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: AS INDICATED ON THE AGENDA

DATE: MARCH 21, 2019

10 A.M.

REPORTER: BETH C. DRAIN, CSR

CA CSR. NO. 7152

FILE NO.: 2019-07

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PAGE NO. ITEM DESCRIPTION OPEN SESSION 1. CALL TO ORDER. 3 2. ROLL CALL. 3 3. CONSIDERATION OF APPLICATIONS SUBMITTED IN RESPONSE TO CLINICAL TRIAL STAGE PROJECTS, CLIN1, 2 OR 3. CLOSED SESSION NONE DISCUSSION OF CONFIDENTIAL INTELLECTUAL PROPERTY OR WORK PRODUCT, PREPUBLICATION DATA, FINANCIAL INFORMATION, CONFIDENTIAL SCIENTIFIC RESEARCH OR DATA, AND OTHER PROPRIETARY INFORMATION RELATING TO APPLICATIONS SUBMITTED IN RESPONSE TO AGENDA ITEMS "3" ABOVE. (HEALTH & SAFETY CODE 125290.30(F)(3)(B) AND (C)). CONSENT CALENDAR: 5 APPOINTMENT OF SCIENTIFIC MEMBERS TO THE GRANTS WORKING GROUP 6. PUBLIC COMMENT. NONE 20 7. ADJOURNMENT.

THURSDAY, MARCH 21, 2019

10 A.M.

CHAIRMAN THOMAS: GOOD MORNING, EVERYBODY.

LIKE TO CALL THE REGULAR MEETING OF THE MARCH ICOC

AND APPLICATION REVIEW SUBCOMMITTEE TO ORDER. VERY

NICE TO BE ON A BRIGHT, SUNNY DAY IN OAKLAND FOR A

CHANGE. SURE EVERYBODY AGREES WITH THAT THROUGHOUT

THE STATE WHEREVER YOU ARE. SO, MARIA, WILL YOU

PLEASE CALL THE ROLL.

MS. BONNEVILLE: GEORGE BLUMENTHAL.

DR. BLUMENTHAL: HERE.

MS. BONNEVILLE: LINDA BOXER.

DR. BOXER: PRESENT.

MS. BONNEVILLE: KEN BURTIS.

DR. BURTIS: HERE.

MS. BONNEVILLE: DEBORAH DEAS. ANNE-MARIE

DULIEGE.

MS. BONNEVILLE: JUDY GASSON.

DR. GASSON: HERE.

MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: HERE.

MS. BONNEVILLE: STEPHEN JUELSGAARD.

MR. JUELSGAARD: HERE.

MS. BONNEVILLE: SHERRY LANSING. LINDA

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MALKAS.

DR. MALKAS: HERE.

MS. BONNEVILLE: DAVE MARTIN.

DR. MARTIN: HERE.

MS. BONNEVILLE: LEON FINE.

DR. FINE: HERE.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: HERE.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: HERE.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: HERE.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: HERE.

MS. BONNEVILLE: ROBERT QUINT. AL

ROWLETT.

MS. BONNEVILLE: SUZANNE SANDMEYER. JEFF

SHEEHY.

MR. SHEEHY: HERE.

MS. BONNEVILLE: OSWALD STEWARD. JONATHAN

THOMAS.

CHAIRMAN THOMAS: HERE.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: HERE.

MS. BONNEVILLE: KRISTINA VUORI.

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DR. VUORI: HERE.

MS. BONNEVILLE: KEITH YAMAMOTO. DIANE

WINOKUR.

MS. WINOKUR: HERE.

MS. BONNEVILLE: DOUG ZIEDONIS.

DR. ZIEDONIS: HERE.

MS. BONNEVILLE: THANK YOU.

CHAIRMAN THOMAS: THANK YOU, MARIA.

QUICK --

MR. TORRES: WE HAVE A QUORUM?

MS. BONNEVILLE: YES, WE HAVE A QUORUM.

CHAIRMAN THOMAS: THANK YOU, EVERYBODY,

FOR BEING ON TODAY. THIS IS A BIT OF A SHORT AGENDA, BUT REALLY APPRECIATE THE ATTENDANCE.

QUICKLY, I WANT TO GET ONE CONSENT ITEM

OUT OF THE WAY, WHICH IS THE APPOINTMENT OF

SCIENTIFIC MEMBERS TO THE GRANTS WORKING GROUP. I

THINK YOU'VE SEEN IT IN YOUR MATERIALS. IF THERE'S

NO COMMENT ON THAT, WE WILL PROCEED TO A VOICE VOTE.

MR. TOCHER: YOU NEED A MOTION.

MR. TORRES: MOVE IT.

DR. GASSON: SECOND.

CHAIRMAN THOMAS: ANY COMMENTS ON THAT? I
WOULDN'T EXPECT MUCH. VOICE VOTE IN THE ROOM AFTER
PUBLIC COMMENTS. ALL THOSE IN THE ROOM IN FAVOR

PLEASE SAY AYE. OPPOSED? ABSTENTIONS? MARIA, WILL

YOU PLEASE CALL THE ROLL OF THOSE ON THE PHONE.

- MS. BONNEVILLE: GEORGE BLUMENTHAL.
- DR. BLUMENTHAL: YES.
- MS. BONNEVILLE: LINDA BOXER.
- DR. BOXER: YES.
- MS. BONNEVILLE: KEN BURTIS.
- DR. BURTIS: YES.
- MS. BONNEVILLE: DAVID HIGGINS.
- DR. HIGGINS: YES.
- MS. BONNEVILLE: STEVE JUELSGAARD.
- MR. JUELSGAARD: YES.
- MS. BONNEVILLE: LINDA MALKAS.
- DR. MALKAS: YES.
- MS. BONNEVILLE: DAVE MARTIN.
- DR. MARTIN: YES.
- MS. BONNEVILLE: LEON FINE.
- DR. FINE: YES.
- MS. BONNEVILLE: LAUREN MILLER.
- MS. MILLER: YES.
- MS. BONNEVILLE: ADRIANA PADILLA.
- DR. PADILLA: YES.
- MS. BONNEVILLE: JOE PANETTA.
- MR. PANETTA: YES.
- MS. BONNEVILLE: FRANCISCO PRIETO.

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DR. PRIETO: AYE.

MS. BONNEVILLE: KRISTINA VUORI.

DR. VUORI. YES.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: YES.

MS. BONNEVILLE: DOUG ZIEDONIS.

DR. ZIEDONIS: YES.

MS. BONNEVILLE: THANK YOU. THE MOTION CARRIES.

CHAIRMAN THOMAS: THE NEXT ITEM ON THE AGENDA IS CONSIDERATION OF APPLICATIONS SUBMITTED IN RESPONSE TO CLINICAL TRIAL STAGE PROJECTS CLIN1, 2 OR 3. I'LL TURN THE MEETING NOW OVER TO MR. SHEEHY.

MR. SHEEHY: DR. SAMBRANO, ARE YOU GOING TO TAKE US THROUGH THIS APPLICATION TODAY?

DR. SAMBRANO: YES. THANK YOU, MR. SHEEHY. THANK YOU, MEMBERS OF THE BOARD AND THE PUBLIC. I'M GOING TO TAKE YOU THROUGH A REVIEW OF THE PROGRAM AND THE APPLICATION THAT IS BEFORE YOU FOR CONSIDERATION TODAY.

SO THIS IS -- WE HAVE JUST ONE

APPLICATION, WHICH IS RESPONDING TO THE CLIN1, WHICH

IS THE LATE STAGE PRECLINICAL PROJECTS PROGRAM

ANNOUNCEMENT.

JUST A QUICK REMINDER OF THE SCORING

SYSTEM WE USE. THE SCORES THAT ARE GIVEN TO EACH OF THESE APPLICATIONS IS BASED ON A MAJORITY VOTE FROM THE SCIENTIFIC MEMBERS OF THE WORKING GROUP. A SCORE OF 1 MEANS THAT IT'S THOUGHT OF AS HAVING EXCEPTIONAL MERIT AND WARRANTS FUNDING. A SCORE OF 2 MEANS THAT IT NEEDS IMPROVEMENT AND DOESN'T WARRANT FUNDING YET, BUT CONCERNS CAN BE ADDRESSED IN ORDER TO IMPROVE IT. AND THEN A SCORE OF 3 MEANS THAT IT'S SUFFICIENTLY FLAWED THAT IT DOESN'T WARRANT FUNDING AT THIS TIME.

ALSO A QUICK OVERVIEW ON WHERE WE ARE IN TERMS OF BUDGET AND TARGETS FOR THIS YEAR. THERE WAS AN ANNUAL ALLOCATION FOR 2019 OF \$93 MILLION THAT WAS FOR OUR CLINICAL PROGRAM AND DID NOT INCLUDE THE SICKLE CELL DISEASE APPLICATIONS THAT ARE ALSO TARGETED. THAT WAS AN ADDITIONAL 30 MILLION. BUT FOCUSING IN ON THE 93 MILLION FOR CLINICAL PROGRAMS, WE HAVE APPROVED AWARDS NOW THAT UTILIZED 21.7 MILLION. IF THE CURRENT APPLICATION IS APPROVED, THAT WOULD LEAVE A BALANCE OF ABOUT 67 MILLION FOR THIS YEAR FOR THOSE PROGRAMS.

SIMILARLY, IN TERMS OF THE TARGET NUMBER
OF AWARDS, SO THIS IS EITHER INTERNAL TARGETS THAT
WE SET. OUR GOAL WAS BY THE END OF THE YEAR TO
ACHIEVE A CLINICAL TRIAL AND TWO LATE STAGE

PRECLINICAL TRIALS. WE HAVE AT THIS TIME ACHIEVED
TWO CLINICAL TRIALS THAT HAVE BEEN APPROVED AND ONE
LATE STAGE PRECLINICAL. IF WE APPROVE TODAY'S
APPLICATION, WE WILL HAVE MET AT LEAST THE TARGET
GOAL FOR CLIN1S FOR THIS YEAR.

SO FOCUSING IN ON THE APPLICATION FOR
CONSIDERATION, THIS IS CLIN1-11256. AND THIS IS A
THERAPY WHICH IS A LIPOSOMAL FORMULATION OF
RECOMBINANT HUMAN WNT-3A. IT IS FOR PATIENTS WHO
ARE SUFFERING FROM DEGENERATIVE SPONDYLOLISTHESIS,
AND THE GOAL IS TO COMPLETE IND-ENABLING STUDIES, A
TOXICOLOGY STUDY, AND A DOSE FINDING STUDY, AS WELL
AS DOING SOME GMP MANUFACTURING, AND FILING THEIR
IND.

THE FUNDS REQUESTED ARE 3.9 MILLION. THE APPLICANT IS PROVIDING COFUNDING OF CLOSE TO ONE MILLION.

SO SOME BACKGROUND ON THIS INDICATION. SO DEGENERATIVE SPONDYLOLISTHESIS IS CAUSED BY DEGENERATION OF THE SPINE TISSUE. AND WHAT HAPPENS IS THAT ONE OF THE VERTEBRAE BONES SLIPS BECAUSE OF THE DEGENERATION OF THE DISK. AND COMMON SYMPTOMS INCLUDE LOWER BACK PAIN, LEG PAIN, AND TENDS TO AFFECT OLDER PATIENTS, AS WELL AS AFFECTING WOMEN MORE THAN MEN.

SO THERE ARE ANNUALLY OVER 90,000 SPINAL FUSION SURGERIES THAT ARE PERFORMED IN ORDER TO ADDRESS THE ISSUE. AND AS WE GET OLDER, ONE OF THE THINGS THAT HAPPENS IS THAT IT BECOMES LESS EFFECTIVE. AND SO IN MANY CASES THE SPINAL FUSION IS NOT SUCCESSFUL. THERE ARE OTHER APPROACHES AS WELL. GRAFT SUBSTITUTES SUCH AS BMP-2. THAT ONE IS ASSOCIATED WITH SOME LOCAL AND SYSTEMIC RISKS, INCLUDING THE POSSIBILITY OF CANCER.

SO THIS WNT-3A THERAPY HAS THE POTENTIAL TO BE MUCH SAFER AND ALSO IMPROVE THE LIKELIHOOD THAT THE BONE FUSION WILL BE SUCCESSFUL.

WHY IS THIS A STEM CELL PROJECT? THE THERAPY, THE WNT-3A, TARGETS ENDOGENOUS OSTEOPROGENITOR CELLS OR THE STEM CELLS IN THE BONE THAT ALLOW THE BONE TO GROW AND TO FUSE.

SO LOOKING AT OTHER PROJECTS THAT ARE RELATED IN OUR PORTFOLIO, THERE'S ONE OTHER THAT IS SIMILAR. IT IS NOT FOR THE SAME INDICATION. WE HAVE A PHASE 1/2 TRIAL FOR OSTEONECROSIS. AND OSTEONECROSIS IS A DIFFICULT CONDITION DUE TO LACK OF BLOOD SUPPLY SO THE BONE DEGENERATES. AND IN THAT PARTICULAR CASE, THEY'RE USING A SMALL MOLECULE AGENT THAT WILL ACTIVATE OSTEOGENIC DIFFERENTIATION OF STEM CELLS IN ORDER FOR REPAIR. SO THAT'S THE

CLOSEST ONE WE HAVE.

FOR THIS PARTICULAR APPLICATION, THE
APPLICANT HAS RECEIVED PREVIOUS CIRM FUNDING IN THE
FORM OF A TRAN1 AWARD AS WELL AS AN EARLY
TRANSLATION AWARD, WHICH IS EQUIVALENT TO OUR
CANDIDATE DISCOVERY AWARDS, WHICH HAVE LED THIS
PROJECT TO PUT TOGETHER AN APPLICATION FOR THE
CLIN1. AND THIS ACTUALLY WOULD REPRESENT, I
BELIEVE, THE FIRST TRAN1 THAT WOULD TRANSITION INTO
A CLIN PROGRAM.

OKAY. AND THEN SO THE RECOMMENDATION FROM THE GRANTS WORKING GROUP ON THIS RECOMMENDATION IS THAT THIS APPLICATION HAS EXCEPTIONAL MERIT, WARRANTS FUNDING BY 10 VOTES FROM THE WORKING GROUP THAT GAVE IT A SCORE OF 1. THERE WERE THREE VOTES THAT GAVE IT A SCORE OF 2, AND NONE A SCORE OF 3. THE CIRM TEAM RECOMMENDATION CONCURS WITH THAT OF THE GWG AND THAT THIS APPLICATION BE FUNDED FOR THE AWARD AMOUNT OF 3.9 MILLION. MR. SHEEHY.

MR. SHEEHY: SO DOES ANYONE HAVE ANY QUESTIONS FOR DR. SAMBRANO?

CAN I ASK A QUESTION? I JUST WAS NOTICING
THAT THE PEOPLE FROM THE SUMMARY WHO GAVE IT THREES
WERE CONCERNED ABOUT THE LACK OF A SPINAL SURGEON
FOR THE PROJECT.

DR. SAMBRANO: RIGHT. SO THERE WERE
CONCERNS RELATED TO THE PROJECT ABOUT THE CLINICAL
TRIAL THAT WAS PROPOSED. AND SO SOME OF IT WAS
HAVING AN EXPERT SPINAL SURGEON APPOINTED SO THAT
THEY CAN ADDRESS AND CLEAN UP SOME OF THE ISSUES
THAT THEY IDENTIFIED IN THE CLINICAL TRIAL PROTOCOL.
BUT SINCE THIS IS AT THE CLIN1 STAGE, THAT IS
THEY'RE DOING LATE STAGE PRECLINICAL ACTIVITY, THEY
FELT THAT AT THE LEAST FOR THIS AWARD IT WAS
SOMETHING THAT THEY COULD DO DURING THE COURSE OF
THE AWARD TO TIGHTEN UP AND ADDRESS THOSE ISSUES.

MR. SHEEHY: I'M JUST LOOKING AT -- THIS

PRODUCT IS USED AFTER SURGERY, RIGHT? IT SAYS, "FOR

COMPLETE ALIGNMENT OF THE PROPOSED PHYSICAL

APPROACH, FDA RECOMMENDATION IS NEEDED."

DR. SAMBRANO: RIGHT. SO THAT WAS ONE OF THE COMMENTS. SO THE APPLICANTS HAVE INDICATED THEY HAVE, IN FACT, DISCUSSED THIS WITH THE FDA. I THINK WHAT HAPPENS IS THE APPLICATION HAS HAD CERTAIN PLACES WHERE THEY REFERENCE THE POSSIBILITY OF OTHER APPROACHES, BUT THEY HAVE CONFIRMED THAT THEY ARE GOING TO FOLLOW UP WITH THE FDA'S RECOMMENDATION TO DO IT AS A SINGLE APPROACH.

MR. SHEEHY: THANK YOU.

DO I HAVE A MOTION TO EITHER ACCEPT THE

TEAM RECOMMENDATION AND APPROVE THIS APPLICATION OR NOT TO ACCEPT IT, DENY THE APPLICATION?

MR. TORRES: MOVE TO APPROVE.

MR. SHEEHY: DO I HAVE A SECOND?

CHAIRMAN THOMAS: SECOND.

MR. SHEEHY: ANY FURTHER BOARD DISCUSSION?
ANY PUBLIC COMMENT AT ANY OF THE SITES?

MS. BONNEVILLE: I HAVE A LETTER TO READ FROM DON REED.

DR. HELMS: MY NAME IS JILL HELMS. AND SOME OF YOU KNOW ME AND SOME OF YOU DON'T. SO WE WORKED TOGETHER FOR NINE YEARS MOVING THE WNT THERAPEUTIC FROM A SCIENTIFIC DISCOVERY AT STANFORD TOWARDS A CLINICAL REALITY. AND THIS VISION WAS MADE POSSIBLE BY MANY PEOPLE AT CIRM WHO OFFERED UNPARALLELED GUIDANCE AND SUPPORT, CRITICISMS, AND, IN GENERAL, ENCOURAGEMENT, SOME REALLY VISIONARY VENTURE CAPITALISTS WHO WERE WILLING TO BACK THIS, AND THE COMMITTED PEOPLE, THE CLINICIANS AND SCIENTISTS OF ANKASA.

SO NOW WE'RE IN THE FINAL APPROACH TO AN IND. IT'S HARD TO BELIEVE THAT WE HAVE GOTTEN HERE, BUT I WANT TO DEEPLY THANK ALL OF YOU. THIS PROPOSAL HAS BEEN VETTED BY THE FDA, BY CIRM, AND BY SOME WORLD-CLASS REVIEWERS. I CANNOT MAKE EVERY

REVIEWER HAPPY, BUT WE HAVE DONE OUR VERY, VERY
BEST. AND I THINK THAT WE ARE GREATLY ENCOURAGED BY
THE STRONG SUPPORT OF THE REVIEWERS THAT VOTED IT AS
A TIER 1. I CAN'T EXPRESS ENOUGH HOW GRATEFUL WE
ARE FOR YOUR SUPPORT.

CIRM'S MISSION IS TO EXPEDITE STEM CELL
THERAPIES TO PATIENTS. EVERY MOMENT COUNTS. I
THINK YOU, LIKE I, HAVE A DEEPLY PERSONAL CONNECTION
TO MAKING THIS VISION OF CIRM A REALITY. AND I HOPE
YOU VOTE TO SUPPORT THIS APPLICATION.

THANK YOU SO MUCH FOR YOUR PAST SUPPORT.

I REALLY APPRECIATE IT.

MR. SHEEHY: THANK YOU. ADDITIONAL PUBLIC COMMENT?

MS. BONNEVILLE: I HAVE A LETTER FROM DON REED THAT HE WOULD LIKE ME TO READ.

FROM DON C. AND GLORIA REED: "A FEW DAYS AGO IN THE MIDDLE OF THE NIGHT, I WAS OVER AT MY PARALYZED SON ROMAN'S HOUSE PROVIDING SOME MEDICAL CARE. MY WIFE GLORIA DECIDED TO TAKE SOME LAUNDRY OUTSIDE TO PUT IT ON THE CLOTHESLINE, BUT SHE SLIPPED AND FELL AND COULD NOT GET UP. SHE MIGHT HAVE LAIN THERE IN THE DARK FOR HOURS IF NOT FOR THE ALERTNESS OF A NEIGHBOR WHO HEARD HER GROWN AND CAME TO HER ASSISTANCE.

"AT THE HOSPITAL, AFTER MANY HOURS AND MULTIPLE XRAYS, THEY GAVE THE DIAGNOSIS. "YOUR SHOULDER IS BROKEN AND WE'RE SENDING YOU HOME," THEY SAID. THAT SEEMED A CONTRADICTION IN TERMS. IF SHE WAS INJURED, SHOULD THEY NOT KEEP HER IN THE HOSPITAL? "NO," THE DOCTOR SAID. "THIS IS THE SORT OF BROKEN BONE THAT WILL HOPEFULLY HEAL ON ITS OWN." THEY PUT HER ON MEDICATION FOR THE PAIN, EVERY SIX HOURS ONE OXYCONTIN TABLET. I'M GOING TO BE ADDICTED TO DRUGS, WORRIED GLORIA. AND HER CONCERNS ARE NOT WITHOUT FOUNDATION. IT IS ONE OF THE MOST ADDICTIVE DRUGS ON THE MARKET. WHEN YOU HEAR ABOUT PRESCRIPTION DRUG ADDICTION, OXYCONTIN IS WHAT THEY ARE TALKING ABOUT.

"BUT WHAT ELSE COULD WE DO? SHE'S IN CONSTANT PAIN, AN INCAPACITATING AGONY, AND EVEN THE PILL ONLY SLIGHTLY TAKES THE EDGE OFF.

"UNTIL SHE IS WELL, I MUST BE HER ARMS AND LEGS AND HANDS, HELPING HER DO EVERYTHING SHE NORMALLY DOES FOR HERSELF...EVERY SMALLEST ACT OF DAILY LIVING.

"HOW LONG WILL IT BE FOR HER FRACTURED SHOULDER TO HEAL? MAYBE MONTHS.

"NATURALLY, I WENT TO CIRM'S WEBSITE TO
SEE IF THERE WERE ANY CLINICAL TRIALS GOING ON WHICH

MIGHT HELP. TO MY DELIGHT, I LEARNED THAT CIRM HAS BEEN SYSTEMATICALLY SUPPORTING A TISSUE REPAIR PROCESS INVOLVING THE HEALING OF BONE.

"ANESTHETIZED MICE HAD TINY HOLES DRILLED INTO THEIR HIPBONES. WHEN THEY WOKE UP, THEY ARE PUT ON PAINKILLERS DURING THE HEALING PROCESS. BY GIVING THEM A PROTEIN CALLED WNT-3, THE SPEED OF BONE HEALING COULD BE ACCELERATED BY 350 PERCENT, TRIPLE THE RATE OF THE NONTREATED MOUSE.

"CIRM RECOGNIZED THE VALUE OF THIS AND HAS SYSTEMATICALLY PROVIDED FUNDING FOR IT. TODAY AN ADVANCED VERSION OF WNT-3 BONE HEALING IS BEFORE YOU.

"CLIN1-11256 IS NARROWLY FOCUSED ON THE BONES SURROUNDING THE HUMAN SPINE AND WILL NOT BE IMMEDIATELY HELPFUL TO GLORIA. BUT THE HEALING PROCESS SEEMS EXTRAORDINARY. IF IT WILL FIX ONE KIND OF BROKEN-BONE INJURY, WHY NOT ANOTHER? WE MUST FIND OUT. IF IT LIVES UP TO ITS POTENTIAL, IT MAY BE THE ANSWER FOR MANY FORMS OF BROKEN-BONE ACCIDENTS. DOCTORS SHOULD NOT HAVE TO MERELY SEND PEOPLE HOME WITH THE HOPE THAT THEIR INJURIES WILL HEAL ON ITS OWN. WE CAN AND MUST DO BETTER. GLORIA AND I URGE ACCEPTANCE OF THIS APPLICATION.

"THANK YOU, DON AND GLORIA REED."

MR. SHEEHY: THANK YOU. ANY OTHER PUBLIC

COMMENT? CAN WE CALL THE ROLL THEN?

MS. BONNEVILLE: ANNE-MARIE DULIEGE.

DR. DULIEGE: YES.

MS. BONNEVILLE: DAVID HIGGINS.

DR. HIGGINS: YES.

MS. BONNEVILLE: STEVE JUELSGAARD.

MR. JUELSGAARD: YES.

MS. BONNEVILLE: DAVE MARTIN.

DR. MARTIN: YES.

MS. BONNEVILLE: LAUREN MILLER.

MS. MILLER: YES.

MS. BONNEVILLE: ADRIANA PADILLA.

DR. PADILLA: YES.

MS. BONNEVILLE: JOE PANETTA.

MR. PANETTA: YES.

MS. BONNEVILLE: FRANCISCO PRIETO.

DR. PRIETO: AYE.

MS. BONNEVILLE: JEFF SHEEHY.

MR. SHEEHY: YES.

MS. BONNEVILLE: JONATHAN THOMAS.

CHAIRMAN THOMAS: YES.

MS. BONNEVILLE: ART TORRES.

MR. TORRES: AYE.

MS. BONNEVILLE: DIANE WINOKUR.

MS. WINOKUR: YES.

SHEEHY.

MS. BONNEVILLE: THANK YOU. MOTION CARRIES.

MR. SHEEHY: THANK YOU. THAT CONCLUDES
THE BUSINESS OF THE APPLICATION REVIEW SUBCOMMITTEE.
CHAIRMAN THOMAS: THANK YOU VERY MUCH, MR.

IS THERE ANY PUBLIC COMMENT HERE OR AT ANY OF THE SITES ON ANY TOPICS OF INTEREST? HEARING NONE, I JUST WANTED TO GIVE A BRIEF SHOUT OUT TO AN EVENT WE HAVE COMING UP WHICH IS, FOR THOSE OF YOU PARTICULARLY IN NORTHERN CALIFORNIA IF YOU GET A CHANCE, BUT ALL ARE WELCOME, WE HAVE ON APRIL 18TH OUR FOURTH ANNUAL ALPHA STEM CELL CLINIC NETWORKS SYMPOSIUM, WHICH IS A MEETING WHERE A NUMBER OF DIFFERENT CIRM GRANTEES PRESENT ON PARTICULAR TOPICS THAT THEY'RE WORKING ON AND IS EVERY YEAR A SPECTACULAR EVENT AND WAY FOR OUR GRANTEES TO TELL THOSE IN ATTENDANCE EXACTLY WHAT THE CUTTING EDGE WORK IS THAT THEY'VE GOT GOING ON.

THIS PARTICULAR YEAR THE TOPICS THAT ARE GOING TO BE COVERED WILL BE GENE EDITING, WHICH, OF COURSE, HAS BEEN HEAVILY IN THE NEWS RECENTLY, SICKLE CELL CURES INITIATIVE, ENGINEERING CELLS TO FIGHT DISEASE, ALL THE CAR-T WORK AND THAT SORT OF

THING, AND FINDING THE RIGHT TREATMENT, WHICH IS SOMETHING INVOLVED WITH ADVISING PATIENTS ON WHAT THEY SHOULD BE LOOKING TOWARDS IN TERMS OF WORK THAT WILL ACTUALLY HELP THEM AS OPPOSED TO THE MANY STEM CELL SNAKE OIL EFFORTS THAT ARE OUT THERE BEING OFFERED, NOT JUST IN CALIFORNIA, BUT EVERYWHERE IN THE WORLD.

WE TRY TO EVERY YEAR MOVE THE ALPHA CLINIC SYMPOSIUM AROUND SO THAT IT'S IN DIFFERENT PARTS OF THE STATE. AGAIN, THIS IS AT UCSF. AND I STRONGLY URGE ANY OF YOU WHO HAVE TIME ON THAT DAY TO ATTEND ALL OR PART. I THINK YOU'LL BE EXTREMELY IMPRESSED. DR. MILLAN, WOULD YOU LIKE TO ADD ANYTHING TO THAT?

DR. MILLAN: NO. WE WELCOME -- IT'S A
MULTISTAKEHOLDER MEETING, SO PATIENT ADVOCATES,
POLICY, SCIENTISTS, THE PRACTITIONERS FOR THE FOLKS
THAT ARE ACTUALLY DOING THE CLINICAL TRIALS, AND THE
NURSES WILL ALL BE THERE. SO IT'S A REALLY SPECIAL
GATHERING.

CHAIRMAN THOMAS: THANK YOU. I THINK AND
I THINK WE ALL THINK THIS THE IS ONE OF THE EVERY
YEAR NOW THE BIGGEST AND BEST DAYS OF THE YEAR IN
TERMS OF WHAT CIRM IS DOING AND HAS ENABLED
THROUGHOUT THE STATE.

OUR NEXT BOARD MEETING IS GOING TO BE ON

BETH C. DRAIN, CA CSR NO. 7152 MAY 23D UP HERE AT OUR OFFICES AND WOULD ENCOURAGE EVERYBODY TO ATTEND. THAT WILL BE A FULLER AGENDA. AND, AS ALWAYS, IT WOULD BE GREAT TO SEE EVERYONE. SO WITHOUT FURTHER ADO, I THINK THAT CONCLUDES TODAY'S BUSINESS. I'D LIKE TO THANK EVERYBODY ONCE AGAIN FOR JOINING, AND WE WILL TALK TO YOU IN APRIL, AND WE STAND ADJOURNED. (THE MEETING WAS THEN CONCLUDED AT 10:29 A.M.)

REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THE THE FOREGOING TRANSCRIPT OF THE TELEPHONIC 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 ON MARCH 21, 2019, WAS HELD AS HEREIN APPEARS AND THE THE IS THE ORIGINAL TRANSCRIPT THEREOF AND THE THE STATEMENTS THE APPEAR IN THE TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CA CSR 7152 133 HENNA COURT SANDPOINT, IDAHO (208) 255-5453