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: CALIFORNIA INSTITUTE FOR

REGENERATIVE MEDICINE

1999 HARRISON STREET, SUITE 1650

OAKLAND, CALIFORNIA

DATE: MAY 25, 2017

11 A. M.

REPORTER: BETH C. DRAIN, CSR

CA CSR. NO. 7152

FILE NO.: 2017-13

1			
2	INDEX		
3	INDLA		
4	ITEM DESCRIPTION	PAGE	NO.
5	OPEN SESSION		
6	1. CALL TO ORDER.		3
7	2. ROLL CALL.		3
8 9	3. CONSIDERATION OF APPLICATIONS SUBMITTED RESPONSE TO CLIN 1: PARTNERING OPPORTUNITY FOR LATE STAGE PRECLINICAL PROJECTS.	IN	4
10	4. CONSIDERATION OF APPLICATIONS SUBMITTED RESPONSE TO THE DISC1: INCEPTION AWARDS.	IN	8
11	CLOSED SESSION	NO	NE
12 13	5. DISCUSSION OF CONFIDENTIAL INTELLECTUAL OR WORK PRODUCT, PREPUBLICATION DATA, FINANCINFORMATION, CONFIDENTIAL SCIENTIFIC RESEARCE	CLAL	RTY
14	DATA, AND OTHER PROPRIETARY INFORMATION RELA APPLICATIONS SUBMITTED IN RESPONSE TO CLIN 1	ATI NG	ТО
15 16	PARTNERING OPPORTUNITY FOR LATE STAGE PRECLI PROJECTS AND THE DISC1: INCEPTION AWARDS (HE SAFETY CODE 125290.30(F) (3) (B) AND (C)).	NI CAL	
17	6. PUBLIC COMMENT.	NO	NE
18	7. ADJOURNMENT.		19
19			
20			
21			
22			
23			
24			
25			
	2		

1	MAY 25, 2017; 11 A.M.
2	
3	CHAIRMAN THOMAS: THANK YOU. I'D LIKE TO
4	CALL THE REGULAR MEETING OF THE ICOC AND THE
5	APPLICATION REVIEW SUBCOMMITTEE TO ORDER. MARIA,
6	WILL YOU PLEASE CALL THE ROLL?
7	MS. BONNEVILLE: GEORGE BLUMENTHAL. DAVID
8	BRENNER. KEN BURTIS. DEBORAH DIES. ANNE-MARIE
9	DULI EGE.
10	DR. DULI EGE: PRESENT.
11	MS. BONNEVILLE: HOWARD FEDEROFF. JUDY
12	GASSON. SAM HAWGOOD. DAVID HIGGINS.
13	DR. HI GGI NS: YES, HERE.
14	MS. BONNEVILLE: STEVE JUELSGAARD.
15	DR. JUELSGAARD: HERE.
16	MS. BONNEVILLE: SHERRY LANSING. KATHY
17	LAPORTE. SHLOMO MELMED. LAUREN MILLER.
18	MS. MILLER: HERE.
19	MS. BONNEVILLE: LLOYD MINOR. ADRIANA
20	PADI LLA.
21	DR. PADI LLA: HERE.
22	MS. BONNEVILLE: JOE PANETTA.
23	MR. PANETTA: I'M HERE. AND I JUST WANT
24	TO MENTION THAT I DO HAVE A MEMBER OF THE PUBLIC
25	HERE FOR THE PUBLIC COMMENT PERIOD.
	3

133 HENNA COURT, SANDPOINT, I DAHO 83864 208-255-5453 208-920-3543 DRAI BE@HOTMAI L. COM

1	MS. BONNEVILLE: THANK YOU.
2	FRANCISCO PRIETO.
3	DR. PRI ETO: HERE.
4	MS. BONNEVILLE: CARMEN PULIAFITO. ROBERT
5	QUINT. AL ROWLETT.
6	MR. ROWLETT: HERE.
7	MS. BONNEVILLE: JEFF SHEEHY.
8	SUPERVI SOR SHEEHY: HERE.
9	MS. BONNEVILLE: OS STEWARD.
10	DR. STEWARD: HERE.
11	MS. BONNEVILLE: JONATHAN THOMAS.
12	CHAIRMAN THOMAS: HERE.
13	MS. BONNEVILLE: ART TORRES.
14	MR. TORRES: HERE.
15	MS. BONNEVILLE: KRISTINA VUORI. DIANE
16	WI NOKUR.
17	WE'LL FOLLOW UP WITH DIANE AND ROBERT
18	QUINT. WE HAVE THEM AS
19	DR. QUINT: ROBERT QUINT, HERE.
20	MS. BONNEVILLE: GREAT. THANKS,
21	DR. QUINT.
22	WE HAVE A QUORUM.
23	CHAIRMAN THOMAS: THANK YOU, MARIA.
24	WE'LL MOVE ON TO ITEM 3, CONSIDERATION OF
25	APPLICATIONS PRESENTED IN RESPONSE TO CLIN1,
	4

PARTNERING OPPORTUNITY FOR LATE STAGE PRECLINICAL 1 2 PROJECTS. I WILL NOW TURN THE MEETING OVER TO 3 SUPERVISOR SHEEHY. 4 SUPERVISOR SHEEHY: THANKS, J. T. GIL, DO 5 YOU HAVE A PRESENTATION? DR. SAMBRANO: YES, I DO? SHALL I GO 6 7 AHEAD? 8 SUPERVISOR SHEEHY: YES, PLEASE. 9 DR. SAMBRANO: THANK YOU. SO GOOD 10 MORNING, EVERYONE. THIS MORNING I'M GOING TO PRESENT A PROPOSAL THAT COMES TO US RESPONDING TO 11 THE CLINICAL STAGE PROGRAM CALLED SPECIFICALLY THE 12 13 CLIN1 THAT PROVIDES FUNDING FOR PROJECTS THAT ARE DOING IND-ENABLING STUDIES THAT INTEND TO GET THEM 14 TOWARDS A CLINICAL TRIAL. 15 16 JUST A REMINDER OF THE SCORING SYSTEM SO THAT WE'RE ALL ON THE SAME PAGE. WE HAVE A SCORING 17 SYSTEM OF 1, 2, AND 3, WITH A SCORE OF 1 MEANING 18 19 EXCEPTIONAL MERIT: A SCORE OF 2 MEANS THAT THE APPLICATION NEEDS IMPROVEMENT AND DOES NOT WARRANT 20 FUNDING AT THIS TIME, BUT CAN BE RESUBMITTED TO 21 22 IMPROVE THOSE AREAS OF CONCERN; AND A THEN SCORE OF 23 3, WHICH MEANS IT'S SUFFICIENTLY FLAWED THAT IT 24 DOESN'T WARRANT FUNDING AND THEY SHOULD NOT SUBMIT 25 THE APPLICATION FOR AT LEAST SIX MONTHS.

1	SO THE APPLICATION UNDER CONSIDERATION IS
2	CLIN1-09811. THIS IS A CLINICAL DEVELOPMENT PROJECT
3	FOCUSED ON A CELL THERAPY OR DEVELOPING A CELL
4	THERAPY FOR STROKE. THE INTENDED THERAPEUTIC IS A
5	MESENCHYMAL STROMAL CELLS, AND THE INDICATION IS FOR
6	ACUTE ISCHEMIC STROKE.
7	AND SO THEIR GOAL IS TO COMPLETE
8	PRECLINICAL ACTIVITIES TO FILE AN IND FOR TESTING
9	THE CELL THERAPY PRODUCT AND, MORE SPECIFICALLY, ARE
10	ACTIVITIES THAT THE FDA HAS SUGGESTED THAT THEY DO
11	PRIOR TO THEIR FILING. SO THEY HAVE KIND OF AN
12	ITEMIZED LIST OF ACTIVITIES THAT WERE REQUESTED.
13	AND SO THAT'S WHAT THEY INTEND TO DO, AND THEY ARE
14	REQUESTING 1.38 MILLION IN ORDER TO DO THOSE
15	STUDI ES.
16	ON THE LAST SLIDE THERE IS AN OVERVIEW OF
17	THE OUTCOME OF THE REVIEW. AS I MENTIONED IN
18	PREVIOUS TIMES, WE UNDERGO A BUDGET REVIEW WITH EACH
19	OF THE APPLICATIONS. NO ISSUES WERE HIGHLIGHTED IN
20	REGARDS TO THE BUDGET. HOWEVER, WITH THE GRANTS
21	WORKING GROUP REVIEW, THE GRANTS WORKING GROUP
22	REVIEWED THIS AND GAVE IT A SCORE OF 3, WHICH THEN
23	MEANS DOES NOT WARRANT FUNDING, WITH NO MEMBERS
24	GIVING IT A SCORE OF 1, THERE WERE TWO MEMBERS WHO
25	GAVE IT A SCORE OF 2, AND 13 THAT GAVE IT A SCORE OF

1	THREE.
2	AND THE CIRM TEAM ALSO REVIEWS THESE
3	RECOMMENDATIONS FROM A PROCESS PERSPECTIVE AND WE
4	ARE IN CONCURRENCE WITH NOT FUNDING THIS PARTICULAR
5	APPLI CATI ON.
6	SO, MR. SHEEHY, BACK TO YOU.
7	SUPERVISOR SHEEHY: SO DO I HAVE A MOTION
8	TO ACCEPT THE GRANTS WORKING GROUP AND THE CIRM
9	TEAM'S RECOMMENDATION THAT WE DO NOT FUND THIS
10	APPLI CATI ON?
11	DR. DULIEGE: I CAN MAKE THIS MOTION.
12	YES. I AGREE WITH THIS MOTION.
13	DR. PRIETO: I'LL SECOND.
14	SUPERVISOR SHEEHY: OKAY. WE'VE GOT A
15	MOTION AND A SECOND. IS THERE ANY DISCUSSION
16	AMONGST BOARD MEMBERS? ANY PUBLIC COMMENT? SO
17	COULD WE CALL THE ROLL THEN?
18	MS. BONNEVILLE: YES.
19	ANNE-MARIE DULIEGE.
20	DR. DULI EGE: YES.
21	MS. BONNEVILLE: DAVID HIGGINS.
22	DR. HI GGI NS: YES.
23	MS. BONNEVILLE: STEVE JUELSGAARD.
24	DR. JUELSGAARD: YES.
25	MS. BONNEVILLE: KATHY LAPORTE. LAUREN
	7

133 HENNA COURT, SANDPOINT, I DAHO 83864 208-255-5453 208-920-3543 DRAIBE@HOTMAIL.COM

1	MI LLER.
2	MS. MILLER: YES.
3	MS. BONNEVILLE: ADRIANA PADILLA.
4	DR. PADI LLA: YES.
5	MS. BONNEVILLE: JOE PANETTA.
6	MR. PANETTA: YES.
7	MS. BONNEVILLE: FRANCISCO PRIETO.
8	DR. PRI ETO: AYE.
9	MS. BONNEVILLE: ROBERT QUINT.
10	DR. QUINT: YES.
11	MS. BONNEVILLE: AL ROWLETT.
12	MR. ROWLETT: YES.
13	MS. BONNEVILLE: JEFF SHEEHY.
14	SUPERVI SOR SHEEHY: YES.
15	MS. BONNEVILLE: JONATHAN THOMAS.
16	CHAIRMAN THOMAS: YES.
17	MS. BONNEVILLE: ART TORRES.
18	MR. TORRES: AYE.
19	MS. BONNEVILLE: DIANE WINOKUR.
20	MOTION CARRIES.
21	SUPERVI SOR SHEEHY: THANK YOU. SO GOING
22	TO THE NEXT ITEM, CONSIDERATION OF INCEPTION OF THE
23	DISC1 INCEPTION AWARDS. GIL, DO WE HAVE A
24	PRESENTATION FOR THAT?
25	DR. SAMBRANO: YES, I DO.
	8

1	SO ON THE WEBEX YOU HAVE EITHER SLIDES
2	THAT WERE PROVIDED TO YOU, YOU CAN FOLLOW THERE, OR
3	ON WEBEX IF YOU HAVE IT. IF ABSOLUTELY NECESSARY,
4	I WILL PRETTY MUCH TELL YOU EVERYTHING THAT'S ON
5	THESE SLIDES.
6	THE FIRST ONE IS JUST AN ILLUSTRATION THAT
7	SHOWS THE TRACKS OF OUR CONTINUOUS AND RECURRING
8	FUNDING OPPORTUNITIES FROM DISCOVERY THROUGH THE
9	CLINIC. AND THE POINT OF THIS IS JUST TO HELP PLACE
10	THE INCEPTION PROGRAM IN YOUR MIND. IT IS REALLY AT
11	THE VERY BEGINNING OF DISCOVERY. IT IS A SEED
12	PROGRAM, SO IT IS THE LAUNCHING OF AN IDEA. AND
13	THAT'S WHERE WE ARE CREATING THIS PARTICULAR FUNDING
14	OPPORTUNI TY.
15	AND THAT THE OBJECTIVE IS TO PROVIDE SEED
16	FUNDING FOR WHAT ARE HOPEFULLY GREAT IDEAS THAT WILL
17	HAVE AN IMPACT ON THE FIELD OF HUMAN STEM CELL
18	RESEARCH, BUT WHERE THEY MAY NEED SOME MODEST
19	SUPPORT TO ACTUALLY TEST THE IDEA, SEE IF IT WORKS,
20	AND THEN COMPETE FOR LARGER FUNDING OPPORTUNITIES.
21	AS SUCH, THE EMPHASIS OF THE REVIEW AND
22	OUR INSTRUCTIONS TO THE GRANTS WORKING GROUP REVIEW
23	MEMBERS WAS THAT WE ARE LOOKING FOR GREAT NEW IDEAS.
24	SO THAT'S WHERE WE NEED THEIR HELP IN IDENTIFYING
25	THEM, THOSE THAT HAVE THE POTENTIAL TO ULTIMATELY

1	RESULT IN SOMETHING THAT MAY BE A TRANSLATABLE HUMAN
2	STEM PROGENITOR-BASED PRODUCT OR TOOL.
3	WE LIKE IDEAS THAT HAVE A SOUND SCIENTIFIC
4	RATIONALE. AND, OF COURSE, THAT IS IMPORTANT, BUT
5	WE ALSO EMPHASIZE THAT PRELIMINARY DATA IS NOT
6	REQUIRED OR EXPECTED AT THIS STAGE. WE WANT TO
7	FOCUS THE REVIEW ON WHETHER THE IMPACT CAN BE GREAT
8	AND ALLOW FOLKS TO GIVE SOMETHING THAT HAS SOME
9	POTENTIAL FOR IMPACT A SHOT. AND, THUS, THIS IS A
10	HIGH RISK, HIGH REWARD PROGRAM.
11	WE WILL PROVIDE 150 K TO TEST THE IDEA, SO
12	IT IS A MODEST AMOUNT TO GENERATE THE DATA. SO
13	THOSE WERE GENERAL INSTRUCTIONS TO REVIEWERS AS THEY
14	WENT INTO THE REVIEW, UTILIZE THE SELECTED
15	PROPOSALS.
16	WE STARTED WITH A POSITIVE SELECTION
17	PROCESS. SO WE HAD 72 PROPOSALS THAT WE STARTED
18	WITH. AND THROUGH THE POSITIVE SELECTION PROCESS,
19	THE PANEL ITSELF THAT REVIEWED THEM THROUGHOUT THE
20	COURSE WERE THE SAME ONES THAT DID THE POSITIVE
21	SELECTION AS WELL AS THE FINAL REVIEW. THEY
22	NARROWED THE APPLICATIONS DOWN TO 38 PROPOSALS.
23	AND, OF COURSE, SELECTION BY ANY ONE MEMBER OF THE
24	GWG, EITHER SCIENTIFIC OR PATIENT ADVOCATE MEMBER,
25	WAS SUFFICIENT TO MOVE AN APPLICATION FORWARD.

1	THE SCORING SYSTEM THAT WE USE IN
2	DISCOVERY AND TRANSLATION, JUST, AGAIN, AS A
3	REMINDER BECAUSE IT IS DIFFERENT FROM CLINICAL, WE
4	USE A SCALE OF ONE TO A HUNDRED, AND THE MEDIAN OF
5	ALL THE SCORING REVIEWERS IS WHAT YOU UTILIZE AS THE
6	SCORE. APPLICATIONS THAT SCORE BETWEEN 85 AND 100
7	ARE DEEMED TO HAVE EXCEPTIONAL MERIT AND WARRANT
8	FUNDING. THOSE THAT RECEIVE A SCORE FROM 1 TO 84
9	ARE NOT RECOMMENDED FOR FUNDING.
10	AND FOR THIS ROUND OF THE DISCOVERY1 OR
11	THE INCEPTION PROGRAM, THE SUMMARY OF THE
12	RECOMMENDATIONS ARE SHOWN ON THE TABLE WHERE WE HAD
13	SIX APPLICATIONS THAT WERE IN THE TOP FUNDING
14	CATEGORY, WHICH WOULD TOTAL TO ABOUT 1.37 MILLION IN
15	REQUESTED FUNDS FROM THOSE SIX APPLICATIONS, AND
16	THEN 32 OTHERS THAT WERE NOT SELECTED.
17	I HAVE A SLIDE HERE JUST TO REMIND YOU
18	THAT, AT THE CONCLUSION OF EACH OF THE REVIEWS, THE
19	GRANTS WORKING GROUP TAKES A VOTE ON THE REVIEW
20	PROCESS. AND IN THIS CASE THE PATIENT ADVOCATE
21	MEMBERS AND SCIENTIFIC MEMBERS UNANIMOUSLY FOUND THE
22	APPROPRIATENESS OF THE PROCESS UNDERTAKEN FOR THIS
23	REVI EW.
24	BEFORE TURNING IT OVER, I MIGHT JUST VERY
25	BRIEFLY GO OVER EACH OF THE SIX APPLICATIONS THAT

1	WERE RECOMMENDED FOR FUNDING JUST TO GIVE YOU A HIGH
2	LEVEL VIEW OF WHAT THEY ARE. I'LL BE BRIEF SINCE I
3	KNOW WE DON'T HAVE THAT MUCH TIME TODAY.
4	SO THE FIRST APPLICATION IS 10074. IT'S
5	ENTITLED "REPROGRAMMING HUMAN STEM CELLS FOR BLOOD
6	CELL GENERATION." THE GOAL OF THIS APPLICATION IS
7	TO CREATE A UNIVERSAL DONOR BLOOD CELL LINE; THAT
8	IS, TO CREATE THE ABILITY TO GENERATE RED BLOOD
9	CELLS FOR TRANSPLANTATION. AND THIS APPLICATION
10	RECEIVED THE TOP SCORE OF 90 WITH ALL SCIENTIFIC
11	MEMBERS UNANIMOUSLY VOTING IN FAVOR OF FUNDING THIS
12	APPLI CATI ON.
13	THE NEXT ONE IN LINE IS 10036. THIS ONE
14	IS ENTITLED "PRO-DRUG INNOVATION TO TARGET MUSCLE
15	STEM CELLS AND ENHANCE MUSCLE REGENERATION." THE
16	OBJECTIVE IN THIS APPLICATION IS TO DEVELOP AN
17	APPROACH TO TARGET MUSCLE STEM CELLS OR THERAPEUTICS
18	TO MUSCLE STEM CELLS. AND THE IDEA HERE IS THAT
19	THEY WILL GENERATE EITHER A PEPTIDE OR A FRAGMENT OF
20	THE ANTIBODY THAT RECOGNIZES A NEW PROTEIN THAT WAS
21	IDENTIFIED IN THESE MUSCLE STEM CELLS IN ORDER TO
22	DIRECT THERAPEUTICS TO THOSE MUSCLE STEM CELLS.
23	THIS RECEIVED A SCORE OF 86, AGAIN,
24	UNANI MOUSLY BY THE GROUP.
25	THE THIRD APPLICATION IS 09912. THIS ONE
	40

1	IS ENTITLED "NOVEL TISSUE ENGINEERING TECHNIQUE TO
2	REPAIR DEGENERATED RETINA." THE OBJECTIVE HERE IS
3	TO DEVELOP A THERAPEUTIC PRODUCT FROM HUMAN
4	EMBRYONIC STEM CELLS TO TREAT ADVANCED HUMAN RETINA
5	DEGENERATIVE DISEASES. AND THIS COMBINES WHAT'S
6	RETINA ORGANOIDS ALONG WITH RETINAL PIGMENT
7	EPITHELIUM COMBINED IN ORDER TO REPAIR DAMAGED OR
8	DI SEASED EYES.
9	THIS APPLICATION RECEIVED A SCORE OF 85,
10	AGAIN, A FAVORABLE RECOMMENDATION UNANIMOUSLY BY THE
11	GROUP.
12	THE FOURTH APPLICATION IS 10079 ENTITLED
13	"AN EXOSOME-BASED TRANSLATIONAL STRATEGY TO MITIGATE
14	ALZHEIMER'S DISEASE NEUROPATHOLOGY." THE GOAL HERE
15	IS TO DEVELOP A THERAPEUTIC PRODUCT FROM STEM
16	CELL-DERIVED EXOSOMES, MORE SPECIFICALLY, NEURAL
17	STEM CELLS WHICH RELEASE THESE EXOSOMES, AND THEY
18	ISOLATE THEM IN ORDER TO TREAT ALZHEIMER'S DISEASE
19	SYMPTOMS.
20	THIS APPLICATION RECEIVED ALSO AN 85 AND
21	WAS UNANI MOUSLY RECOMMENDED.
22	THE FIFTH APPLICATION IS 09984. THE TITLE
23	IS "HYPO-IMMUNOGENIC CARDIAC PATCHES FOR MYOCARDIAL
24	REGENERATION." THE GOAL OF THIS PROPOSAL IS TO
25	ENGINEER AN ALLOGENEIC CARDIAC PATCH THAT WOULD

1	RESTORE FUNCTION AFTER A HEART ATTACK, BUT THAT DOES
2	NOT ELICIT AN IMMUNE RESPONSE. SO BY CREATING A
3	CELL LINE THAT IS MISSING THE MAJOR
4	HISTOCOMPATIBILITY PROTEINS, THEY HOPE TO CREATE A
5	LINE THAT CAN BE USED WITHOUT WORRY OF IMMUNE
6	I SSUES.
7	THIS APPLICATION RECEIVED A SCORE OF 85,
8	AND 13 OUT OF 14 MEMBERS GAVE IT A RECOMMENDATION
9	FOR FUNDING.
10	THE LAST APPLICATION THAT IS IN THE
11	RECOMMENDED TIER IS 09999. IT'S ENTITLED
12	"GENERATION OF EXPANDABLE SELF-RENEWING MUSCLE STEM
13	CELLS FOR DUCHENNE MUSCULAR DYSTROPHY." AND THE
14	OBJECTIVE OF THIS IS TO GENERATE EXPANDABLE
15	SELF-RENEWING HUMAN MUSCLE STEM CELLS, HUMAN INDUCED
16	PLURIPOTENT STEM CELLS, IN ORDER TO CREATE A MODEL
17	FOR STUDYING DUCHENNE MUSCULAR DYSTROPHY AND PERHAPS
18	THEN DEVELOP ULTIMATELY A THERAPEUTIC FOR IT.
19	THIS APPLICATION SCORED AN 85 WITH NINE
20	MEMBERS GIVING IT A SCORE OF RECOMMENDED AND FIVE
21	WHO DID NOT.
22	AND SO THAT IS A SUMMARY OF THE
23	APPLICATIONS THAT ARE RECOMMENDED. HAPPY TO TAKE
24	QUESTIONS. MR. SHEEHY.
25	SUPERVISOR SHEEHY: ANY QUESTIONS FROM

BETH C. DRAIN, CA CSR NO. 7152

1	MEMBERS OF THE BOARD? SO IS THERE A MOTION TO MOVE
2	ANY APPLICATION FROM TIER I TO TIER II? IS THERE A
3	MOTION TO MOVE ANY APPLICATION FROM TIER II INTO
4	TIER I? SO COULD I GET A MOTION TO FUND ALL THE
5	APPLICATIONS IN TIER I AND TO NOT FUND THE
6	APPLICATIONS IN TIER II?
7	CHAIRMAN THOMAS: SO MOVED.
8	SUPERVISOR SHEEHY: MARIA, DID YOU CATCH
9	WHO MADE THE MOTION AND WHO SECONDED?
10	MS. BONNEVILLE: NO. IT WOULD BE GREAT IF
11	WE COULD CLARIFY.
12	CHAIRMAN THOMAS: J.T. MADE THE MOTION.
13	MR. PANETTA: SECOND.
14	SUPERVISOR SHEEHY: IS THERE ANY BOARD
15	COMMENT? IS THERE ANY PUBLIC COMMENT?
16	MR. PANETTA: WE'VE GOT PUBLIC COMMENT
17	HERE. THIS IS JOE.
18	MS. BONNEVILLE: GREAT.
19	DR. SACCO: (UNI NTELLI GI BLE.)
20	THE REPORTER: I'M SORRY, MR. CHAIRMAN, I
21	CAN'T UNDERSTAND THE SPEAKER.
22	MS. BONNEVILLE: PLEASE SPEAK DIRECTLY
23	INTO THE PHONE.
24	DR. SACCO: IS IT BETTER NOW?
25	THE REPORTER: YES. THANK YOU.
	15

133 HENNA COURT, SANDPOINT, I DAHO 83864 208-255-5453 208-920-3543 DRAI BE@HOTMAI L. COM

1	DR. SACCO: SO I WAS JUST SAYING THAT SO
2	THE GOAL OF THIS APPLICATION IS TO OVERCOME THE
3	BOTTLENECK OF GENERATING EXPANDABLE MUSCLE STEM
4	CELLS FROM HUMAN IPS CELLS. SO FAR ALL THE
5	APPROACHES HAVE BEEN GENERATING COMMITTED
6	PROGENITORS THAT ACTUALLY HAVE LIMITED CELL
7	SELF-RENEWAL, SO THEY ARE NEEDED IN THEIR ABILITY TO
8	BEING USED FOR MODELING IN VITRO AND ALSO IN
9	THERAPIES. SO THE APPROACH THAT WE ARE PROPOSING IS
10	TO COMBINE PROTOCOLS THAT RECAPITULATE TOGETHER WITH
11	THE USE OF OTHER INHIBITORS WHICH WE HAVE RECENTLY
12	SHOWN ARE IMPORTANT IN MUSCLE TO EXPAND MUSCLE STEM
13	CELLS. SO REALLY THE GOAL IS TO INTEGRATE THESE TWO
14	ASSETS AND TO ACTUALLY TEST MUSCLE STEM CELL
15	GENERATED BOTH IN VITRO AND IN VIVO TRANSPLANTATION
16	ASSAY (UNINTELLIGIBLE).
17	AND SO, OF COURSE, WITH THE APPLICATION
18	NOT ONLY FOR DUCHENNE MUSCULAR DYSTROPHY, WHICH IS
19	THE FOCUS OF THE APPLICATION, BUT ALSO MORE BROADLY
20	TO OTHER MUSCLE DISEASES BECAUSE IT WOULD ENABLE US
21	TO RECAPITULATE (UNINTELLIGIBLE) OF MYOGENESIS IN
22	OTHER HUMAN DISEASES. I JUST WANTED TO ADD THAT.
23	THANK YOU.
24	SUPERVI SOR SHEEHY: THANK YOU. DO WE HAVE
25	ANOTHER PUBLIC COMMENT? SO, MARIA, COULD YOU CALL

1	THE ROLL PLEASE?
2	MR. HARRISON: JEFF, IT'S JAMES. JUST A
3	REMINDER TO THOSE MEMBERS WHO HAVE A CONFLICT WITH
4	RESPECT TO ANY APPLICATION IN TIER I OR TIER II TO
5	VOTE YES OR NO FOR THE MOTION EXCEPT FOR THOSE
6	APPLICATIONS IN WHICH YOU HAVE A CONFLICT.
7	MS. BONNEVILLE: ANNE-MARIE DULIEGE.
8	DR. DULI EGE: YES.
9	MS. BONNEVILLE: DAVID HIGGINS.
10	DR. HI GGI NS: YES.
11	MS. BONNEVILLE: STEVE JUELSGAARD.
12	DR. JUELSGAARD: YES.
13	MS. BONNEVILLE: SHERRY LANSING. KATHY
14	LAPORTE. LAUREN MILLER.
15	MS. MILLER: YES.
16	MS. BONNEVILLE: ADRIANA PADILLA.
17	DR. PADI LLA: YES.
18	MS. BONNEVILLE: JOE PANETTA.
19	MR. PANETTA: YES.
20	MS. BONNEVILLE: FRANCISCO PRIETO.
21	DR. PRI ETO: AYE.
22	MS. BONNEVILLE: ROBERT QUINT.
23	DR. QUINT: YES.
24	MS. BONNEVILLE: AL ROWLETT.
25	MR. ROWLETT: YES.
	17
	17

133 HENNA COURT, SANDPOINT, I DAHO 83864 208-255-5453 208-920-3543 DRAI BE@HOTMAI L. COM

1	MS. BONNEVILLE: JEFF SHEEHY.
2	SUPERVI SOR SHEEHY: YES.
3	MS. BONNEVILLE: OS STEWARD.
4	DR. STEWARD: YES EXCEPT FOR THOSE WITH
5	WHICH I'M IN CONFLICT.
6	MS. BONNEVILLE: JONATHAN THOMAS. ART
7	TORRES.
8	MR. TORRES: AYE.
9	CHAIRMAN THOMAS: SORRY. I HAD IT ON
10	MUTE, MARIA. YES.
11	MS. BONNEVILLE: THANK YOU. THE MOTION
12	CARRI ES.
13	SUPERVI SOR SHEEHY: GREAT. THANK YOU,
14	MARI A.
15	SO IT'S BACK TO YOU, J.T., AND I THINK
16	WE'VE CONCLUDED THE BUSINESS OF THE APPLICATION
17	REVIEW SUBCOMMITTEE.
18	CHAIRMAN THOMAS: THANK YOU, MR.
19	SUPERVI SOR.
20	LAST ITEM ON THE AGENDA IS GENERAL PUBLIC
21	COMMENT. DO WE HAVE ANY SUCH COMMENTS? HEARING
22	NONE, THAT CONCLUDES TODAY'S MEETING. DO I HEAR A
23	MOTION TO ADJOURN?
24	MR. TORRES: SO MOVED.
25	CHAIRMAN THOMAS: MOVED AND SECONDED. I
	10
	18

BETH C. DRAIN, CA CSR NO. 7152

```
1
      DON'T THINK WE NEED TO TAKE A VOTE ON THAT.
                                                      S0
 2
     THANK YOU, EVERYBODY, FOR YOUR PARTICIPATION AS
      ALWAYS. WE STAND ADJOURNED.
 3
                 (THE MEETING WAS THEN CONCLUDED AT 11:26
 4
 5
      A. M. )
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
                                 19
```

1	
2	REPORTER' S CERTIFICATE
3	
4	
5	
6	I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT
7	THE FOREGOING TRANSCRIPT OF THE TELEPHONIC PROCEEDINGS BEFORE THE INDEPENDENT CITIZEN'S
8	OVERSIGHT COMMITTEE AND THE APPLICATION REVIEW SUBCOMMITTEE OF THE CALIFORNIA INSTITUTE FOR
9	REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON MAY 25, 2017, WAS HELD AS HEREIN
10	APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS
11	TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS
12	TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.
13	
14	
15	BETH C. DRAIN, CA CSR 7152 133 HENNA COURT
16	SANDPOINT, I DAHO (208) 255-5453
17	
18	
19	
20	
21	
22	
23	
24	
25	
	20