AS YOU RECALL, IN PROP 71 THE SHARED LABS WERE INTENDED TO PROVIDE A PLACE WHERE EMBRYONIC STEM CELL RESEARCH AND CULTURE METHODS AND THE EVOLVING UNDERSTANDING OF THAT BIOLOGY AND THOSE SKILL SETS IS SOMETHING THAT COULD THEN BE PROVIDED FOR RESEARCHERS GETTING STARTED FOR THE INSTITUTION. IT SERVED WELL. AND I HAVE DR. SHEPARD AND DR. AVILES ON THE LINE WHO CAN KIND OF GIVE SOME OVERVIEW OF WHAT THE RESULTS OF THOSE PROGRAMS HAVE BEEN.

THE NEXT GENERATION OF THIS COULD BE LEVERAGING ADVANCEMENTS IN OTHER TYPES OF CELL

MODELS AND CELL ASSETS SUCH AS INDUCED PLURIPOTENT STEM CELLS, ORGANOID MODELS, ET CETERA, THAT IF THOSE TYPES OF RESOURCES COULD BE SHARED, ONLY THOSE THAT ARE READY TO BE SHARED, WELL CHARACTERIZED, THERE'S VALUE IN THAT BEING SOMETHING THAT'S ACCESSIBLE TO MORE. SO THAT REPRODUCIBILITY AND STANDARDS TO BE SET IN TERMS OF HOW THE SCIENTIFIC DATA IS LOOKED AT, THAT'S ONE EXAMPLE. AND THAT WOULD BE SOMETHING THAT'S VERY MUCH KIND OF A NEXT GENERATION TO THE PREVIOUS SHARED LABS.

OTHER EXAMPLES ARE GENE THERAPY CORES WHERE THERE'S NO REASON THAT EVERYBODY NEEDS TO START FROM SCRATCH WHEN THEY HAVE A PROGRAM INTENDED TO FOLLOW A POTENTIAL GENE THERAPY APPROACH. THERE'S SOME KIND OF BASIC, WELL-ESTABLISHED TECHNIQUES BY THOSE WHO HAVE SPECIALIZED IN THIS THAT COULD BE POTENTIALLY SHARED.

AND THEN OTHERS THAT COULD RELATE TO A PAST PROGRAM SUCH AS AN INDUCED PLURIPOTENT STEM CELL BANK IS HAVING DIVERSE CELL AND REPRESENTATIVE CELLS TO WORK FROM. A VERY KIND OF RECENT EXAMPLE IS DURING OUR COVID ROUND, WHEN WE INTRODUCED DIVERSITY, EQUITY, AND INCLUSION INTO OUR APPLICATION AND REVIEW PROCESS, ONE OF THE PROGRAMS TO VACCINE DEVELOPMENT WAS USING KIND OF STANDARD

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CELL LINES TO DEVELOP THE VACCINE. AND THOSE STANDARD CELL LINES HAPPENED TO BE ON BACKGROUND OF THE HLA OF NORTHERN EUROPEAN BACKGROUND AND WERE NOT REPRESENTATIVE OF ALL THOSE WHO COULD BE AFFLICTED OR INFECTED WITH COVID. SO THERE WAS AN OPPORTUNITY FOR THOSE INVESTIGATORS TO BE FUNDED BY CIRM TO CREATE MORE DIVERSE CELL LINES THAT WERE MORE REPRESENTATIVE, MORE REPRESENTATIVE OF THE COMMUNITY. SO WHEN THESE TECHNOLOGIES ARE DEVELOPED, THEN THEY'RE NOT JUST DEVELOPED FOR A SMALL PORTION OF THE POPULATION THAT IT'S INTENDED FOR.

SO CREATING A WAY TO BE ABLE TO ACCESS DIVERSE REFERENCE CELLS OR STARTING CELLS IS ANOTHER AREA THAT'S BEING EXPLORED. AND THERE ARE KIND OF ON THE LATER STAGE PROGRAMS IN CLINICAL RESEARCH THINGS SUCH AS STATISTICAL CORES OR IMAGING CORES WHERE NOT ALL INSTITUTIONS HAVE THE SAME CAPACITY IN TERMS OF SPECIALIZED IMAGING THAT COULD ENABLE CLINICAL RESEARCH.

SO THOSE ARE JUST EXAMPLES, AND WE WILL HAVE A MUCH MORE DEVELOPED AND WELL-INFORMED CONCEPT SHOULD THE BOARD AGREE THAT THE IDEA OF THIS BROAD CATEGORY OF TECHNOLOGY COMPETENCY HUBS WOULD BE IMPORTANT TO ENABLE OUR SCIENTIFIC COMMUNITY TO DO

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THEIR WORK.

MS. BONNEVILLE: LARRY, YOU HAD YOUR HAND RAISED.

DR. GOLDSTEIN: YES. THANK YOU. MARIA, THAT'S A TERRIFIC SUMMARY AND APPROACH TO THE FIRST PART OF THIS STRATEGIC PLAN. I THINK YOU'VE DONE A GENERALLY GOOD JOB WITH YOU AND YOUR TEAM.

I DO HAVE A COUPLE OF SUGGESTIONS TO CONSIDER. ONE IS THAT IN LOOKING AT THIS VERY BROAD MISSION STATEMENT, LEVERAGE COLLECTIVE SCIENTIFIC KNOWLEDGE, ET CETERA, WHEN I LOOK DOWN AT THE FIVE-YEAR STRATEGIC GOALS, I FIND THAT THOSE GOALS ARE ACTUALLY QUITE A BIT LIMITED RELATIVE TO THAT BROAD WORDING. AND I WONDER IF IT MIGHT BE GOOD TO INCLUDE SOMETHING LIKE A PROGRAMMATIC EFFORT CLOSE TO MY HEART, WHICH IS TO INCENTIVIZE HIGH IMPACT, HIGH RISK SCIENTIFIC RESEARCH INTO REGENERATIVE MEDICINE.

I THINK WE ARE AS AN ORGANIZATION DEDICATED TO FINDING THOSE REALLY GREAT PROJECTS THAT ARE NONETHELESS RISKY. AND I THINK THIS IS A REALLY GREAT PLACE TO CALL OUT THAT SORT OF HIGH RISK, HIGH IMPACT STUFF. IN SOME WAYS THAT'S THE BASIS OF THE ENTIRE CALIFORNIA BIOTECH INDUSTRY WAS HIGH RISK, HIGH IMPACT SCIENCE. I THINK WE WANT TO

KEEP THAT IN MIND AS WE PROCEED.

THE SECOND COMMENT I WANTED TO MAKE IS SOMETHING THAT MIGHT SPEAK TO INTEGRATING SCIENTISTS INTO THE CLINICAL TRIAL TEAMS IN SOME WAYS. WHAT I'M THINKING OF THERE IS THAT WE ALWAYS HAVE PATIENTS IN CLINICAL TRIALS THAT JUST DON'T SEEM TO RESPOND TO THE THERAPY. AND IF BASIC SCIENTISTS ARE AWARE OF THOSE KINDS OF PROBLEMS, WHICH I WOULD ARGUE AT THE MOMENT THEY'RE NOT NECESSARILY BECAUSE THEY'RE NOT INTEGRATED INTO CLINICAL TRIAL TEAMS, EXPLAINING THAT RARE (UNINTELLIGIBLE), HOW RESISTANT TO REALLY HIGH QUALITY THERAPY AND FIGURING OUT WHY IS A TERRIFIC THING TO INCENTIVIZE BECAUSE I THINK WE LEARN A LOT FROM THE PATIENTS THAT FAIL TRIALS FOR REASONS WE DON'T UNDERSTAND.

DR. MILLAN: DR. GOLDSTEIN, THANK YOU FOR THOSE COMMENTS. IN TERMS OF HIGH IMPACT, HIGH RISK, WE LIKE TO BELIEVE THAT THE CIRM PROGRAMS IN GENERAL, THAT THESE ARE THE PROGRAMS WE FUND. SO IT'S KIND OF THE NATURE AND THE FABRIC OF OUR FUNDING. WE ARE KNOWN TO FUND HIGH RISK, HIGH REWARD PROGRAMS. BUT DEFINITELY WE'LL TAKE THAT -- CONTINUE TO LOOK AT THAT AND MAKE SURE THAT WE'VE DONE EVERYTHING WE POSSIBLY CAN TO LOWER ARTIFICIAL BARRIERS TO BRING THOSE TYPE OF PROGRAMS IN.

THE SECOND PIECE ABOUT THIS UNDERSTANDING OF SCIENTISTS TO WHAT HAPPENS DOWN THE ROAD, I ABSOLUTELY AGREE WITH THAT. AND, IN FACT, WE'VE BEEN IN CONVERSATION WITH THE SOCIETIES SUCH AS ISSCR AND TRYING TO FIGURE IT OUT AND A BROAD APPROACH TO THAT BECAUSE I AGREE. AND I THINK WE CAN HAVE THAT TYPE OF EXPOSURE AS PART OF OUR EDUCATION PROGRAMS, AND I WILL DESCRIBE THAT IN BROAD TERMS LATER.

BUT IN TERMS OF PARADIGM SHIFTING CULTURE SHIFT, WE REALLY NEED TO DO IT KIND OF ON A BROAD BASIS, AND WE ARE IN DISCUSSIONS WITH PARTNER ORGANIZATIONS IN TERMS OF HOW WE CAN DO THESE TYPES OF PROGRAMS TOGETHER WHERE WE HAVE AN AWARENESS OF BOTH THE SCIENTISTS TO THE COMMUNITY, BUT ALSO A COMMUNITY IN TERMS OF BEING ABLE TO TRUST WHAT'S GOING ON WITH THE SCIENCE AND HAVE JUST THAT LEVEL OF INTERACTION THAT'S MORE LIKE -- SO WE HAVE HERE, YOU CAN SEE THIS NEW KIND OF BRANDING OF REAL LIFE. LIFE IS ABOUT PEOPLE. AND ONCE YOU KIND OF BREAK DOWN THOSE BARRIERS AND PEOPLE START ACTUALLY UNDERSTANDING WHAT IT IS THAT THE OTHER COMMUNITIES ARE ABOUT, THAT PARTNERED WITH A SYSTEM THAT WE HOPE TO CREATE AT CIRM, THAT THAT SHOULD BRING US FURTHER.

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I'M WAXING KIND OF PHILOSOPHICAL NOW, BUT JUST TO LET YOU KNOW THAT WE REALLY ARE LOOKING AT TANGIBLE STEPS IN THAT DIRECTION.

DR. GOLDSTEIN: THANK YOU.

DR. MILLAN: MARIA.

MS. BONNEVILLE: STEVE.

MR. JUELSGAARD: YES. I WANT TO JUST GO BACK TWO SLIDES. YOU DON'T REALLY NEED TO BACK IT UP, BUT THAT'S WHERE I'M GOING TO START. SO IN THE HEADLINE, THE BACK PART OF THE HEADLINE SAYS, "EFFECTIVE TREATMENTS ARE STILL LIMITED FOR DEVASTATING CONDITIONS," AND THEN PARENTHETICALLY, "INCLUDING CNS AND DISEASES OF THE BRAIN," WHICH ARE FOOTNOTED TO SAY, "PROP 14 STIPULATES FUNDING FOR RESEARCH IN CNS AND DISEASES OF THE BRAIN." THAT'S WHAT I WANT TO FOCUS ON BECAUSE WHAT PROP 14 ACTUALLY SAYS IS THAT DEDICATING $1.5 BILLION FOR THE SUPPORT OF RESEARCH AND THE DEVELOPMENT OF TREATMENTS FOR DISEASES AND CONDITIONS OF THE BRAIN AND CENTRAL NERVOUS SYSTEM. $1.5 BILLION REPRESENTS A LITTLE OVER 27 PERCENT OF THE $5.5 BILLION THAT WAS APPROVED FOR PROP 14.

SO THE TAKEAWAY FOR ME IS THAT THIS IS SOMETHING THAT THE VOTERS, WHEN THEY VOTED FOR THIS, THOUGHT WAS REALLY IMPORTANT. WE NEEDED TO MAKE

SOME PROGRESS IN THIS PARTICULAR AREA. AND SO ONE THOUGHT ON MY PART IS IN TERMS OF EFFORTS TO TRY AND ADVANCE WORLD-CLASS SCIENCE IN THE WAYS THAT YOU'VE DESCRIBED POTENTIALLY IS TO HAVE A REAL FOCUS, AT LEAST IN ONE OF THEM, ON DISEASES OF THE BRAIN AND OF THE CENTRAL NERVOUS SYSTEM WHERE THERE CAN BE COLLABORATIVE WORK, NOT JUST AMONG ACADEMIC CENTERS, BUT ALSO, IF THEY'RE WILLING TO PARTICIPATE, COMPANIES, ET CETERA.

SO I'LL END IT THERE. BUT I DO THINK IT WOULD BE NICE TO HAVE A LITTLE MORE EMPHASIS ON THIS PARTICULAR AREA GIVEN THE AMOUNT OF EMPHASIS THAT'S BEING PLACED IN THE PROPOSITION BASED ON THE AMOUNT OF MONEY THAT'S BEEN DEDICATED TO PURSUING IT.

DR. MILLAN: THANK YOU SO MUCH FOR THAT COMMENT, AND THANK YOU FOR THE OPPORTUNITY TO ACTUALLY TALK ABOUT THAT.

SO $1.5 BILLION OF THE $5.5 BILLION THAT PROP 14 HAS EARMARKED FOR CNS RESEARCH AND DISEASES OF THE BRAIN INCLUDING NEUROPSYCHIATRIC RESEARCH. THE REASON THAT THESE ARE THE FIVE-YEAR STRATEGIC GOALS AND CREATING COMPETENCY HUBS AND KNOWLEDGE NETWORKS ARE THESE ARE ENABLING MECHANISMS THAT WE CAN EXTRACT THE MOST VALUE AND ORGANIZE THE EFFORTS SO THAT WE CAN DEPLOY THEM TOWARD SPECIFICALLY CNS

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AND DISEASES OF THE BRAIN.

JUST BY WAY OF BACKGROUND, I NOTE CHAIRMAN THOMAS HAD MENTIONED THIS BEFORE, ORGANICALLY THROUGH OUR PILLAR PROGRAMS AND STILL TO THIS DAY AS WE'RE TRACKING IT, IT'S EASILY THAT PROPORTION OF WHAT OUR FUNDING GOES OUT TO THAT GOES TO CNS RESEARCH EVEN IF IT WASN'T EARMARKED. THAT'S WHAT IT TURNS OUT TO BE, EVEN A LITTLE BIT MORE THAN THAT. SO OKAY. SO WE'RE GOING TO BE ABLE TO HIT THAT MARK BECAUSE WE JUST HAVE THIS ENGINE TO BRING IN TOP SCIENCE. WE ARE READY ORGANICALLY TO GET NEURAL PROGRAMS, NOT AS MUCH NEUROPSYCHIATRIC, MIND YOU, BUT NEURAL PROGRAMS.

HOW DO WE OPTIMIZE THE IMPACT OR -- I DON'T WANT TO SAY IMPACT. HOW CAN WE ORGANIZE IT SO THAT THE PROBABILITY OF GETTING SOMETHING MORE THAN THE SUM OF ITS PARTS OR JUST THAT EACH PROJECT THAT HAPPENS TO SUCCEED, HOW DO WE GET THAT COLLECTIVE SUCCESS? AND THE REASON FOR THESE FIVE-YEAR STRATEGIC GOALS IS TO CREATE A WAY THAT WE CAN ENABLE A CONSORTIUM APPROACH TO THIS SO THAT WE CAN PROVIDE EFFICIENCIES, INCREASE THE KNOWLEDGE BASE, THE DENOMINATOR OF DATA SETS THAT GO INTO ALL THE RESEARCHERS THAT ARE FUNDED IN THIS AREA SO THEY HAVE ACCESS TO A GREATER DENOMINATOR OF DATA THAN

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THEY WOULD PRODUCE THEMSELVES OR WITH THEIR INTENDED LIMITED COLLABORATORS. SO THAT'S THE REASON FOR THIS.

WE DO HAVE IN MIND CNS WHEN WE'RE TALKING ABOUT LAYING DOWN THESE TYPES OF FRAMEWORK, BUT IT'S ALSO SOMETHING THAT'S RELEVANT TO ALL OF THE DIFFERENT AREAS THAT WE FUND. WE ACTUALLY HAVE PILOT STUDIES ALREADY IN THIS KIND OF -- FOR SICKLE CELL, FOR INSTANCE, WHERE THERE IS, DRIVEN BY OUR PARTNERSHIP WITH THE NIH, DATA SHARING PLATFORMS THAT ARE BEING DEVELOPED. THERE IS ALREADY A COLLABORATION IN TERMS OF HOW, AS A SCIENTIFIC UNIT, WE ALL ADDRESS ISSUES REGARDING THE GENOMICS AND OTHER ASPECTS EVEN AS WE ARE FUNDING CLINICAL TRIALS.

SO I HOPE THAT ANSWERS YOUR QUESTION. YOU WILL SEE MORE OF THIS UNFOLD. THE IDEA OF THE STRATEGIC PLAN IS TO HAVE JUST A GENERAL UNDERSTANDING AND GUIDANCE FROM THE BOARD AS TO WHETHER TO PURSUE THESE BROAD DIRECTIONS THAT WILL ENABLE KIND OF THE DOWNSTREAM OUTPUT WHICH IS RELATED TO THINGS SUCH AS PUSHING FORWARD CNS RESEARCH AND DISEASES OF THE BRAIN, NEUROPSYCHIATRIC RESEARCH.

MS. BONNEVILLE: KEITH.

DR. YAMAMOTO: SO MARIA KNOWS THIS, THAT KNOWLEDGE NETWORKS ARE AT THE HEART OF OUR DEVELOPMENT OF PRECISION MEDICINE CONCEPTS THAT I WAS INVOLVED IN WITH THE NATIONAL ACADEMIES 12 YEARS AGO. AND SOMETHING THAT I REALLY PROMOTED, THAT CIRM CAN BE INVOLVED IN AS WELL BECAUSE OF WHAT MARIA JUST SAID, BECAUSE IT IS A TOOL, AN ENABLING TOOL, THAT DELIVERS TO EVERYONE THE INTEGRATED INFORMATION THAT SHOWS HOW THE WORK THAT ANY INDIVIDUAL INVESTIGATOR IS DOING IS LINKED TO AND CAN CONTRIBUTE TO EFFORTS OF RESEARCHERS WHO TAKE AN ENTIRELY DIFFERENT APPROACH TO A PROBLEM.

AND SO, MARIA, I'M MAKING THIS COMMENT NOW BECAUSE OF THE COMMENT EARLIER THAT LARRY MADE TO SOMEHOW MAKE BASIC SCIENTISTS MORE AWARE OF OUTCOMES OF CLINICAL TRIALS SO THAT IT WILL FEED THEIR INTERESTS IN CREATING NEW HYPOTHESES TO BE TESTED IN A BASIC SCIENCE LAB. AND I THINK THAT THAT'S GREAT, BUT I DON'T ACTUALLY WANT TO MAKE BASIC SCIENTISTS BECOME TRANSLATIONAL RESEARCHERS. IF THEY DO, THAT'S GREAT AND WE'RE SEEING THAT INCREASINGLY ACROSS THE RESEARCH SPHERE. BUT I WANT TO BE RESPECTFUL OF BASIC SCIENTISTS WHO ARE CURIOSITY DRIVEN AND JUST WANT TO UNDERSTAND A BIOLOGICAL OR PATHOLOGICAL PROCESS BETTER, NOT BECAUSE THEY WANT

TO CURE THE DISEASE OR MAKE A DRUG, THAT'S LEFT FOR SOMEONE ELSE TO DO, BUT HAVING A TOOL OF A KNOWLEDGE NETWORK THAT BASICALLY DELIVERS TO THEM INFORMATION THAT IS THE PRODUCT OF OTHER RESEARCH THAT THEY WOULDN'T OTHERWISE BE AWARE OF WILL CHANGE THE WAY THAT THEY THINK ABOUT THEIR CURIOSITY DRIVEN PROJECTS.

AND SO THAT'S WHAT THE KNOWLEDGE NETWORK REALLY DOES DO. SO INSTEAD OF ASKING BASIC SCIENTISTS TO SAY, ALL RIGHT. I'LL JOIN A CLINICAL TRIAL TEAM THAT THEY BASICALLY MAY NOT BE INTERESTED IN, INFORMATION WILL GET TO THEM IN OTHER WAYS THROUGH ACCESS IN THE KNOWLEDGE NETWORK. AND SO I THINK THAT THESE STRATEGIC GOALS THAT ARE LAID OUT ARE APPROPRIATE. THEY ARE ENABLING TOOLS THAT ALLOW CIRM TO BETTER ADVANCE WORLD-CLASS SCIENCE AND TAKE ON THE CHALLENGE OF THE FACT THAT DIFFERENT KINDS OF RESEARCHERS COME AT THE SAME PROBLEM FROM VERY DIFFERENT DIRECTIONS. AND WE ARE ALL BLUDGEONED WITH KNOWLEDGE AND NEW INFORMATION COMING AT US IN THE FORM OF DATA. AND CONVERTING THAT INTO KNOWLEDGE IS A VERY DIFFICULT TASK IF WE DON'T EVEN KNOW ABOUT WHAT OTHER GROUPS ARE DOING. THAT'S WHAT THE KNOWLEDGE NETWORK DOES. AND I THINK IT WILL PROVIDE THE KIND OF DRIVER FOR ADVANCING WORLD-CLASS

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SCIENCE THAT WE ARE LOOKING FOR IN CIRM.

DR. MILLAN: THANK YOU, DR. YAMAMOTO.

MS. BONNEVILLE: AL.

MR. ROWLETT: SO, MARIA, IF YOU COULD GO BACK TO THE PREVIOUS SLIDE, I'M JUST TO GOING TO TAKE A BRIEF OPPORTUNITY TO AGAIN THANK THE STAFF FOR THE WORK THAT THEY'VE DONE ON PUTTING THIS TOGETHER.

THE LANGUAGE HERE IN THE PREAMBLE OF "CREATING A SYSTEMIC APPROACH TO FOSTER A CULTURE OF COLLABORATION, EFFICIENT KNOWLEDGE TRANSFER, AND DIVERSITY AND INCLUSION TO STRENGTHEN AND EMPOWER SCIENTIFIC OUTPUT," I KNOW I DIDN'T HAVE TO READ IT, BUT IT READS -- I THINK IT COULD BE STRENGTHENED A BIT, AND YOU MIGHT WANT TO CONSIDER HOW YOU TALK ABOUT DIVERSITY AND INCLUSION. AND I THINK ABOUT THIS IN THE CONTEXT OF THE EXAMPLE THAT YOU PROVIDED FOR US IN ENSURING THAT THE WORK THAT WE FUNDED DID NOT INCLUDE JUST PEOPLE OF EUROPEAN ANCESTRY. AND THAT WAS THE REFERENCE POINT WHEN YOU SHOWED THIS SLIDE.

AND SO PERHAPS, AGAIN, THINKING ABOUT ACHIEVING DIVERSITY AND INCLUSION OR ADVANCING DIVERSITY AND INCLUSION, AND I'M BEING A BIT EXTEMPORANEOUS, BUT I THINK THAT THAT STATEMENT CAN

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BE STRENGTHENED AND THERE ARE WAYS TO DO THAT.

DR. MILLAN: THANK YOU SO MUCH. ONE OF THE THINGS IS THAT DIVERSITY AND INCLUSION WILL BE A THEME THAT WILL COME UP ALL THROUGHOUT, SO IT'S INTERWOVEN IN EVERY KIND OF ASPECT OF THE STRATEGY.

IN THIS CASE, AND PERHAPS IT'S NOT AS ARTICULATE AS IT COULD HAVE BEEN, IT'S A MATTER OF THE BASIC PRINCIPLE OF UNLESS THIS IS ACTUALLY INCLUDED, THE SCIENCE IS NOT STRONG. SO IT'S NOT COMPLETE WITHOUT THIS. AND SO WE WANT TO MAKE SURE TO CAPTURE THAT, BUT WE'LL DEFINITELY TAKE A LOOK AT THE WORDING TO MAKE SURE THAT THAT MESSAGE IS CLEARER IN THIS PARTICULAR APPLICATION.

MR. ROWLETT: AND, AGAIN, LET ME ENDORSE WHAT YOU SAID. I AM NOT SUGGESTING THAT YOU REMOVE DIVERSITY AND INCLUSION. IN FACT, I THINK THAT YOU WANT TO ACHIEVE EXACTLY WHAT YOU JUST DESCRIBED. AND SO POTENTIALLY I THINK THAT, AGAIN, THE CONJUNCTIVE THERE, SOMEHOW IT WEAKENS THE STATEMENT. AND FROM MY PERSPECTIVE, THE PERSPECTIVE OF ONE, HOWEVER, WHAT YOU SAID IN YOUR PREAMBLE CERTAINLY SPOKE TO THE HEART OF WHAT YOU WERE TRYING TO ACHIEVE TO MAKE SURE TRIALS DID NOT JUST REFLECT PEOPLE OF EUROPEAN ANCESTRY.

DR. MILLAN: THANK YOU SO MUCH --

MS. BONNEVILLE: KRISTINA.

DR. VUORI: THANKS, MARIA. JUST WANTED TO QUICKLY FOLLOW UP ON COMMENTS BY STEVE, LARRY, AND KEITH. FIRST ON STEVE'S COMMENT ON THE PROP 14 SPECIFICALLY CALLING OUT BRAIN AND CNS DISORDERS. I DO UNDERSTAND THAT THE HIGH LEVEL, THE VARIOUS -- VERY INTERESTING, GREAT THINGS THAT YOU HAVE OUTLINED HERE TO ADVANCE WORLD-CLASS SCIENCE ALSO ADVANCE AND ENABLE RESEARCH ON BRAIN AND CNS AS WELL. BUT I THINK IT REMAINS THAT WE COLLECTIVELY, NOT ONLY CIRM, BUT THE RESEARCH COMMUNITY AT LARGE, HAS NOT REALLY GIVEN US ANY CLEAR BREAKTHROUGHS, AND ONE WOULD EVEN ARGUE NOT EVEN INCREMENTAL ADVANCES IN NEURODEGENERATIVE OR NEUROPSYCHIATRIC DISORDERS.

I'M WONDERING IF THERE WOULD BE AN OPPORTUNITY FOR CIRM AND MAYBE THE EXPECTATION ALSO BY THE VOTERS THAT WE COULD TRY TO TAKE A REALLY DEDICATED STAB AT SOME THINGS THAT WE THINK COULD ACCELERATE THOSE FIELDS SPECIFICALLY. ONE WAY MIGHT BE TO HAVE SOME SORT OF A GRANT CHALLENGES PROGRAM, REALLY IN AN EDUCATED MANNER COME UP WITH TOPICS OR QUESTIONS IN A MANNER THAT, IF WE ONLY KNEW ANSWER TO THIS, WE COULD MAYBE MOVE THESE SPECIFIC FIELDS FORWARD. SO JUST A THOUGHT THERE.

AND SOMETHING LIKE THAT MIGHT ALSO HELP IN

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THE TOPIC THAT LARRY AND KEITH DISCUSSED. AND THAT IS AS IT COMES FROM BASIC SCIENTIST PERSPECTIVE, I ABSOLUTELY AGREE THAT THE POWER THERE IS THE CURIOSITY-DRIVEN RESEARCH, BUT AT THE SAME TIME, IT WOULD BE VERY HELPFUL TO FIND WAYS TO HARNESS THE BIOLOGICAL KNOWLEDGE THAT SCIENTISTS HAVE TO SOLVE MEDICAL QUESTIONS ONLY IF THOSE FOLKS WHO HAVE THESE BIOLOGICAL SOLUTIONS WOULD KNOW WHAT THESE QUESTIONS ARE. AND THAT MIGHT BE, AGAIN, IN SOME FORM OF VERY TARGETED QUESTIONS THAT THIS IS WHAT WE WOULD LIKE TO SOLVE, WHATEVER IT MIGHT BE IN THE BROAD FIELD OF REGENERATIVE MEDICINE, AND TARGET SOME RFA'S SO THAT THE BASIC SCIENCE MAY THINK, WELL, THIS IS A KEY QUESTION IN THE CLINIC, THE MEDICINE, AND I HAVE SOME KNOWLEDGE AT THE BENCH SCIENCE LEVEL THAT MIGHT HELP TO ADDRESS THIS. SO JUST A FEW THOUGHTS.

DR. MILLAN: THANK YOU, DR. VUORI. IN FACT, THIS IS WHAT WE -- WHAT WE'RE TRYING TO LAY DOWN THE FOUNDATION FOR IS BEING ABLE TO HAVE THE RIGHT CONNECTORS SO THAT IF WE PUT OUT A CHALLENGE GRANT, A MOONSHOT PROJECT, OR CONSORTIUM CHALLENGE, THAT THIS HAS ALREADY KIND OF WORKED INTO OUR SYSTEMS, RIGHT, SO THAT THESE KIND OF INFRASTRUCTURE ARE SET UP TO INCREASE THE PROBABILITY OF SUCCESS FOR THOSE PROGRAMS COMING IN.

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SO THE FIVE-YEAR STRATEGIC GOALS ARE INTENDED TO START LAYING THIS DOWN. WE BELIEVE ORGANICALLY SOME OF THOSE KIND OF FOCUSED TEAMS WILL EMERGE, AND TEAMS WILL EMERGE BASED ON WHAT WE'RE SEEING IN TERMS OF WHAT TYPES OF PROGRAMS ARE COMING IN, THAT EVENTUALLY THOSE WOULD EITHER ORGANICALLY OR THROUGH INCENTIVIZING OR ORGANIZING THROUGH PROGRAM ANNOUNCEMENTS WOULD COME TOGETHER AS THESE TYPE OF TEAMS ADDRESSING KEY QUESTIONS OR LOOKING AT SHARED PATHWAYS OR WHATEVER THE THEME HAPPENS TO BE. SO THANK YOU FOR THAT COMMENT.

DR. VUORI: THANK YOU.

MS. BONNEVILLE: JUDY.

DR. GASSON: I WANT TO SECOND WHAT KRISTINA SAID ABOUT THE LACK OF PROGRESS IN CERTAIN AREAS OF NEUROPSYCH AND THE REAL IMPORTANCE OF GETTING BASIC SCIENTISTS TO FOCUS ON GENETICS AND GENOMICS, ET CETERA, OF THESE DISEASES. I THINK THAT THAT'S REALLY CRITICALLY IMPORTANT. AND HOPEFULLY THAT WILL BE CARRIED OUT AS THE RFA'S ARE ROLLED OUT IN THIS AREA.

MY SECOND COMMENT IS ABOUT THE KNOWLEDGE NETWORKS. AND I ENDORSE WHAT KEITH SAID ABOUT THE IMPORTANCE AND THAT WE'RE ALL BARRAGED BY SO MUCH INFORMATION AND DATA AND SO ON. I JUST WANT TO MAKE

THE POINT THAT I THINK IT'S GOING TO BE REALLY IMPORTANT TO INVOLVE THE ACADEMIC HEALTH CENTERS IN THESE CONVERSATIONS BEFORE THESE NETWORKS GET DESIGNED. THE REASONS ARE PRETTY STRAIGHTFORWARD. THAT'S WHERE THE PATIENTS ARE, THAT'S WHERE THE CLINICAL TRIALS WILL OCCUR, AND THAT'S WHERE THE SUBJECT MATTER EXPERTS ARE, CLINICALLY AT LEAST, IN MANY OF THESE DISEASES. SO I THINK IT'S IMPORTANT TO ASK THEM AS THE END USERS WHAT KINDS OF INFORMATION WOULD THEY LIKE TO SEE IN THESE KNOWLEDGE NETWORKS SO THAT WE CAN, IN FACT, EXPERIENCE THIS CONTINUING GROWTH AND IMPACT THAT THESE DATA CAN HAVE. THANK YOU.

DR. MILLAN: DR. GASSON, I BELIEVE YOU AND SOME OTHER BOARD MEMBERS PARTICIPATED IN KIND OF A PLANNING MEETING FOR A BROADER STAKEHOLDER GROUP REGARDING FORMATION OF KNOWLEDGE NETWORKS, DATA PLATFORMS, WHAT ARE SOME OF THOSE THAT ARE OUT THERE ALREADY? WHAT MAKES SENSE? WHAT'S IN CALIFORNIA? AND SO THERE WILL BE A BROAD STAKEHOLDER MEETING, A CONFERENCE, THAT'S BEING ORGANIZED BY DR. AVILES, OUR VP OF SCIENTIFIC PROGRAMS HERE AT CIRM, AND HER TEAM ALONG WITH THE SCIENTIFIC LEADERSHIP IN CALIFORNIA AND OTHER PROMINENT PLAYERS IN THE FIELD, SUCH AS THE BROAD AND NIH AND OTHERS WHO VERY MUCH

HAVE ALREADY STARTED BUILDING THESE PLATFORMS AS WELL AS OUR CALIFORNIA INSTITUTIONS. AND SO ABSOLUTELY.

AND AT THAT PLANNING MEETING, WE HAD END USERS IN TERMS OF SCIENTISTS AND TRANSLATIONAL SCIENTISTS WHO WERE THERE, AND THEY VERY MUCH PROVIDED KIND OF AN IMPORTANT INSIGHT. AND ONE OF THE KEY TOPICS WAS THERE ARE SOME THINGS THAT ARE READY FOR PRIME TIME IN TERMS OF IT'S ALREADY KNOWN. AND FOR THOSE, THERE'S ONE APPROACH, AND THEN FOR OTHERS WHERE IT'S JUST GOING TO BE CONTINUALLY COLLECTING IMPORTANT INFORMATION SO DOWNSTREAM, WHEN IT'S READY, IT'S AVAILABLE TO VALIDATE KIND OF A GENERAL BODY OF INFORMATION. SO ALL THOSE TYPES OF CONVERSATIONS ARE HAPPENING, AND FOR SURE IT WILL BE AN INCLUSIVE CONVERSATION, INCLUDING THE COMMUNITY AND PATIENT ADVOCATES WHO -- THE PATIENT COMMUNITY, WHO WOULD HAVE TO BE PARTNERS. AFTER ALL, PATIENTS OWN THEIR DATA. AND SO THERE'S A LOT OF THAT CONVERSATION THAT'S GOING TO OCCUR IN THE UPCOMING YEAR. THANK YOU.

MS. BONNEVILLE: AL.

MR. ROWLETT: I WOULD BE REMISS IF I DIDN'T ENDORSE WHAT DR. VUORI SAID. IT IS CLEARLY THE ISSUE OF THE DAY OTHER THAN COVID AND

HOMELESSNESS. IT'S BEHAVIORAL HEALTH AND MENTAL HEALTH. AND CLEARLY I THINK THE COLLOQUIALISM THAT WAS USED WAS THE NOTION OF A MOONSHOT. I'M NOT OFFENDED BY THAT, AND I THINK THAT THERE ARE LOTS OF PEOPLE IN OUR STATE WHO WOULD BE ENTHUSIASTIC SUPPORTERS OF AN OPPORTUNITY FOR THE SCIENTIFIC COMMUNITY TO BE CHALLENGED TO COME UP WITH WHAT IS CLEARLY TODAY STILL INCURABLE IN TERMS OF NEUROPSYCHIATRIC DISORDERS. AND FOR PEOPLE WHO ARE EXPERIENCING THAT AND THE WORK THAT JUDY GASSON HAS DONE IS REFLECTIVE OF THAT. FROM THE PATIENT ADVOCATE COMMUNITY, I WANT TO SAY AGAIN THANK YOU. I LOOK FORWARD TO SEEING THAT ADDITION VERY CALLED OUT IN OUR STRATEGIC PLAN.

DR. MILLAN: THANK YOU.

MS. BONNEVILLE: MARK.

DR. FISCHER-COLBRIE: I THINK IT GOES WITHOUT SAYING, BUT GIVEN THE EXPLOSION OF ACTIVITY WITHIN THE BROAD REGIME OF DATA SCIENCE, WHICH INCLUDES MINING OF PUBLIC DATABASES AND PERIODICALS AND JOURNAL ARTICLES, AND THE EXPLOSION OCCURRING IN THE ADVENT OF EVERYTHING FROM BEING ABLE TO IN SILICO ON A COMPUTER DESIGN A COMPOUND, AND THE OPPORTUNITIES FOR UNDERSTANDING PROTEIN STRUCTURES AND EVERYTHING ELSE, THAT ALL THOSE MACHINE

LEARNING, DEEP LEARNING KINDS OF ACTIVITIES ARE EMBEDDED WITHIN THE CONCEPT OF A KNOWLEDGE NETWORK RELATED TO THAT. SO I JUST WANTED TO UNDERSTAND THAT CLARIFICATION TO ASSUME THAT THAT'S COVERED AS PART OF THAT ACTIVITY.

DR. MILLAN: ABSOLUTELY. SO WHENEVER WE START HAVING THE CONVERSATION ABOUT THIS TOPIC, IT CAN GET VERY DEEP VERY QUICKLY. SO I'M GOING TO TRY TO KEEP IT AT A LEVEL THAT IT'S STILL HELPFUL AND CLARIFYING.

WHEN WE ARE TALKING ABOUT WHAT CIRM COULD FUND, WE FIRST WANT TO LAY DOWN KIND OF THE PLATFORMS THAT CAN ENABLE THINGS SUCH AS MOONSHOT PROJECTS OR SECONDARY DATA ANALYSIS, AI, MACHINE LEARNING TYPE OF ACTIVITIES. FIRST WE NEED TO LAY DOWN THE PATHWAY AND THE FOUNDATION FOR THIS. AND THAT DOESN'T CURRENTLY EXIST. SO THE CHALLENGE WE HAVE IN FRONT OF US IS WHAT MAKES SENSE. WE ARE NOT TRYING TO SOLVE DATA SHARING FOR THE ENTIRE WORLD. WE ARE TRYING TO BE RESPONSIBLE AND ACTIVE AND MEANINGFUL MEMBERS OF THE COMMUNITY THAT'S TRYING TO ACHIEVE THIS IN SERVICE OF OUR SCIENTIFIC COMMUNITY.

AND SO IT REALLY BECOMES SOMEWHAT A HARDWARE/SOFTWARE ISSUE IS WHAT WE HAVE TO FIRST SOLVE. WHAT IS THE BEST PLATFORM? AND THEN ALL OF

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THE KIND OF SOUL OF IT, LIKE THE KIND OF THE CONTENT COMES FROM THE TYPE OF RESEARCHERS WE FUND, RIGHT, AND THEN ALSO THE SECONDARY USERS BECAUSE IT'S NOW ACCESSIBLE. THERE'S ALSO SOME BENEFIT TO THIS THAT CAN OCCUR EVEN WHEN CIRM DOESN'T DIRECTLY FUND PROGRAMS, THAT THERE'S STILL BENEFITS TO SCIENTISTS IN THEIR OWN WORK JUST BECAUSE THIS EXISTS. THAT'S WHAT WE ARE TALKING ABOUT WHEN WE SAY BUILD KNOWLEDGE NETWORKS. IT SAYS BUILD KNOWLEDGE NETWORKS; BUT WHEN IT COMES DOWN TO IT, WHAT YOU COULD EXPECT DOWN THE LINE IS A CONCEPT PROPOSAL TO FUND KIND OF THE HEAVY-DUTY CREATION OF THE PLATFORM AND INTERCONNECTIVITY WITH LARGE PLATFORMS OR EVEN A CLONE OF MAJOR PLATFORMS, THE HIGHWAYS FOR THIS INFORMATION ECOSYSTEM. I HOPE THAT MAKES SENSE.

DR. FISCHER-COLBRIE: JUST A QUICK FOLLOW-ON. THAT'S GREAT. AND THAT ALSO POINTS TO POSSIBLY SETTING UP STANDARDS AROUND DATA THAT CAN FURTHER BE EMPLOYED WITH THESE DIFFERENT MODELING CAPABILITIES UNDER FAIR DATA STANDARDS AS THEY'RE CALLED JUST FOR FURTHER REFERENCE. THANK YOU FOR THE CLARIFICATION. THAT WAS EXCELLENT.

DR. MILLAN: THANK YOU SO MUCH.

MS. BONNEVILLE: LEON.

DR. FINE: JUST BY WAY OF FOLLOW-UP ON THE

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ISSUE OF NEUROPSYCHIATRIC DISEASES. WHILE THE NEED FOR PROGRESS IN THIS AREA IS UNDENIABLE, WITHOUT BEING OVERLY CYNICAL, I THINK THE CHANCES OF MAKING HEADWAY ARE PROBABLY SMALLER IN THIS AREA THAN IN MOST OTHER AREAS. I THINK IT WOULD BE HELPFUL TO HAVE SOME SORT OF COMPILATION OF DISCOVERIES MADE THUS FAR BY CIRM FUNDEES IN THIS AREA. I UNDERSTAND THAT THE WORD "DISCOVERIES" IS OPEN TO INTERPRETATION, BUT IT WOULD BE NICE TO BE ABLE TO WAVE AROUND A SET OF DISCOVERIES MADE THUS FAR SIMPLY TO SHOW THAT THE BASELINE IS NOT AS LOW AS IT MIGHT BE PERCEIVED TO BE.

DR. MILLAN: THANK YOU VERY MUCH. SO JUST TO REPEAT BACK, THE IDEA IS TO EVALUATE WHAT WE HAVE SO FAR IN OUR PORTFOLIO RELATED TO NEUROPSYCHIATRIC RESEARCH AND DISCOVERIES THAT HAVE SO FAR BEEN OR OUTPUT OF THAT RESEARCH SO FAR TO ESTABLISH OUR BASELINE. AND THEN FROM THAT, IS IT BY WAY OF JUSTIFICATION FOR PROCEEDING FORWARD WITH FUNDING ADDITIONAL OR IS IT --

DR. FINE: I'M USING THE WORD "DISCOVERY" HERE RATHER THAN PORTFOLIO. IN OTHER WORDS, WITHIN THE PORTFOLIO, CAN ONE HANDPICK A SERIES OF WHAT YOU WOULD OR WHAT WE WOULD COLLECTIVELY CALL REAL DISCOVERIES WHICH COULD BE SHOWN TO HAVE ALREADY

MADE SOME ADVANCES IN THE FIELD? IT'S NOTHING MORE THAN A DEMONSTRATION THAT THERE'S ACTIVITY AND THAT THERE'S PROGRESS BEING MADE.

DR. MILLAN: THANK YOU VERY MUCH. WE'LL DEFINITELY BRING THAT BACK TO THE TEAM. I CAN SAFELY SAY THAT IT'S NOT A MAJOR PART OF OUR PORTFOLIO. I KNOW YOU'RE NOT TALKING ABOUT PORTFOLIO. THERE MAY BE DISCOVERIES THAT ARISE FROM OTHER PLACES IN THE COURSE OF CARRYING OUT THE RESEARCH IN THE PORTFOLIO. WE'LL HAVE A LOOK AT THAT FOR SURE. THANK YOU.

MS. BONNEVILLE: MARIA, THAT WAS THE LAST QUESTION IN THIS SECTION.

DR. MILLAN: THANK YOU SO MUCH. MARIA, DID YOU WANT TO GIVE PEOPLE A BREAK, OR SHOULD WE JUST KEEP GOING?

MS. BONNEVILLE: YOU GUYS WANT A FIVE-MINUTE BREAK? HOW DOES EVERYONE FEEL ABOUT THAT? J.T.?

CHAIRMAN THOMAS: HOW IS BETH DOING ON THIS?

THE REPORTER: BETH IS FINE. THANKS ANYWAY.

CHAIRMAN THOMAS: I WOULD PROPOSE WE KEEP GOING HERE BECAUSE WE HAVE A NUMBER OF THINGS TO GET

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THROUGH.

MR. TORRES: HERE. HERE. UNTIL BETH CRIES.

CHAIRMAN THOMAS: IT'S ALL BETH DRIVEN.

DR. MILLAN: NEXT SLIDE PLEASE. OKAY. THEME TWO, DELIVER REAL-WORLD SOLUTIONS. PROBLEM STATEMENT: THE REGENERATIVE MEDICINE FIELD IS ADVANCING RAPIDLY, BUT PERVASIVE BOTTLENECKS SLOW CLINICAL DEVELOPMENT AND STALL THE APPROVAL OF THESE POTENTIALLY TRANSFORMATIVE THERAPIES. WE'VE HAD RECURRENT AND STRONG FEEDBACK THAT WE NEED TO BUILD THE INFRASTRUCTURE AND THE EXPERTISE IN CERTAIN AREAS IN CALIFORNIA, INCLUDING MANUFACTURING, WHICH IS A RISK POINT FOR THE DEVELOPMENT OF THESE PROGRAMS, AS WELL AS TO INCREASE THE PROBABILITY OF BEING ABLE TO PROVIDE ENOUGH REGULATORY, CLINICAL, AND MANUFACTURING SUPPORT FOR OUR PROGRAMS BY WAY OF ADVISORY OR FUNDING THE RESEARCH TO ENABLE THIS TO OCCUR. NEXT SLIDE PLEASE.

JUST TO BE VERY, VERY CONCRETE, THERE ARE PROMINENT AND WELL-RECOGNIZED BOTTLENECKS IN CELL AND GENE MANUFACTURING. THE CAR-T FIELD HAS SEEN THIS IN TERMS TRYING TO FIGURE OUT HOW TO GET IT OUT OF THE ACADEMIC INSTITUTIONS TO LARGE PHARMA. THERE'S STILL CONTINUED CHALLENGES WITH THIS, BUT

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ESPECIALLY FOR THE EARLY STAGE CELL AND GENE THERAPY PROGRAMS IN REGENERATIVE MEDICINE PROGRAMS IN OUR ACADEMIC INSTITUTIONS.

THIS STEMS FROM SOME MAJOR REALITIES. ONE IS JUST THE NATURE OF THE CELL AND GENE THERAPIES. THESE LIVING MEDICINES ARE VERY COMPLEX COMPARED TO TRADITIONAL DRUGS AND BIOLOGICS. THE RULES DON'T APPLY. THE TYPICAL QUALITY SYSTEMS AND APPROACHES IN PRODUCT DEVELOPMENT JUST DON'T APPLY.

SECONDLY, MOST OF THESE REGENERATIVE MEDICINE PROGRAMS ARE FIRST DEVELOPED IN ACADEMIA. IN FACT, THE EARLY STAGE TRIALS AND THE MANUFACTURE OF PRODUCTS FOR THESE TRIALS OCCUR IN ACADEMIC GMP FACILITIES. AND IT'S CHALLENGING TO TRANSFER THESE ACADEMIC PROCESSES TO INDUSTRY ACCORDING TO INDUSTRY STANDARDS. THERE'S A LITTLE BIT OF A DIFFERENT CULTURE AND LANGUAGE THAT IS SPOKEN AT ACADEMIC MANUFACTURING SITES FROM INDUSTRY.

AND THEN IN ADDITION, IN THIS NEW FIELD THERE IS NO ESTABLISHED WORKFORCE PIPELINE. SO THERE'S DEFINITELY A TALENT GAP, TALENT POOL GAP IN THIS FIELD.

FROM OUR ACADEMIC AND INDUSTRY STAKEHOLDERS, THERE'S A HUGE AMOUNT OF SUPPORT FOR THE BUILDING OF SOME ORGANIZED APPROACH BY WAY OF A

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NETWORK AND PUBLIC-PRIVATE PARTNERSHIP TO ACCELERATE MANUFACTURING DEVELOPMENT AND OVERCOME THESE BOTTLENECKS.

SECONDLY, THERE IS A REQUEST, BOTH FROM ACADEMIC AND INDUSTRY, FOR CIRM TO SUPPORT THE TRAINING AND DEVELOPMENT OF LEADERSHIP WITHIN THE FIELD AND CREATING ONRAMPS FOR MANUFACTURING CAREERS. NEXT SLIDE PLEASE.

SO HERE'S A BROAD CONCEPT THAT, BASED ON THIS FEEDBACK AND BASED ON THE LAY OF THE LAND IN TERMS OF HOW THINGS ARE DONE CURRENTLY WITH PRODUCT DEVELOPMENT AND MANUFACTURE, CIRM COULD FUND AN ACADEMIC GMP NETWORK THAT WOULD ADDRESS THESE BOTTLENECKS. THE THREE OUTCOMES ARE TO ACCELERATE AND DERISK PATHS TO COMMERCIALIZATION, ADVANCE STANDARDS AND QUALITY BY DESIGN, AND BUILD MANUFACTURING LEADERSHIP AND WORKFORCE.

HOW WOULD THIS HAPPEN? THE NETWORK AND THE INTEGRATED PUBLIC-PRIVATE PARTNERSHIP THAT IS COORDINATED BY CIRM WITH OUR INDUSTRY PARTNERS AND OUR FORMAL INDUSTRY ALLIANCE PROGRAM WOULD BE DESIGNED TO ACCELERATE COMMERCIALIZATION BY DERISKING THE PATH. BY HAVING EARLY INVOLVEMENT OF INDUSTRY ALONG WITH OUR ACADEMIC GMP NETWORK, WE COULD LEVERAGE INDUSTRY INPUT AND PARTICIPATION AND

CREATE MORE ROBUST STANDARDS, QUALITY SYSTEMS, AND TECH TRANSFER APPROACHES, TECHNOLOGY TRANSFER APPROACHES, THAT DERISKS DOWNSTREAM WHEN THEY FINALLY ARE READY TO TRANSFER THIS FOR FINAL APPROVAL AND COMMERCIALIZATION TO THE CORPORATE PARTNERS, TO THE COMMERCIALIZATION ENTITY.

ADVANCE, AS A NETWORK, THE MEMBER ACADEMIC GMP TEAMS COULD ADVANCE STANDARDS AND QUALITY BY DESIGN TO IMPROVE OUTCOME AND THE SUCCESS RATES OF SCALE-UP AND COMMERCIALIZATION THAT COULD SHARE BEST PRACTICES, SUPPORT EACH OTHER IN TERMS OF THEY THEMSELVES BEING COMPETENCY HUBS. FOR INSTANCE, IF ONE GMP FACILITY HAS A SPECIALIZATION IN CREATION OF VECTORS FOR GENE THERAPY AND ANOTHER ONE HAS A SPECIALIZATION IN DIFFERENTIATING CELLS, THERE'S A CROSS-FERTILIZATION AND A SYNERGY THAT CAN OCCUR THROUGH THESE ACADEMIC GMP NETWORKS.

BUILD THE WORKFORCE OF TOMORROW. SUCH A NETWORK, INCLUDING THE INDUSTRY PARTNERS, WILL PROVIDE A TRAINING GROUND FOR LEADERSHIP AND WORKFORCE TRAINING AND MANUFACTURING AND PROVIDE A TALENT POOL BOTH FOR ACADEMIA AND INDUSTRY. CIRM WOULD FACILITATE THE NETWORK PARTNERSHIP BETWEEN THE ACADEMIC GMP TEAMS AS WE DO FOR THE ALPHA CLINICS, WHICH YOU WILL HEAR ABOUT IN A BIT, AND COORDINATE

ACTIVE INDUSTRY ENGAGEMENT WITH THESE ACADEMIC GMP TEAMS AND THE NETWORK ITSELF TO TAP INTO INDUSTRY EXPERTISE, RESOURCES, AND POTENTIALLY INVESTMENT.

I WOULD LIKE TO HAVE A CONVERSATION SPECIFICALLY ABOUT THIS BECAUSE IT'S A VERY DISCREET TOPIC AND WELCOME THE BOARD'S INPUT, QUESTIONS, AND DISCUSSION ON THIS PARTICULAR BROAD CONCEPT.

MS. BONNEVILLE: ART.

MR. TORRES: AS MARIA AND J.T. KNOW AND MARIA BONNEVILLE AS WELL, I'VE BEEN WORKING VERY CLOSELY WITH OUR COMMUNITY COLLEGE SYSTEM AND MY ROLE ON THE UC REGENTS IN RESPECT TO MANUFACTURING INITIATIVES. MANY OF YOU ALREADY KNOW THAT THE COMMUNITY COLLEGES IN CALIFORNIA, MIRA COSTA AND SOLANO, ARE CURRENTLY OFFERING FOUR-YEAR DEGREES IN BIOMANUFACTURING. SO I INTENDED TO CONTINUE THAT RELATIONSHIP AS WE MOVE FORWARD BECAUSE THAT IS ANOTHER ELEMENT IN NOT ONLY OUR BRIDGES PROGRAM, OUR OTHER PROGRAMS FOR HIGH SCHOOL STUDENTS, THE OTHER, SPARKS, BUT ALSO THE EMPHASIS THAT WE SHOULD PLACE ON COMMUNITY COLLEGE EDUCATION WITH THESE FOUR-YEAR DEGREES IN BIOMANUFACTURING WHERE WE CAN BEGIN TO DEVELOP AN ENTIRELY NEW WORKFORCE FOR CALIFORNIA THAT FEEDS OUR INTERESTS AND OUR NEEDS DOWN THE ROAD.

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SO I JUST WANTED TO ALERT YOU THAT'S IN THE OFFING, AND THAT CONTINUES TO BE A PRIORITY ESPECIALLY IN LIGHT OF THE GOVERNOR'S BUDGET THAT PROVIDES FOR A FREE, ALMOST FREE, EDUCATION AT OUR COMMUNITY COLLEGES AND FAR LESS COST THAN A TYPICAL B.A. WOULD COST AT A STATE UNIVERSITY OR A UC SYSTEM.

SO THE OTHER ELEMENT OF THOSE PROGRAMS WHICH I FIND PARTICULARLY APPEALING IS THAT IT REACHES OUT TO A DIVERSE COMMUNITY. IN OTHER WORDS, THE PEOPLE THAT ARE ENROLLING BECAUSE OF THEIR ECONOMIC STATUS, BECAUSE OF THEIR UNDERSERVED STATUS, TEND TO COME FROM DIVERSE COMMUNITIES AND PEOPLE OF COLOR. THOSE KINDS OF PROGRAMS ARE SO ESSENTIAL FOR US BECAUSE THEY WILL PRODUCE HIGHER EARNING FOLKS WITH MORE PROFESSIONAL APPROACHES AND TO FULFILL A NEED THAT MARIA SO ELOQUENTLY JUST TALKED ABOUT IN HER PRESENTATION. SO THAT'S JUST AN FYI.

DR. MILLAN: THANK YOU SO MUCH. AND THEN THE SUPPORT FOR THE CONTINUATION OF THESE FOUR-YEAR DEGREES IN THE COMMUNITY COLLEGES RECENTLY IS A HUGE BOON.

IN THE MANUFACTURING WORKSHOP AND IN CONVERSATIONS WITH BOTH INDUSTRY AND ACADEMIC GMP

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FACILITIES, THERE'S DEFINITELY A RECOGNITION AND THEY VALUE HOW THE COMMUNITY COLLEGE SYSTEMS COULD FEED INTO THIS, BUT WE ALSO NEED TO ACKNOWLEDGE THAT THEY HAVE DIFFERENT PARAMETERS OF ENGAGEMENT, RIGHT. SO THESE COMMUNITY COLLEGES, FOR INSTANCE, WOULD NOT HAVE THE BANDWIDTH OR THE EXPERTISE TO BE PURSUING HUGE GRANTS, FOR INSTANCE, SO GRANT APPLICATIONS. AND THEIR FACULTY GENERALLY DON'T HAVE THE SAME TYPE OF EXPOSURE TO THOSE FUNDING OPPORTUNITIES. SO AS WE ARE LOOKING AT THIS, WE ARE DEFINITELY FINDING WAYS THAT ARE APPROPRIATE FOR ENGAGEMENT GIVEN THE VALUE THAT THE DIFFERENT STAKEHOLDERS HAVE TO PROVIDING TRAINING AND EDUCATION OPPORTUNITIES ACROSS UNIVERSITIES, COMMUNITY COLLEGES, AS WELL AS INDUSTRY. SO STAY TUNED AND YOU WILL BE HEARING SOME OF THAT AS WE CONTINUE TO DEVELOP THIS PROGRAM.

MS. BONNEVILLE: LARRY.

DR. GOLDSTEIN: THANK YOU. SO FIRST I WANT TO COMMEND YOU AND YOUR TEAM FOR CALLING OUT WHAT I THINK IS AN ABSOLUTELY CRITICAL ISSUE MOVING FORWARD. MANUFACTURING ENOUGH OF A LENTIVIRUS OR A HEMATOPOIETIC STEM CELL AS PART OF A CLINICAL TRIAL AND THEN ON TO MANUFACTURING IN THE REAL WORLD OF BIOTECH AND PHARMA WHERE THIS GETS DELIVERED TO LOTS OF PEOPLE, ABSOLUTELY CRITICAL ISSUE. SO GOOD JOB

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ON THAT.

I DO WANT TO BE SURE THAT YOU HAVE IN MIND IMPLEMENTATION AND POSSIBLY IN BROAD GOALS THE NOTION OF FINDING WAYS TO IDENTIFY PEOPLE IN THE PROCESS ENGINEERING COMMUNITY. SO THERE ARE EXPERTS IN HOW TO GO FROM ONE LITER TO A THOUSAND LITERS. I SUSPECT NONE OF US ARE ON THIS CALL, BUT THEY'RE OUT THERE, AND WE WANT TO BE SURE THAT WE IDENTIFY THEM AND INTEGRATE THEM INTO THIS GOAL.

DR. MILLAN: THANK YOU. ABSOLUTELY. AND WHERE WE THINK THAT THAT PIPELINE FOR THAT TYPE OF EXPERTISE WOULD BE ARE WITH OUR INDUSTRY PARTNERS. IN FACT, INDUSTRY ALLIANCE PROGRAMS, LARGE PROGRAMS SUCH AS BAYER AND OTHERS ARE IN OUR INDUSTRY ALLIANCE PROGRAM. THEY'RE VERY MUCH INTERESTED IN BUILDING THIS CAPACITY IN CALIFORNIA. THERE'S INVESTMENT INTO THIS SPACE WITH CREATION OF NEW COMPANIES SUCH AS RESILIENCE, FOR INSTANCE. THESE ARE ALL ENTITIES THAT ARE WELL FUNDED THAT INTEND TO BUILD THIS.

SO CIRM DOES NOT HAVE THE BUDGET TO BE ABLE TO DO THIS. THANKFULLY OTHERS SEE THE IMPORTANCE OF THIS AND ARE DOING THAT. WHAT CIRM CAN DO IS BRING THAT EXPERTISE BY WAY OF OUR ACADEMIC GMP BECAUSE THAT'S WHERE IT ALL STARTS, AND

ALL OF THESE INDUSTRY PARTNERS RECOGNIZE THAT. THEY COULD HAVE THE MONEY, THEY COULD HAVE THE EXPERTISE IN TERMS OF TRADITIONAL MANUFACTURING, BUT THEY NEED THAT KNOW-HOW. ACADEMIC GMP FACILITIES AND THE TYPE OF TALENT THAT'S EMBEDDED WITHIN THOSE SYSTEMS, THEY ACKNOWLEDGE THE IMPORTANCE OF THAT IN EARLY DEVELOPMENT. AND SO BY CREATING THIS TYPE OF PUBLIC-PRIVATE PARTNERSHIP AND NETWORK, THE IDEA IS TO BE ABLE TO REALLY BRIDGE THAT GAP AND MAKE THEM PART OF THE SOLUTION EARLY ON. THANK YOU.

MS. BONNEVILLE: PAT.

DR. LEVITT: THE FOCUS ON MANUFACTURING IS UNDERSTANDABLE AND REALLY IMPORTANT. I THINK IN THIS CONTEXT IN TERMS OF DELIVER REAL-WORLD SOLUTIONS, ONE COMPONENT THAT I THINK IS REALLY IMPORTANT THAT I THINK EVERYBODY ON THE ZOOM RECOGNIZES IN THEIR OWN INSTITUTIONS IS THAT THERE'S AN HR CRISIS IN TERMS OF ACTUALLY DOING CLINICAL TRIALS; THAT IS, CLINICAL RESEARCH COORDINATORS ARE VANISHING. AND IT'S NOT JUST IN CALIFORNIA. IT'S ACROSS THE UNITED STATES.

DANA-FARBER LOST 80 PERCENT OF ITS CRC'S IN ABOUT A TWO-MONTH PERIOD. 80 PERCENT. I'M NOT EXAGGERATING. WE LOST AT CHILDREN'S HOSPITAL LOS ANGELES, WE LOST 40 PERCENT. OTHER INSTITUTIONS

AROUND CALIFORNIA. SO WE CAN HAVE THE GREATEST MANUFACTURING IN THE WORLD; BUT IF WE CAN'T DO A REAL-WORLD DELIVERY OF THE CLINICAL TRIALS THEMSELVES, WE ARE IN DEEP DO-DO. AND WE ALREADY ARE. THERE ARE CLINICAL TRIALS THAT ARE SLOWING, THAT ARE BEING PAUSED, ET CETERA, AT A LOT OF INSTITUTIONS.

SO I WAS REALLY INTERESTED IN WHAT ART MENTIONED ABOUT COMMUNITY COLLEGE. THERE ARE NOT A LARGE NUMBER OF PROGRAMS THAT ARE TRAINING CLINICAL RESEARCH COORDINATORS. JUST AS TRAINING AND EDUCATION IS IMPORTANT FOR BUILDING THE NEXT GENERATION OF BENCH SCIENTISTS AND OTHER SCIENTISTS, THIS IS A REALLY CRITICAL NEED IF WE'RE GOING TO REALLY DELIVER REAL-WORLD SOLUTIONS BECAUSE YOU CAN'T DO IT IN THE ABSENCE OF THOSE INDIVIDUALS WHO ARE TRAINED. AND SO I THINK I JUST WANTED TO RAISE THIS BECAUSE I THINK IT'S SOMETHING WE SHOULD THINK ABOUT AND INVESTIGATE IN TERMS OF HOW CIRM CAN PARTICIPATE IN THIS PROCESS. BUT I'M NOT BEING AN ALARMIST. IT'S A REAL CRISIS.

DR. MILLAN: THANK YOU SO MUCH. I'VE TAKEN THAT DOWN AND HIGHLIGHTED IT, AND THAT IS SOMETHING WE WILL DEFINITELY PURSUE IN TERMS OF CLINICAL RESEARCH COORDINATORS BECAUSE WE DO HAVE,

AS YOU WILL SEE IN A LITTLE BIT IN TERMS OF ALPHA CLINICS EXPANSION AND THEN POTENTIALLY THE COMMUNITY CARE CENTERS OF EXCELLENCE, THOSE COULD BE THE SETTINGS BY WHICH SOME OF THE FUTURE WORKFORCE IN THAT REGARD WILL BE TRAINED. OUR EDUCATION PROGRAMS CAN PARTNER WITH THAT. BUT A SPECIFIC WAY TO BRING IN THE COMMUNITY COLLEGES IN THAT REGARD IS A REALLY GREAT IDEA, AND WE'LL LOOK INTO THAT. THANK YOU SO MUCH.

DR. LEVITT: AND IT'S ALSO ANOTHER OPPORTUNITY TO REALLY GROW AND ENHANCE THE CIRM EFFORTS IN DIVERSITY, EQUITY, AND INCLUSION BECAUSE CRC'S AND OTHERS WHO WERE WORKING IN THE CLINICAL TRIAL, CLINICAL RESEARCH SPACE ARE COMMUNITY FACING IN TERMS OF ENGAGING FAMILIES TO PARTICIPATE IN STUDIES. AND I THINK THAT'S A REALLY IMPORTANT COMPONENT TO MAKE SURE THAT WE ARE WELL REPRESENTED IN TERMS OF WHATEVER WE END UP DOING.

DR. MILLAN: MARIA BONNEVILLE IS TAKING THAT DOWN, RIGHT, MARIA?

MS. BONNEVILLE: YES. DAVID.

DR. MARTIN: I TOTALLY AGREE THAT THIS TRIANGLE IS REALLY IMPORTANT AND THE NEED IS ENORMOUS. HOWEVER, THERE'S A VERY LARGE ELEPHANT IN THE CENTER OF THIS TRIANGLE, AND THAT'S INTELLECTUAL

PROPERTY, BOTH FROM ACADEME AND FROM INDUSTRY. AND I THINK THAT WE CAN'T MAKE ANY PROGRESS HERE WITHOUT TRYING TO UNDERSTAND THAT AND DEAL WITH IT PROSPECTIVELY.

AND I CERTAINLY AGREE WITH PAT'S COMMENT ABOUT EDUCATION OF CRC'S, PROCESS DEVELOPMENT, TECHNICIANS, ET CETERA. THOSE ARE ALL VERY IMPORTANT AND NOT ENCUMBERED BY INTELLECTUAL PROPERTY. SO I THINK WE NEED TO REALLY PUSH ON THOSE VERY HARD AND DETERMINE WHETHER THERE ARE SOME NOVEL IDEAS OR APPROACHES OR PARTICIPANTS THAT ARE WILLING TO EITHER SHARE NONEXCLUSIVELY THEIR INTELLECTUAL PROPERTY THAT ARE GOING TO BE GENERATED ON ALL SIDES OF THIS TRIANGLE.

DR. MILLAN: THANK YOU SO MUCH. THERE'S GOING TO BE KNOW-HOW THAT'S GENERATED WITHOUT EVEN LIKE SPECIFIC -- JUST GENERAL KNOW-HOW. AND SO I JUST GIVE THIS EXAMPLE OF A VERY ESTABLISHED MANUFACTURING, LANSA, FROM BALTIMORE. HOW THEY BUILT THEIR BUSINESS IS THEY STARTED FIRST TAKING CARE OF THE FIRST MSC-TYPE PROGRAMS. THEY GOT BETTER AT IT. THEIR CUSTOMERS KEEP THEIR INTELLECTUAL PROPERTY. IN SOME CASES LANSA WILL LICENSE IN SPECIFIC PLATFORMS THAT THEY CAN THEN OFFER TO THEIR CUSTOMERS. BUT, IN GENERAL, THE

CUSTOMERS WILL KEEP THEIR INTELLECTUAL PROPERTY, BUT THERE'S THIS KIND OF ITERATIVE LEARNING PROCESS THAT DOES NOT GET UNLEARNED. AND THAT'S WHAT THE VALUE OF A NETWORK IS.

AND IT'S A MATTER OF -- AND WE DO HAVE, IN DISCUSSION WITH THE INDUSTRY REPRESENTATIVES AS WELL AS ACADEMIA, I BELIEVE THAT FOLKS KNOW THAT THEY CANNOT LIVE IN THEIR SILOS. THEY'RE NOT GOING TO MAKE PROGRESS. IN FACT, IT BENEFITS THEM TO KIND OF HAVE THAT COLLECTIVE KNOWLEDGE.

AND SO THERE ARE WAYS TO PROTECT INTELLECTUAL PROPERTY FROM THEIR PROGRAMS WHILE STILL MAKING ADVANCES FOR THIS COLLECTIVE KNOWLEDGE THAT SUCH A NETWORK WILL BRING. IT'S SOMETHING WE PRESSURE TESTED. THERE'S A LOT OF INTEREST IN THIS, AND SO IT'S NOT A THEORETICAL THING. WE BELIEVE THIS IS FEASIBLE AND SOMETHING THAT CAN BE IMPLEMENTED.

MS. BONNEVILLE: DAVID.

DR. HIGGINS: JUST A QUICK QUESTION ABOUT THE STATISTICS WE HEARD FOR 20 TO 40 PERCENT OF THE CRC'S BEING LOST RECENTLY IN THE NORTHEAST. CAN YOU TALK A LITTLE BIT MORE ABOUT WHY THAT MIGHT BE THE CASE?

AND THE SECOND ONE IS CAN WE LOOK AT THAT

AS AN OPPORTUNITY AS OPPOSED TO A TRAGEDY? IF WE'RE GOING TO BE HIRING ALL THOSE REPLACEMENTS, NOW MAY BE THE TIME TO BRING IN A NEW PARADIGM OR NEW PARADIGM SHIFT OR A NEW PHILOSOPHY OR WHATEVER YOU WANT TO CALL IT.

WHAT I THINK I'VE LEARNED TODAY IS THAT WE THINK OF CLINICAL DEVELOPMENT AS THIS MONOLITH OR THIS MEGALITH, MEGA MONOLITH, AND WE EITHER SUCCEED OR FAIL. AND THERE'S A PIPELINE. A PIPELINE SUPPLIES A SINGLE CONDUIT FROM POINT A TO POINT B. CLINICAL DEVELOPMENT IS DYING BY A DEATH OF A THOUSAND CUTS, AND THIS IS JUST A COUPLE OF THEM. AND IT REALLY POINTS OUT THE CRITICAL NATURE OF THIS GROUP OF PEOPLE WHO HAVE THEIR FINGERS IN ESSENTIALLY EVERY POT YOU CAN IMAGINE. BUT I JUST WANTED TO ASK FOR A LITTLE BIT OF INFORMATION ON THE STATISTIC YOU JUST GAVE AND TO ASK WHETHER YOU VIEW THIS AS AN OPPORTUNITY OR A SERIOUS THREAT. THANKS.

DR. LEVITT: MARIA, DO YOU WANT ME TO ADDRESS THAT? OR, J.T., YOU WANT ME TO SAY? SO IT'S A COMBINATION OF THINGS. ONE IS THAT STARTING SALARIES IN CALIFORNIA FOR A CRC-1 HAS BEEN ABOUT 17 AND A HALF TO $18 AN HOUR. AND SO THAT'S A REAL PROBLEM IN TERMS OF COMPENSATION. A LARGE NUMBER OF, IN A NONORGANIZED WAY, DIFFERENT INSTITUTIONS

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HAVE ADDRESSED THAT, WHICH MEANS THAT CRC'S ARE MOVING FROM ONE INSTITUTE TO ANOTHER. SO THERE'S COMPETITION BETWEEN OUR BROTHERS AND SISTERS IN CALIFORNIA, RIGHT. IT'S LIKE A COMPANY MOVING FROM MINNEAPOLIS TO ST. PAUL BECAUSE OF A TAX BREAK AND THEN BACK AGAIN WHEN THEY GET THE TAX BREAK FIVE YEARS LATER FROM MINNEAPOLIS. SO COMPENSATION IS A BIG ISSUE.

THE OTHER ISSUE IS THAT CRC'S CAN WORK ON HYBRID SCHEDULES; THAT IS, THEY CAN BE REMOTE FOR PERIODS OF TIME AND THEN THEY MAY HAVE TO BE ON SITE. SOME CAN BE FULLY REMOTE DEPENDING UPON THE ROLE OF THE RESEARCH NURSES THAT ARE AVAILABLE. AND MANY INSTITUTIONS ACROSS THE COUNTRY ARE ACCEPTING AND SIGNING ON CRC'S WHO DON'T LIVE IN THEIR STATE. SO THERE'S COMPETITION NATIONALLY NOW, AND THERE'S A SHORTAGE. IT'S NOT AS IF WE HAVE AN ABUNDANCE OF THOSE WHO ARE TRAINED TO DO CLINICAL RESEARCH COORDINATION, WHICH, AS YOU KNOW, HAS MANY COMPONENTS THAT CAN BE DONE VIRTUALLY. SO IT'S A COMBINATION OF THOSE THINGS.

AND WITH HOSPITALS AND ACADEMIC INSTITUTIONS, PARTICULARLY THIS YEAR, STILL BEING STRAPPED FINANCIALLY, IT'S TOUGHER TO DEAL WITH THE COMPENSATION ISSUE, BUT THEY'RE TRYING. THE ISSUE

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OF NOW COMPETITION NATIONALLY IS A BIG PROBLEM. I.T. IS A REAL CHALLENGE. AND THERE'S A SHORTAGE OF THEM. SO, OF COURSE, THEY CAN GO WHEREVER THEY WANT. THAT'S WHAT I THINK ARE THE TWO BIG ISSUES.

DR. HIGGINS: MCDONALD'S DOWN THE STREET, BY THE WAY, HAS A SIGN IN THE WINDOW THAT SAYS $18 AN HOUR.

DR. LEVITT: YES. YOU'RE PAYING A CRC BASICALLY A FEW DOLLARS MORE ABOVE MINIMUM WAGE, AND THEY CAN LOOK FOR POSITIONS WHERE THEY CAN BE FULLY REMOTE IN ALABAMA AT UAB OR IN FLORIDA, UNIVERSITY OF FLORIDA, OR WHEREVER, AND THEY LIVE IN CALIFORNIA. SO THERE'S A NUMBER. IT'S COMPLICATED TO SOME EXTENT, ALTHOUGH WE SORT OF KNOW WHAT SOME OF THE CORE PROBLEMS ARE. I DON'T HAVE A SOLUTION. I'M JUST SAYING THAT CALIFORNIA COULD BE A SOLUTION FOR US IN PARTICULAR STARTING HERE FIRST BECAUSE WE HAVE EDUCATIONAL INFRASTRUCTURE BECAUSE OF OUR VERY LARGE COMMUNITY COLLEGE SYSTEM OR CALIFORNIA STATE COLLEGE SYSTEM, ET CETERA, THAT CAN BUILD CAPACITY IN REALLY SIGNIFICANT WAYS. AND YOU CAN'T DO THESE -- AGAIN, YOU CAN HAVE THE GREATEST MANUFACTURING IN THE WORLD; BUT IF YOU DON'T HAVE THE STAFF TO BE ABLE TO DO THESE CLINICAL TRIALS, WHICH, AS YOU KNOW, HAVE GOTTEN FAR MORE COMPLICATED

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BECAUSE OF REGULATORY COMPONENTS, THAT'S WHERE THEY'RE REALLY IMPORTANT IN TERMS OF UNDERSTANDING AND BEING ABLE TO DELIVER ON THE FDA REGULATORY COMPONENTS WHEN IT STARTS IN AN ACADEMIC INSTITUTION.

I WOULD SAY ONE OTHER THING. THERE IS COMPETITION BETWEEN ACADEMIC INSTITUTIONS AND THE PRIVATE SECTOR. SO ANYTHING THAT CIRM CAN DO TO PROMOTE A MORE FRIENDLY ARRANGEMENT WHERE YOU HAVE THESE PUBLIC-PRIVATE PARTNERSHIPS, WE'D LIKE THE PUBLIC-PRIVATE PARTNERSHIPS TO BE REAL PARTNERSHIPS AND NOT COMPETITION BECAUSE THERE IS COMPETITION NOW IN TERMS OF THE PRIVATE SECTOR GOING AFTER CRC'S WHO HAVE HAD TWO, THREE YEARS EXPERIENCE AT AN ACADEMIC INSTITUTION AND THEN THEY WAVE MORE DOLLARS IN FRONT OF THEM, WHICH IS UNDERSTANDABLE, AND THEN THEY LEAVE. SO THAT'S SOMETHING WE CAN WORK ON IN TERMS OF PARTNERSHIPS BECAUSE THE PHARMAS ARE NOT GOING TO BE ABLE TO DO THEIR STUDIES WITHOUT FIRST BEING DONE THROUGH THE ACADEMIC INSTITUTIONS.

DR. MILLAN: I WANTED TO -- FIRST OF ALL, THAT WAS A GREAT DISCUSSION, BUT WANTED TO SHARE SOMETHING THAT CAME UP IN OUR CONVERSATIONS THROUGH THESE WORKSHOPS AND TACKLING HOW YOU GET AN ASSOCIATE LEVEL -- FIRST, IT WAS IN THE

MANUFACTURING ASSOCIATES DISCUSSION; HOWEVER, IT ALSO IS RELEVANT TO THE CRC. ONE OF THE THINGS THAT I THINK THAT WE CAN CONSIDER IS THAT WE JUST NEED TO UNDERSTAND THAT THAT'S REALITY. WE ARE NOT GOING TO BE ABLE TO STOP PEOPLE FROM GOING TO BETTER JOBS AND WE SHOULD BE HAPPY FOR THAT. MAYBE WE JUST WORK IT INTO THE SYSTEM.

I CAME FROM A SYSTEM TRAINED AS SURGEON AND THEN A TRANSPLANT SURGEON WHERE WE WERE PAID VERY LITTLE, BUT WE WERE CHEAP LABOR. AND WE WERE THE ON-THE-GROUND PEOPLE IN THE WARDS AND THE ORS, RIGHT, TAKING CALL AND EVERYTHING ELSE BECAUSE THAT WAS OF VALUE TO US BECAUSE OF WHAT IT DOES FOR THE FUTURE. WE SHOULD START THINKING ABOUT MANUFACTURING ASSOCIATES OR DIFFERENT POSITIONS WITHIN CLINICAL TRIALS AND SYSTEMS AS THAT IS A ROTATION, THAT IS A TRAINING GROUND, AND WE DON'T EXPECT THEM TO STAY THERE FOREVER. THERE'S NOT AN ADVANCEMENT, BUT THAT WE JUST CREATE A PATHWAY SO THEY CAN GAIN WHAT THEY HAVE, CONTRIBUTE, GO ON TO THE NEXT STATION, RIGHT. SO THOSE ARE SOME OF THINGS WE ARE THINKING ABOUT IN TERMS OF HOW YOU INTEGRATE ALL THE DIFFERENT OPPORTUNITIES.

DR. LEVITT: YES. I COULDN'T AGREE MORE. THE MODEL IN A LOT OF BENCH SCIENCE LABORATORIES IS

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JUST THAT, THAT MOST OF THE BENCH SCIENTISTS I KNOW RUN THEIR LABORATORIES, WHICH THEY UNDERSTAND THAT THEY'RE GOING TO HAVE INDIVIDUALS WHO ARE GOING TO BE THERE FOR TWO OR THREE YEARS, ARE NOT GOING TO BE CAREER TECHNICIANS. THERE ARE SOME, BUT IT'S A MUCH SMALLER GROUP. AND THEN THEY MOVE ON TO GRADUATE SCHOOL, MEDICAL SCHOOL, HEALTH PROFESSIONAL SCHOOLS, OTHER SORTS OF THINGS THAT THEY WANT TO DO, AND THAT WORKS VERY WELL BECAUSE YOU GET REALLY FABULOUS INDIVIDUALS RIGHT OUT OF COLLEGE THAT DO THAT WORK TO GET TRAINED AND THEN THEY MOVE ON AND YOU ENCOURAGE THEM TO DO THAT. WE COULD DO THE SAME IN THIS AREA AS WELL.

DR. MILLAN: AND I THINK THAT -- IN THE BEGINNING I STARTED OFF BY SAYING THE PROOF CONCEPT OR A SIGNAL WOULD IMPACT ON PATIENTS. THERE'S A PROOF OF CONCEPT IN THE SIGNAL TO THE LEGACY OF EDUCATION -- DAVID MARTIN BROUGHT THAT UP -- IN TERMS OF WE HAVE SO MANY STORIES OUT THERE OF BRIDGES STUDENTS, PEOPLE WHO HAD GONE THROUGH OUR EDUCATIONAL PROGRAMS, THEN ENDED UP IN LEADERSHIP POSITIONS IN INDUSTRY OR PURSUED CAREERS IN ACADEMIA. AND WHAT WE WANT TO DO IS INCREASE THE PROBABILITY THAT MORE AND MORE OF OUR STUDENTS WHO GO THROUGH THAT FIND A PATH, WHEREVER THAT MAY BE,

ALONG MULTIPLE LEVELS OF POSITIONS AND OPPORTUNITIES.

I THINK WE HAVE AN OPPORTUNITY -- I THINK, PAT, YOU'RE RIGHT. WE HAVE AN OPPORTUNITY TO DO THIS IN CALIFORNIA BECAUSE WE HAVE A STRUCTURE AND A FUNDING TO BE ABLE TO DO THIS IN SERVICE OF THE OVERALL MISSION. THANK YOU SO MUCH. GREAT DISCUSSION.

MS. BONNEVILLE: THAT'S IT FOR QUESTIONS IN THIS ROUND. J.T., I'VE HAD A REQUEST, COUPLE OF REQUESTS FOR A QUICK BREAK IF THAT'S OKAY.

CHAIRMAN THOMAS: CERTAINLY. FIVE MINUTES?

MS. BONNEVILLE: SURE. I THINK THAT SHOULD BE GOOD. THANK YOU.

(A RECESS WAS TAKEN.)

CHAIRMAN THOMAS: OKAY. MARIA, I THINK EVERYBODY IS READY TO RESUME HERE. WHY DON'T WE GO BACK TO DR. MILLAN AND ON TO THE NEXT SLIDE.

DR. MILLAN: THANK YOU SO MUCH. THANK YOU FOR THAT SHORT BREAK.

CONTINUING ON THE TOPIC OF DELIVERING REAL-WORLD SOLUTIONS, OUR BROAD STAKEHOLDERS HAVE SUPPORTED THE CONTINUED NEED FOR CLINICAL INFRASTRUCTURE FOR CLINICAL RESEARCH AND THE

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ADVANCEMENT OF REGENERATIVE MEDICINE AS WELL AS EMPHASIZING THE IMPORTANCE OF ACADEMIC INSTITUTIONS TO PROVIDING THESE OFFERINGS TO THE BROADER CALIFORNIA COMMUNITIES.

TRAINING, THE NEED TO TRAIN CLINICAL EXPERTISE AS WELL AS OTHER SKILL SETS AS DISCUSSED IN THE PREVIOUS CONVERSATION REGARDING CLINICAL RESEARCH COORDINATORS FOR REGENERATIVE MEDICINE CLINICAL TRIAL AND THERAPIES IN THE AREA OF NURSING, PHYSICIANS, PHARMACY, ANCILLARY STAFF. THE CIRM ALPHA CLINICS NETWORK THAT WAS LAUNCHED SIX YEARS AGO HAS DEMONSTRATED VERY CLEAR VALUE IN SUPPORTING ACADEMIC AND INDUSTRY SPONSORED TRIALS WITH ACCELERATING RESOURCES, SHARED RESOURCES, SUCH AS IRB RELIANCE AND THE BUILT-IN CAPACITY TO EXPAND CLINICAL TRIALS BY WAY OF SITE EXPANSION FOR ENROLLMENT, UTILIZING RECIPROCAL ARRANGEMENTS FOR FOLLOW-UP, SHARING OF BEST PRACTICES, AND DRAWING FROM EACH OTHER'S EXPERTISE.

PROPOSITION 14 ANTICIPATES THE CONTINUED FUNDING AND EXPANSION OF THE ALPHA CLINICS NETWORK GOING FORWARD. NEXT SLIDE PLEASE.

JUST TO LET YOU KNOW, CURRENTLY THERE ARE FIVE PROGRAMS THAT HAVE BEEN FUNDED. THEY'RE IN EXTENSION FUNDING THAT THE BOARD APPROVED DURING

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THIS GAP THAT WE'RE DEVELOPING AN ALPHA CLINICS EXPANSION CONCEPT. THE CURRENT SITES ARE UCLA, U.C.I. AS A CONSORTIUM, UC SAN FRANCISCO AND BENIOFF, UC DAVIS, SAN DIEGO, AND CITY OF HOPE. NEXT SLIDE PLEASE, SHYAM.

SO THE IDEA FOR AN ALPHA CLINICS EXPANSION, WHICH IS ANTICIPATED IN PROP 14, IS TO DEVELOP CONCEPTS WHERE WE WOULD ENABLE INNOVATIVE CLINICAL RESEARCH. AND WHAT DO WE MEAN BY THAT? WE TALKED ABOUT NEW MODELS FOR DOING RESEARCH, COLLABORATIVE WAYS, CONSORTIA MODELS, UMBRELLA TRIALS, THOSE TYPE OF THINGS WHEN THEY ARE READY TO BE DONE AND COULD PROGRESS PROGRAMS FORWARD, FOR INSTANCE, FOR CNS RESEARCH AS WELL AS OTHERS. THE FDA IS PUTTING OUT NEW PATHWAYS ON HOW TO RUN CLINICAL TRIALS, INNOVATIVE WAYS FOR USING IND'S, MULTIPLE IND'S, IN A WAY THAT PROGRESSES THE DEVELOPMENT OF PROGRAMS.

WE NEED THE CLINICAL INFRASTRUCTURE TO BE ABLE TO SUPPORT THESE INNOVATIVE APPROACHES TO CLINICAL TRIALS AND CLINICAL DEVELOPMENT. AND ALSO THERE IS THIS NEED TO EXPAND CAPACITY AND REACH GEOGRAPHIC REACH OF THESE PROGRAMS. SO CURRENTLY THERE ARE FIVE PROGRAMS FUNDED. WE ANTICIPATE THAT WE'LL BE COMING BACK TO THE BOARD TO BE ABLE TO FUND

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MORE PROGRAMS.

IN ADDITION, THESE WOULD BE THE TRAINING GRANTS FOR SUBSPECIALTY TRAINING OF CLINICIANS, CLINICIAN RESEARCHERS, AS WELL AS NURSES, CLINICAL RESEARCH COORDINATORS, AND OTHER TYPES OF SPECIALTIES RELATED TO WORKFORCE DEVELOPMENT.

SO THE ALPHA CLINICS EXPANSION IS BUILDING UPON AN ALREADY SUCCESSFUL PROGRAM. THE IDEA OF THE COMMUNITY CARE CENTERS OF EXCELLENCE, WHICH IS ALSO STIPULATED IN PROPOSITION 14 WITH AN ASSOCIATED BUDGET, IS THAT IT WOULD SERVE AS A COMMUNITY PARTNER, NOT JUST A SUPPORTIVE ROLE, BUT ALSO A LEADERSHIP ROLE IN BRINGING THESE EFFORTS TO BRING REGENERATIVE MEDICINE RESEARCH AND THERAPIES TO LOCAL COMMUNITIES IN THE APPROPRIATE WAY IN PARTNERSHIP WITH THE ACADEMIC PROGRAMS.

THE STRUCTURE AND THE SCOPE OF THE COMMUNITY CARE CENTERS OF EXCELLENCE IS STILL BEING EVALUATED AND WILL REALLY BE DRIVEN AND RESPONSIVE TO THE NEEDS OF THE COMMUNITY AND THE LOCAL HEALTH SYSTEMS. SO THERE'S GOING TO BE MORE ON THAT AND THAT'S UNDER DEVELOPMENT. AND MARIA BONNEVILLE IS ORGANIZING, ALONG WITH OUR BOARD MEMBERS, A BROADER STAKEHOLDER DISCUSSION ON WHAT WOULD BE NEEDED IN COMMUNITY CARE CENTERS OF EXCELLENCE. NEXT SLIDE

PLEASE.

SO FIVE-YEAR TANGIBLE GOALS RELATED TO OVERCOMING CRITICAL BOTTLENECKS IN THE APPROVAL OF THERAPIES ARE THE MANUFACTURE AND PUBLIC-PRIVATE PARTNERSHIP AND WE TALKED ABOUT, ESTABLISHING THAT, EXPANDING THE ALPHA CLINICS NETWORK, AND CREATING COMMUNITY CARE CENTERS OF EXCELLENCE THAT SUPPORT DIVERSE PATIENT PARTICIPATION IN THE RAPIDLY MATURING REGENERATIVE MEDICINE LANDSCAPE AND MAKING SURE THIS IS ACCESSIBLE THROUGH ALL THE GEOGRAPHIES OF CALIFORNIA. AND OPTIMIZING CIRM'S CLINICAL TRIAL FUNDING PARTNERSHIP BY WAY OF INDUSTRY PARTNERSHIP, MOU'S SUCH AS WE HAVE WITH NHLBI, BUT ALSO THE WAY CIRM MANAGES THESE PROGRAMS IS A PARTNERSHIP.

WE DEPLOY ADVISORY PANELS, CLINICAL ADVISORY PANELS, TRANSLATIONAL ADVISORY PANELS. AND ABLA CREASEY, WHO IS THE VICE PRESIDENT OF THERAPEUTIC DEVELOPMENT, IS CRAFTING ALONG WITH HER TEAM A WAY TO LEVERAGE THE ADVISORY PANEL MODEL TO HELP PROGRAMS ANTICIPATE WHAT THE NEEDS ARE OF DOWNSTREAM APPROVAL SO THAT WE CAN INCREASE THE PROBABILITY OF PROGRAMS GETTING ALL THE WAY TO FDA MARKETING APPROVAL.

THIS WAS A SHORTER ONE, BUT I'LL NOW OPEN IT UP FOR DISCUSSION. WE SPOKE ABOUT THE

MANUFACTURING, PUBLIC-PRIVATE PARTNERSHIP, DISCUSSED ALPHA CLINICS EXPANSION, AND COMMUNITY CARE CENTERS OF EXCELLENCE AS A TOPIC. THANK YOU. CHAIRMAN THOMAS.

MS. BONNEVILLE: YSABEL, YOU HAD YOUR HAND RAISED.

MS. DURON: YES, I DID. SORRY. I TOOK IT DOWN. MAY I PROCEED?

MARIA, I WANTED TO PICK UP ON THE POINT OF THE EXPANSION OF ALPHA CLINICS AND THE COMMUNITY CARE CENTERS OF EXCELLENCE. I THINK IT'S REALLY CRUCIAL, BECAUSE WE'VE TALKED ABOUT THIS BEFORE, TO REALLY LOOK AT THE LACK OF THROUGHOUT THE STATE OF WHERE WE NEED TO MAKE SURE WE ARE PARTNERING WITH OR CREATING THESE CENTERS IN ORDER TO, IN FACT, EXPAND OUR REACH FOR THESE DIVERSE PATIENT PARTICIPANTS BECAUSE SO MANY WHO ARE UNDERSERVED ALSO GO TO COMMUNITY CLINICS.

THERE ARE TWO SOURCES I THINK YOU SHOULD RESEARCH OR PARTNER WITH OR SPEAK WITH. AND ONE IS THE CALIFORNIA PRIMARY CARE ASSOCIATION, WHICH REPRESENTS THE FEDERALLY QUALIFIED HEALTHCARE CENTERS OF THE STATE, ABOUT 1400 OF THEM. AND, OF COURSE, SOME OF THEM ARE VERY SMALL. SOME OF THEM ARE BECOMING MUCH MORE ENGAGED AT CREATING THEIR OWN

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INSTITUTIONAL REVIEW BOARDS. AND SO THERE ARE DIFFERENTIATIONS AMONG THEM. BUT I THINK THAT THIS IS AN ABSOLUTE GOOD PLACE TO BEGIN, PARTICULARLY WHERE THERE ARE REAL GAPS IN SERVICE IN PARTS OF CALIFORNIA WHERE THERE ARE NOT CONCREANTS OF CANCER CENTERS IN LARGE INSTITUTIONS OF CANCER CARE.

THE OTHER GROUP YOU MIGHT TAKE A LOOK AT IS THE ASSOCIATION THAT'S CALLED AOCC OR SOMETHING TO THAT EFFECT, THE ASSOCIATION OF COMMUNITY CANCER CENTERS. IT RUNS EVERYWHERE FROM A TWO-DOC SHOP AS THEY SAY TO M.D. ANDERSON. BUT THE FACT OF THE MATTER IS THAT THEY ARE ALSO LOOKING TO BECOME SMARTER AND BETTER ABOUT THEIR ENGAGEMENT IN CLINICAL TRIALS AND INCLUDING THEIR PATIENTS IN CLINICAL TRIALS. AND SO THEY MIGHT BE A GROUP WITH CENTERS OF CARE IN CALIFORNIA WHO COULD HELP TO START TO CONNECT THOSE DOTS.

BUT I DO BELIEVE THAT PATIENT DIVERSITY REQUIRES A REAL FULL FRONT ASSAULT ON ALL OF THE PARTS OF CALIFORNIA THAT ARE UNDERSERVED IN ORDER TO MAKE SURE THAT THEY ARE GOING TO GET RELIEF AS WELL FROM WHAT WE ARE TALKING ABOUT IN TERMS OF CARE AND THIS EXPANSIVE KIND OF THERAPY.

DR. MILLAN: THANK YOU. MARIA BONNEVILLE, DID YOU WANT TO JUST BRIEFLY DESCRIBE THE PROCESS

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WE'RE GOING TO GO THROUGH TO GET THAT INPUT FOR COMMUNITY CARE CENTERS?

MS. BONNEVILLE: SURE. WE PLAN ON GETTING A WORKSHOP TOGETHER SOMETIME IN THE FIRST QUARTER OF NEXT YEAR. IT WILL INCLUDE STAKEHOLDERS FROM VARIOUS GROUPS, INCLUDING ONE OF THE GROUPS YOU MENTIONED, YSABEL, WHO'S ON OUR RADAR. AND THE TOPICS WE WOULD COVER WOULD BE REACH, HOW TO EXPAND OUR CLINICAL CARE CAPACITY BEYOND EXISTING SPECIALTY CENTERS, INCLUDING PATIENT EDUCATION AND NAVIGATION, CLINICAL RESEARCH OPERATIONS, INCLUDING RECRUITMENT, TREATMENT, FOLLOW-UP, WORKFORCE EXPANSION AND DEVELOPMENT. I KNOW THAT WE'VE HEARD THAT A LOT TODAY AND HOW IMPORTANT THAT IS. AND THEN ESPECIALLY ENGAGEMENT AND OUTREACH. WHAT IS REGENERATIVE MEDICINE? HOW CAN IT HELP MY COMMUNITY OR DISEASE? WHY SHOULD I PARTICIPATE IN CLINICAL RESEARCH? AND REALLY HOW EFFECTIVE HAVE ENGAGEMENT AND OUTREACH EFFORTS BEEN IN SUPPORTING TRUST, COMFORT, AND AWARENESS? SO THAT WILL BE A WORKSHOP THAT WE PUT TOGETHER, AND IT WILL BE REPRESENTATIVES FROM ALL DIFFERENT ORGANIZATIONS. SO DEFINITELY BE ON THE LOOKOUT FOR THAT.

CHRIS, YOU HAVE YOUR HAND RAISED.

DR. MIASKOWSKI: I WOULD LIKE TO SUPPORT

YSABEL'S COMMENTS AS WELL AS YOURS, MARIA. I THINK TO MAKE THE COMMUNITY CARE CENTER INITIATIVE, WHICH I THINK IS EXCEEDINGLY IMPORTANT, SUCCESSFUL, WE'RE GOING TO HAVE TO BE ABLE TO EDUCATE PRIMARY CARE PHYSICIANS AS WELL AS NURSE PRACTITIONERS. THEY'RE REALLY THE TOUCHPOINT IN THE COMMUNITY AND ARE GOING TO BE INCREDIBLY IMPORTANT TO THE SUCCESS OF THIS EFFORT BECAUSE THEY'RE THE INTERFACE WITH THE PATIENTS THAT WE'RE GOING TO WANT TO RECRUIT TO THESE TRIALS.

I GUESS THE OTHER THING I'VE THOUGHT ABOUT, AND IT MAY NOT BE TOTALLY APPROPRIATE FOR THIS STRATEGIC GOAL, BUT IN TERMS OF LAUNCHING THESE CLINICAL TRIALS WITHIN A NETWORK, PARTICULARLY WITHIN THE COMMUNITY CARE CENTERS, I'D BE INTERESTED IN KNOWING IF THERE'S BEEN ANY DISCUSSION ABOUT COMMON DATA ELEMENTS ACROSS CLINICAL TRIALS. THAT CERTAINLY IS THE WAY THE NIH IS GOING FOR A LOT OF THEIR TRIALS. AND I THINK IF WE HAD -- I'M NOT SURE EXACTLY WHAT THEY ARE. I DO THINK IF WE HAD A COMMON SET OF DATA ELEMENTS, WE'D BE ABLE TO GROW THE SCIENCE ACROSS THESE TYPES OF THERAPIES. SO I DON'T KNOW IF THERE'S BEEN ANY CONSIDERATION OF THAT.

I ALSO WAS REALLY PLEASED, MARIA, WHEN YOU

BROUGHT UP THE NOTION OF PATIENT EDUCATION. I THINK THAT'S GOING TO BE A LINCHPIN IN THIS. WE CERTAINLY KNOW ABOUT THE CHALLENGES WHEN WE WERE TALKING ABOUT SEQUENCING THE HUMAN GENOME AND WHO WAS GOING TO GIVE THEIR BLOOD TO ALLOW THAT TO HAPPEN, SO A LOT OF RETICENCE ON THE PART OF INDIVIDUALS TO DO THAT. SO I THINK CAREFULLY CRAFTING THE MESSAGES TO PATIENTS AND FAMILY MEMBERS IS GOING TO BE REALLY, REALLY, REALLY IMPORTANT. THANK YOU.

MS. BONNEVILLE: THANK YOU. ABSOLUTELY AGREE.

DR. MILLAN: THANK YOU, DR. MIASKOWSKI. JUST A COMMENT ON THE COMMON DATA ELEMENTS TOPIC. ONE OF THE -- ONCE THE COMMUNITY CARE CENTERS OF EXCELLENCE NETWORK ALSO GETS UP ALONG WITH OUR ACADEMIC NETWORKS, I THINK IT WILL PROVIDE US THE OPPORTUNITY TO DO DIFFERENT TYPES OF RESEARCH RELATED TO REAL-WORLD EVIDENCE, PATIENT-CENTERED OUTCOMES, AND THINGS LIKE THAT THAT COULD LAYER ON TOP OF OUR -- AND SOCIAL DETERMINANTS OF HEALTH, OTHER TYPES OF RESEARCH THAT WE CAN'T READILY DO SOMETIMES IN JUST PURELY ACADEMIC SETTINGS. SO IN TERMS OF TAKING IT OUT TO THE REAL WORLD, THIS WILL, AGAIN, LAY A FOUNDATION FOR FUTURE OPPORTUNITIES IN THAT REGARD.

DR. MIASKOWSKI: THANKS, MARIA. I APPRECIATE THAT.

MS. DURON: ME AGAIN.

MS. BONNEVILLE: FRED NEXT AND THEN YSABEL.

DR. FISHER: SO I'M JUST CATCHING UP, AND A LOT OF THIS SOUNDS TERRIFIC. THE FIRST BULLET POINT THERE WHERE IT SAYS "ADVANCE MORE THERAPIES TO FDA MARKETING APPROVAL," I KNOW THAT IN THE NEURODEGENERATIVE DISEASE SPACE, THE FAILURE RATE FOR CLINICAL TRIALS IS EXCEEDINGLY HIGH. AND GETTING TO FDA MARKETING APPROVAL MEANS GETTING TO -- MEETING ENDPOINTS OF CLINICAL TRIALS WHICH HAS BEEN ENORMOUSLY CHALLENGING. AND I'M CURIOUS ABOUT THE RELATIONSHIP OF CIRM AS A GOVERNMENT-FUNDED ENTITY DRIVING MONEY INTO THE DEVELOPMENT OF TREATMENTS AND THE FDA AS A GOVERNMENT-FUNDED ENTITY DESIGNED TO REVIEW THE DATA AND APPROVE OR REJECT THOSE THERAPEUTIC CANDIDATES. IF THERE'S SOMETHING BURIED IN THERE THAT HAS TO DO WITH CIRM'S ROLE IN WORKING COLLABORATIVELY OR INTENTIONALLY WITH THE FDA BECAUSE OF THE KEY ROLE THAT THE FDA PLAYS IN WHETHER OR NOT ANY OF THESE THERAPIES ACTUALLY MAKE IT INTO PATIENTS OUTSIDE OF A CLINICAL TRIAL.

SO I'M JUST -- WE KNOW THAT FDA MARKETING

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APPROVAL IS ESSENTIAL. I'M WONDERING HOW THE FDA'S ENGAGED BY CIRM THROUGH THESE VARIOUS INITIATIVES, IF AT ALL.

DR. MILLAN: THANK YOU FOR THAT QUESTION. IT IS BURIED IN THERE, AND A LOT OF WHAT -- KIND OF THE FOUNDATIONAL TYPE OF CONCEPTS THAT WE ARE BRINGING FORWARD WILL ENABLE A MORE ORGANIZED APPROACH MAYBE TO PORTFOLIO TYPE APPROACH WITH THE FDA AND WHEN WE HAVE OUR CONVERSATIONS.

THERE IS INTEREST AND PRINCIPLE ON THIS. WE'VE HAD MANY INTERACTIONS WITH PETER MARKS AND OTHER MEMBERS WHO WERE FORMER FDA COMMISSIONERS, AND THERE'S AN UNDERSTANDING OF CIRM AND REAL SUPPORT FOR WHAT WE ARE ABOUT, WHICH IS EVIDENCE GENERATION. AND SO ANY WAY THAT WE CAN HAVE AN ORGANIZED WAY OF GETTING EVIDENCE GENERATION TYPES OF STANDARDS AND WHAT EMPOWERS A PORTFOLIO APPROACH BECAUSE YOU HAVE A BASELINE AND A COMFORT LEVEL WITH WHAT YOU'RE BRINGING FORWARD SO THAT THEY CAN EVALUATE WHAT YOU NEED FOR THAT PARTICULAR TRIAL. SO THAT IS SOMETHING THAT IS GOING ON. ABLA CREASEY, WHO IS THE VP OF THERAPEUTIC, AND I HAVE BEEN KIND OF ON AN INDIVIDUAL BASIS VERY MUCH IN TOUCH WITH VARIOUS LEADERSHIP AT THE FDA REGARDING TOPICS, BROAD TOPICS, NOT SPECIFICALLY ABOUT TRIALS. THAT

WOULDN'T BE APPROPRIATE FOR US TO BE ADVOCATING FOR CERTAIN APPROVALS OBVIOUSLY. BUT IN TERMS OF THE APPROACH SO THAT WE CAN HAVE THE STANDARDS IN TERMS OF DATASETS, THE FORMAT, JUST A BETTER WAY TO PRESENT THE OPPORTUNITIES TO FDA, A BETTER WAY TO DESIGN APPROACHES ALONG WITH OUR GRANTEES EARLY ON.

OUR TEAM ALREADY WORK WITH OUR GRANTEES EARLY IN TERMS OF DESIGNING THEIR APPROACH EVEN BEFORE THEY COME IN FOR THEIR APPLICATION SOMETIMES. SO MORE AND MORE IN TERMS OF THAT KIND OF PARTNERSHIP FROM THE BEGINNING ALONG WITH OUR ADVISORY PANEL IS WHAT WE ENVISION IN THAT FIRST GOAL.

SO IT IS EMBEDDED IN THERE. AND THERE'S GOING TO BE A CHANGE OF LEADERSHIP SOON AT THE FDA. WE ARE VERY ENCOURAGED BY WHERE THE TRENDS ARE GOING BECAUSE WE HAVE HAD A LOT OF CONVERSATIONS, A LOT OF INTERACTION, AND A LOT OF SUPPORT FROM LEADERSHIP AT THE FDA. THEY UNDERSTAND WHAT CIRM IS ABOUT AND THAT WE ARE VERY MUCH ALIGNED WITH THEIR GOALS.

FDA IS A DATA-DRIVEN ORGANIZATION, AND CIRM BUILDING THAT DATA CAPACITY AND ABILITY TO PRESENT OUR PROGRAMS IN A DATA DRIVEN WAY IS A VERY COMPATIBLE AND EMPOWERING APPROACH TO THIS PATH TOGETHER.

DR. FISHER: THAT SOUNDS TERRIFIC, AND IT SOUNDS VERY PROACTIVE, AND IT SOUNDS LIKE AN ANSWER THAT MANY IN THE PATIENT COMMUNITY WOULD APPRECIATE HEARING BECAUSE THE FDA IS OFTEN PORTRAYED INACCURATELY, I THINK, AS THE ENEMY IN THIS PROCESS, PARTICULARLY WITH REALLY TOUGH DISEASES WHERE IT'S BEEN VERY DIFFICULT TO HAVE DATA ACTUALLY DEMONSTRATE EFFICACY. SO I DON'T KNOW IF YOU WANT TO CONSIDER ADDING SOME WORDS. I DON'T HAVE ANY IN PARTICULAR TO SUGGEST. BUT WHEN YOU THINK ABOUT CIRM'S ROLE IN WORKING COLLABORATIVELY WITH THE FDA TO REDUCE BARRIERS OR ACCELERATE THE PROCESS, MAYBE YOU JUST WANT TO THINK ABOUT IT SORT OF FROM THE PUBLIC CONSUMPTION SIDE WHO DON'T NECESSARILY UNDERSTAND EVERYTHING THAT'S GOING ON BEHIND THE SCENES. AND IN THIS INSTANCE IT WOULD BE REALLY NICE TO SEE CIRM AS A STRONG ADVOCATE AND PARTNER WITH THE FDA TO MOVE THERAPIES, CORRECT THERAPIES, THERAPIES THAT ACTUALLY WORK, MOVE THEM QUICKLY TO APPROVAL.

DR. MILLAN: ABSOLUTELY. IN THE BEGINNING OF THE -- DURING THE BACKGROUND I DID HIGHLIGHT THAT CIRM PORTFOLIO PROGRAMS ARE AMONG THE LARGEST CONSTITUENTS OF THE EXPEDITED PATHWAY DESIGNATION WHICH BUILT INTO THAT IS CONTINUOUS AND CLOSE

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CONVERSATIONS WITH THE FDA AS THE DEVELOPMENT PLANS ARE BEING BROUGHT FORWARD.

IN TERMS OF A FORMAL MOU WITH THE FDA, WE DON'T HAVE THAT YET. BUT CERTAINLY IN TERMS OF HOW WE DO THINGS AND HOW WE CONDUCT OURSELVES AND HOW WE PRACTICE, WE DEFINITELY DO WORK COLLABORATIVELY AND WITH ALIGNMENT WITH THE FDA. IN FACT, OUR FUNDING, OUR APPLICATIONS FOR OUR CLINICAL PROGRAMS THEMSELVES ALIGN WITH FDA REQUIREMENTS, AND THEY'RE BUILT INTO THE APPLICATION. SO THAT IS -- BY DESIGN IT REALLY BUILDS IN KIND OF THIS EFFICIENCY AND ALIGNMENT. THANK YOU.

MS. BONNEVILLE: YSABEL.

MS. DURON: THANK YOU. I APPRECIATED CHRISTINE'S COMMENTS, AND THEY MADE SOME THOUGHTS COME UP FOR ME.

SOME OF THE WORK I'VE BEEN DOING IN THE LAST YEAR HAS BEEN A LOT ABOUT COMMUNICATION BACK AND FORTH AND HOW PEOPLE ARE HEARING THINGS AND ALSO LOOKING AT SOME LITERATURE REVIEW. AND WHAT I RECOGNIZED OVER TIME IS THAT THE COMMUNITY IS NOT RESISTANT. THEY ARE UNINFORMED. ONCE YOU BRING THEM TO THE PROPER KNOWLEDGE, THEY DO MAKE INFORMED DECISIONS.

TAKE THE SAN FRANCISCO MISSION DISTRICT,

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FOR INSTANCE, OR LATINOS IN SAN FRANCISCO WHERE COVID RAN THROUGH THEM LIKE -- HAMMERED THEM WITH HIGH BOTH INFECTION AS WELL AS MORTALITY RATES. AND A LARGE SWATH OF COMMUNITY AND COMMUNITY HEALTH TASK FORCES GOT INVOLVED IN ENGAGING THEM AND TESTING AS WELL AS VACCINATION. AND TODAY 83 PERCENT OF THE LATINO POPULATION OF SAN FRANCISCO IS VACCINATED, ONE OR TWO VACCINATIONS, AND MOST OF THEM TWICE. SO IT ISN'T RELUCTANCE OR RESISTANCE. IT IS KNOWLEDGE AND AWARENESS AND ACCEPTANCE.

I THINK WHERE WE'RE SEEING THE RESISTANCE IS IN THE SYSTEM AND AMONGST CLINICIANS WHO ARE NOT TAKING THE APPROPRIATE TIME TO BE ABLE TO SPEAK TO THEIR PATIENTS AND SYSTEMS WHO ARE NOT INVESTING IN OUTREACH THAT'S NECESSARY TO MAKE SURE THAT, IN FACT, COMMUNITIES UNDERSTAND WHAT THEY DO AND WHY THEY DO IT TO GET THAT INFORMED PARTNERSHIP THAT IS VERY NECESSARY AND WHICH WILL BE VERY NECESSARY HERE AS WELL FOR COMMUNITY TO UNDERSTAND THE COMPLEXITY OF THE WORK THAT WE ARE DOING.

I'M STILL ON THE LEARNING CURVE MYSELF. SO I THINK THAT I'M VERY GLAD TO KNOW THAT CIRM IS ALSO INVESTING IN STRONGER COMMUNICATION AND OUTREACH. AND MARIA B. CAN PROBABLY TALK TO THAT MORE AS WE GO ALONG BECAUSE COMMUNICATION OUT IS

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JUST AS IMPORTANT AS COMMUNICATION WITHIN. I'M REALLY GLAD THAT WE'RE GOING THERE, AND I APPRECIATE HEARING OVER TIME FROM EACH OF THE BOARD MEMBERS HERE TODAY THAT THEY REALLY, REALLY, REALLY NOT ONLY ARE GETTING, BUT SUPPORTING THE WHOLE ASPECT OF DEI. WE WILL NOT GET THERE UNLESS WE PUT IT OUT THERE FRONT AND CENTER. SO I APPRECIATE ALL THE SUPPORT FOR THAT HERE ON THIS BOARD. THANK YOU.

DR. MILLAN: THANK YOU, YSABEL. ONE THING ABOUT WHAT YOU JUST BROUGHT UP, AND I THINK CHRISTINE, DR. MIASKOWSKI, HAD BROUGHT UP AS WELL, IS EDUCATING THE PHYSICIANS, THE NURSE PRACTITIONERS, THE FIRST CONTACTS WITH THE COMMUNITY, THAT'S NOT A SMALL UNDERTAKING. THAT IS GOING TO BE ESSENTIAL. AND THAT'S WHY IN THAT WORKSHOP THAT MARIA IS TALKING ABOUT, THE ACTUAL HEALTHCARE WORKERS THEY CALL, THOSE WILL BE THERE AS WELL BECAUSE THEY ARE NOT UP TO SPEED. FRANKLY, THERE ARE MANY PEOPLE IN THE ACADEMIC MEDICAL CENTERS WHO ARE NOT AS AWARE OF THE PROGRESS IN REGENERATIVE MEDICINE. SO THAT'S NOT UNEXPECTED.

SO I THINK THAT IS SUCH AN IMPORTANT POINT TO UNDERSCORE, AND THAT IS SOMETHING THAT WE DEFINITELY, IN TERMS OF THINKING ABOUT COMMUNITY CARE CENTERS OF EXCELLENCE AS AN ACCESS FOR BEING

ABLE TO IMPACT ON THIS, THIS IS SOMETHING WE DEFINITELY NEED TO BUILD INTO IT.

MS. BONNEVILLE: J.T.

CHAIRMAN THOMAS: YSABEL, THANK YOU FOR YOUR COMMENTS ON COMMUNICATION AND FOR BEING THE CHAIRPERSON OF THE COMMUNICATION SUBCOMMITTEE. YOU WILL HAVE A LOT TO SAY ABOUT HOW THAT PLAYS OUT, AND IT'S A MOST IMPORTANT ROLE TO BE SURE.

MARIA MILLAN, HAVE A QUICK LOGISTICAL QUESTION JUST FOR THE BENEFIT OF THE BOARD AND FOR THE INSTITUTIONS AROUND THE STATE AT LARGE AND FACTORING IN THIS WORKSHOP YOU'RE GOING TO HAVE. WHERE DO YOU CURRENTLY ENVISION -- WHAT'S THE TIMING FOR THE NEXT FUNDING ROUND FOR THE ALPHA CLINICS? AND THEN WHEN DO YOU PLAN ON A FUNDING ROUND FOR THE FIRST COMMUNITY CARE CENTERS?

DR. MILLAN: IN TERMS OF THE ALPHA CLINICS EXPANSION, WE ARE TARGETING TO HAVE THAT BE, IF THE BOARD APPROVES THE STRATEGIC PLAN IN DECEMBER, THAT THAT WOULD BE PART OF THE FIRST CROP OF PROGRAMS LAUNCHING THE NEW STRATEGIC PLAN. SO A CONCEPT PROPOSAL WILL BE BROUGHT TO THE BOARD SOMETIME EARLY NEXT YEAR AND THEN THE DOWNSTREAM ACTIVITIES TOWARD FUNDING.

COMMUNITY CARE CENTERS OF EXCELLENCE NEEDS

MORE TIME TO INCUBATE AND MATURE AND REALLY UNDERSTAND WHAT'S NEEDED THERE. SO NEXT YEAR WILL BE AN INTELLIGENCE GATHERING, ACTIVE ENGAGEMENT. I THINK THAT REQUIRES A LOT OF THOUGHT BECAUSE WE WANT TO MAKE SURE THAT THIS IS NOT AN ARTIFICIALLY OR FORCED DESIGN TYPE ACTIVITY HERE, THAT IT'S RATIONALLY DESIGNED AND RESPONSIVE TO THE NEEDS OF THE COMMUNITY, THE PATIENTS, THE COMMUNITY ITSELF, AS WELL AS THE COMMUNITY PHYSICIANS AND HEALTHCARE PROVIDERS. SO I DON'T EXPECT THAT THAT WILL BE SOMETHING THAT WILL BE READY NEXT YEAR FOR AN ACTUAL PROGRAM ANNOUNCEMENT OR FUNDING, WHICH I THINK IT IS ACTUALLY GOING TO WORK OUT WELL IN TERMS OF HOW OTHER THINGS ARE BEING ROLLED OUT SO THAT WE MAKE SURE THE ALPHA CLINICS CONTINUE TO EXPAND, LAY DOWN FOUNDATIONS BECAUSE WE EXPECT THE ALPHA CLINICS WILL ALSO PROVIDE VALUE TO THE CREATION OF THESE COMMUNITY CARE CENTERS OF EXCELLENCE. ALTHOUGH THEY WON'T DICTATE WHAT THE COMMUNITY CARE CENTERS OF EXCELLENCE DO, THAT THEY SHOULD BE ENABLING TO THE FORMATION OF THE COMMUNITY CARE CENTERS OF EXCELLENCE.

CHAIRMAN THOMAS: THANK YOU.

MS. BONNEVILLE: THERE AREN'T ANY MORE QUESTIONS, MARIA, ON THIS SECTION.

DR. MILLAN: ALL RIGHT. GREAT. SHYAM, NEXT SLIDE PLEASE.

CHAIRMAN THOMAS: MARIA, JUST KEEPING AN EYE, KEITH HAD ASKED EARLIER ABOUT A BIT OF BREAK TO GET LUNCH. HOW MUCH MORE DO YOU HAVE FOR THE BOARD AT THIS POINT?

DR. MILLAN: I PROBABLY HAVE THREE MORE MINUTES OF PRESENTATION AND THEN WHATEVER DISCUSSION. SO I THINK WE'LL BE GOOD FOR A BREAK IN THE NEXT TEN MINUTES OR SO.

CHAIRMAN THOMAS: THANK YOU.

DR. MILLAN: HOWEVER LONG THE BOARD WANTS TO GO.

CHAIRMAN THOMAS: SURE.

DR. MILLAN: ALL RIGHT. STRATEGIC THEME THREE, PROVIDE OPPORTUNITY FOR ALL. WHAT DO WE MEAN BY THAT, AN OPPORTUNITY FOR ALL? IN THE MISSION STATEMENT WE TALKED ABOUT OPPORTUNITY FOR ALL IN TERMS OF ACCESS TO EDUCATION AND CAREER PATHS, TO CLINICAL TRIALS, AND GROUP THERAPIES FOR ALL PATIENTS AND FROM ALL COMMUNITIES, FOR SCIENTISTS OF DIVERSE BACKGROUNDS, ALL SCIENTISTS TO BE ABLE TO ACCESS FUNDING TO CARRY ON THEIR IMPORTANT WORK.

SO THE REGENERATIVE MEDICINE FIELD, AGAIN THIS A COMMON THEME, IS ADVANCING AND MATURING

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RAPIDLY. AND SO CIRM CAN HAVE A FOCUSED AND DELIBERATE ACTION OR ACTIONS TO ENSURE DIVERSE WORKFORCE AND PATIENT PARTICIPATION IN DISCOVERY DEVELOPMENT AND DELIVERY OF THERAPIES. THIS IMPLIES IN A PARTNERSHIP TOGETHER WITH UNDERSTANDING WITH KIND OF BREAKING THE BARRIERS TO COMMUNICATION SO THAT TOGETHER THIS CAN OCCUR.

THERE'S BROAD STAKEHOLDER INPUT AND SUPPORT OF CIRM CONTINUING TO FUND EDUCATION AND TRAINING PROGRAMS THAT BUILD A DIVERSE, HIGHLY SKILLED REGENERATIVE MEDICINE WORKFORCE IN THE VARIOUS SPECIALTIES AND FIELDS. AND THE SECOND PART, WHICH IS THE SHORTEST PART OF THIS WHOLE THING, BUT A VERY PROMINENT PART OF CIRM AND PROP 14, IS DEVELOP A STRATEGY TO ADDRESS ACCESS AND AFFORDABILITY FOR ALL PATIENTS. NEXT SLIDE.

EDUCATION. CIRM, ONE OF THE FIRST PROGRAMS CIRM RELAUNCHED ONCE PROP 14 WAS FUNDED WERE OUR EDUCATION PROGRAMS. WE HAVE ACTIVE EDUCATION PROGRAMS, THE SPARK PROGRAM FOR THE HIGH SCHOOL STUDENTS, BRIDGES PROGRAM FOR UNDERGRADUATE AND MASTER'S LEVEL, CIRM SCHOLAR FOR PH.D., FOR POST DOCS. AND THERE'S AN UNDERGRADUATE EDUCATION PROGRAM THAT'S UNDER DEVELOPMENT AND YOU WILL SEE EARLY NEXT YEAR AS WELL AS THE ALPHA CLINICS. THE

MOST RECENT CROP OF ALPHA CLINICS AWARDS PROVIDED FOR FELLOWSHIPS WITHIN THE ALPHA CLINICS. AND YOU MAY HAVE SEEN SOME VIDEOS FROM TRAINEES IN THOSE ALPHA CLINICS.

SO WE'VE CREATED, THEREFORE, MULTIPLE ONRAMPS TO DEVELOP THE NEXT GENERATION OF LEADERS, SCIENTISTS, CLINICIANS, AND FUTURE WORKFORCE WITH TRAINING OPPORTUNITIES ACROSS CIRM-FUNDED PROGRAMS, LEVERAGING THESE PROGRAMS TO GET EXPOSURE AND EXPERIENCE IN BASIC, TRANSLATIONAL, AND CLINICAL RESEARCH, MANUFACTURING SCIENCES, SCIENCE COMMUNICATION, AND COMMUNITY ENGAGEMENT. THIS IS AN AMAZING STARTING POINT TO ACCOMPLISH A LOT OF THE THINGS THAT WERE DISCUSSED EARLIER ON IN THIS MEETING AND THE VARIOUS CAPACITIES. SO WE HAVE, I THINK, ALREADY LAID DOWN THE STRUCTURE FOR THIS AND WILL CONTINUE TO BUILD ON THIS. NEXT SLIDE PLEASE.

SO THIS IS THE SLIDE THAT TALKS ABOUT TWO TANGIBLE FIVE-YEAR STRATEGIC GOALS. THE FIRST, TO BUILD A DIVERSE AND HIGHLY SKILLED WORKFORCE VIA OUR EDUCATION PROGRAMS, TRACKING THE OUTCOME OF THOSE PROGRAMS, LEARNING FROM THAT, AND DETERMINING HOW TO IMPROVE UPON THAT.

SECOND IS TO DELIVER A ROADMAP FOR ACCESS AND AFFORDABILITY UNDER THE GUIDANCE AND PRIORITY

SET FORTH BY THE AAWG, AS YOU HEARD MENTIONED IN THE BEGINNING OF THIS MEETING. AND SO THAT WAS MY TWO MINUTES. IT'S OPEN FOR DISCUSSION.

MS. BONNEVILLE: YSABEL, YOU'RE ON MUTE.

MS. DURON: I UNMUTED MYSELF, BUT NOT WELL ENOUGH.

MARIA, I THINK AND I WAS GOING TO POINT TO IT AND THEN THE NEXT SLIDE CAME UP AND YOU SAID EDUCATION. I THINK THAT THERE SHOULD BE ON THE SLIDE THAT WAS BEFORE THIS, BECAUSE I THINK IT'S REALLY CRUCIAL, BUILDING A PATHWAY TO UNDERSTANDING FOR ALL CALIFORNIANS OR AS MANY AS WE CAN REACH IS REALLY ABOUT MAKING SURE THAT WE ARE TRYING TO DO EDUCATION AND OUTREACH THROUGH OTHER PATIENT ADVOCACY GROUPS AND BROADEN THAT OUTREACH SO THAT YOU MAY NOT BE A PATIENT AT ANY ONE POINT IN TIME OR IN A PATIENT ADVOCACY GROUP IN AND OF ITSELF, BUT YOU'RE NOT ALSO GOING TO SAY WHAT THE HECK ARE STEM CELLS. I THINK WE NEED TO BUILD KNOWLEDGE JUST ABOUT THE WORK THAT IS BEING DONE TO RAISE INTEREST IN IT, TO HAVE A SENSE OF WHAT IT IS.

AND SO BETWEEN EDUCATING A WORKFORCE AND GETTING OUR YOUNG INVESTIGATORS MOVING THROUGH SYSTEMS, HIGH SCHOOL, COLLEGE, ET CETERA, WE NEED TO START JUST IN GENERAL TRYING TO FIND PATHWAYS OF

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COMMUNICATION TO THE GENERAL PUBLIC. AND SO I WOULD LIKE IF YOU PUT IN EITHER HERE OR IN THE ONE BEFORE SOMETHING THAT SAYS EDUCATE THE PUBLIC. I KNOW THAT'S A BIG LIFT, BUT I'M SAYING LET'S REMIND OURSELVES THAT WE ARE NOT ALSO JUST PUSHING OUT TO THESE SPECIFIC GROUPS OF PEOPLE, BUT WE WANT TO TRY TO GET SOME GENERAL KNOWLEDGE OUT THERE SO THAT EVEN WHEN REPORTERS TRY TO DO AN ARTICLE, THEY HAVE A BIGGER SENSE OF WHAT WE ARE TALKING ABOUT AND ARE BETTER ABLE TO COMMUNICATE OUT BACK TO THE PUBLIC WHAT THE HECK PEOPLE INVESTED $5 BILLION IN.

DR. MILLAN: THANK YOU SO MUCH FOR THAT. ONE OF THE THINGS THAT ALWAYS STRIKES ME WHEN GOING OUT IN THE -- WHEN WE WERE ABLE TO GO TO MEETINGS AND EVERYTHING ELSE ARE THESE AMAZING STUDENTS OR PEOPLE EVEN LATER ON WHO COME UP TO ME AND TALK ABOUT HOW THEY SPENT TIME IN THE VARIOUS PROGRAMS. THERE ARE SO MANY, OVER 3,000 WHEN YOU THINK ABOUT IT, THEY ARE OUR AMBASSADORS. THEY ARE THE ONES OUT THERE COMMUNICATING TO THE PUBLIC IN WHATEVER THEY END UP DOING. AND I THINK THAT, IN GENERAL, YOU AND MARIA WORKING ON KIND OF THE COMMUNICATION STRATEGY, I THINK THAT THAT IS SUCH AN IMPORTANT PIECE OF IT; BUT IN TERMS OF BUILDING IT INTO OUR EDUCATION PROGRAMS, SO REGARDLESS OF WHETHER PEOPLE GO INTO

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SCIENCE AND MEDICINE OR SOMETHING ELSE, THEY'RE ACTUALLY INFORMED. IT WAS PART OF THE EDUCATIONAL SYSTEM OR THEIR EXPOSURE AND EXPERIENCE THAT WAS BUILT IN. IT IS ALREADY STARTING, AND IT'S REALLY EXCITING TO SEE THAT, AND WE DO HAVE THE OPPORTUNITY TO DO MORE AND ESPECIALLY WHEN THEY ARE KIND OF CROSSCUTTING ACROSS THESE VARIOUS SPECIALTIES.

SO THE PROGRAMS THAT ARE CURRENTLY FUNDED ARE BROAD EXPOSURE, BUT WE ENVISION THAT WE HAVE A GREAT STARTING POINT TO START BOLTING ON VARIOUS EXPOSURES AND SPECIALTIES AND EVEN IN SCIENCE COMMUNICATION, FOR INSTANCE. SO THERE ALL THESE DIFFERENT OFFSHOOTS FROM THIS THAT ARE GOING TO BE ABLE TO ACCOMPLISH THAT WE BELIEVE. THANK YOU.

MS. BONNEVILLE: FRED.

DR. FISHER: WHEN WE TALK ABOUT INCREASING ACCESS TO THERAPIES IN THE CONTEXT OF COMMUNITIES FOR ALL, WE KNOW THERE ARE LOTS OF OBSTACLES THAT PEOPLE HAVE TO OVERCOME TO CONNECT WITH A CLINICAL TRIAL OR GET ACCESS TO A THERAPY. THE ONE I HEAR THE MOST ABOUT AND THE BIGGEST SOURCE OF FRUSTRATION IS REALLY CONNECTED TO THOSE PEOPLE WHO DON'T MEET THE INCLUSION CRITERIA FOR A CLINICAL TRIAL, AND THEY ARE UNDER THE FALSE BELIEF THAT THE RIGHT TO TRY LAW THAT CALIFORNIA PASSED AND THE RIGHT TO TRY

LAW FEDERALLY THAT THAT SHOULD GIVE THEM ACCESS TO EXPERIMENTAL THERAPIES OUTSIDE OF CLINICAL TRIAL. AND I DON'T KNOW IF DURING YOUR DELIBERATIONS WHEN YOU TALKED ABOUT THIS IF ANY OF THAT WAS PART OF THE CONTEXT FOR THE CONVERSATION ABOUT HOW TO DELIVER A ROADMAP FOR ACCESS AS PART OF THE FIVE-YEAR STRATEGIC GOALS OR IT'S REALLY FOCUSED ON A DIFFERENT DIRECTION. BUT I KNOW FROM PATIENT COMMUNITIES THAT I'M MOST CONNECTED TO THAT'S A HUGE SOURCE OF FRUSTRATION. PART OF IT IS CERTAINLY AN EDUCATION ISSUE, BUT THERE'S ALSO VERY PRACTICAL ISSUES IN TERMS OF WHETHER OR NOT PEOPLE CAN ACTUALLY GET -- IT'S REALLY MORE RIGHT TO ASK THAN RIGHT TO TRY. AND THERE'S AN EDUCATION COMPONENT THERE, BUT THERE'S A STRUCTURAL COMPONENT AS WELL, AND I DON'T KNOW IF THAT WAS CONTEMPLATED AS PART OF YOUR THINKING IN BUILDING OUT THE STRATEGIC GOAL IN THIS SECTION.

DR. MILLAN: NOT YET. WE REALLY ARE WAITING FOR KIND OF THE PRIORITIES AND THE STRATEGY REGARDING ACCESS AND AFFORDABILITY. AND WE ARE REALLY EXCITED TO HEAR ABOUT THE AAWG UPCOMING MEETINGS AND ENGAGING WITH THE AAWG BECAUSE THE CIRM TEAM VERY MUCH WILL SUPPORT THESE EFFORTS IN BRINGING THINGS TO THE AAWG FOR CONSIDERATION.

REGARDING THAT TOPIC THOUGH, THAT IS A VERY KIND OF A HOT-BUTTON TOPIC IN TERMS OF ACCESS. WE DO AS AN ORGANIZATION HOLD VERY CLOSE TO US THE PRINCIPLES OF RESEARCH DRIVEN, APPROPRIATELY DONE CLINICAL TRIALS UNDER FDA REGULATIONS. SO THAT'S SOMETHING THAT TO US IS NONNEGOTIABLE.

HAVING SAID THAT, THERE ARE MECHANISMS FOR PATIENTS TO ACCESS CLINICAL TRIALS THROUGH EXPANDED ACCESS OR PREMARKETING APPROVAL. THERE ARE WAYS THAT STILL CAN BE DONE ALONG WITH THE FDA. SO THAT DOES EXIST AND THAT'S SOMETHING THAT HAS BEEN USED EVEN WITH PROGRAMS THAT WE HAVE FUNDED. I THINK PART OF BEING ON THE PATIENT SIDE OF THINGS, EITHER YOU OR YOUR LOVED ONE IS GOING THROUGH THIS, IT'S REALLY DIFFICULT. ALL YOU HEAR IS NO. SO WITHOUT HAVING THE EXPLANATION AND THE UNDERSTANDING OF WHAT PATHS ARE THERE AND WHY IS THIS AND, IN FACT, ACTUALLY THERE'S A REASON BEHIND THIS. WITHOUT THAT, IT'S MORE FRUSTRATING AND SOMETIMES VERY PAINFUL FOR PEOPLE. SO I AGREE THAT THE EDUCATION, THE ABILITY TO BE ABLE TO DELIVER THAT TYPE OF INFORMATION BETTER IS SOMETHING THAT WE NEED TO WORK ON REGARDING OUR TRIALS FOR SURE. SO THAT IS SOMETHING THAT WE CAN WORK ON THROUGH THE COMMUNITY CARE CENTERS OF EXCELLENCE, THROUGH OUR ALPHA

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CLINICS, AND OTHER WAYS THAT WE INTERACT WITH THE PUBLIC REGARDING OUR CLINICAL RESEARCH.

DR. FISHER: I'M HOPEFUL AT SOME POINT THAT, PARTICULARLY WHEN IT COMES TO A PHASE 3 CLINICAL TRIAL THAT CIRM IS CONTRIBUTING TO THAT DISCUSSIONS CAN BE HAD ABOUT AN EXPANDED ACCESS PROGRAM FOR THOSE WHO DON'T QUALIFY FOR THE CLINICAL TRIAL BECAUSE WHILE THOSE EXIST IN THEORY AND REALITY, NOT MANY COMPANIES ACTUALLY OFFER THEM.

DR. MILLAN: I THINK IT'S A TOPIC THAT WE SHOULD DEFINITELY MAKE SURE THAT WE BRING BACK IN THE FUTURE FOR THE BOARD TO CONSIDER BECAUSE WE DON'T CURRENTLY JUST FUND EXPANDED ACCESS TO TRIALS AS AN ENTITY. THE EXPANDED ACCESS TREATMENTS HAVE BEEN PERFORMED WITHIN THE CONTEXT OF AN OVERARCHING CLINICAL TRIAL. BUT THAT IS A TOPIC WE CAN DISCUSS EITHER IN A SUBGROUP OR ANOTHER WAY. MARIA BONNEVILLE AND I WILL MAKE SURE TO FOLLOW UP ON THAT.

DR. FISHER: THANKS FOR CONSIDERING IT.

MS. BONNEVILLE: CHRIS.

DR. MIASKOWSKI: I'M GOING TO MAKE THESE COMMENTS WITH THE CAVEAT THAT I'M NEW TO THE BOARD. AND I REALLY, REALLY APPLAUD THE EDUCATIONAL EFFORTS. BUT AS I REFLECT ON THEM IN THE SERIES OF

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MEETINGS THAT I'VE BEEN TOO, THEY SEEM TO BE TARGETED TO INDIVIDUALS. SO WE'RE MAKING PROGRESS IN A VARIETY OF AREAS, BUT THE UNIT OF ANALYSIS IS THE INDIVIDUAL WHO RECEIVES THE TRAINING. AND AS YOU WERE TALKING ABOUT THIS OPPORTUNITY FOR ALL AND TALKING ABOUT EDUCATING PRIMARY CARE CLINICIANS AS WELL AS SPECIALISTS, BEING AN EDUCATOR, I WANTED TO ASK IF IT WAS EVER THOUGHT ABOUT THAT CALIFORNIA AND OUR GROUP WOULD DEVELOP A CURRICULUM OF, QUOTE, UNQUOTE, PRINCIPLES OF REGENERATIVE MEDICINE THAT COULD BE INTEGRATED INTO SCHOOLS OF NURSING, PHARMACY SCHOOLS, MEDICAL SCHOOLS WHERE WE REALLY ARE EDUCATING THE NEXT GENERATION OF CLINICIANS.

AND IT WOULD SEEM TO ME THAT FROM OUR INDIVIDUAL EDUCATIONAL PROGRAMS THAT WE'VE SUPPORTED THERE COULD BE SOME BEST PRINCIPLES OR AREAS AND CONTENT THAT COULD BE EXTRACTED TO MAKE A CURRICULUM. IF WE DID IT IN CALIFORNIA, I'M SURE THERE ARE EDUCATIONAL INSTITUTIONS ACROSS THE UNITED STATES THAT WOULD WANT TO PICK THIS UP. SO I DON'T KNOW -- I'M ASKING IT MORE OUT OF AN IDEA. IS IT SOMETHING THAT'S WITHIN THE SCOPE OF CIRM TO DEVELOP AND THEN TO PROMOTE?

DR. MILLAN: I THINK THAT'S SOMETHING THAT THE BOARD -- COULD BE BROUGHT UP FOR BOARD

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DISCUSSION. AND I AGREE WITH YOU THAT WE DEFINITELY HAVE THE MAKINGS OF IT. SO THE BRIDGES PROGRAM, THE SPARK PROGRAM, IT IS ACTUALLY THE EDUCATORS WHO ARE FUNDED, AND THEN THE INDIVIDUALS GET BROUGHT INTO THE PROGRAM. MORE AND MORE WE ARE BUILDING MORE OF KIND OF A CONSORTIUM APPROACH TO THAT AS WELL. IT'S NOT YET THERE, BUT THERE HAS BEEN FEEDBACK THAT SAYS THAT THERE WOULD BE VALUE TO THAT.

AND SO EXTRACTING FROM THAT ELEMENTS THAT CAN GO INTO A CURRICULUM PACKAGE, I THINK, WOULD BE VALUABLE. THE HOW-TOS IN THAT WOULD BE SOMETHING THAT WE NEED TO DEVELOP ALONG WITH YOU AND THE BOARD. ART WAS, I THINK, ABOUT TO SAY SOMETHING. ART.

MR. TORRES: NO, I'M FINE. THANK YOU.

DR. MILLAN: SO IN ANY CASE, I THINK THAT'S ANOTHER TOPIC THAT WE CAN -- AGAIN, WE HAVE THE STARTING POINT FOR THIS. IN FACT, WHEN I TALKED ABOUT THE ALPHA CLINICS AND FELLOWSHIPS AND SUBSPECIALTY TRAINING AND NURSING BEST PRACTICES, SO THE CITY OF HOPE, THEY ACTUALLY ARE MAKING REAL PROGRESS TOWARD HOW TO INCORPORATE THAT INTO SOME OF THE CERTIFICATION PROGRAMS. SO THEY CREATED -- GEOFF LOMAX CAN GIVE YOU INFORMATION. HE'S OUR PROGRAM MANAGER FOR THE ALPHA CLINICS. THE CITY OF

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HOPE NURSING PROGRAM LED A HUGE CONFERENCE IN THIS REGARD, ARE VERY MUCH CONNECTED WITH ALL THE ACCREDITATION BODIES, AND ARE TRYING TO CREATE A CERTIFICATION PROGRAM FOR NURSING FOR REGENERATIVE MEDICINE.

SO THERE ARE -- I THINK THAT, YES, IN PRINCIPLE THAT IS DEFINITELY SOMETHING THAT WE CAN DO, WHETHER IT'S DONE IN ONE FELL SWOOP OR IF IT'S DONE WITHIN THE PROGRAMS IS ANOTHER THING. SO IT'S IN THE EXECUTION. BUT IN PRINCIPLE THAT IS SOMETHING THAT CIRM HAS ALWAYS BEEN SUPPORTIVE OF. WE WOULD DEFINITELY WELCOME YOUR EXPERTISE AND YOUR INVOLVEMENT IN ALL THAT.

DR. MIASKOWSKI: THANK YOU VERY MUCH. I APPRECIATE IT.

MS. BONNEVILLE: YSABEL.

MS. DURON: PICKING UP WHERE CHRISTINE LEFT OFF, AND I APPRECIATE IT BECAUSE EDUCATION, I THINK, IS ALWAYS CRUCIAL AT WHATEVER LEVEL. IN FACT, MY COMMENTS EARLIER ABOUT RESISTANCE CAME FROM, AS I SAID, REVIEW OF SOME RESEARCH LITERATURE. AND PART OF THE RESEARCH SHOWED THAT IN FACT HALF THE REASON WHY LATINAS DIDN'T GET ENOUGH INFORMATION ABOUT GENETIC RISK WAS BECAUSE CLINICIANS WERE RESISTANT OR UNABLE TO TALK TO THEM ABOUT IT OR

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DIDN'T CONSIDER TALKING TO THEM BECAUSE HALF THE TIME THEY WEREN'T QUITE SURE THAT THEY WERE GOING TO TELL THEM OR HOW TO TELL THEM.

SO TO THE POINT OF CLINICIANS NEEDING TO BE INFORMED OR NURSE NAVIGATORS OR WHOMEVER, THEY CREATED KIND OF A TEACHING MECHANISM. SO I KNOW THERE ARE THINGS ALREADY OUT THERE THAT WE MIGHT, RATHER THAN REINVENT THE WHEEL, JUST BUILD ON IT AND FIND THINGS AS ARE A STARTING POINT. AND, IN FACT, WHEN I GO BACK, I WILL LOOK FOR THAT AND SEND YOU THE LINK FOR THAT, AND MAYBE YOU CAN TRACK THROUGH TO THE TRAINING PROGRAMS. BUT I'M SURE THAT ANY NUMBERS OF GROUPS HAVE CONSIDERED THIS. THE CDC HAS DONE A LOT OF RESPONSIVE WORK ON COVID. SO EVERYBODY IS OUT THERE DOING THINGS. AND SO, YES, I THINK IT WOULD BE VERY COOL TO HAVE SOMETHING, BUT MAYBE WE DON'T HAVE TO START FROM SCRATCH.

DR. MILLAN: THANK YOU. MARIA, ANY OTHER --

MS. BONNEVILLE: THERE ARE NO OTHER HANDS.

DR. MILLAN: OKAY. NEXT SLIDE PLEASE.

AND HERE IT IS. THE THREE STRATEGIC THEMES AND THE SEVEN STRATEGIC GOALS THAT WE BELIEVE WE COULD SIGN UP FOR IN THE NEXT FIVE YEARS. I'M JUST GOING TO PUT THIS UP AND NOT SAY IT AGAIN

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BECAUSE WE WENT THROUGH THIS VERY EXTENSIVELY, BUT JUST WANTED TO OPEN IT UP FOR ANY FINAL COMMENTS, QUESTIONS THAT WE HADN'T COVERED SO FAR. I'M HAPPY TO READ THROUGH THEM TOO IF IT HELPS.

MS. BONNEVILLE: J.T. HAS HIS HAND RAISED.

CHAIRMAN THOMAS: SO JUST WANTED TO SAY TO MARIA AND THE ENTIRE TEAM WHAT A GREAT JOB YOU'VE DONE PUTTING THIS TOGETHER AND REITERATING THAT LITERALLY, AS MARIA SET FORTH AT THE OUTSET, WHICH YOU MAY NOT HAVE CAUGHT, THIS STARTED IN THE SPRING OF 2020 IN ADVANCE OF PROP 14 PASSING AND HAS BEEN A VERY LONG, EXTENSIVE PIECE OF WORK BY MANY, MANY PEOPLE. SO THANK YOU FOR PUTTING ALL THIS TOGETHER AND BRINGING IT TODAY.

SECONDLY, I WANT TO THANK THE BOARD FOR AN OUTSTANDING DISCUSSION WITH GREAT PARTICIPATION THIS MORNING AND REALLY BRINGING SOME VALUABLE COMMENTS TO BEAR ON EACH AND EVERY ONE OF THESE VARIOUS TOPICS. I THINK THIS HAS BEEN A GREAT EXAMPLE OF THE COMMON WORK THAT THE TEAM AND THE BOARD DO AS CIRM WRIT LARGE, AND WE WILL END UP WITH A VERY GOOD FIVE-YEAR STRATEGIC PLAN TO PRESENT TO THE BOARD BASED ON TODAY'S DISCUSSION, AND THEN IN DECEMBER WE'LL BE OFF TO THE RACES THEREAFTER. SO JUST AN OVERALL THANK YOU AND JOB WELL DONE TO EVERYBODY.

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DR. MILLAN: THANK YOU, J.T. STEVE JUELSGAARD, I THINK, HAD HIS HAND UP, MARIA.

MR. JUELSGAARD: I THINK J.T. JUST ANSWERED MY QUESTION. SO THIS IS GOING TO COME BACK TO THE BOARD IN DECEMBER IS WHAT I HEARD.

CHAIRMAN THOMAS: YEAH.

MR. JUELSGAARD: AND INTEGRATING WHATEVER COMMENTS FROM TODAY'S DISCUSSION INTO THESE GOALS AS APPROPRIATE WILL HAPPEN. SO I JUST -- I JUST WANTED TO BE SURE THIS IS NOT THE FINAL VERSION, BUT THIS IS THE ITERATIVE VERSION. WE'VE HAD COMMENTS TODAY AND SO WE'LL SEE AN UPDATED VERSION?

DR. MILLAN: YES, ABSOLUTELY, STEVE. MARIA BONNEVILLE, DO YOU WANT TO JUST REVIEW TO THE BOARD WHAT OUR PROCESS IS GOING FORWARD LEADING UP TO DECEMBER?

MS. BONNEVILLE: SURE. THIS WILL COME BACK TO THE SCIENCE SUBCOMMITTEE, I THINK IT'S, NOVEMBER 29TH OR 30TH. I CAN'T REMEMBER RIGHT NOW. SO THAT WILL GO TO THE SCIENCE SUBCOMMITTEE FOR A PREVIEW THERE AND THEIR RECOMMENDATION, AND THEN IT WILL GO TO THE FULL BOARD IN DECEMBER AT OUR DECEMBER 14TH BOARD MEETING.

MR. JUELSGAARD: THANK YOU.

DR. MILLAN: THANK YOU, MARIA. AND THEN

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ALONG WITH THAT, FOR THE BOARD, WE WILL BE BRINGING A REVISED BUDGET OR ADDITIONAL BUDGET ASK BECAUSE THERE ARE NEW PROGRAMS ASSOCIATED WITH THE STRATEGIC PLAN TO ADD TO THE 2021-2022 BUDGET SO THAT IT WILL COVER THE JANUARY TO JUNE SPAN OF THE BUDGET YEAR BECAUSE WE DO INTEND TO LAUNCH THE PLAN AS SOON AS WE ATTAIN BOARD APPROVAL IN DECEMBER.

NEXT SLIDE PLEASE, SHYAM. I DIDN'T WANT TO END BY -- BEFORE I THANKED EVERYBODY. AND IF YOU LOOK AT THE LIFE HERE, YOU WILL SEE SOME FACES THAT YOU RECOGNIZE. CIRM TEAM MEMBERS: MARIA BONNEVILLE VERY PROMINENTLY IN THE L AND SHYAM PATEL PROMINENTLY IN THE APP WHO HAVE BEEN JUST REALLY INSTRUMENTAL IN HELPING ME PUT TOGETHER THIS SLIDE DECK PRESENTATION ALONG WITH THE LEADERSHIP TEAM AND THEIR TEAM MEMBERS. EVERYBODY HAS CONTRIBUTED TO THIS. OUR PATIENT ADVOCATES, OUR PATIENTS ARE HERE IN THIS BEAUTIFUL TAPESTRY. AND OUR BOARD MEMBERS, OF COURSE, YOU HAVE BEEN WITH US ALL THE WAY THROUGH IN DESIGNING EVERYTHING I PRESENTED TODAY. SO THIS WAS ALL VERY MUCH A JOINT EFFORT BETWEEN ALL THE STAKEHOLDERS, THE COMMUNITY, THE BOARD, SCIENTIFIC COMMUNITY, OUR TEAM, AND OUR SCIENTISTS. THANK YOU SO MUCH. WE LOOK FORWARD TO BRINGING BACK A REVISED PLAN FOR CONTINUED INPUT IN NOVEMBER AND THEN A

FINAL PLAN FOR YOUR APPROVAL IN DECEMBER. REALLY APPRECIATE THE OPPORTUNITY TO PRESENT AND LEAD THE DISCUSSION TODAY. IT WAS GREAT.

CHAIRMAN THOMAS: THANK YOU VERY MUCH AGAIN, MARIA. MARIA B., HOW SHALL WE PROCEED HERE? I PERHAPS SUGGEST TEN MINUTES TO GET LUNCH. WE WANT TO DO THIS AS A WORKING LUNCH, CORRECT?

MS. BONNEVILLE: SURE. SO LET'S TAKE A TEN-MINUTE BREAK. I WILL PAUSE THE RECORDING. WE'LL COME BACK LIVE AT 12:26. WE CAN JUST SAY 12:30. FOURTEEN MINUTES WILL BE GENEROUS. WE'LL COME BACK. WE'VE GOT A LOT OF VOTING ITEMS THIS AFTERNOON. SO PLEASE DO COME BACK AFTER LUNCH.

CHAIRMAN THOMAS: THANK YOU, GUYS.

(A RECESS WAS THEN TAKEN.)

CHAIRMAN THOMAS: OKAY. THANK YOU. EVERYBODY PLEASE FEEL FREE TO KEEP MUNCHING AS WE PROCEED HERE. WE ARE ON NOW TO THE ACTION ITEM PORTION OF THE AGENDA. WE HAVE A NUMBER OF ITEMS OFF THE TOP COMING OUT OF OUR AUGUST GOVERNANCE SUBCOMMITTEE. SO I'M GOING TO TURN THIS PORTION OF THE AGENDA OVER TO JUDY TO LEAD THE DISCUSSION.

DR. GASSON: THANK YOU, J.T. AND WELCOME BACK, EVERYONE.

THE GOVERNANCE SUBCOMMITTEE MET ON OCTOBER

6TH AND CONSIDERED AND PASSED ALL OF THE ITEMS ON THE AGENDA THAT WE WILL GO THROUGH NOW ONE BY ONE. FIRST IS THE MISSION STATEMENT. YOU'VE HAD AN OPPORTUNITY TO VIEW THESE DOCUMENTS.

THE MISSION STATEMENT HAS BEEN UPDATED TO REFLECT THE ABSORPTION, IF YOU DON'T MIND, OF THE EVALUATION SUBCOMMITTEE. AND SO YOU WILL ALSO NOTE FOR CONSIDERATION AS PART OF THE MISSION STATEMENT IS THE PROCESS FOR EVALUATION OF THE CHAIR, VICE CHAIR -- PROCESS FOR THE CONSIDERATION OF THE CHAIR, VICE CHAIR, PRESIDENT AND CEO. SO MAY I HAVE A MOTION TO APPROVE THE MISSION STATEMENT BEFORE YOU?

CHAIRMAN THOMAS: SO MOVED.

DR. GASSON: MAY I HAVE A SECOND?

MR. BERNAL: SECOND.

MS. BONNEVILLE: WHO WAS THE SECOND? WAS IT DAN?

MR. BERNAL: YES.

MS. BONNEVILLE: SO J.T. FIRST AND DAN SECOND. THANK YOU SO MUCH.

DR. GASSON: THANK YOU VERY MUCH. AT THIS TIME ARE THERE ANY QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD? IS THERE ANY PUBLIC COMMENT, MARIA?

MS. BONNEVILLE: I DO NOT SEE ANY PUBLIC

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COMMENT.

DR. GASSON: THANK YOU, MARIA. WOULD YOU CALL THE ROLL PLEASE.

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: GEORGE BLUMENTHAL. LINDA BOXER. I HOPE EVERYONE IS BACK FROM LUNCH. MICHAEL BOTCHAN.

DR. BOTCHAN: AYE.

MS. BONNEVILLE: ALLISON BRASHEAR. LE ONDRA CLARK HARVEY.

DR. CLARK HARVEY: YES.

MS. BONNEVILLE: DEBORAH DEAS. ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: YSABEL DURON.

MS. DURON: YES.

MS. BONNEVILLE: MARK FISCHER-COLBRIE.

DR. FISCHER-COLBRIE: AYE.

MS. BONNEVILLE: LEON FINE. FRED FISHER.

DR. FISHER: AYE.

MS. BONNEVILLE: ELENA FLOWERS.

DR. FLOWERS: YES.

MS. BONNEVILLE: JUDY GASSON.

DR. GASSON: YES.

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MS. BONNEVILLE: LARRY GOLDSTEIN. DAVID HIGGINS.

DR. HIGGINS: YES.

MS. BONNEVILLE: STEPHEN JUELSGAARD.

MR. JUELSGAARD: YES.

MS. BONNEVILLE: RICH LAJARA. PAT LEVITT.

DR. LEVITT: YES.

MS. BONNEVILLE: LINDA MALKAS.

DR. MALKAS: YES.

MS. BONNEVILLE: DAVE MARTIN.

DR. MARTIN: YES.

MS. BONNEVILLE: CHRISTINA MIASKOWSKI.

DR. MIASKOWSKI: YES.

MS. BONNEVILLE: LAUREN MILLER-ROGEN.

MS. MILLER-ROGEN: YES.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: YES.

MS. BONNEVILLE: AL ROWLETT.

MR. ROWLETT: YES.

MS. BONNEVILLE: MICHAEL STAMOS.

DR. STAMOS: YES.

MS. BONNEVILLE: JONATHAN THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES. KRISTINA VUORI.

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DR. VUORI: YES.

MS. BONNEVILLE: KEITH YAMAMOTO. HE MAY NOT BE BACK.

I'M FAIRLY CERTAIN WE DO NOT HAVE A QUORUM FOR THAT VOTE. SO IF YOU HOLD ON FOR ONE SECOND.

CHAIRMAN THOMAS: MARIA, LOOKS LIKE JIM KOVACH HAS HIS HAND UP. PERHAPS HE'S VOTING FOR ALLISON.

DR. KOVACH: YES. HEY, MARIA, IT'S JIM. ALLISON HAD TO STEP OUT, AND SHE HAD ASKED ME TO VOTE YES IN HER ABSENCE.

MS. BONNEVILLE: OKAY. THANK YOU. ARE YOU GOING TO BE PARTICIPATING FOR HER FOR THE REST OF THE MEETING, JIM?

DR. KOVACH: I BELIEVE SHE'S GOING TO COME BACK AT ABOUT 1 O'CLOCK. SHE HAD A ONE-HOUR MEETING.

MS. BONNEVILLE: OKAY. THANK YOU. HOLD ON FOR ONE SECOND. I THINK PEOPLE ARE JUST RETURNING FROM LUNCH, WHICH IS PART OF IT. HOLD ON FOR ONE SECOND.

(PAUSE IN PROCEEDINGS.)

MS. BONNEVILLE: SO I'M GOING TO TRY AGAIN. DEBORAH, ARE YOU ON THE LINE?

LARRY --

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DR. GOLDSTEIN: YES.
MS. BONNEVILLE: -- I'M NOT SURE IF YOU VOTED, I DID NOT HEAR, FOR THE MISSION STATEMENT FOR THE GOVERNANCE SUBCOMMITTEE.
DR. GOLDSTEIN: NO. SORRY. YES, THAT'S FINE.
MS. BONNEVILLE: OKAY. GREAT.
LEON FINE, ARE YOU BACK ON THE LINE? ART.
MR. TORRES: I HAD TO GO ON A QUICK CALL. WHAT IS THE ISSUE WE ARE VOTING ON NOW?
MS. BONNEVILLE: IT IS THE MISSION STATEMENT FOR THE GOVERNANCE SUBCOMMITTEE.
MR. TORRES: YES. AYE.
DR. DEAS: MARIA, I VOTED. DID YOU HEAR ME?
MS. BONNEVILLE: I DID NOT. THANK YOU, DEBORAH, FOR CLARIFYING.
DR. DEAS: YES.
MS. BONNEVILLE: I'M GOING TO KEEP THIS OPEN, AND WE'LL GO THROUGH SOME OF THE OTHER ITEMS AND COME BACK TO THOSE NOT ABLE TO VOTE FOR THIS. SO, JUDY, IF YOU'D LIKE TO CONTINUE.
DR. GASSON: THANK YOU, MARIA.
OUR CURRENT CHAIR AND VICE CHAIR, J.T. AND ART, WILL HAVE TERMED OUT AT THE END OF 2022. AND

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SO THE GOVERNANCE COMMITTEE WILL BE INITIATING A PROCESS TO SEARCH FOR THEIR REPLACEMENTS, AS THOUGH THAT WOULD BE POSSIBLE. BUT AS THE BEGINNING OF THAT PROCESS, J.T. AND ART WILL DO A SELF-EVALUATION, AND WE WILL HAVE AN OPPORTUNITY TO ADDRESS THE FULL BOARD IN CLOSED SESSION IN DECEMBER.

MAY I HAVE A MOTION TO APPROVE THE SELF-EVALUATION FOR J.T. AND ART?

MR. ROWLETT: SO MOVED.

DR. HIGGINS: SECOND.

DR. GASSON: THANK YOU VERY MUCH. ARE THERE ANY QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD AT THIS TIME? HEARING NONE, IS THERE ANY PUBLIC COMMENT?

MS. BONNEVILLE: I DO NOT SEE ANY PUBLIC COMMENT.

DR. GASSON: THANK YOU, MARIA. WOULD YOU CALL THE ROLL?

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

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DR. BOTCHAN: YES.
MS. BONNEVILLE: JIM KOVACH.
DR. KOVACH: YES.
MS. BONNEVILLE: LE ONDRA CLARK HARVEY.
DR. CLARK HARVEY: YES.
MS. BONNEVILLE: DEBORAH DEAS.
DR. DEAS: YES.
MS. BONNEVILLE: ANNE-MARIE DULIEGE.
DR. DULIEGE: YES.
MS. BONNEVILLE: YSABEL DURON.
MS. DURON: YES.
MS. BONNEVILLE: MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: AYE.
MS. BONNEVILLE: LEON FINE. FRED FISHER.
DR. FISHER: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.

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MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: THE MOTION CARRIES.

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CAN I GO BACK TO, LINDA, I DID NOT RECORD A VOTE FOR YOU FOR THE MISSIONS STATEMENT FROM THE GOVERNANCE SUBCOMMITTEE.

DR. BOXER: YES.

MS. BONNEVILLE: THANK YOU SO MUCH. WE GOT DEBORAH. IS LEON FINE ON THE LINE? OKAY. LARRY, WE GOT YOURS. ALL RIGHT. THANK YOU. JUDY.

DR. GASSON: THE NEXT AGENDA ITEM IS THE BOARD BYLAWS, AND MARIA HAS A BRIEF SUMMARY.

MS. BONNEVILLE: LET ME GET THAT PRESENTATION GOING.

DR. GASSON: THANKS, MARIA.

MS. BONNEVILLE: NEXT SLIDE PLEASE.

SO WITH THE PASSAGE OF PROP 14 CAME THE NEED TO UPDATE THE FOLLOWING POLICIES: THE INTERNAL GOVERNANCE POLICY, THE BOARD BYLAWS, AND THE BOARD CODE OF CONDUCT. WE'LL START WITH THE BOARD BYLAWS. NEXT SLIDE PLEASE.

AGAIN, THE BOARD BYLAWS WERE AMENDED TO REFLECT CHANGES MADE BY PROP 14, INCLUDING THE APPOINTMENT OF SIX NEW BOARD MEMBERS -- AS YOU WILL RECALL, THE BOARD GREW IN SIZE TO 35 -- THE CREATION OF THE ACCESSIBILITY AND AFFORDABILITY WORKING GROUP. THE EXACT LANGUAGE FROM THE PROPOSITION

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DESCRIBING THE GROUP AND ITS MEMBERSHIP WAS ADDED. IT REQUIRES THE BOARD REVIEW OF THE CONFLICTS POLICIES EVERY FOUR YEARS. AND THEN OTHER CHANGES INCLUDE IT REMOVES THE REQUIREMENT THAT BOARD MEMBERS LEAVE THE ROOM IN LIGHT OF REMOTE MEETINGS, ELIMINATES THE LEGISLATURE COMMITTEE. ALL LEGISLATIVE ISSUES FOR CONSIDERATION WILL GO DIRECTLY TO THE BOARD FOR A VOTE. AND VERY KEY HERE IS IN THE MECHANISM FOR PATIENT ADVOCATE AND NURSE MEMBER COMPENSATION. THE INTERNAL TEAM WILL BRING A PROPOSAL FOR THIS TO THE GOVERNANCE SUBCOMMITTEE IN THE NEXT COUPLE OF MONTHS.

ARE THERE ANY QUESTIONS ABOUT THE CHANGES TO THE BOARD BYLAWS?

DR. GASSON: MAY I HAVE A MOTION TO APPROVE THESE CHANGES?

MS. DURON: SO MOVED.

DR. DULIEGE: I SECOND.

DR. GASSON: THANK YOU. ARE THERE ANY QUESTIONS OR COMMENTS FROM THE BOARD AT THIS TIME? MARIA, ARE THERE ANY QUESTIONS OR COMMENTS FROM THE PUBLIC?

MS. BONNEVILLE: ACTUALLY LARRY GOLDSTEIN HAS A QUESTION.

DR. GOLDSTEIN: SO DO THESE CHANGES THAT

YOU JUST SUMMARIZED, MARIA, ARE THESE WHAT DOCUMENT NO. 6 COVERS THAT WAS SEND TO US BECAUSE THERE WAS ANOTHER SUBSTANTIVE CHANGE IN THE LANGUAGE IN THAT DOCUMENT?

MS. BONNEVILLE: SURE. THESE WERE JUST SOME OF THE CHANGES THAT WERE MADE, BUT ABSOLUTELY CAN ANSWER QUESTIONS ABOUT ANYTHING ELSE YOU MIGHT NEED.

DR. GOLDSTEIN: OKAY. SO IN DOCUMENT 6(C), THERE IS THE ADDITION IN A NUMBER OF PLACES TO FUND GENETIC RESEARCH. AND I WANT FOLKS TO THINK ABOUT THE FACT THAT IF WE JUST SAY WE'RE GOING TO FUND GENETIC RESEARCH IN GENERAL, WE'RE GOING TO SEE PROPOSALS FROM ALL OVER THE SCIENTIFIC LANDSCAPE THAT HAVE NOTHING TO DO WITH STEM CELLS AND REGENERATIVE MEDICINE. AND SO I'D LIKE TO SUGGEST THAT THAT LANGUAGE BE CHANGED TO GENETIC RESEARCH AS IT PERTAINS TO THE DEVELOPMENT OR UNDERSTANDING OF STEM CELLS AND REGENERATIVE MEDICINE OR SOMETHING TO THAT EFFECT TO RESTRICT THE LANGUAGE SO THAT WE ARE NOT GOING TO GET HIT WITH FUNDING PROPOSALS FOR GENETIC ANALYSIS OF THIS OR THAT IN SOME MODEL ORGANISM THAT'S WONDERFUL SCIENCE BUT DOESN'T PERTAIN TO OUR MISSION TO THE PUBLIC.

MS. BONNEVILLE: MY UNDERSTANDING IS THAT,

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CORRECT ME IF I'M MISTAKEN, JAMES, THAT THAT'S THE LANGUAGE THAT CAME FROM THE PROPOSITION.

MR. HARRISON: THAT'S CORRECT. LARRY, THESE CHANGES THAT YOU SEE OUTLINED, INCLUDING THE REFERENCE TO GENETIC MEDICINE, ARE SIMPLY TO BRING THE BYLAWS INTO CONFORMITY WITH THE LANGUAGE OF PROP 14.

YOUR CONCERN, I THINK, WOULD PROPERLY BE ADDRESSED THROUGH THE CONCEPT PLANS THAT THE CIRM TEAM BRINGS TO THE BOARD WHICH PRECEDE EVERY FUNDING ROUND. AND THEN THE SPECIFIC DIRECTION TO APPLICANTS ON LIMITATIONS REGARDING WHAT IS ELIGIBLE FOR FUNDING WOULD BE INCLUDED IN THE PROGRAM ANNOUNCEMENT THAT'S DERIVED FROM WHATEVER CONCEPT THE BOARD HAS APPROVED.

DR. GOLDSTEIN: THANK YOU, JAMES. I DO UNDERSTAND THAT IT CAME FROM THE LANGUAGE OF THE PROPOSITION. I GUESS MAYBE THE QUESTION I SHOULD BE ASKING YOU IS IS THERE ANYTHING LEGALLY THAT KEEPS US FROM RESTRICTING IN SOME WAY WHAT WAS STATED OR MAKING IT MORE CONSISTENT WITH THE DIRECTION OF THIS AGENCY? IT'S NOT THAT I'M SAYING WE STRIKE THE LANGUAGE. I'M JUST SAYING WE MODIFY IT SLIGHTLY AS I SUGGESTED.

MR. HARRISON: SO THE ANSWER TO YOUR

QUESTION IS THAT, NO, THE BOARD HAS THE AUTHORITY TO INTERPRET AND DEFINE THOSE TERMS AS THEY APPLY TO WHAT THE BOARD DETERMINES IS ELIGIBLE FOR FUNDING. THE BYLAWS ARE AN INTERNAL GOVERNANCE DOCUMENT RATHER THAN A STATEMENT ABOUT WHAT IS ELIGIBLE FOR CIRM FUNDING. STATEMENTS REGARDING ELIGIBILITY FOR FUNDING ARE INCLUDED IN THE CONCEPT PLANS AND THE PROGRAM ANNOUNCEMENTS. BUT OBVIOUSLY IT'S THE BOARD'S DISCRETION WHETHER YOU WANT TO MODIFY THIS LANGUAGE AS WELL.

DR. GASSON: LARRY, DID YOU FIND JAMES' ANSWER TO BE SATISFACTORY, OR WOULD YOU LIKE TO CONSIDER MODIFYING THE LANGUAGE?

DR. GOLDSTEIN: I CAN LIVE WITH JUST DOING IT AT THE LEVEL OF CONCEPT PLANS AND FUNDING. I'LL ADMIT TO SOME DISCOMFORT WITH THIS LANGUAGE AS IT SITS. BUT IF I'M THE ONLY ONE WHO HAS A PROBLEM, I'M NOT GOING TO HIJACK THIS MEETING OVER MY CONCERN.

DR. GASSON: OKAY. THANK YOU FOR YOUR COMMENT. AND THANK YOU, JAMES, FOR THE CLARIFICATION. WAS THERE ANY COMMENT FROM THE PUBLIC?

MS. BONNEVILLE: THERE WERE NOT.

DR. GASSON: OKAY. IN THAT CASE WOULD YOU

CALL THE ROLL PLEASE.

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: YES.

MS. BONNEVILLE: JIM KOVACH.

DR. KOVACH: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.

DR. CLARK HARVEY: YES.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: YES.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: YSABEL DURON.

MS. DURON: YES.

MS. BONNEVILLE: MARK FISCHER-COLBRIE.

DR. FISCHER-COLBRIE: YES.

MS. BONNEVILLE: FRED FISHER.

DR. FISHER: YES.

MS. BONNEVILLE: ELENA FLOWERS.

DR. FLOWERS: YES.

MS. BONNEVILLE: JUDY GASSON.

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DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.

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MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: MOTION CARRIES. THANK YOU.
DR. GASSON: THANK YOU, MARIA. THE NEXT PART OF MARIA'S PRESENTATION IS ON THE INTERNAL GOVERNANCE.
MS. BONNEVILLE: NEXT SLIDE PLEASE.
SO THE AMENDMENTS TO UPDATE THE INTERNAL GOVERNANCE POLICY WITH THE LANGUAGE FROM PROP 14, SIMILAR TO WHAT WE DID WITH THE BOARD BYLAWS. HIGHLIGHTS: IT OUTLINES THE ROLES OF THE CHAIR, VICE CHAIR, AND CEO/PRESIDENT AS DESCRIBED IN PROP 14, PROVIDES FOR LEGISLATIVE ISSUES TO BE BROUGHT DIRECTLY TO THE BOARD WITH THE ELIMINATION OF THE LEGISLATIVE SUBCOMMITTEE, AND IT ADDS LANGUAGE FOR ACCESSIBILITY AND AFFORDABILITY WORKING GROUP, AND IT ESTABLISHES THE REPORTING STRUCTURE FOR THE CIRM TEAM WITH A PRELIMINARY ORG CHART.

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DR. GASSON: CAN WE HAVE A MOTION TO APPROVE THESE CHANGES?

DR. DULIEGE: I MOVE.

MR. BERNAL: SO MOVED.

DR. DULIEGE: OR SECOND.

DR. GASSON: THANK YOU VERY MUCH. ARE THERE ANY QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD?

MS. BONNEVILLE: THERE ARE NO HANDS RAISED, JUDY.

DR. GASSON: MARIA, DO YOU HAVE QUESTIONS OR COMMENTS FROM MEMBERS OF THE PUBLIC?

MS. BONNEVILLE: THERE ARE NO HANDS RAISED.

DR. GASSON: THANK YOU, MARIA. WILL YOU CALL THE ROLL PLEASE.

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: YES.

MS. BONNEVILLE: JIM KOVACH.

DR. KOVACH: YES.

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MS. BONNEVILLE: LE ONDRA CLARK HARVEY.
DR. CLARK HARVEY: YES.
MS. BONNEVILLE: DEBORAH DEAS.
DR. DEAS: YES.
MS. BONNEVILLE: ANNE-MARIE DULIEGE.
DR. DULIEGE: YES.
MS. BONNEVILLE: YSABEL DURON.
MS. DURON: YES.
MS. BONNEVILLE: MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: AYE.
MS. BONNEVILLE: FRED FISHER.
DR. FISHER: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.

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DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: MOTION CARRIES.
DR. FINE: MARIA, LEON FINE. YES.

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MS. BONNEVILLE: I DID NOT KNOW YOU WERE BACK. THANK YOU. THE MOTION CARRIES.

DR. GASSON: TERRIFIC. THE FINAL ITEM FROM THE GOVERNANCE SUBCOMMITTEE IS AN UPDATE OF THE BOARD CODE OF CONDUCT.

MS. BONNEVILLE: YES. THANK YOU. NEXT SLIDE PLEASE.

FINALLY, THE BOARD CODE OF CONDUCT WAS AMENDED TO INCLUDE CHANGES TO PROP 14. ADDITIONS TO THE CODE OF CONDUCT WERE MADE TO INCLUDE THE ABILITY TO SANCTION AND IN SOME INSTANCES RECOMMEND REMOVAL OF A BOARD MEMBER. THE EXACT ADDITION READS, "THE BOARD SHALL HAVE THE AUTHORITY TO SANCTION A MEMBER WHO IS FOUND BY THE BOARD TO HAVE VIOLATED THIS CODE OF CONDUCT OR ENGAGED IN ANY MISCONDUCT CONSTITUTING HARASSMENT, DISCRIMINATION, OR RETALIATION. SANCTIONS MAY BE IMPOSED ONLY BY MAJORITY VOTE OF THE BOARD WITH THE EXCEPTION OF A RECOMMENDATION FOR REMOVAL WHICH REQUIRES A VOTE OF 60 PERCENT OF A QUORUM.

"THE TYPES OF SANCTIONS THAT MAY BE IMPOSED ON A MEMBER ARE AS FOLLOWS: WRITTEN CENSURE, REMOVAL OR SUSPENSION FROM A COMMITTEE ASSIGNMENT, OR RECOMMENDATION FOR REMOVAL BY APPOINTING AUTHORITY."

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DR. GASSON: THANK YOU, MARIA. MAY I HAVE A MOTION FOR APPROVAL OF THE PROPOSED AMENDMENTS TO THE BOARD'S CODE OF CONDUCT?

DR. FISCHER-COLBRIE: SO MOVED.

DR. YAMAMOTO: SECOND.

MS. BONNEVILLE: SORRY. I COULD NOT HEAR.

DR. GASSON: ARE THERE ANY QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD? MARIA, DO YOU HAVE ANY QUESTIONS OR COMMENTS FROM THE PUBLIC?

MS. BONNEVILLE: NO.

DR. GASSON: THANK YOU, MARIA. WOULD YOU CALL THE ROLL PLEASE.

MS. BONNEVILLE: YES.

DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: AYE.

MS. BONNEVILLE: JIM KOVACH.

DR. KOVACH: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.

DR. CLARK HARVEY: YES.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: YES.

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MS. BONNEVILLE: ANNE-MARIE DULIEGE.
DR. DULIEGE: YES.
MS. BONNEVILLE: YSABEL DURON.
MS. DURON: YES.
MS. BONNEVILLE: LEON FINE.
DR. FINE: YES.
MS. BONNEVILLE: MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: YES.
MS. BONNEVILLE: FRED FISHER.
DR. FISHER: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.

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DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KAROL WATSON. KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: THANK YOU. THE MOTION CARRIES.
DR. GASSON: THIS CONCLUDES THE ACTIVITIES

OF THE GOVERNANCE SUBCOMMITTEE. I'D LIKE TO THANK MARIA BONNEVILLE FOR ALL OF HER HARD WORK, MY CO-CHAIR, KRISTINA VUORI, AND THE MEMBERS OF THE COMMITTEE. THANK YOU VERY MUCH.

CHAIRMAN THOMAS: THANK YOU, MADAM CHAIRPERSON. EXCELLENT REPORT OUT OF THE GOVERNANCE SUBCOMMITTEE.

WE NOW MOVE TO ITEM NO. 7, CONSIDERATION OF NEW APPOINTMENTS AND REAPPOINTMENTS TO THE GRANTS WORKING GROUP. GIL.

DR. SAMBRANO: THANK YOU, MR. CHAIRMAN. GOOD AFTERNOON TO EVERYONE.

SO TODAY WE ARE BRINGING FOR YOUR CONSIDERATION APPOINTMENT OF SCIENTIFIC MEMBERS. WE HAVE 12 NEW GRANTS WORKING GROUP NOMINEES THAT ARE SHOWN AND THE BIOS ARE SHOWN IN THE DOCUMENTATION THAT WAS PROVIDED ALONG WITH 22 REAPPOINTMENTS OF MEMBERS TO THE GRANTS WORKING GROUP. AND THIS IS ALL PART OF OUR ONGOING EFFORT TO BOTH MAINTAIN AND GROW THE POOL OF EXPERTS THAT WE DRAW FROM FOR ALL THE DIFFERENT SCIENTIFIC REVIEWS THAT WE HAVE FROM BASIC BIOLOGY, DISCOVERY, CLINICAL. AND IN PARTICULAR WE NEED TO RAMP UP OUR EARLY STAGE REVIEWERS. AND SO THIS IS, IN PART, THE NOMINEES WE HOPE THEIR EXPERTISE WILL BRING.

SO WHEN WE REACH OUT AND FOCUS OUR IDENTIFICATION OF SCIENTISTS THAT WE WANT TO BRING IN, OBVIOUSLY THE MOST -- THERE'S A COUPLE OF REALLY IMPORTANT ELEMENTS. SO RELEVANT SCIENTIFIC EXPERTISE IS KEY, BUT WE ALSO WANT TO ENHANCE THE DIVERSITY OF THE GRANTS WORKING GROUP POOL IN A VARIETY OF WAYS. AND SO WE ALSO SEEK RECOMMENDATIONS FROM OUTSIDE ORGANIZATIONS, AND ONE OF THOSE IS THE NATIONAL ACADEMY OF SCIENCES. AND THEY ALONG WITH US PARTNER TO TRY TO KEEP THESE THINGS IN MIND. AND SO SIX OF THE NEW NOMINEES THAT ARE PRESENTED WERE REFERRED TO US BY THE NATIONAL ACADEMY OF SCIENCE. SO I DID WANT TO SPECIFICALLY POINT THAT OUT, THAT THAT HAS ALLOWED US TO IDENTIFY PEOPLE THAT WE MIGHT NOT OTHERWISE.

SO IF THERE ARE ANY QUESTIONS, I'M HAPPY TO ADDRESS THEM, BUT OTHERWISE WE'D LIKE TO SEEK APPROVAL FOR THESE NEW NOMINEES AS WELL AS THE REAPPOINTMENTS.

AND I THINK, MR. CHAIRMAN, YOU ALSO HAVE THE NOMINATION FROM THE BOARD FOR A PATIENT ADVOCATE MEMBER, I BELIEVE.

CHAIRMAN THOMAS: YES, THAT'S CORRECT. I'D, AS PREVIOUSLY SELF-IDENTIFIED, LIKE TO NOW ADD TO THIS NOMINATION THE FRED FISHER TO BECOME ONE OF

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THE PATIENT ADVOCATES ON THE GWG.

GIL, IF YOU WOULD -- IF YOU ARE FINISHED, THEN DO WE HEAR A MOTION TO APPROVE THE SLATE OF NEW GWG NOMINEES INCLUDING FRED?

DR. BOTCHAN: SO MOVED.

DR. MARTIN: SECOND.

CHAIRMAN THOMAS: MOVED BY MIKE. SECONDED BY DAVE. IS THERE ANY BOARD DISCUSSION OR COMMENT ON THIS?

MS. BONNEVILLE: DAVID HIGGINS HAS HIS HAND RAISED.

CHAIRMAN THOMAS: DAVID.

DR. HIGGINS: YES. I DON'T MEAN -- I DON'T WANT TO BE INFLAMMATORY OR COME ACROSS AS BEING INFLAMMATORY AT ALL. THIS IS THE BEST GROUP OF PEOPLE I'VE EVER WORKED WITH IN MY CAREER. GIL, PERHAPS YOU COULD TELL ME ONE OF MY ISSUES WAS THE GWG AND IT'S ALWAYS BEEN THE REPRESENTATION OF WOMEN ON THERE. IT'S INCREDIBLY LOPSIDED OR IT WAS A YEAR AGO. IS THAT STILL THE CASE? CAN YOU TELL ME HOW MANY MALES AND HOW MANY FEMALES THERE ARE ON THE GWG?

DR. SAMBRANO: NO. THAT'S A GREAT QUESTION. DAVID, I'LL TELL YOU THAT WE ARE STRIVING TO SEEK OUT AND PRIORITIZE OUR OUTREACH SUCH THAT WE

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DO REACH OUT SPECIFICALLY TO WOMEN, PEOPLE OF COLOR, TO YOUNG FACULTY, FOLKS THAT MAY HAVE NONTRADITIONAL ROLES IN SCIENCE BECAUSE WE WANT TO DRAW AND BRING THEIR EXPERTISE TO THE TABLE PARTICULARLY IN THE GWG.

THERE ARE DEFINITELY MORE MEN THAN WOMEN ON THE GWG WHICH PROBABLY REFLECTS WHAT IS OUT THERE AMONG FACULTY AS WELL AS AT ACADEMIC INSTITUTIONS AND IN THE SCIENTIFIC ARENA. BUT WE DO AND ARE TRYING TO MAKE AN EFFORT TO DO MORE ABOUT IT. I DO WANT TO SAY THAT WE HAVE ONE PARTICULAR INDIVIDUAL, WELL, WE HAVE EIGHT WOMEN WHO WE'RE BRINGING IN IN THIS GROUP OUT OF THE 34 THAT WE ARE APPOINTING OR REAPPOINTING. ONE OF THE INDIVIDUALS THAT WE ARE BRINGING IN IS DR. LATISHA WYATT, WHO IS A NEUROSCIENTIST BUT WHO ALSO SERVES AS THE DIRECTOR OF DIVERSITY AND RESEARCH AT THE OREGON HEALTH AND SCIENCE UNIVERSITY. SHE'S ALSO A DIRECTOR OF INNOVATIVE POLICY AT THE RACIAL, EQUITY AND INCLUSION CENTER AT THE VOLLUM INSTITUTE.

AND SO SHE HAS EXPERTISE IN DEVELOPING PLANS, POLICIES THAT BRING BOTH RACIAL EQUITY, GENDER EQUITY. AND SO THIS IS AN ELEMENT THAT WAS PARTICULARLY ATTRACTIVE TO US. AND SO WE ARE HOPING THAT THROUGH THE HELP OF FOLKS LIKE HER, OTHER GWG

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MEMBERS, AND OUR OWN EFFORTS IN TRYING TO IDENTIFY FOLKS THAT WE CAN BROADEN AND ENHANCE DIVERSITY OF THE GROUP BECAUSE I DO AGREE. WE DEFINITELY NEED TO DO THAT.

MS. DURON: JUST TO ADD FLAME TO DAVID'S FIRE, I WAS GOING TO ASK HOW DIVERSE IS THE NATIONAL ACADEMY OF SCIENCES, WHICH I DON'T EXPECT AN ANSWER TO. BUT I'M JUST WONDERING IF WE'RE NOT TRYING SOME NONTRADITIONAL PLACES WITH FOLK WHO MIGHT KNOW WHAT THEY CONSIDER EXPERTS OUT THERE THAT DON'T NORMALLY GO THROUGH THE -- AREN'T NORMALLY CHOSEN THROUGH THE REGULAR CHANNELS. SO I'M THINKING ABOUT THE NATIONAL HISPANIC MEDICAL ASSOCIATION. I KNOW THERE'S A NATIONAL BLACK ASSOCIATION OF DOCTORS. AND JUST OTHER NONTRADITIONAL PATHWAYS THAT YOU MIGHT REACH OUT TO BECAUSE THEY MAY HAVE SOME REALLY SMART YOUNG INVESTIGATORS THEY KNOW OF, THEY CAN POINT TO, AND THEY COULD PERHAPS SEND NAMES AND PROVIDE TO YOUR LIST.

THE OTHER THING I KIND OF WONDERED, GIVEN MY OWN PARTICIPATION IN ORGANIZATIONS OR COMMITTEES LIKE THIS, IS WONDERING HOW MUCH RELUCTANCE, NOT RESISTANCE, BUT RELUCTANCE TO JOIN THESE GROUPS GIVEN, ONE, HOW MUCH WORK IS INVOLVED BECAUSE EVERYBODY IS SO OVERWORKED ALREADY. AND, SECOND OF

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ALL, WHETHER OR NOT THEY FEEL COMFORTABLE JOINING THE GROUP. I THINK WE ALL HAVE TO LEARN TO JUMP INTO THE WATER AND NOT BE FRIGHTENED OBVIOUSLY IF IT'S NOT OUR EXPERTISE. BUT I JUST KIND OF WONDER GIVEN THAT I THINK OF MANY OF OUR YOUNGER INVESTIGATORS OF COLOR AS HAVING NOT AS MUCH EXPERIENCE AND SOMETIMES NOT GIVING THEMSELVES CREDIT FOR BEING ABLE TO JOIN A GROUP SUCH AS THIS AND BRING THEIR EXPERTISE TO THE TABLE.

SO THAT'S JUST A LITTLE THINKING I WOULD ADD TO THE TABLE. I DON'T KNOW THAT IT'S GOING TO CHANGE MUCH, BUT I THINK THAT IF ALL OF YOU CAN REACH OUT TO THOSE YOUNG INVESTIGATORS IN YOUR CIRCLES AND TALK TO THEM ABOUT THESE KINDS OF OPPORTUNITIES AND WHY THOU SHALT NOT BE AFRAID, BUT IN FACT WE NEED YOUR VOICE AT THE TABLE. OR, YES, I KNOW YOU'VE GOT A LOT OF WORK, BUT YOU'RE IMPORTANT AND WE NEED YOU HERE. I THINK THAT WOULD BE REALLY IN MY MIND WELCOME AND INFORMATIVE FOR SOME PEOPLE WHO MIGHT ULTIMATELY BE FABULOUS AND GREAT ONCE AT THE TABLE, BUT WHO MIGHT BE A SHADE RELUCTANT TO START ON THAT PATH. THANK YOU.

CHAIRMAN THOMAS: THANK YOU, YSABEL.

GIL, JUST FOR THE BENEFIT OF THE NEWER MEMBERS, ASSUMING WE PASS THIS MOTION, WHAT IS THE

SIZE OF THE GWG POOL AS IT CURRENTLY STANDS?

DR. SAMBRANO: WE'VE BEEN WORKING OUR POOL BACK UP BECAUSE THERE WERE MANY, AS YOU CAN TELL FROM THE REAPPOINTMENTS, WHOSE TERM ENDED. SO WE WOULD BE COMING BACK TO ABOUT 200 MEMBERS THAT ARE ACTIVE.

CHAIRMAN THOMAS: THANK YOU. ANY FURTHER COMMENTS OR QUESTIONS FROM MEMBERS OF THE BOARD? MEMBERS OF THE PUBLIC? HEARING NONE, MARIA, WILL YOU PLEASE CALL THE ROLL.

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: YES.

MS. BONNEVILLE: JIM KOVACH.

DR. KOVACH: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.

DR. CLARK HARVEY: YES.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: YES.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

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MS. BONNEVILLE: YSABEL DURON.
MS. DURON: YES.
MS. BONNEVILLE: MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: YES.
MS. BONNEVILLE: FRED FISHER.
DR. FISHER: SHOULD I ABSTAIN SINCE I'M A NOMINEE?
MS. BONNEVILLE: YOU'RE CORRECT. I'M SORRY ABOUT THAT.
LEON FINE.
DR. FINE: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.

MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI. KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: THE MOTION CARRIES.
CHAIRMAN THOMAS: THANK YOU, MARIA. ON TO ITEM 8, CONSIDERATION OF APPOINTMENT OF MEMBERS TO THE ACCESSIBILITY AND AFFORDABILITY WORKING GROUP.

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MARIA OR SOMEBODY, CAN YOU PUT THE MEMO FOR THIS ITEM UP ON THE SCREEN PLEASE.

SO AS YOU RECALL, AS WE IDENTIFIED MEMBERS OF THE AAWG TO FILL THE TEN NON-BOARD MEMBERS SLOTS, WE BRING THOSE NOMINEES TO THE BOARD FOR APPROVAL. THIS IS THE LAST OF THOSE VOTES. WE HAVE FOUR NEW MEMBERS HERE THAT ARE UNDER CONSIDERATION TODAY.

ON THE SCREEN YOU CAN SEE THE EXISTING MEMBERS WE'VE ALREADY VOTED ON. IF YOU SCROLL A BIT FURTHER DOWN TO THE NEXT PAGE, THAT'S THE SIX WE HAVE. NOW WE HAVE THE NEXT FOUR. AND YOU SEE BOTH NAME AND TITLE AND THE SLOT THAT EACH INDIVIDUAL IS GOING TO FILL PER THE TERMS OF PROP 14 AS A NON-BOARD MEMBER MEMBER OF THIS WORKING GROUP. YOU CAN SEE THESE ARE ALL HIGHLY QUALIFIED.

I WOULD NOTE FOR THOSE WHO ARE NEW AND NOT SO NEW, DAVID SERRANO SEWALL PREVIOUSLY WAS A BOARD MEMBER OF CIRM BACK IN THE EARLIER DAYS. HE WAS THE PATIENT ADVOCATE FOR MS AND ALS WHO PRECEDED DIANE WINOKUR. BUT YOU CAN SEE THE FOUR FULL NAMES. AND SO DO WE HAVE A MOTION TO APPROVE THESE NEW FOUR NOMINEES?

MR. TORRES: I MOVE TO APPROVE.

CHAIRMAN THOMAS: THANK YOU, ART. IS THERE A SECOND?

DR. MARTIN: SECOND.

CHAIRMAN THOMAS: THANK YOU, DAVE. ANY QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD? ANY COMMENTS FROM MEMBERS OF THE PUBLIC? NEARING NONE, MARIA, PLEASE CALL THE ROLL.

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: YES.

MS. BONNEVILLE: JIM KOVACH.

DR. KOVACH: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.

DR. CLARK HARVEY: YES.

MS. BONNEVILLE: DEBORAH DEAS.

DR. DEAS: YES.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: YSABEL DURON.

MS. DURON: YES.

MS. BONNEVILLE: LEON FINE.

DR. FINE: YES.

MS. BONNEVILLE: MARK FISCHER-COLBRIE.

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DR. FISCHER-COLBRIE: YES.
MS. BONNEVILLE: FRED FISHER.
DR. FISHER: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
ADRIANA PADILLA.

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DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: I THINK I NEED TO ABSTAIN. ONE OF MY FACULTY IS A CANDIDATE.
MS. BONNEVILLE: YOU CAN VOTE ON THIS. IT'S OKAY.
DR. STAMOS: OKAY. YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: THANK YOU. THE MOTION CARRIES.
MR. TORRES: WHAT'S THE TOTAL, MARIA, OF THE VOTES THAT WERE CAST?
MS. BONNEVILLE: THAT WILL TAKE ME A SECOND TO COUNT UP. SO JUST ONE MOMENT.
MR. TORRES: JUST TEXT ME. THAT'S FINE.
MS. BONNEVILLE: OKAY. I WILL.

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CHAIRMAN THOMAS: SO THANK YOU VERY MUCH, MARIA. JUST WANT TO NOTE ON THIS. WE BELIEVE THIS TO BE A MOST DISTINGUISHED GROUP WHICH WILL BRING THE DESIRED EXPERTISE TO THE AAWG. I AND/OR ART AND MARIA SPOKE TO EACH OF THESE FOLKS AS THEY WERE FIRST BROUGHT TO OUR ATTENTION AND BELIEVE THAT THIS IS A REALLY ACCOMPLISHED GROUP THAT WILL DO A LOT OF GREAT THINGS FOR THE WORKING GROUP AND FOR THE CAUSE OF ACCESSIBILITY AND AFFORDABILITY. SO THANK YOU VERY MUCH FOR YOUR APPROVAL ON THAT.

WE NOW COME TO THE PORTION OF THE MEETING WHICH IS THE APPLICATION REVIEW SUBCOMMITTEE. AND WE HAVE ITEM 9, CONSIDERATION OF APPLICATIONS SUBMITTED IN RESPONSE TO CLINICAL TRIAL STAGE PROJECTS PROGRAM ANNOUNCEMENT CLIN1, 2, OR 3. PRESENTATION AND SUMMARY FROM GIL.

DR. SAMBRANO: OKAY. LET ME JUST SHARE MY SCREEN. SO THESE ARE THE RECOMMENDATIONS FROM THE GRANTS WORKING GROUP FOR APPLICATIONS THAT WERE SUBMITTED TO THE CLIN PROGRAM. AND AS MENTIONED, THE CLINICAL PROGRAM SUPPORTS THREE DIFFERENT STAGES OF DEVELOPMENT: IND-ENABLING PROJECTS THAT WORK TOWARDS GETTING AN IND FILING, A CLINICAL TRIAL, OR SUPPLEMENTAL ACCELERATING ACTIVITIES.

SO THE APPLICATION FOR TODAY FALLS INTO

THE CLIN1 OR LATE STAGE PRECLINICAL PROJECTS.

THIS SLIDE IS JUST A REMINDER OF WHAT THE CLINICAL BUDGET STATUS IS. THERE'S AN ANNUAL ALLOCATION FOR THE FISCAL YEAR 2021 TO 22.

CHAIRMAN THOMAS: SLIDES AREN'T ADVANCING, GIL.

DR. SAMBRANO: THAT IS STRANGE. THEY'RE ADVANCING ON MY SCREEN. I DON'T KNOW WHY THEY'RE NOT.

MS. BONNEVILLE: GIL, IF YOU NEED US TO SHARE ON OUR END.

DR. SAMBRANO: YEAH. THEY'RE WORKING ON MINE. I HAVE NO IDEA WHY YOU AREN'T SEEING IT.

MS. BONNEVILLE: OKAY. LET ME BRING THAT UP; AND IF YOU COULD STOP SHARING, I'LL SHARE MY SCREEN. LET'S SHARE. WE ARE A SHARING BUNCH.

DR. SAMBRANO: NEXT ONE PLEASE. SO THIS IS THE CLINICAL BUDGET STATUS. AND SO THERE WAS AN ALLOCATION OR AN ANNUAL ALLOCATION FOR THE FISCAL YEAR 21/22 OF 162 MILLION. AND SO THE AMOUNT THAT HAS BEEN APPROVED THUS FAR BY THE BOARD FOR CLINICAL PROJECTS IS 43 MILLION. THE AMOUNT THAT'S REQUESTED IN THE ONE APPLICATION BEING CONSIDERED TODAY IS 6 MILLION. SO IF THAT IS APPROVED, THAT WOULD LEAVE US WITH A BALANCE OF ABOUT 113 MILLION.

SO THE NEXT SLIDE IS THE SET OF REVIEW CRITERIA THAT WAS UTILIZED BY THE GRANTS WORKING GROUP TO ASSESS THE MERIT OF THESE PROJECTS. AND SO THEY ARE CENTERED AROUND THESE FIVE QUESTIONS. DID THE PROJECT HOLD THE NECESSARY SIGNIFICANCE AND POTENTIAL FOR IMPACT? MEANING WHAT KIND OF VALUE DOES IT OFFER AND IS IT WORTH DOING? DOES IT HAVE A SOUND RATIONALE? DOES IT HAVE A GOOD PLAN AND DESIGN? IS IT FEASIBLE? MEANING THEY HAVE A GOOD PROJECT TEAM AND ALL THE NECESSARY RESOURCES TO CARRY IT OUT. AND THEN THE LAST ONE, DOES THE PROJECT ADDRESS THE NEEDS OF UNDERSERVED COMMUNITIES? AND THE NEXT SLIDE PLEASE.

THE SCIENTIFIC SCORING SYSTEM THAT WE USE FOR THE CLINICAL APPLICATIONS IS BASED ON A SYSTEM OF 1, 2, OR 3 WITH A SCORE OF 1 BEING EXCEPTIONAL MERIT WHICH WOULD WARRANT FUNDING. A SCORE OF 2 MEANS IT NEEDS IMPROVEMENT, SO THOSE TYPICALLY GO BACK TO THE APPLICANT FOR REVISIONS AND THEY GET ANOTHER LOOK AT BY THE GRANTS WORKING GROUP. OR A SCORE OF 3, WHICH MEANS THAT THEY ARE SUFFICIENTLY FLAWED THAT WE WOULDN'T WANT TO HAVE THEM BACK FOR SIX MORE MONTHS.

THE NEXT SLIDE, JUST TO DISTINGUISH, THERE ARE TWO ELEMENTS OF DIVERSITY THAT ARE PART OF THE

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APPLICATION. ONE IS CALLED ADDRESSING THE NEEDS OF UNDERSERVED COMMUNITIES, WHICH WRAPS UP INTO THAT FIFTH REVIEW QUESTION THAT I MENTIONED EARLIER. AND SO THIS SECTION IS THE ONE THAT DESCRIBES THE APPLICANT'S PLAN FOR OUTREACH AND ENROLLMENT OF A DIVERSE PATIENT COHORT. IT ACCOUNTS FOR RACE, ETHNICITY, AND GENDER DIVERSITY AS PART OF THAT COHORT. AND THAT SECTION IS EVALUATED BY THE WORKING GROUP AS A WHOLE, AND IT'S INCORPORATED INTO THAT SCIENTIFIC MERIT SCORE OF A 1, 2, OR A 3.

IN ADDITION TO THAT, WE ALSO HAVE A SECTION CALLED DIVERSITY, EQUITY, AND INCLUSION. THAT SECTION DESCRIBES HOW THE APPLICANT TEAM MIGHT INCORPORATE DIVERSE PERSPECTIVES AND EXPERIENCES IN OTHER WAYS, INCLUDING THE COMPOSITION OF THE TEAM. AND THAT SECTION IS EVALUATED AND SCORED BY THE PATIENT ADVOCATE AND NURSE MEMBERS OF THE BOARD THAT ARE APPOINTED TO THE GWG. AND THAT IS SHOWN AS A DEI SCORE BETWEEN ZERO AND TEN, WITH TEN BEING THE BEST POSSIBLE SCORE. I WILL HIGHLIGHT THAT WHEN WE GET TO THAT ON THIS APPLICATION.

SO THIS PARTICULAR APPLICATION IS CLIN1-12880. THIS IS A PROPOSAL FOR A CELL THERAPY FOR ARTICULAR CARTILAGE REPAIR, AND IT UTILIZES A PLURIPOTENT STEM CELL-DERIVED CHONDROCYTE CELL TYPE

THAT'S ON A SCAFFOLD. AND THE INDICATION IS FOR FOCAL ARTICULAR CARTILAGE LESIONS OF THE KNEE. AND THEIR GOAL FOR THIS PROJECT IS TO SUBMIT AN IND TO THE FDA. THE AMOUNT THAT IS REQUESTED IS JUST UNDER 6 MILLION FOR THIS PROJECT. NEXT SLIDE PLEASE.

SO A LITTLE BACKGROUND ON THIS PARTICULAR INDICATION, ARTICULAR CARTILAGE INJURY IS SOMETHING THAT CAN OVER TIME PROGRESS TO OSTEOARTHRITIS IN THE MAJORITY OF PATIENTS IF THEY ARE NOT TREATED IN SOME WAY. THE DEVELOPMENT OF OSTEOARTHRITIS CAN, IN TURN, LEAD TO A TOTAL JOINT REPLACEMENT SURGERY FOR SOME OF THE PATIENTS.

SO THE VALUE PROPOSITION FOR THIS THERAPY, THE CURRENT STANDARD OF CARE FOR ARTICULAR CARTILAGE INJURY IS PRIMARILY PALLIATIVE AND FOCUSED ON REDUCING INFLAMMATION AND PAIN RANGING FROM OVER-THE-COUNTER STUFF TO SOME SURGICAL INTERVENTION WHEN WARRANTED. THE PROPOSED THERAPY HAS THE POTENTIAL TO HALT DEGENERATIVE JOINT DISEASE RESULTING FROM INJURY AND TO PREVENT PROGRESSION TO ULTIMATELY OSTEOARTHRITIS. AND SO THIS IS A STEM CELL PROJECT BECAUSE THE THERAPEUTIC CANDIDATE IS MANUFACTURED FROM HUMAN EMBRYONIC STEM CELLS THAT ARE THEN DIFFERENTIATED INTO THE CHONDROCYTE CELL THAT IS INTRODUCED INTO THE LOCAL AREA OF INJURY.

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NEXT SLIDE PLEASE.

SO IN TERMS OF OTHER PROJECTS THAT CIRM IS FUNDING THAT MIGHT BE SIMILAR IN OUR PORTFOLIO, WE HAVE NOTHING CURRENTLY THAT'S ACTIVE THAT WOULD BE ADDRESSING ARTICULAR CARTILAGE REPAIR OR OSTEOARTHRITIS SPECIFICALLY. WE ARE SUPPORTING OTHER PROJECTS IN OTHER BONE OR CARTILAGE-RELATED AREAS SUCH AS OSTEONECROSIS OF THE HIP AND THEN A RARE GENETIC DISORDER TERMED INFANTILE MALIGNANT OSTEOPETROSIS. NEXT SLIDE PLEASE.

SO THE APPLICANT HAS RECEIVED CIRM FUNDING IN THE PAST. WE'VE SUPPORTED THE WORK THAT STARTED WITH THE BASIC BIOLOGY PROJECT, DEVELOPED A STRATEGY FOR ARTICULAR CARTILAGE RESTORATION USING HUMAN PLURIPOTENT STEM CELLS, AND THEN THAT WAS FOLLOWED BY A TRANSLATIONAL AWARD WHICH HELPED THEM DEVELOP THE NECESSARY STUDIES TO CONDUCT A PRE-IND MEETING WITH THE FDA. AND THAT AWARD CONCLUDED ABOUT A COUPLE OF YEARS AGO, AND NOW THEY ARE AT THE STAGE WHERE THEY ARE DOING THEIR IND-ENABLING WORK TO GET TO THE ULTIMATE IND FILING. SO NEXT SLIDE PLEASE.

AND SO THE RECOMMENDATION FROM THE GRANTS WORKING GROUP ON THIS APPLICATION IS A SCORE OF 1 WITH 13 MEMBERS GIVING IT A SCORE OF 1. THERE WAS ONE MEMBER THAT GAVE IT A SCORE OF 2. NO MEMBERS

GIVING IT A SCORE OF 3. THE DEI SCORE BY THE PATIENT ADVOCATE AND NURSE MEMBERS WAS A MEDIAN OF 8. AND THE CIRM TEAM RECOMMENDATION IS TO FUND THIS APPLICATION IN CONCURRENCE WITH THE GRANTS WORKING GROUP RECOMMENDATION FOR AN AWARD AMOUNT OF 5.999 MILLION. AND THAT'S IT FOR MY PRESENTATION. HAPPY TO ADDRESS ANY QUESTIONS.

CHAIRMAN THOMAS: THANK YOU, GIL. YES, YSABEL. YSABEL, BEFORE YOU GO, LET'S GET A MOTION ON THE TABLE FIRST. IS THERE A MOTION TO APPROVE?

DR. DEAS: SO MOVED.

CHAIRMAN THOMAS: THANK YOU, DEBORAH. SECOND?

MS. BONNEVILLE: HOLD PLEASE. DEBORAH, YOU CANNOT MAKE A MOTION FOR THIS. IT IS THE VOTING MEMBERS OF THE APPLICATION REVIEW SUBCOMMITTEE THAT SHOULD MAKE THE MOTION.

MR. JUELSGAARD: I'LL MAKE THE MOTION.

DR. DULIEGE: SECOND.

CHAIRMAN THOMAS: STEVE AND ANNE-MARIE. YSABEL, YOU FIRST. THANK YOU, MARIA.

MS. DURON: OKAY. THANK YOU, MR. CHAIR. I WAS A BIT PERTURBED AT THE BOTTOM IN READING THE DEI RECOMMENDATIONS. ONE OF THE LINES SAID THEY HAVE A VERY WEAK DEI PLAN, AND SOMEONE SAID THEY

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HAVE A VERY STRONG DEI PLAN. SO I AM CONCERNED ABOUT WHAT REQUIREMENTS, REQUISITES, OR EVEN TEMPLATE THAT WE HAVE PUT OUT THAT FIRST OUR PATIENT ADVOCATES AND THE OTHER REVIEWERS CAN READ SO THAT THEY UNDERSTAND WHAT STRONG VERSUS WEAK LOOKS LIKE BECAUSE OTHERWISE IT'S IN THE EYES OF THE BEHOLDER.

AND SO I AM CONCERNED. HAVE WE GOT A TEMPLATE THERE, GIL, IN THE APPLICATION THAT ACTUALLY SHOWS WHAT IS NEEDED TO SHOW US IF THEY ACTUALLY KNOW WHAT THE HECK DIVERSITY AND INCLUSION LOOKS LIKE, WHAT KIND OF PLANNING MECHANISMS THEY HAVE WITH COMMUNITY GROUPS, HOW THEY ENGAGE THEM AND UTILIZE THEM AND WORK WITH THEM? I'M JUST -- AND I SHOULD HAVE ASKED A LOT SOONER, MARIA, IF I COULD SEE THE PAPERWORK AROUND THE APPLICATION BECAUSE I WANT TO KNOW HOW A RESEARCHER READS THE DEI PLAN AND TWO DIFFERENT REVIEWERS HAVE THESE TOTAL DIFFERENT VISIONS OF WEAK AND STRONG.

AND I THINK THAT WE AS A BOARD NEED TO REALLY BE CONSISTENT. AND I REMEMBER THAT THE EVALUATION PLAN WE GOT FROM SEATTLE TALKED ABOUT INCONSISTENCIES. AND I THINK THAT THIS IS ONE OF THEM. AND IF WE ARE REALLY GOING TO MOVE TOWARDS TRUE DIVERSITY AND INCLUSION, I THINK WE NEED A REALLY CONSISTENT TEMPLATE BY WHICH EVERYBODY CAN

MEASURE WHAT A GOOD PLAN VERSUS A WEAK PLAN LOOKS LIKE. AND SO MAYBE I'M OFF BASE HERE, BUT MAYBE SOMEONE HAS AN ANSWER FOR ME.

DR. SAMBRANO: SO I THINK THAT'S A VERY GOOD POINT. AND SO THERE'S ALWAYS GOING TO BE SORT OF A SUBJECTIVE VIEW ON THIS BY SOME REVIEWERS, BUT I THINK YOUR POINT OF HAVING AN EXAMPLE AND SPECIFIC CRITERIA THAT WE CAN POINT TO THAT SAYS THIS IS WHAT A STRONG PLAN VERSUS A WEAK PLAN OR EVEN WHERE WE WOULD WANT TO DRAW THE LINE WOULD BE IS IMPORTANT TO HAVE. AND SO IT IS SOMETHING THAT WE ARE WORKING ON AS WE ARE DEVELOPING THE DEI STRUCTURE.

SO PART OF OUR PLAN IS TO HAVE ADDITIONAL MEETINGS WITH OUR PATIENT ADVOCATE AND NURSE MEMBERS BECAUSE, AS THE DRIVERS OF THE SCORING, WE WANT TO MAKE SURE WE ARE ALL ON THE SAME PAGE. AND THEN SUBSEQUENTLY TO PUT THAT INFORMATION AS CLEARLY AS WE CAN IN THE APPLICATION INSTRUCTIONS AND ALSO MAKE SURE THAT THE GUIDANCE THAT WE PROVIDE, BECAUSE APPLICANTS WILL COME TO OUR SCIENCE OFFICERS, FOR EXAMPLE, TO ASK FOR WHAT DO I PUT HERE, WHAT'S A GOOD PLAN OR NOT, WE WANT TO BE ABLE TO GIVE THEM GOOD GUIDANCE.

SO THAT IS STILL SOMETHING THAT WE ARE DEVELOPING. AND SO AT THE MOMENT IT'S VERY ROUGH,

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TO SAY THE LEAST. AND SO, YES, IT IS SOMETHING THAT WE DEFINITELY NEED TO DEVELOP FURTHER.

MS. DURON: COULD I JUST ASK IF I COULD SEE THOSE AS WELL AND WEIGH IN?

DR. SAMBRANO: OF COURSE. ABSOLUTELY.

CHAIRMAN THOMAS: THANK YOU, YSABEL.

MS. BONNEVILLE: DAVE MARTIN.

DR. MARTIN: JUST GETTING INTO THE WEEDS. IS THIS AN ALLOTYPIC OR AUTOLOGOUS --

DR. SAMBRANO: IT'S AN ALLOGENEIC THERAPY FROM A HUMAN EMBRYONIC STEM CELL LINE.

DR. MARTIN: THANK YOU.

CHAIRMAN THOMAS: ANNE-MARIE.

DR. DULIEGE: A VERY BRIEF QUESTION. CAN YOU JUST TELL US AT A HIGH LEVEL WHAT THE $6 MILLION COVERED? IS IT TWO TOXICOLOGY STUDIES AND CMC WORK?

DR. SAMBRANO: SO THIS IS MOSTLY MANUFACTURING WORK. SO PART OF IT IS TO MANUFACTURE THE PLURIPOTENT STEM CELL-DERIVED PRODUCT ALONG WITH THE SCAFFOLD THAT IT GOES WITH SO THAT THEY CAN PERFORM SOME TOXICITY, BIODISTRIBUTION, TUMORIGENICITY STUDIES. AND THEN THEY'RE GOING TO MANUFACTURE TWO FULL GMP COMPLIANT LOTS THAT THEY CAN THEN USE FOR THE SUBSEQUENT CLINICAL TRIAL. SO MOST OF IT IS GOING TO BE MANUFACTURING RELATED.

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DR. DULIEGE: SO THAT MEANS THAT THEY HAVE DONE EVERYTHING ELSE AND THAT WILL ALLOW THEM TO GO TO AN IND AND HAVE A PRE-IND MEETING?

DR. SAMBRANO: THAT'S THE EXPECTATION.

DR. DULIEGE: VERY GOOD.

CHAIRMAN THOMAS: FRED.

DR. FISHER: I WANTED TO CHIME IN IN SUPPORT OF YSABEL'S COMMENTS. IT GOES TO SOME OF THE ISSUES I WAS RAISING EARLIER IN THE CONTEXT OF THE STRATEGIC PLAN. AND AS I'M ON MY LEARNING CURVE AS A NEW WORKING GROUP MEMBER RESPONSIBLE FOR THE DEI SCORE, I'M HOPEFUL THAT BY DECEMBER, WHEN THE BOARD IS GOING TO BE PRESENTED THE OPPORTUNITY TO APPROVE THE STRATEGIC PLAN FOR DEI IN THE MISSION STATEMENT, THAT WE ALSO HAVE REALLY CLEAR GUIDELINES FOR WHAT A STRONG DEI PLAN LOOKS LIKE BECAUSE OTHERWISE WE WON'T BE ABLE TO KNOW WHETHER OR NOT WE'RE FULFILLING THE MISSION PRIORITY.

AND IT RAISES FOR ME, NOT IN CONNECTION TO THIS PARTICULAR REQUEST, BUT IT DOES RAISE FOR ME THE QUESTION OF THIS IDEA OF WEIGHTING OF DEI SCORE, THAT HYPOTHETICALLY, IF A PROJECT RECEIVED A TERRIFIC SCIENTIFIC MERIT, BUT EVERYONE AGREED THAT THE DEI PLAN WAS TERRIBLE, I DON'T KNOW IF THAT'S EVER HAPPENED BEFORE, AND I'M WONDERING WHAT WOULD

HAPPEN IN THAT INSTANCE. AND MAYBE THIS IS THE WRONG PLACE TO ASK AND ANSWER THE QUESTION, WHICH I'M TOTALLY PREPARED TO ACCEPT. I'LL JUST PUT IT OUT THERE AS SOMETHING TO UNDERSTAND AT SOME POINT DOWN THE ROAD.

DR. SAMBRANO: IF I MAY SAY, I THINK THAT'S AN IMPORTANT QUESTION AND ONE THAT WE ARE DEFINITELY THINKING ABOUT OF HOW TO GO ABOUT THAT AND PART OF THE CONVERSATION THAT WE NEED TO HAVE TO COME TO TERMS WITH WHAT GUIDANCE WE PROVIDE AND KIND OF WHERE WE DRAW THOSE LINES.

DR. DEAS: AND I RECALL US HAVING THAT DISCUSSION AT THE SCIENCE COMMITTEE WHEN WE BEGAN TO DISCUSS THE DEI, ONE OF THE CRITERIA. AND AT THAT TIME WE DISCUSSED THAT IF THEY HAD A GREAT SCIENCE PLAN AND A TERRIBLE DEI, THEN THAT WOULD BE SOMETHING THAT WOULD FALL IN THAT CATEGORY WHERE YOU SEND IT BACK AND GIVE THEM A CHANCE TO REVISE THEIR PLAN.

CHAIRMAN THOMAS: MARIA MILLAN, DO YOU HAVE A THOUGHT ON THIS?

DR. MILLAN: I'D LIKE TO DEFER FIRST TO AL ROWLETT WHO HAS BEEN VERY ACTIVE WITH US TRYING TO ADDRESS THESE VERY CHALLENGES. AND THEN I CAN COMMENT AFTER THAT IF THAT'S OKAY WITH YOU, MR.

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CHAIRMAN.

CHAIRMAN THOMAS: CERTAINLY. AL.

MR. ROWLETT: SO I PUT MY HAND UP, J.T. I'M GOING TO GO BACK TO YSABEL'S COMMENT FIRST. I RAISED THIS ON A COUPLE OF OCCASIONS WITH GIL, AND SPECIFICALLY I'LL GIVE YOU AN EXAMPLE. IT IS INCLUDING REPRESENTATION AS PART OF A TEAM AND NOT HAVING THE OPERATIONAL COMPONENTS OF A PLAN CLEARLY SPELLED OUT OR REFERENCING WHAT THE UNIVERSITY DID AND HOW THAT'S APPLICABLE TO THE APPLICATION. AND THOSE ARE QUESTIONS THAT I'VE ASKED ON A COUPLE OF OCCASIONS WITH GIL, AND IT IS MY BELIEF THAT THE TEAM IS GOING TO GIVE US ANOTHER OPPORTUNITY TO COME TOGETHER TO DISCUSS THE VERY TEMPLATE THAT WE HELPED PUT TOGETHER, WE'VE HAD SOME FEEDBACK ABOUT.

SO, YSABEL, ABSOLUTELY WOULDN'T BEGIN TO DO THIS KIND OF WORK WITHOUT SOME TEMPLATE OR GUIDANCE. AND THAT SPEAKS ALSO TO FRED'S POINT. ALSO MAKING SURE THAT APPLICANTS UNDERSTAND THE VERY NATURE OF THE TEMPLATE AND WHAT WE ARE LOOKING FOR. BECAUSE YOU ASK THE RIGHT QUESTIONS, AND IF YOU STILL DON'T GET THE INFORMATION, THAT SPEAKS TO THE QUALITY OF THE APPLICATION. AND THEN WITH A GOOD DEAL OF PASSION ASSOCIATED WITH THE QUESTION, JUST SAYING TO GIL HOW I AM AT TIMES UNCOMFORTABLE WITH

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MY ASSESSMENT OF WHAT A DEI APPLICATION SHOULD INCLUDE AND WHAT SOME OF THE OTHER REVIEWERS HAVE SAID ABOUT THE DEI PORTION OF THE APPLICATIONS AND HAVE HAD THAT CONVERSATION WITH GIL. I DON'T KNOW, GIL, IF YOU WANTED TO SAY MORE ABOUT THAT. I THINK THOSE CONVERSATIONS HAVE BEEN HELPFUL, AND I'M LOOKING FORWARD TO, AS WE REFINE THIS WORK IN PROGRESS, COMING UP WITH A SOLUTION THAT WILL WORK FOR ALL MEMBERS OF THE BOARD. AND CERTAINLY AS A PATIENT ADVOCATE I TAKE ON THIS RESPONSIBILITY VERY SERIOUSLY.

CHAIRMAN THOMAS: GIL.

DR. SAMBRANO: I DON'T REALLY HAVE MORE TO ADD. I AGREE. WE NEED TO CONTINUE TO TALK ABOUT IT SO THAT WE CAN DEVELOP THE BEST GUIDANCE THAT WE CAN.

CHAIRMAN THOMAS: THANK YOU. MARIA.

DR. MILLAN: WELL, COUPLE OF THINGS. SO THERE IS THIS RUBRIC THAT'S OUT THERE, THE STARTING POINT, THAT IS A WAY FORWARD AT LEAST IN TERMS OF SOMETHING YOU CAN KIND OF LOOK AT AS A STARTING POINT ONLY.

ONE OF THE THINGS THAT I THINK, THINKING THROUGH THIS, IS JUST LIKE IN THE REVIEW OF THE SCIENCE, THERE'S NOT GOING TO BE UNIFORMITY IN HOW

IT'S INTERPRETED. SIMILARLY, THE STRENGTH OF THE DEI PLAN, THERE IS GOING TO BE VARIABILITY. IT DOESN'T MEAN THAT THE SYSTEM IS FLAWED. IT JUST MEANS THAT THERE ARE DIFFERENT PERSPECTIVES, AND IT'S A JUDGMENT CALL BASED ON WHO'S SCORING IT. EVEN WITH A RUBRIC, THEY MAY VIEW ASPECTS OR ELEMENTS THAT ARE IN THE RUBRIC MORE IMPORTANT FROM THEIR STANDPOINT. WE NEED DIVERSITY IN OUR BOARD MEMBERS AND DIVERSITY IN OUR REVIEWERS AS WELL, RIGHT. SO I DON'T THINK THERE'S ANYTHING FUNDAMENTALLY WRONG WITH HAVING DISPARATE SCORES.

I THINK WHERE IT'S MORE IMPORTANT IS THAT WE HAVE THE OPPORTUNITY FOR DISCUSSION BECAUSE THIS IS A PROGRAMMATIC DISCUSSION AND A WAY TO BRING THE CONVERSATION SO THAT WHEN THERE ARE THESE DISPARITIES AND SCORES, THAT THERE IS AN OPPORTUNITY TO DETERMINE WHY THAT DISPARITY AND PULL OUT OF THERE PROBABLY THE MOST IMPORTANT THING. I THINK ACTUALLY THOSE ARE THE MOST -- I THINK THAT MIGHT BE EVEN MORE VALUABLE THAN ANYTHING ELSE TO DETERMINE WHAT THAT IS. SO THAT'S POINT ONE.

POINT 2 IS I THINK THAT, FIRST OF ALL, I'M PROUD TO BE PART OF AN ORGANIZATION THAT IS TRYING TO LEAD THE CHANGE WE WANT TO SEE. HOWEVER, IN THE COURSE OF DOING THAT, WE KNOW IT'S NOT A PERFECT

SCIENCE. AND THE ONLY WAY THAT WE KNOW WE'RE GOING TO MAKE PROGRESS IS TO DETERMINE HOW WE ARE DOING AGAINST INTENDED OUTCOMES. SO ANOTHER THING THAT I THINK WE NEED TO DRIVE AT IS WHAT DOES SUCCESS LOOK LIKE IN TERMS OF A DEI PLAN? WHAT DOES THE BOARD THINK SUCCESS LOOKS LIKE WHEN WE ARE DRIVING THESE REQUIREMENTS FOR OUR GRANTEES IN TERMS OF TEAM DIVERSITY AS WELL AS INCORPORATING DEI INTO THEIR SCIENTIFIC PLAN ITSELF?

I THINK THOSE ARE TWO THINGS THAT WE STILL HAVE TO DO, AND I THINK IT'S AN IMPORTANT THING WE NEED TO DO. AND IT'S NOT JUST THAT WE'RE THINKING ABOUT IT. I THINK WE NEED TO ACTUALLY DO SOMETHING ABOUT IT. SO WE NEED -- I THINK AT SOME POINT WE NEED TO START PUTTING SOME STAKES IN THE GROUND THAT ARE APPROPRIATE, THAT ARE WITHIN THE LEGAL BOUNDARIES WE CAN POINT TO IN TERMS OF OUTCOME MEASURES. AND THAT'S WHAT WE NEED TO DO. HOW DO WE KNOW WE'RE SUCCEEDING UNLESS WE LOOK AT THINGS THAT WE CAN MEASURE? THAT'S, I THINK, THE SECOND PIECE OF IT.

CHAIRMAN THOMAS: THANK YOU, MARIA. ANY OTHER COMMENTS OR QUESTIONS?

MS. BONNEVILLE: ART HAS HIS HAND RAISED.

MR. TORRES: YES. THIS IS NOT A NEW ISSUE

TO ME GIVEN MY CONSTANT BICKERING WITH WARD CONNERLY OVER THE YEARS ON PROP 209. WE FAILED WITH PROPOSITION 16 ON THE BALLOT IN NOVEMBER TO CHALLENGE 209. SO WE ARE BACK TO WHERE WE ARE BASICALLY SKIPPING ALONG A VERY FINE LINE. AND WE ARE DOING THAT AT THE UNIVERSITY OF CALIFORNIA AND ITS REGENTS TO DEAL WITH ADMISSION POLICIES, AGAIN, WALKING A TIGHT ROPE ON THE ISSUE OF PROP 209 AND NOT VIOLATING THAT AND STILL TRYING TO MAINTAIN A SENSE OF INTEGRITY FOR OUR DIVERSE COMMUNITY IN CALIFORNIA.

WHAT BRINGS IT MORE TO THE FOREFRONT NOW IS A CASE DECIDED OCTOBER 18TH BY A FEDERAL COURT JUDGE IN NORTH CAROLINA. IT WAS THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL THAT WAS SUED BY A GROUP OF ASIAN AND WHITE STUDENTS CLAIMING THAT RACE SHOULD NOT BE THE BASIS FOR ADMISSION INTO THE UNIVERSITY. THAT GROUP LOST THAT CASE. SO NOW THE ASSOCIATION IS GOING TO APPEAL A HARVARD SIMILAR CASE AND THIS SOUTH CAROLINA CASE TO THE SUPREME COURT. GIVEN THE MAKEUP OF THE COURT, IT PROBABLY WILL AFFIRM THE STUDENTS' APPEAL AND NOT CONTINUE TO SUPPORT THE UNIVERSITY OF NORTH CAROLINA OR HARVARD UNIVERSITY.

SO WHEN WE DEAL WITH DIVERSITY ISSUES,

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JUST LIKE WE'RE DEALING HERE, THE RUBRIC THAT GIL AND STAFF -- THANK YOU AGAIN FOR ALL THE TIME YOU SPENT IN GAINING THE INPUT OF ALL OF US -- IT'S VERY DIFFICULT TO WALK THIS TIGHT ROPE. WE WANT TO CREATE MORE DIVERSE OPPORTUNITIES, YET WE'RE HANDCUFFED BY FOLLOWING THE LAW AS CONSTITUTIONALLY AS WE CAN, NO. 1, AND NO. 2, THE POLITICS OF ALL OF THIS. SO MY OWN REVIEW OF THIS PARTICULAR CASE WAS DEALING WITH THE FACT THAT THE -- CAN I SAY WHO THE APPLICANT WAS?

MS. BONNEVILLE: NO, NOT YET.

MR. TORRES: THEN MY COMMENTS ARE IRRELEVANT AS TO WHY I VOTED THE WAY I DID. THANK YOU.

CHAIRMAN THOMAS: DAVID.

MS. BONNEVILLE: DEBORAH WAS NEXT, J.T.

CHAIRMAN THOMAS: OH, I'M SORRY. DEBORAH.

DR. DEAS: THANK YOU. WELL, I REALLY THINK THAT WE HAVE A GREAT OPPORTUNITY HERE TO LEAD; AND TO LEAD AS AN INSTITUTION THAT ASKS US TO BE GOOD STEWARDS OF THEIR VOTES. AND WHEN WE DISCUSSED THIS AT THE SCIENCE COMMITTEE, WE SPECIFICALLY TALKED ABOUT WHAT HAPPENS IF AN APPLICATION HAS A TERRIBLE DEI SCORE. AND AS I RECALL, WE DIDN'T DECIDE THAT WE WOULD REJECT THAT APPLICATION;

HOWEVER, WE WOULD NOT FUND IT RIGHT THEN, BUT WE WOULD SEND IT BACK, LETTING THE APPLICANT KNOW WHAT NEEDED TO BE ADDRESSED, AND THEY COULD SEND THE APPLICATION BACK.

WITH SOME DEI ISSUES, WE CANNOT BE IMMOBILIZED BY FEAR OF LAWS AND WHAT MIGHT HAPPEN. WE HAVE TO DO WHAT WE FEEL IS RIGHT BY THE CITIZENS OF THE STATE OF CALIFORNIA. AND IF WE'RE GOING TO ADVANCE OR MOVE THE NEEDLE, WE MUST BE INTENTIONAL. WE HAVE TO HAVE THAT INTENTIONALITY AND REALLY FOCUS ON IT.

SO WHAT I WOULD SUGGEST, I DON'T KNOW WHETHER THIS APPLICATION WAS A TERRIBLE ONE AS IT RELATES TO THE DEI. I RECALL SEEING A SCORE, I THINK, IT WAS 8 FOR THE OVERALL, BUT THERE WERE DISPARITIES. I DON'T KNOW IF MAYBE TWO PEOPLE SAID IT WAS TERRIBLE. BUT PERHAPS WE COULD LOOK AT A SITUATION WHEN WE HAVE DISPARITIES IN THE VOTE ON THE DEI AND PUSH THAT UP TO ANOTHER SUBCOMMITTEE TO REVIEW THAT AND MAKE RECOMMENDATIONS BACK AS TO WHETHER THIS APPLICATION WARRANTS RETURN WITH FURTHER REVISION OR WORK ON THE DEI PORTION OF THE APPLICATION.

MS. BONNEVILLE: DAVID, YOU WERE NEXT.

CHAIRMAN THOMAS: I WOULD THINK, JUST IN

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RESPONSE TO DEBORAH, I THINK THESE ARE EXCELLENT SUGGESTIONS. I THINK THAT IS SOMETHING THAT NEEDS SORT OF FURTHER THOUGHT AND DISCUSSION TO BRING BACK DOWN THE ROAD HERE TO ADDRESS THESE ISSUES WHICH ARE VERY IMPORTANT. SO THANK YOU. DAVID.

DR. HIGGINS: IN THAT CONTEXT, IF YOU DON'T WANT ME TO SPEAK, THAT'S FINE. WE CAN MOVE ON.

CHAIRMAN THOMAS: NO. NO. PLEASE, GO AHEAD.

DR. HIGGINS: IT'S JUST TO MAKE A COUPLE OF POINTS. ONE IS THAT THERE WERE NO CLEAR AND WELL-THOUGHT OUT AND WELL-WRITTEN INSTRUCTIONS IN THE RFA FOR DEI. IT'S NOT COMPLETELY ABSENT, BUT WE ARE ASKING THE APPLICANTS TO DO SOMETHING THEY'VE NEVER DONE BEFORE OR IN SOME CASES NEVER EVEN SEEN BEFORE. I'VE NOW READ A DOZEN GRANT PROPOSALS THAT INCLUDE DEI SCORES, BUT I HAVEN'T READ HUNDREDS OF DOZENS, WHICH MOST GWG MEMBERS HAVE.

SO THE PURPOSE OF ME MAKING THOSE TWO POINTS IS LET'S BACK OFF A LITTLE BIT. I THINK THIS IS WHAT YOU JUST HEARD FROM THE PREVIOUS SPEAKER. BACK OFF A LITTLE BIT ON THE BAR, WHERE WE ARE SETTING THE BAR. WE'RE GOING TO DO THAT. I THINK WE'RE GOING TO GET THERE, BUT WE HAVEN'T GOTTEN

THERE FOR A NUMBER OF TECHNICAL REASONS, NOT BECAUSE WE DON'T BELIEVE IN THE PHILOSOPHICAL ISSUE AT HAND HERE.

I THINK WHERE WE'RE GOING TO WIN, THIS WAS SAID AS WELL, I THINK YSABEL SAID THIS, TRAINING. THE OPPORTUNITY TO HAVE CIRM-DRIVEN TRAINING FOR THESE GRANT REVIEWERS SO THAT WE CAN WALK ON ART'S EDGE, IF YOU WILL. HE WOULD APPRECIATE THAT, I'M SURE.

AND THE BIGGEST POINT I WANT TO MAKE, AND THIS IS OBVIOUS, BUT THIS IS NOT SCIENCE. IN A SENSE THE SCIENCE REVIEW OF AN APPLICATION IS SCIENCE. THE DEI ASPECT IS NOT. IT REMINDS ME -- I'M SORRY I CAN'T GET THIS OUT OF MY HEAD. IT REMINDS ME OF SOMEBODY WHO DEFINED PORNOGRAPHY, NOT KNOWING WHAT IT REALLY IS, BUT KNEW IT WHEN HE SAW IT. THAT APPLIES TO YOU SORT OF KNOW SOMEBODY IS KIND OF B.S.'ING ON THEIR DEI COMMITMENT, BUT IT'S NOT QUANTITATIVE. IT'S QUALITATIVE. AND THAT'S VERY DIFFERENT THAN THE SCIENCE PART.

SO I THINK WE ARE PUSHING THIS THE RIGHT WAY. WE'VE GOT TWO DIFFERENT EXPERTISE ON THE COMMITTEE. WE'VE GOT PEOPLE WHO UNDERSTAND PATIENTS, AND WE'VE GOT PEOPLE WHO UNDERSTAND THE SCIENCE MUCH BETTER. I THINK WE SHOULD FOLLOW THE

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LEAD THAT HAS ALREADY BEEN SET OUT THERE BY GIL. AND I THINK I WILL STOP THERE EXCEPT TO SAY THAT I THINK WE ARE GOOD ENOUGH NOW TO BE INCORPORATING DEI SCORES. WE'RE NOT AS GOOD AS WE CAN BE TO SATISFY EVERYONE. IT'S BEEN VERY DIFFICULT FOR ME. THAT'S ENOUGH SAID.

CHAIRMAN THOMAS: THANK YOU, DAVID. YSABEL.

MS. DURON: THANK YOU, MR. CHAIR. GOING BACK TO DAVID'S POINT ABOUT THE LESS THAN CLEAR RFA, THAT'S WHERE I PROPOSED WE STARTED LIKE TWO YEARS AGO BECAUSE I THINK THAT IF WE LAY OUT VERY CLEARLY WHAT IS EXPECTED OF THEM FROM THE GIT-GO, INCLUDING PERHAPS AN ADDITIONAL TEMPLATE FOR WHAT A GOOD DEI PLAN IS EXPECTED, I THINK THAT WE CAN GET TO A POINT WHERE WE ARE EDUCATING THE SCIENTISTS WHO DON'T NECESSARILY DO THIS OUT OF INTENTION TO NOT INCLUDE, BUT WHO HAVE NEVER BEEN HELD ACCOUNTABLE FOR NOT INCLUDING OR FOR NOT TRYING EVEN AT THAT.

SO I THINK WE NEED TO BUILD IN SOME ACCOUNTABILITY MEASURES OR MILESTONES ALONG THE WAY AS WELL BECAUSE I AM ALL ABOUT SCIENCE. AND EVEN THIS PROJECT, I SAID, OH, THIS WOULD HELP THE LATINO COMMUNITY A LOT. I'M NOT AGAINST GREAT SCIENCE. BUT TO ME DEI IS NOT EVEN ABOUT POLITICS. DEI IS

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ABOUT GOOD MEDICINE. ULTIMATELY WHEN WE GET THERE, EVERYBODY GAINS. THIS WILL IMPACT ALL OF US AT SOME POINT IN TIME DOWN THE ROAD. I'M NOT JUST TALKING ABOUT STEM CELL. I'M TALKING ABOUT RESEARCH IN GENERAL.

I'VE SEEN MANY RESEARCH PAPERS OUT THERE THAT WERE WRITTEN TEN YEARS AGO AND 15 YEARS AGO ABOUT ENGAGEMENT OF COMMUNITIES OF COLOR. AND NOBODY LISTENED. SO HERE WE ARE AGAIN. YOU'RE RIGHT, ART. SO THOSE WHO DON'T KNOW HISTORY ARE DOOMED TO REPEAT IT. I'M JUST HOPING THAT THIS TIME WITH INTENTION AND ALL OF THESE GREAT MINDS AT THE TABLE WE'RE GOING TO GET IT RIGHT, AS RIGHT AS WE CAN GET IT, WITHIN ITS LIMITATIONS.

SO I APPRECIATE, DEBORAH. I THINK YOUR IDEAS ARE EXCELLENT AS WELL. I DO HOPE WE DO CREATE A TEMPLATE, WE DO GO BACK AND LOOK AT THE RFA'S OR RPA'S OR WHATEVER THEY'RE CALLED THESE DAYS AND THAT WE START RIGHT THERE. AND I'M VERY WILLING TO ENGAGE WITH THOSE ON WHAT THAT LOOKS LIKE.

I SIT ON THE INSTITUTIONAL REVIEW BOARD FOR THE ALL OF US PROGRAM. I WAS THERE FROM THE GIT-GO. AND THE FIRST THING I DEMANDED WAS THAT THEY HAVE BASICALLY A DIVERSION AND INCLUSION PLAN. AS A RESULT, WE'VE SEEN MUCH MORE UPTAKE IN GENETIC

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INCLUSION OF COMMUNITIES OF COLOR: 17 PERCENT LATINO, 20 SOME PERCENT AFRICAN AMERICAN. SO THERE IS AN OPPORTUNITY BOTTOM LINE TO MAKE RESEARCHERS LISTEN AND TO CHANGE THE DYNAMIC SO THAT WE'RE GOING TO GET CLOSER TO WHERE WE WANT. AND THAT'S GOOD MEDICINE FOR EVERYBODY AND GOOD SCIENCE FOR EVERYBODY. THANK YOU.

CHAIRMAN THOMAS: THANK YOU, YSABEL. AL.

MR. ROWLETT: WANTED TO MAKE ONE PROCESS COMMENT. AND, FIRST, REGARDING THE RUBRIC THAT IS CURRENTLY IN PLACE, IT IS A WORK IN PROGRESS. AND CERTAINLY I CONTINUE TO MAKE RECOMMENDATIONS TO GIL AND TO DR. MILLAN REGARDING ITS UTILITY. BUT THE PROCESS COMMENT IS REGARDING MY EXPERIENCE OF BEING A REVIEWER, PATIENT ADVOCATE, PRIOR TO DEI AND NOW POST DEI. AND I WILL TELL YOU, WITHOUT QUESTION, I BELIEVE THAT I HAVE FAR MORE INFLUENCE ON THE OUTCOME AND CERTAINLY OF ONE APPLICATION OF NOTE WHERE MY DEI SCORE WAS LOW AND IT DID INFLUENCE THE OUTCOME AND THAT WASN'T FUNDED. SO, AGAIN, I WANT FOLKS TO APPRECIATE THAT, FROM THE PERSPECTIVE OF ONE, DEI IS MATTERING, AND IT IS MATTERING MORE. IT IS NOT, AS YSABEL SO ELOQUENTLY STATED, IT IS NOT MATTERING TO THE DEGREE THAT IT WILL ULTIMATELY. AND WHEN WE ARRIVE AT A FINAL PRODUCT, I AM VERY

COMMITTED TO MAKE SURE THAT IT IS THE BEST REPRESENTATION FOR ALL THE INDIVIDUALS THAT RESIDE IN OUR GREAT STATE AND AROUND THE WORLD. SO...

DR. MILLAN: MR. CHAIRMAN, MAY I MAKE A COMMENT?

CHAIRMAN THOMAS: YES.

DR. MILLAN: SO I WANTED TO PROPOSE THAT THE CIRM TEAM WORK WITH OUR BOARD MEMBERS IN CREATING A PROCESS BECAUSE I THINK THE PROCESS IS GOING TO BE AN IMPORTANT PART OF THIS. DR. DEAS, DEAN DEAS, HAD BROUGHT UP A VERY IMPORTANT PART OF THE PROCESS, WHICH IS FEEDBACK TO OUR APPLICANTS FROM THE BOARD WHO ARE LOOKING AT THIS PROGRAMMATICALLY. THAT'S NO. 1.

AND NO. 2, I REALLY WANT TO EMPHASIZE THAT WHAT WE'RE TRYING TO DO HERE IS GOING TO TRANSFORM SCIENTIFIC CULTURE. IT WILL HAVE IMPACT IN SOCIETY, BUT IT'S NOT GOING TO BE SOMETHING THAT THERE'S A RIGHT ANSWER TO IN TERMS OF AN APPROACH. SO IT WILL HAVE TO BE A DYNAMIC AND INTERACTIVE PROCESS. SO WHATEVER PROCESS WE COME UP WITH FOR OUR GRANTMAKING REVIEW AND BOARD EVALUATION OF PROGRAMS NEEDS TO TAKE THAT INTO ACCOUNT, AND WE NEED TO ACKNOWLEDGE THAT IT WILL BE AN ITERATIVE AND A LEARNING PROCESS, AND WE WILL NOT NECESSARILY HAVE DEFINED PARAMETERS

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THAT WE CAN RELY ON FROM THE START JUST BECAUSE OF THE NATURE OF THE SCIENCE THAT WE ARE FUNDING.

IF YOU THINK ABOUT CLINICAL TRIALS AND THE TYPE OF TRIALS THAT WE FUND, THEY WILL IMPACT DIFFERENT COMMUNITIES DIFFERENTLY IN TERMS OF DISEASE INCIDENCE OR RELEVANCE, NO. 1. NO. 2, THERE'S SOME PRACTICAL ASPECTS OF HOW CLINICAL TRIALS ARE DESIGNED --

(INTERRUPTION IN PROCEEDINGS.)

MS. MILLAN: MARIA HIT THE MUTE BUTTON.

I KIND OF LOST MY THOUGHT, BUT THERE ARE SOME ASPECTS OF CLINICAL TRIAL AND PRINCIPLES AND REGULATORY REQUIREMENTS AND OTHER THINGS THAT GO INTO DEVELOPING A PROGRAM THAT WILL PRECLUDE IN SOME PHASES OF SCIENTIFIC DEVELOPMENT THE MOST IDEAL REPRESENTATION, FOR INSTANCE, AT THAT POINT. THAT DOESN'T MEAN THAT IT SHOULD NOT BE CONSIDERED IN TERMS OF HOW IT'S CONSIDERED AS A WHOLE. IT JUST MEANS THAT WE DO NOT WANT TO SET STANDARDS THAT CAN'T BE MET, RIGHT, OR STANDARDS THAT ALL OF A SUDDEN IMPACT THE WHOLE MACHINERY IN TERMS OF DELIVERING ON THE MISSION TO ADVANCE THE SCIENCE AND DELIVER THIS TO THE PATIENTS AT LARGE, INCLUDING ALL THE COMMUNITIES.

SO I KNOW THE BOARD KNOWS THIS, BUT I WANT

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YOU TO KNOW THAT WE ARE VERY, VERY MUCH INVESTED IN FIGURING OUT A WAY TO WORK WITH THE BOARD AND TO BRING PROPOSALS TO YOU SO THAT WE CAN BALANCE ALL THESE ELEMENTS AS WE PROPOSE SOME PROCESS FORMATS. BUT I WANT TO ALSO REQUEST TO THE BOARD THAT YOU DO INCORPORATE INTO YOUR EVALUATION OF THESE PROGRAMS A SPECIFIC PROGRAMMATIC DISCUSSION OF DEI WHEN YOU LOOK AT THESE APPLICATIONS BECAUSE THERE'S A SCIENTIFIC RECOMMENDATION AND THERE'S A DEI RECOMMENDATION. AND I AGREE WITH BOARD MEMBER ROWLETT, THAT IT IS IMPACTFUL, BUT I THINK IT WILL HAVE MORE IMPACT IF THE BOARD HAS A CHANCE TO LOOK AT IT PROGRAMMATICALLY AT THE SAME TIME THEY'RE EVALUATING FUNDING BASED ON SCIENTIFIC SCORE. THAT'S ALL I WANTED TO BRING UP AT THIS TIME.

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

MS. BONNEVILLE: DAN BERNAL.

MR. BERNAL: AYE.

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.

DR. HARVEY: YES.

MS. BONNEVILLE: YSABEL DURON.
MS. DURON: YES.
MS. BONNEVILLE: MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: YES.
MS. BONNEVILLE: FRED FISHER.
DR. FISHER: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: JOE PANETTA. AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: JONATHAN THOMAS.

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CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: THE MOTION CARRIES.

CHAIRMAN THOMAS: THANK YOU, MARIA. THAT CONCLUDES THE MEETING OF THE APPLICATION REVIEW SUBCOMMITTEE.

ON TO ACTION ITEM NO. 10, CONSIDERATION OF REQUEST TO WAIVE 180-DAY WAITING PERIOD TO HIRE RETIRED ANNUITANTS TO PERFORM DUTIES. KEVIN MARKS WILL BE PRESENTING.

MR. MARKS: THANK YOU, MR. CHAIRMAN. AND I'LL TRY TO MAKE THIS BRIEF. THE MEMORANDUM REQUESTING THE WAIVER OF THE 180-WAITING PERIOD FOR THE RETIREE ANNUITANT WAS UPLOADED AND AVAILABLE FOR PUBLIC VIEW.

IN SUMMARY, AS THE BOARD IS WELL AWARE, RETIRED ANNUITANTS ARE FOLKS THAT HAVE RETIRED FROM THE STATE AGENCY, BUT THEY ARE SUBSEQUENTLY APPOINTED FOR A MISSION-CRITICAL ACTIVITY TO THE AGENCY. THESE APPOINTMENTS ARE USUALLY TEMPORARY IN NATURE AND USED TO FILL A CRITICAL NEED. TYPICALLY RETIRED ANNUITANTS COULD NOT BE APPOINTED TO THESE POSITIONS IF THEY'RE WITHIN 180 DAYS OF THEIR RETIREE DATE WITH THE EXCEPTION COMING FROM THIS

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PARTICULAR SITUATION, IF THE BOARD APPROVES THE APPOINTMENT OF A RETIREE ANNUITANT.

SPECIFICALLY HERE INGRID CARAS IS CURRENTLY A DIRECTOR IN THE THERAPEUTICS DEVELOPMENT ORGANIZATION OF CIRM. SHE IS DUE TO RETIRE AT THE END OF OCTOBER. BECAUSE WE HAVE AN IMMEDIATE NEED TO CONTINUE HER ACTIVITIES FOR THE PERIOD OF TIME AND ALSO WHILE WE LOOK TO HIRE NEW SENIOR SCIENCE OFFICERS WHO WILL BE REPLACING AND TAKING OVER HER DUTIES, WE ARE REQUESTING THAT THE BOARD APPROVE A WAIVER OF THE 180-DAY PERIOD FOR DR. CARAS TO BEGIN A RETIRED ANNUITANT PERIOD BEGINNING ON NOVEMBER 1ST. THIS HIRE WILL BE TEMPORARY IN NATURE AND WILL LAST ONLY UNTIL JUNE OF NEXT YEAR.

AND SO AS BASICALLY SUMMARIZED IN THE MEMO, WE REQUEST THIS TO ENSURE THAT WE HAVE CONTINUITY OF SERVICE IN THE ORGANIZATION AS WE LOOK TO FILL HER ROLE MOVING FORWARD.

CHAIRMAN THOMAS: THANK YOU, KEVIN. DO WE HEAR A MOTION TO APPROVE?

DR. MARTIN: SO MOVED.

MR. TORRES: SECOND.

CHAIRMAN THOMAS: MOVED BY DAVE. I DIDN'T CATCH THE SECOND THERE. ART. THANK YOU, ART.

COMMENTS OR QUESTIONS FROM MEMBERS OF THE

BOARD? ANY PUBLIC COMMENT? HEARING NONE, MARIA, WILL YOU PLEASE CALL THE ROLL.

MS. BONNEVILLE: DAN BERNAL. GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN. ALLISON BRASHEAR.

DR. BRASHEAR: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY. DEBORAH DEAS.

DR. CLARK HARVEY: YES.

DR. DEAS: YES.

MS. BONNEVILLE: WAS THAT LE ONDRA? THANK YOU.

ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: YSABEL DURON.

MS. DURON: YES.

MS. BONNEVILLE: MARK FISCHER-COLBRIE.

DR. FISCHER-COLBRIE: YES.

MS. BONNEVILLE: LEON FINE.

DR. FINE: YES.

MS. BONNEVILLE: FRED FISHER.

DR. FISHER: YES.

MS. BONNEVILLE: ELENA FLOWERS.

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DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. BONNEVILLE: DAVID HIGGINS.
DR. HIGGINS: YES.
MS. BONNEVILLE: STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.
MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.

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MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KEITH YAMAMOTO.
DR. YAMAMOTO: YES.
MS. BONNEVILLE: THANK YOU. THE MOTION CARRIES.
CHAIRMAN THOMAS: THANK YOU. ITEM NO. 11, CONSIDERATION OF REVISIONS TO EMPLOYEE POSITIONS AND DISCLOSURE OBLIGATIONS IN CIRM CONFLICT OF INTEREST CODE SECTION 10000. BEN WILL BE PRESENTING.
MR. HUANG: HELLO, BOARD MEMBERS. I'M PRESENTING THE PROPOSED REVISIONS TO SECTION 10000 OF THE CIRM REGULATIONS COVERING CONFLICT OF INTEREST FOR CIRM STAFF AND ICOC BOARD MEMBERS.
THESE UPDATES ARE REQUIRED BY THE CALIFORNIA FAIR POLITICAL PRACTICES COMMISSION AND WILL BE SUBMITTED TO THE FPPC FOR POTENTIAL COMMENTS AND APPROVAL. AS YOU CAN SEE HERE ON THE FIRST PAGE, ARE THERE NO CHANGES IN THE MAIN TEXT OF THIS

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SECTION.

NEXT PAGE. ALL OF THE EDITS ARE IN THIS APPENDIX A, WHICH CONTAINS THE EMPLOYEE TITLES AND THEIR ASSOCIATED DISCLOSURE CATEGORIES. THE DISCLOSURE CATEGORY IMPACTS THE ANNUAL FORM 700S STATEMENT OF ECONOMIC INTEREST SUBMISSIONS THAT ALL BOARD MEMBERS AND CIRM EMPLOYEES SUBMIT.

DOUG, CAN YOU ADVANCE TWO PAGES? THERE HAS BEEN AN EXERCISE AT CIRM TO SIMPLIFY THE EMPLOYEE TITLES. THIS IS REFLECTED IN THIS APPENDIX A WITH THE DELETION OF THE PRIOR TITLES, THE TWO PRIOR PAGES OF REDLINE DELETION, AND THE INSERTION OF NEW TITLES UNDER REORGANIZED DEPARTMENTS.

THE ASSIGNMENT OF DISCLOSURE CATEGORIES IS CONSISTENT WITH PRIOR CIRM VERSIONS. FOR EXAMPLE, THE GOVERNING BOARD AND SENIOR LEADERSHIP WILL HAVE THE BROADER REPORTING REQUIREMENTS OF DISCLOSURE CATEGORY 1. SCIENCE OFFICERS AND GRANT OFFICERS ARE TYPICALLY IN DISCLOSURE CATEGORY 2, AND STAFF AND, FOR EXAMPLE, HR AND I.T., ARE TYPICALLY ASSIGNED TO CATEGORIES 3 AND 4, WHICH HAVE LOWER DISCLOSURE REQUIREMENTS.

DOUG, CAN YOU ADVANCE TO THE APPENDIX B. HERE ARE THE DISCLOSURE CATEGORIES IN APPENDIX B. NO CHANGES WERE MADE. THIS IS, IN FACT, UP TO THE

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REQUIREMENTS FOR EACH OF THE EMPLOYEES. THAT'S IT.

CHAIRMAN THOMAS: OKAY. DO WE HAVE A MOTION TO APPROVE?

MR. TORRES: MOVE IT.

CHAIRMAN THOMAS: SECOND?

MS. DURON: YES.

CHAIRMAN THOMAS: YES. QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD?

MR. JUELSGAARD: I HAVE A QUESTION, YES.

CHAIRMAN THOMAS: MR. JUELSGAARD.

MR. JUELSGAARD: SO A FEW HOURS BACK OR IT SEEMS WE REVIEWED THE INTERNAL GOVERNANCE DOCUMENT, AND THERE WAS AN ORG CHART ON THE VERY LAST PAGE. ON THAT ORG CHART THERE WAS A BOX FOR MEDICAL AFFAIRS. THAT'S A DISCUSSION WE HAD IN THE PREVIOUS MEETING. I REALIZE IT HASN'T BEEN STAFFED YET, BUT WHAT'S THE THOUGHT BEHIND ADDING THE MEDICAL AFFAIRS DEPARTMENT TO THIS PARTICULAR DOCUMENT?

MR. HUANG: WELL, THESE PROPOSED REVISIONS ARE REQUIRED EVERY TWO YEARS. SO WHEN MEDICAL AFFAIRS IS IMPLEMENTED, WE WILL REVISE THE DOCUMENTS FOR THE NEXT SUBMISSION TO THE FPPC. AND IF MEDICAL AFFAIRS COMES INTO PLACE BEFORE THAT REVISION, WE WILL USE THE PREEXISTING CATEGORIES TO IDENTIFY THE APPROPRIATE DISCLOSURE CATEGORIES FOR THOSE

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EMPLOYEES.

MR. JUELSGAARD: WAS THERE A PREEXISTING DISCLOSURE CATEGORY FOR MEDICAL AFFAIRS?

MR. HUANG: WELL, THE PREEXISTING TITLES. FOR EXAMPLE, SENIOR LEADERSHIP THAT ARE ON THE LEADERSHIP TEAM WILL HAVE A DISCLOSURE CATEGORY OF 1. AND IF THERE ARE SCIENCE OFFICERS UNDER MEDICAL AFFAIRS, THEY WILL TYPICALLY HAVE A DISCLOSURE CATEGORY OF A 2 UNLESS AT THAT TIME WE FEEL LIKE THE MEDICAL AFFAIRS IS ENHANCED MORE SO THAN THE CURRENT SCIENCE OFFICERS. AND THEN WE WOULD BUMP THEIR DISCLOSURE CATEGORIES UP. I JUST THINK WE HAVEN'T REALLY CONTEMPLATED THAT AT THIS TIME.

DR. JUELSGAARD: GOT IT.

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

MS. BONNEVILLE: DAN BERNAL. GEORGE BLUMENTHAL. LINDA BOXER.

DR. BOXER: YES.

MS. BONNEVILLE: MICHAEL BOTCHAN.

DR. BOTCHAN: AYE.

MS. BONNEVILLE: ALLISON BRASHEAR.

DR. BRASHEAR: YES.

MS. BONNEVILLE: LE ONDRA CLARK HARVEY.
DR. LE ONDRA CLARK HARVEY: YES.
MS. BONNEVILLE: DEBORAH DEAS.
DR. DEAS: YES.
MS. BONNEVILLE: ANNE-MARIE DULIEGE.
DR. DULIEGE: YES.
MS. BONNEVILLE: YSABEL DURON. SHE'S FROZEN. IF SHE COMES BACK.
MARK FISCHER-COLBRIE.
DR. FISCHER-COLBRIE: YES.
MS. BONNEVILLE: FRED FISHER.
DR. FISHER: YES.
MS. BONNEVILLE: LEON FINE.
DR. FINE: YES.
MS. BONNEVILLE: ELENA FLOWERS.
DR. FLOWERS: YES.
MS. BONNEVILLE: JUDY GASSON.
DR. GASSON: YES.
MS. BONNEVILLE: LARRY GOLDSTEIN.
DR. GOLDSTEIN: YES.
MS. DURON: MARIA.
MS. BONNEVILLE: DAVID HIGGINS. STEPHEN JUELSGAARD.
MR. JUELSGAARD: YES.
MS. BONNEVILLE: RICH LAJARA.

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MR. LAJARA: YES.
MS. BONNEVILLE: PAT LEVITT.
DR. LEVITT: YES.
MS. BONNEVILLE: LINDA MALKAS.
DR. MALKAS: YES.
MS. BONNEVILLE: DAVE MARTIN.
DR. MARTIN: YES.
MS. BONNEVILLE: CHRISTINE MIASKOWSKI.
DR. MIASKOWSKI: YES.
MS. BONNEVILLE: LAUREN MILLER-ROGEN.
MS. MILLER-ROGEN: YES.
MS. BONNEVILLE: ADRIANA PADILLA.
DR. PADILLA: YES.
MS. BONNEVILLE: AL ROWLETT.
MR. ROWLETT: YES.
MS. BONNEVILLE: MICHAEL STAMOS.
DR. STAMOS: YES.
MS. BONNEVILLE: JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
MS. BONNEVILLE: ART TORRES.
MR. TORRES: AYE.
MS. BONNEVILLE: KRISTINA VUORI.
DR. VUORI: YES.
MS. BONNEVILLE: KEITH YAMAMOTO.
I'M GOING TO GO BACK TO YSABEL. DID SHE

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JOIN?

MS. DURON: I'M BACK. I GUESS I HAD DROP-OUT PROBLEMS. YES.

MS. BONNEVILLE: THANK YOU. DAVID HIGGINS.

DR. YAMAMOTO: KEITH IS A YES AS WELL.

MS. BONNEVILLE: THANK YOU, KEITH.

AND IS DAVID HIGGINS BACK? I DO NOT SEE HIM. THANK YOU. THE MOTION CARRIES.

CHAIRMAN THOMAS: THANK YOU, MARIA. THANK YOU, BEN, FOR ALL YOUR HARD WORK ON THAT MATTER.

THAT CONCLUDES THE ACTION ITEMS. WE NOW MOVE TO A PRESENTATION ON THIS YEAR'S PERFORMANCE AUDIT, WHICH COLLEEN ROZILLIS WILL BE GIVING ON BEHALF OF THE MOSS-ADAMS FIRM. COLLEEN.

MS. ROZILLIS: THANKS VERY MUCH. HELLO, EVERYONE. THANK YOU FOR HAVING ME. FOR THOSE OF YOU WHO I HAVEN'T MET, I'M COLLEEN ROZILLIS. I'M A DIRECTOR WITH MOSS-ADAMS. I AM HAPPY TO SHARE OUR TRIENNIAL PERFORMANCE AUDIT RESULTS WITH ALL OF YOU.

I HAVE A SHORT PRESENTATION AND THEN I'LL OPEN IT UP FOR QUESTIONS. IN A PERFORMANCE AUDIT, THERE ARE TWO MAIN ELEMENTS. WE COVER COMPLIANCE WITH THE MEASURE UNDER WHICH CIRM IS FUNDED AS WELL AS WE LOOK AT PERFORMANCE. SO WE LOOK AT, AS A

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PUBLIC AGENCY, OUR EFFICIENCY AND EFFECTIVENESS OF OUR OPERATIONS AND WHETHER WE ARE ACHIEVING THE ECONOMY IN WHICH WE EXPEND PUBLIC FUNDS.

THIS PERFORMANCE AUDIT WAS CONDUCTED UNDER GENERALLY ACCEPTED GOVERNMENT AUDIT STANDARDS. OUR PERFORMANCE AUDIT METHODOLOGY HAD FOUR MAIN PHASES. WE CONDUCTED LOTS OF INTERVIEWS AS WE ALWAYS DO WITH STAFF, WITH BOARD MEMBERS, WITH LEADERSHIP ACROSS CIRM. WE REVIEWED LOTS OF DOCUMENTS. WE CONDUCTED PROCESS WALK-THROUGHS AND TESTING, AND WE DID QUITE A BIT OF ANALYSIS AS WELL AS REPORTING. PART OF OUR WORK THAT'S VERY IMPORTANT IS DOING PRELIMINARY FINDINGS AND DRAFT REVIEW AND RECOMMENDATION REVIEW.

AS WE HAVE DONE PERFORMANCE AUDITS OF THE AGENCY A NUMBER OF TIMES, YOU WILL NOTE THAT WE REPORT AT THE END OF OUR REPORT THE STATUS OF PRIOR RECOMMENDATIONS. IT'S VERY IMPORTANT TO US THAT OUR RECOMMENDATIONS DON'T SIT ON A SHELF. SO WE WORK CLOSELY WITH STAFF TO MAKE SURE THAT OUR RECOMMENDATIONS ARE IMPLEMENTABLE AND ACHIEVABLE. AND WE DID THAT THROUGH THIS PROCESS AS WELL.

AS A REMINDER TO ALL OF YOU, CIRM'S PERFORMANCE AUDITS ARE CONDUCTED EVERY THREE YEARS, AND THIS AUDIT YEAR WAS FISCAL YEAR 19/20. SO WE WERE LOOKING VERY FAR BACK AT A VERY UNIQUE YEAR FOR

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CIRM. THIS WAS A WIND-DOWN YEAR. IT WAS THE YEAR OF RENEWAL OF THE MEASURE. SO IT WAS A VERY UNIQUELY CHALLENGING YEAR FOR THE AGENCY.

I WANTED TO NOTE OVERALL JUST A REAL THEME OF, WITHIN THOSE CHALLENGES, THAT THE STAFF WAS VERY DEDICATED AND REALLY FLEXIBLE, CONTINUING TO DELIVER ON THE MISSION EVEN WITHIN THE CHALLENGES OF THAT YEAR. WE HAD ELEVEN FINDINGS IN OUR PERFORMANCE AUDIT THIS YEAR. THREE OF THEM WERE FOCUSED ON COMPLIANCE, EIGHT ON EFFICIENCY AND EFFECTIVENESS. WITHIN THOSE FINDINGS I WOULD SAY THERE ARE TWO MAIN THEMES. ONE IS REALLY JUST CONTINUING TO FOCUS ON DOCUMENTATION, MAKING SURE THAT OUR CONTROLS ARE STRONG AND THAT OUR POLICIES ARE STRONG WITHIN THE CONTEXT OF UNDERSTANDING THAT WE HAD REDUCED STAFF, THAT THERE WAS A LOT OF PRESSURE AND UNCERTAINTY WITH THE WIND-DOWN AND COVID AFFECTING THE AGENCY. AND THE SECOND IS TO CONTINUE TO FOCUS ON STRENGTHENING GOVERNANCE AND OPERATIONS TO SUPPORT THE AGENCY, PARTICULARLY LOOKING TO THE FUTURE AS WE CONTINUE TO GROW AND WANTING TO CREATE STABLE OPERATIONS, WHICH I KNOW THAT YOU ALL TALKED ABOUT QUITE A BIT THIS MORNING.

SO WHILE OUR JOB IS TO IDENTIFY OPPORTUNITIES FOR IMPROVEMENT, WE ALSO WANT TO NOTE

THAT THERE ARE MANY POSITIVE THINGS IN PLACE AT CIRM, ESPECIALLY DURING A VERY CHALLENGING YEAR. WE HAVE QUITE A FEW IN THIS REPORT. I WANTED TO HIGHLIGHT JUST A COUPLE. ONE WAS THAT, WHILE THERE WAS A TREMENDOUS AMOUNT GOING ON, THERE WAS STILL A REALLY HIGH FOCUS ON GOAL SETTING AND MONITORING THAT PROGRESS, REALLY A FOCUS ON DATA. CIRM REALLY HAD AMBITIOUS GOALS, AND THERE CONTINUES TO BE THAT HIGH LEVEL OF FOCUS ON THOSE GOALS AND REPORTING ON THOSE ON A REGULAR BASIS, AND THAT REALLY KEPT THE STAFF MOTIVATED.

YOU ALSO HEARD THIS MORNING ABOUT THE STRATEGIC PLAN WHICH DID START DURING THIS YEAR. SO WHILE THERE WAS A REALLY HIGH LEVEL OF FOCUS ON WIND-DOWN PLANNING, MAKING SURE THAT WE KEPT WITHIN THE BOUNDS OF ECONOMY AND EFFECTIVENESS OF THE ORIGINAL PROPOSITION, THAT PLANNING DID START IN LOOKING TOWARD THE FUTURE. THAT WAS A TREMENDOUS LIFT TO BEING LOOKING AT DURING THAT TIME OF UNCERTAINTY AND TRANSITION. WE DON'T ALWAYS SEE AGENCIES ABLE TO PULL THAT OFF. AND SO WE REALLY COMMEND STAFF AND LEADERSHIP FOR BEING ABLE TO DO THAT.

FINALLY, I JUST WANTED TO NOTE THAT THERE WAS A REALLY TREMENDOUS EFFORT AMONG STAFF, THE

ABILITY TO CONTINUE TO COMPLETE A REALLY HIGH LEVEL OF WORK DESPITE THE NATURAL ATTRITION THAT COMES WITH THE WIND-DOWN OF THE AGENCY. AND SO THERE WAS A LOT OF WORK THAT WENT INTO REASSIGNING WORK TO EXISTING STAFF TO MAKE SURE THAT WORK CONTINUED TO BE ACCOMPLISHED DURING THE YEAR EVEN WHILE WE WERE IMPACTED BY COVID GRANT ROUNDS AND CONTINUING TO TRY TO GET FUNDS OUT THE DOOR TO GRANTEES.

SO AS I MENTIONED BEFORE, WE HAD THREE COMPLIANCE FINDINGS. TWO WERE RELATED TO EXCEPTIONS FOUND IN THE TESTING. IN BOTH CASES WE RECOMMEND STRENGTHENING DOCUMENTATION PROCESSES AND CONTROLS. THAT'S BASICALLY WHAT BOTH OF THESE ARE ABOUT, JUST MAKING SURE THAT WE'VE GOT ALL OF OUR I'S DOTTED AND T'S CROSSED.

OUR TESTING FOUND NO EXCEPTIONS IN LOANS, CONTRACTS, OR INTELLECTUAL PROPERTY. HOWEVER, WE NOTED AN OPPORTUNITY FOR IMPROVEMENT WITH RESPECT TO INTELLECTUAL PROPERTY SPECIFICALLY WITH RESPECT TO TECHNOLOGY DISCLOSURES. IT'S CHALLENGING FOR CIRM TO MONITOR COMPLIANCE WITH TECHNOLOGY DISCLOSURES, AND THIS IS A PROCESS THAT RELIES ON GRANTEES TO BE PROACTIVE AND VOLUNTARILY COMPLY. AND SO IT CAN BE A LOT OF LEGWORK FOR CIRM. AN I.T. CONTROL COULD HELP STREAMLINE THIS PROCESS, ESPECIALLY AS THESE

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ARE EXPECTED TO INCREASE OVER TIME.

MOVING ON TO EFFICIENCY AND EFFECTIVENESS RECOMMENDATIONS, OUR FIRST CATEGORY IS ALL ABOUT YOU, WHICH IS VERY EXCITING, GOVERNANCE. CIRM HAS BENEFITED FOR MOST OF ITS LIFE FROM A VERY STABLE AND WELL FUNCTIONING BOARD. AND THESE RECOMMENDATIONS, THESE TWO ARE REALLY ABOUT TAKING PROACTIVE STEPS TO KEEP IT THAT WAY.

SO THE FIRST IS ABOUT ENSURING THAT WE CAPTURE THE INSTITUTIONAL KNOWLEDGE OF THE DEPARTING ICOC MEMBERS, MAKING SURE THAT WE CONDUCT THAT NECESSARY SUCCESSION PLANNING SO THAT WE CAN MAKE SURE THAT THOSE OF YOU WHO HAVE SPENT A LONG TIME SERVING ON THIS BOARD AND CAPTURING THAT INSTITUTIONAL KNOWLEDGE SO THAT WE CAN SUPPORT THE LEADERSHIP TRANSITION THAT IS CURRENTLY HAPPENING AND THAT WILL BE UPCOMING IN THE NEXT YEAR.

AND SECOND, TO PROACTIVELY ENGAGE THE BOARD. BY NATURE THIS IS A LARGE STATEWIDE BOARD, AND SO IT CAN BE CHALLENGING TO MAKE SURE THAT WE REALLY LEVERAGE ALL OF THE TREMENDOUS EXPERTISE AND TALENT IN THIS ORGANIZATION. AND SO WE HAVE SOME RECOMMENDATIONS TO CONTINUE TO LEVERAGE THE ENGAGEMENT THAT WE HEARD REALLY ACROSS THE BOARD FROM INTERVIEWS WAS QUITE HIGH RIGHT NOW, AND SO WE

WANT TO BE ABLE TO CONTINUE TO LEVERAGE THAT.

LIKE TECHNOLOGY DISCLOSURES, PUBLICATION DISCLOSURES RELY ON GRANTEES TO SELF-REPORT. THEY REQUIRE A HIGH LEVEL OF WORK FOR CIRM STAFF TO ENSURE COMPLIANCE. SO OUR RECOMMENDATIONS HERE CENTER ON MORE PROACTIVE AND EFFICIENT MONITORING PRACTICES. AND THIS, AGAIN, IS PARTICULARLY IMPORTANT AS CIRM MATURES, AND WE EXPECT THESE TO INCREASE.

WE ALSO HAVE A RECOMMENDATION HERE ABOUT THE GWG AND DIVERSITY. YOU ALREADY DISCUSSED THIS IN-DEPTH EARLIER TODAY. WE RECOMMEND THAT YOU CONTINUE THIS IMPORTANT WORK TO ENSURE THAT THERE ARE DIVERSE PERSPECTIVES ON THE GWG. AS PERFORMANCE AUDITORS, WE COME AT THIS FROM THE PERSPECTIVE OF THE PERCEPTION OF INDEPENDENCE AS A PUBLIC AGENCY AND APPLICATION REVIEW. THAT'S VERY IMPORTANT. AND SO WE JUST WANT TO COMMEND YOU FOR DIGGING INTO THIS WORK, AND WE HOPE THAT YOU CONTINUE TO IMPLEMENT IT AND ENCOURAGE YOU TO DO SO.

OUR FINAL AREA OF FINDINGS AND RECOMMENDATIONS ARE AROUND DATA AND SYSTEMS. I WANT TO NOTE THAT BECAUSE OUR AUDIT YEAR WAS A WIND-DOWN YEAR, CIRM WAS NOT MAKING INVESTMENTS IN THEIR SYSTEMS SIGNIFICANTLY BECAUSE IT WASN'T A GUARANTEE

THAT THE AGENCY WOULD BE RENEWED. AND SO IT DIDN'T MAKE SENSE TO INVEST A LOT OF MONEY INTO NEW SYSTEMS OR MAJOR SYSTEM IMPROVEMENTS. BUT WE EXPECT THAT THESE RECOMMENDATIONS WILL HELP STRENGTHEN OPERATIONS AND HELP SUPPORT IMPLEMENTATION OF THE NEW STRATEGIC PLAN.

SO THESE FOUR RECOMMENDATIONS ARE ABOUT IMPLEMENTING AND STANDARDIZING BEST PRACTICES. SO FIRST, WE HAVE UPDATING THE RECORDS RETENTION SCHEDULE, ASSOCIATED POLICIES AND PROCEDURES, AND MAKING SURE THAT WE ARE CONSISTENTLY TRAINING OUR STAFF AND MAKING SURE OUR RECORDS ARE IN GOOD ORDER. THIS IS PARTICULARLY IMPORTANT AS A STATE AGENCY. AS WE MATURE AS AN AGENCY, THAT WE HAVE EVERYTHING AND ALL OF OUR DOCUMENTATION AND DATA IN ORDER.

SECOND IS AROUND DOCUMENT MANAGEMENT. WE HAVE THROUGHOUT OUR PERFORMANCE AUDITS OF THE AGENCY, DOCUMENT MANAGEMENT HAS BEEN A CHALLENGE BETWEEN THE DIFFERENT FUNCTIONS AND PROGRAMS OF CIRM. AND SO WE KNOW THAT THERE ARE SOME DOCUMENT MANAGEMENT SYSTEM PLANS IN ORDER. AND SO WE'RE LOOKING FORWARD TO SEEING CIRM ADOPT CONSISTENT PRACTICES WITH DOCUMENT MANAGEMENT.

AND THEN OUR LAST TWO FINDINGS, AGAIN, AROUND REALLY ADOPTING THOSE BEST PRACTICES. SO

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CONTINUING TO IMPROVE THE GRANTS MANAGEMENT SYSTEM, ENSURING THAT COMPLETE DATA IS IN THE SYSTEM AND IS ACCESSIBLE TO THOSE WHO NEED IT, AND THAT IT'S CONSISTENT ACROSS ALL OF THE DATA.

AND THEN, FINALLY, AS CIRM MATURES AND GROWS, WE RECOMMEND THAT YOU CONSIDER IMPLEMENTING A CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM, AN INTEGRATED DATABASE TO BETTER COLLECT AND TRACK AND LEVERAGE THE DATA ACROSS PROGRAMS AND DISCIPLINES. THERE'S A LOT OF DATA. IT LIVES IN A LOT OF FOLKS' HEADS, AND YOU'VE GOT A LOT OF LONG-TERM STAFF. IT WOULD BE GREAT TO GET THAT INFORMATION SO THAT FOLKS CAN COLLABORATE AND LEVERAGE IT AND BE ABLE TO USE IT FOR LOTS OF DIFFERENT PURPOSES ACROSS PROGRAMS.

SO WITH THAT, I WILL OPEN IT UP FOR ANY QUESTIONS THAT YOU ALL MIGHT HAVE.

CHAIRMAN THOMAS: THANK YOU, COLLEEN. QUESTIONS OR COMMENTS FROM MEMBERS OF THE BOARD? LARRY.

DR. GOLDSTEIN: THE RECOMMENDATION ABOUT GRANT REVIEWERS IN YOUR WRITTEN DOCUMENT AND AS YOU STATED IT REFERS TO CALIFORNIA REVIEWERS AND THE NEED TO GET MORE DIVERSITY AMONG CALIFORNIA REVIEWERS. I JUST WANT TO POINT OUT THAT OUR REVIEWERS COME FROM OUTSIDE OF CALIFORNIA BY POLICY.

AND I'D LIKE TO SEE THAT RECOMMENDATION CHANGED TO REFLECT THAT.

CHAIRMAN THOMAS: OTHER COMMENTS FROM MEMBERS OF THE BOARD?

MS. ROZILLIS: SURE. WE CAN DEFINITELY MAKE THAT UPDATE.

CHAIRMAN THOMAS: OTHER COMMENTS FROM MEMBERS OF THE BOARD?

MR. TORRES: I JUST WANTED TO MAKE SURE THAT EVERYONE KNEW, AND JAMES HARRISON AND I WERE PART OF THOSE DISCUSSIONS WITH THE SENATE WHEN WE AGREED TO THIS PERFORMANCE AUDIT. SO THIS WAS NOT SOMETHING THAT WAS IMPOSED UPON US. IT WAS A RECOMMENDATION THAT WE MADE TO THE LEGISLATURE TO MAKE SURE THAT WE COMPLIED WITH IT EVERY THREE YEARS.

CHAIRMAN THOMAS: THANK YOU, ART. OTHER QUESTIONS OR COMMENTS? COLLEEN, DO YOU HAVE ANY SORT OF SUMMARY STATEMENT ON THE STATE OF THE UNION BASED ON YOUR ANALYSIS?

MS. ROZILLIS: WELL, LIKE I SAID AT THE BEGINNING, IT WAS A REALLY CHALLENGING YEAR. AND OUR WORK IS ALMOST EXCLUSIVELY IN THE PUBLIC SECTOR, AND WE SAW A LOT OF PUBLIC AGENCIES REALLY, REALLY STRUGGLE LAST YEAR. AND WHEN WE CAME IN, WE WEREN'T

REALLY SURE WHAT TO EXPECT. AND WHAT WE ACTUALLY FOUND WERE PEOPLE WHO CONTINUED TO BE VERY DEDICATED TO DELIVERING THE MISSION OF CIRM. WE ARE ALWAYS VERY IMPRESSED WITH THE EMPLOYEES HERE AND THAT CONTINUED TO BE THE CASE. AND SO I REALLY WANT TO COMMEND THE STAFF FOR CONTINUING TO DELIVER IN A DIFFICULT YEAR.

I THINK OUR NUMBER OF FINDINGS MAY HAVE DECREASED FROM THE PRIOR YEAR, WHICH IS A GOOD SIGN, OR WAS ABOUT THE SAME. SORRY. WE HAD TEN IN THE PRIOR YEAR, SO IT WAS ABOUT THE SAME. SO THAT'S PRETTY GOOD. THAT'S STABLE. AND I WOULD SAY THAT IN GENERAL YOU'RE EMBARKING ON A NEW STRATEGIC PLAN AND REALLY LOOKING TOWARD THE FUTURE. AND SO FROM OUR PERSPECTIVE OUR FOCUS IS REALLY ABOUT IMPLEMENTING BEST PRACTICES AND MAKING SURE THAT WE CAN SUPPORT OPERATIONAL STABILITY TO BE ABLE TO TRULY SUPPORT EFFECTIVE IMPLEMENTATION OF THAT STRATEGIC PLAN.

CHAIRMAN THOMAS: WELL, THANK YOU. AND AS I SAID IN MY COMMENTS AT THE BEGINNING, MANY THANKS TO MARIA B. AND ALL OF YOU WHO WORKED ON THE PERFORMANCE AUDIT AND HELPING TO GET ALL THE DATA COLLECTED AND NECESSARY TO COLLEEN AND HER TEAM TO BE ABLE TO PRODUCE THIS RESULT. SO THANK YOU,

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EVERYBODY, VERY MUCH.

THIS IS NOT SOMETHING THAT REQUIRES A VOTE. IF THERE ARE NO FURTHER QUESTIONS FOR COLLEEN, THAT WILL CONCLUDE THIS ITEM.

MS. BONNEVILLE: J.T., REALLY QUICKLY IF I MAY.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: I JUST WANTED TO THANK MOSS-ADAMS. THEY WERE A GREAT PARTNER AND WORKING WITH THEM HAS BEEN A PLEASURE. I WANT TO THANK EVERYONE WHO PARTICIPATED. MOSS-ADAMS REACHED OUT TO A LOT OF FOLKS AND INTERVIEWED THEM, BOTH ON THE BOARD AND INTERNALLY. SO THANK YOU. SHEILA, JENN, BEN, AND GIL WERE INSTRUMENTAL IN THIS. SO I REALLY APPRECIATE EVERYTHING THEY DID TO MAKE THIS SUCH A SUCCESSFUL AUDIT.

AND JUST IN CLOSING, WE WILL HAVE A PLAN FOR THE BOARD WE WILL BRING TO THEM IN JANUARY FOR HOW WE WILL SORT OF APPROACH THE FINDINGS AND WHAT OUR NEXT STEPS ARE.

CHAIRMAN THOMAS: THANK YOU, MARIA. OKAY. THAT CONCLUDES THIS ITEM. AND I THINK WE ARE DOWN NOW TO THE PUBLIC COMMENT ON ANY AND EVERY TOPIC. IS THERE ANY MEMBERS OF THE PUBLIC WHO WOULD LIKE TO COMMENT ON ANYTHING? HEARING NONE, STEVE OR AL, DO

YOU HAVE ANY CLOSING COMMENTS YOU'D LIKE TO MAKE?

MR. TORRES: RUDE. RUDE. RUDE.

MR. ROWLETT: J.T., YOU ARE SUPPOSED TO BE GRACIOUS. AND BECAUSE YOU ARE NOT, YOU WILL RUE THE DAY, LET ME TELL YOU.

MR. TORRES: HERE. HERE, AL.

CHAIRMAN THOMAS: I MERELY ASKED FOR COMMENTS. I THOUGHT I DID IT VERY GRACIOUSLY.

MR. ROWLETT: YOU HIT A NERVE, SIR.

MR. TORRES: ON TO ATLANTA, J.T.

MR. ROWLETT: THERE YOU GO.

MR. JUELSGAARD: J.T., THERE'S AN OLD SAYING IN BASEBALL, AND THAT IS THE UMPIRES ARE NOT SUPPOSED TO DECIDE THE GAME.

MR. TORRES: EXACTLY. EXACTLY.

CHAIRMAN THOMAS: I WILL CERTAINLY AGREE WITH THAT. IT WAS A TERRIBLE CALL, ALTHOUGH THE END WAS NEAR REGARDLESS FROM MY VIEW AT LEAST. IN ANY EVENT, ALL RIGHT. THANK YOU SO MUCH, EVERYBODY, MEMBERS OF THE CIRM TEAM, FOR STICKING WITH A LENGTHY AGENDA. WE ACCOMPLISHED A LOT HERE. ANOTHER EXCELLENT MEETING.

MARIA, WILL YOU PLEASE REPEAT, YOU GAVE THE DATE EARLIER, BUT THE NEXT BOARD MEETING IS?

MS. BONNEVILLE: WE HAVE AN APPLICATION

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REVIEW SUBCOMMITTEE ON NOVEMBER 23D. SO FOR THOSE ON THE APPLICATION REVIEW SUBCOMMITTEE, PLEASE NOTE THAT. THEN OUR FULL BOARD MEETING IS DECEMBER 14TH.

CHAIRMAN THOMAS: OKAY. WELL, THANK YOU VERY MUCH. AND EVERYBODY HAVE A SAFE AND HAPPY HALLOWEEN AND WE WILL SEE YOU IN NOVEMBER.

(THE MEETING WAS THEN CONCLUDED AT 2:22 P.M.)

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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 VIRTUAL ZOOM PROCEEDINGS BEFORE THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE AND THE APPLICATION REVIEW SUBCOMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON OCTOBER 19, 2021, 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
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