# BEFORE THE IP AND INDUSTRY SUBCOMMITTEE OF THE INDEPENDENT CITIZENS' OVERSIGHT COMMITTEE TO THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE ORGANIZED PURSUANT TO THE CALIFORNIA STEM CELL RESEARCH AND CURES ACT

**REGULAR MEETING** 

LOCATION: VIA ZOOM

DATE: FEBRUARY 14, 2022

1 P.M.

REPORTER: BETH C. DRAIN, CA CSR

CSR. NO. 7152

FILE NO.: 2022-07

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2. ROLL CALL	3
3. CONSIDERATION OF CHANGES TO CO-FUNDING REQUIREMENTS FOR FOR-PROFIT TRANSLATIONAL AWARD APPLICANTS AND GRANTEES	4
4. PUBLIC COMMENT	NONE
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	2211 (1214111), (11 (221111)
1	MONDAY, FEBRUARY 14, 2022; 1:00 P.M.
2	
3	CHAIRMAN JUELSGAARD: CALL THE MEETING TO
4	ORDER, AND, MARIANNE, IF YOU WANT TO CALL THE ROLL
5	PLEASE.
6	MS. DEQUINA-VILLABLANCA: KIM BARRETT.
7	DR. BARRETT: HERE.
8	MS. DEQUINA-VILLABLANCA: ANNE-MARIE
9	DULIEGE. LARRY GOLDSTEIN.
10	DR. GOLDSTEIN: HERE.
11	MS. DEQUINA-VILLABLANCA: STEVE
12	JUELSGAARD.
13	CHAIRMAN JUELSGAARD: HERE.
14	MS. DEQUINA-VILLABLANCA: DAVID MARTIN.
15	DR. MARTIN: HERE.
16	MS. DEQUINA-VILLABLANCA: SHLOMO MELMED.
17	DR. MELMED: HERE.
18	MS. DEQUINA-VILLABLANCA: JOE PANETTA.
19	BARRY SELICK.
20	DR. SELICK: HERE.
21	MS. DEQUINA-VILLABLANCA: MICHAEL STAMOS.
22	DR. STAMOS: HERE.
23	MS. DEQUINA-VILLABLANCA: JONATHAN THOMAS.
24	CHAIRMAN THOMAS: HERE.
25	MS. DEQUINA-VILLABLANCA: ART TORRES.
	3

1	MR. TORRES: HERE.
2	MS. DEQUINA-VILLABLANCA: KAROL WATSON.
3	WE DO HAVE A QUORUM.
4	CHAIRMAN JUELSGAARD: PERFECT. THAT YOU,
5	MARIANNE.
6	SO WE HAVE ON THE AGENDA A SINGLE TOPIC.
7	THERE MAY BE OTHER THINGS THAT COME UP, BUT THIS IS
8	WHAT WE ARE NEEDING TO FOCUS ON. FOR QUITE SOME
9	TIME NOW, GOING BACK TO 2012, SOMEWHERE IN THAT TIME
10	FRAME, WE PUT IN PLACE FOR TRANSLATIONAL WORK
11	THIS ALSO, BY THE WAY, IS TRUE FOR OTHER AWARDS, BUT
12	THIS MEETING IS FOCUSED ON THE TRANSLATIONAL AWARD,
13	SORT OF THE EARLIEST OF THE AWARDS THAT GO TO THE
14	DEVELOPMENT OF A POTENTIAL THERAPEUTIC PRODUCT
15	THAT FOR-PROFIT COMPANIES WOULD NEED TO PROVIDE
16	CO-FUNDING IN A TRANSLATIONAL AWARD SETTING. SO IN
17	ORDER TO RECEIVE \$4 MILLION IN TRANSLATIONAL AWARD
18	FUNDING, THEY WOULD NEED TO CO-FUND \$1 MILLION.
19	AND AT THE TIME THAT WE DID THIS, AND, AS
20	I SAID, IT'S BEEN SOME TIME AGO, I THINK THE GENERAL
21	SENSE IS THAT THE COMPANIES THAT WOULD BE INVOLVED
22	IN COMING TO THE TABLE WOULD BE MORE ESTABLISHED
23	COMPANIES, EITHER TRADED COMPANIES OR WELL-FUNDED
24	VENTURE COMPANIES, AND THAT THEY COULD WELL AFFORD
25	TO CONTRIBUTE A MILLION DOLLARS AND HAVE THEIR OWN
	,

1	INVESTMENT SIDE BY SIDE WITH CIRM.
2	AS TIME HAS GONE ON, CERTAINLY IN THE MORE
3	RECENT PERIOD OF THE LAST COUPLE OF YEARS ANYWAY, I
4	THINK WHAT WE HAVE BEGUN TO SEE I'M GOING TO HAVE
5	SHYAM PATEL AND ABLA CREASEY TALK TO US IN A
6	MOMENT IS THE INVOLVEMENT OF A LOT MORE VERY
7	EARLY STAGE COMPANIES. THESE ARE COMPANIES THAT IN
8	A NUMBER OF CASES HAVEN'T EVEN RECEIVED ANY VENTURE
9	FUNDING YET, BUT THEY'RE AT THE FRIENDS AND FAMILY,
10	ANGEL INVESTOR ROUNDS. SO THEY'RE TRYING TO RAISE
11	ENOUGH MONEY TO KEEP GOING TO HAVE ENOUGH SUBSTANCE
12	IN THE WORK THAT THEY'RE DOING THAT WILL ACTUALLY
13	ULTIMATELY ATTRACT VENTURE FUNDING.
14	ALONG WITH THAT THERE'S BECOME A BIT OF AN
15	ISSUE WITH REGARD TO BEING ABLE TO PUT A MILLION
16	DOLLARS ON THE TABLE FOR COMPANIES THAT ARE IN THAT
17	PARTICULAR GROUP. AND SO WHAT I WANTED TO DISCUSS
18	
	AND HAVE US CONSIDER IS ACTUALLY REMOVING THAT
19	AND HAVE US CONSIDER IS ACTUALLY REMOVING THAT REQUIREMENT. AND IN THIS CASE JUST LIMITED RIGHT
19 20	
	REQUIREMENT. AND IN THIS CASE JUST LIMITED RIGHT
20	REQUIREMENT. AND IN THIS CASE JUST LIMITED RIGHT  NOW TO THE TRANSLATIONAL AWARD AREA. SO REMEMBER,
20 21	REQUIREMENT. AND IN THIS CASE JUST LIMITED RIGHT  NOW TO THE TRANSLATIONAL AWARD AREA. SO REMEMBER,  TRANSLATIONAL AWARDS ARE AT THE VERY EARLIEST
20 21 22	REQUIREMENT. AND IN THIS CASE JUST LIMITED RIGHT  NOW TO THE TRANSLATIONAL AWARD AREA. SO REMEMBER,  TRANSLATIONAL AWARDS ARE AT THE VERY EARLIEST  STAGES.
<ul><li>20</li><li>21</li><li>22</li><li>23</li></ul>	REQUIREMENT. AND IN THIS CASE JUST LIMITED RIGHT  NOW TO THE TRANSLATIONAL AWARD AREA. SO REMEMBER,  TRANSLATIONAL AWARDS ARE AT THE VERY EARLIEST  STAGES.  IN RE-READING THE REQUIREMENTS FOR A

1	ASTRAY BUT THE CANDIDATE HAS TO HAVE AN ACTUAL
2	MOLECULE THAT THEY WANT TO PROCEED WITH, AND THAT
3	MOLECULE NEEDS TO BE THE SAME ONE THAT THEY USED TO
4	CONDUCT THEIR EARLY ANIMAL STUDIES TO DEMONSTRATE
5	SOME EARLY STAGE EFFICACY.
6	SO IT'S REALLY AT THE VERY, VERY ADVENT OF
7	THE WHOLE PROCESS OF TRYING TO GET A PRODUCT THROUGH
8	THE WHOLE INVESTMENT CHANNEL AND ULTIMATELY
9	HOPEFULLY FDA APPROVAL AND THEN COMMERCIALIZATION.
10	SO THERE'S A LOT THAT'S REALLY UNKNOWN.
11	THE TRANSLATIONAL AREA, TO BE HONEST FROM AN
12	INVESTING POINT OF VIEW, IS A MORE HIGH RISK AREA.
13	I'M NOT SURE INVESTING IN A PLATFORM OR SOMETHING
14	THAT'S A LITTLE MORE TRIED AND TRUE WHERE THE PATH
15	HAS ALREADY BEEN TROD BY OTHERS, UNLESS IT'S THAT
16	KIND OF SITUATION, THE TRANSLATIONAL INVOLVEMENT IS
17	REALLY A FAIRLY HIGH RISK POPULATION BECAUSE THERE'S
18	A LOT THAT'S UNKNOWN THAT'S GOING TO BE DEMONSTRATED
19	BY THE PRE-IND STUDIES AND ULTIMATELY AN IND FILING
20	WITH THE FDA.
21	SO I'M GOING TO PAUSE THERE BECAUSE I WAS
22	JUST TRYING TO KIND OF LAY A BIT OF THE LANDSCAPE ON
23	THE LINE AND ASK SHYAM AND ABLA TO TALK A LITTLE
24	MORE SPECIFICALLY ABOUT WHAT WE ARE SEEING WITH
25	RESPECT TO THE FOR-PROFIT APPLICANTS IN THAT AREA.

1	DR. PATEL: THANK YOU. I'LL START OFF ON
2	GIVING YOU A LITTLE BIT OF BACKGROUND ON THE
3	PROGRAM, THE TYPES OF APPLICANTS WE GET, AND THEN
4	DR. ABLA CREASEY WILL FILL IN SOME OF THE DETAILS
5	ABOUT THE PROFILES OF THE GRANTEES BECAUSE HER TEAM
6	MANAGES THESE AWARDS AT THIS POINT.
7	SO AS STEVE MENTIONED, THE TRANSLATIONAL
8	STAGE FUNDING OPPORTUNITY IS WHAT WE WOULD CALL THE
9	PROTOTYPICAL TRANSLATIONAL VALLEY OF DEATH TYPE OF
10	RESEARCH, WHICH IS THAT THEY HAVE A CANDIDATE AND WE
11	FUND THEM TO PROGRESS TO HAVING A WELL-PLANNED
12	PRE-IND MEETING, AND THAT WOULD THEN SET THEM UP FOR
13	IND-ENABLING STUDIES GOING FROM THERE.
14	FOR-PROFIT APPLICANTS TO CIRM HAVE TWO
15	REQUIREMENTS. THE FIRST IS AN ELIGIBILITY
16	REQUIREMENT THAT THEY MUST MAINTAIN SOLVENCY FOR SIX
16 17	REQUIREMENT THAT THEY MUST MAINTAIN SOLVENCY FOR SIX MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND
17	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND
17 18	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND  APPLIES TO TRANSLATIONAL STAGE GRANTEES AND LATER IS
17 18 19	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND  APPLIES TO TRANSLATIONAL STAGE GRANTEES AND LATER IS  A CO-FUNDING REQUIREMENT WHICH RAMPS UP FOR 20
17 18 19 20	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND  APPLIES TO TRANSLATIONAL STAGE GRANTEES AND LATER IS  A CO-FUNDING REQUIREMENT WHICH RAMPS UP FOR 20  PERCENT CO-FUNDING AT THE TRANSLATIONAL STAGE UP TO
17 18 19 20 21	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND  APPLIES TO TRANSLATIONAL STAGE GRANTEES AND LATER IS  A CO-FUNDING REQUIREMENT WHICH RAMPS UP FOR 20  PERCENT CO-FUNDING AT THE TRANSLATIONAL STAGE UP TO  A 50-PERCENT CO-FUNDING REQUIREMENT IF THEY WERE TO
17 18 19 20 21	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND APPLIES TO TRANSLATIONAL STAGE GRANTEES AND LATER IS A CO-FUNDING REQUIREMENT WHICH RAMPS UP FOR 20 PERCENT CO-FUNDING AT THE TRANSLATIONAL STAGE UP TO A 50-PERCENT CO-FUNDING REQUIREMENT IF THEY WERE TO APPLY FOR A PHASE III CLINICAL TRIAL IN THE CLINICAL
17 18 19 20 21 22	MONTHS AT THE TIME THAT THEY APPLY. AND THE SECOND APPLIES TO TRANSLATIONAL STAGE GRANTEES AND LATER IS A CO-FUNDING REQUIREMENT WHICH RAMPS UP FOR 20 PERCENT CO-FUNDING AT THE TRANSLATIONAL STAGE UP TO A 50-PERCENT CO-FUNDING REQUIREMENT IF THEY WERE TO APPLY FOR A PHASE III CLINICAL TRIAL IN THE CLINICAL PROGRAM.

1	FOR A FOR-PROFIT APPLICANT OR A GRANTEE COULD BE A
2	MILLION DOLLARS, COULD BE A LITTLE BIT MORE THAN
3	THAT DEPENDING ON WHAT THEY'RE ASKING FROM CIRM. SO
4	OVER THE LAST FIVE YEARS, I'VE DONE THE SOLVENCY AND
5	CO-FUNDING ELIGIBILITY FOR EVERY SINGLE FOR-PROFIT
6	APPLICATION THAT COMES TO CIRM, SO FROM TRANSLATION
7	TO CLINICAL.
8	AND THE PROFILE OF THE TRANSLATIONAL
9	GRANTEE AND APPLICANT IS SOMETHING I'LL RELY ON ABLA
10	MORE ON.
11	SO FIRST OF ALL, ROUGHLY 23 PERCENT OF
12	ELIGIBLE TRAN APPLICANTS ARE FOR-PROFIT COMPANIES,
13	AND 21 PERCENT OF TRAN AWARDS ARE FOR-PROFIT
14	COMPANIES. SO WHAT THAT WOULD TELL YOU IS THAT WE
15	ARE GETTING ABOUT A FIFTH OF THE APPLICANTS AT THE
16	TRANSLATIONAL STAGE THAT ARE COMPANIES. AND THEY'RE
17	ACTUALLY COMPETING QUITE WELL IN TERMS OF BEING ABLE
18	TO GET CIRM AWARD FUNDING AT THE END OF THE DAY WITH
19	RESPECT TO MATCHING UP THE PROPORTIONS.
20	AND THERE'S BEEN A RISE IN THE NUMBER OF
21	FOR-PROFIT APPLICANTS IN THE LAST FEW ROUNDS. SO
22	UNDER PROP 14 WE ARE ACTUALLY GETTING A DOUBLING OF
23	THE NUMBER OF TRANSLATIONAL COMPANIES APPLYING FOR
24	THE TRAN ROUND; BUT, AGAIN, THAT'S STILL A SMALL
25	FRACTION OF THE OVERALL. MOST OF THE APPLICANTS ARE
	0

1	STILL NONPROFIT APPLICANTS FOR THE TRANSLATIONAL
2	PROGRAM.
3	SO WHAT ARE THE TYPES OF COMPANIES THAT
4	APPLY TO A TRANSLATIONAL FUNDING OPPORTUNITY? AS
5	STEVE MENTIONED, THESE ARE ALMOST ALL SMALL
6	PRECLINICAL STAGE COMPANIES. THEY'RE OFTEN
7	REQUESTING FUNDING FOR THEIR LEAD CANDIDATE. I
8	WOULD SAY A MAJORITY OF THEM ARE SEED STAGE
9	COMPANIES. THEY'RE RELYING ON FRIENDS AND FAMILY
10	FUNDING, ANGEL INVESTMENTS, AS WELL AS GRANTS,
11	PARTICULARLY NIH SMALL BUSINESS INNOVATION RESEARCH
12	GRANTS.
13	THE NEXT MOST COMMON COMPANIES ARE SERIES
14	A COMPANIES OFTEN WITH SMALLER SERIES A ROUNDS THAN
15	WHAT YOU NORMALLY SEE IN THE MEDIA, BUT THEY EITHER
16	ARE IN THE PROCESS OF RAISING THAT SERIES A FUNDING
17	OR HAVE SECURED AT LEAST THE FIRST TRANCHE OF THAT.
18	AND SO WITH THAT IN MIND, THESE ARE SMALL
19	COMPANIES THAT ARE ACTIVELY RAISING FUNDS. THEY
20	OFTEN ARE RELYING ON SEED STAGE FUNDING. THAT'S THE
21	TYPICAL TRANSLATIONAL APPLICANT AND GRANTEE WHEN IT
22	COMES TO FOR-PROFIT COMPANIES.
23	WE HAVE AWARDED TEN TRANSLATIONAL AWARDS
24	TO FOR-PROFIT COMPANIES, AND SIX OF THESE WERE
25	ACTUALLY AWARDED IN THE PAST YEAR. SO THAT JUST

1	GIVES YOU AN IDEA AS TO THE UPTAKE IN TRANSLATIONAL
2	FOR-PROFIT GRANTEES. AND THESE HAVE ALL BEEN SMALL
3	PRIVATE PRECLINICAL STAGE COMPANIES, AS I MENTIONED.
4	SO AT THIS POINT I'LL LET DR. ABLA CREASEY
5	ELABORATE A LITTLE BIT MORE ON THE TYPES OF GRANTEES
6	THAT WE HAVE FUNDED UNDER TRANSLATIONAL AND WHAT
7	THEY'RE DOING WITH THEIR FUNDING.
8	DR. CREASEY: HI, EVERYONE. I JUST WANTED
9	TO DESCRIBE MY CURRENT EXPERIENCE WITH THE
10	TRANSLATION AWARD. I BECAME RESPONSIBLE FOR THAT
11	EFFORT ONLY RECENTLY, BUT IN THAT SETTING I JUST
12	WANTED TO REITERATE THAT, IN GENERAL, FUNDING FOR
13	TRAN-LIKE APPLICATIONS HAS BEEN ESSENTIALLY HARD TO
14	GET. MOST OF THE GRANTEES TELL US THAT THEY ARE IN
15	NEED OF FUNDS AND THEY'RE VERY GRATEFUL TO CIRM FOR
16	DOING THAT.
17	SO WE HAD PROJECTED THAT WE WOULD ONLY GET
18	FIVE TO SIX TRAN GRANTS IN THIS LAST ROUND, AND WE
19	ACTUALLY GOT 11 APPROVED BY YOU. AND SO IT SEEMS,
20	AS AGAIN CONFIRMED BY WHAT STEVE AND SHYAM SAID,
21	THERE IS AN INCREASE IN INTEREST IN APPLYING TO CIRM
22	AND ALSO BECAUSE THERE'S LACK OF FUNDING BY EVERYONE
23	ELSE, MOSTLY INVESTED WITH PHILANTHROPY OR FAMILY
24	INVESTMENTS, ET CETERA.
25	SO CURRENTLY IN OUR GRANTS MANAGEMENT
	10

1	SYSTEM WE HAVE 47 AWARDS. 30 ARE ACTIVE, 11 CLOSED,
2	4 TERMINATED, 1 DECLINED. THREE OF THE CLOSED 11
3	ARE FUNDED BY INDUSTRY, SMALL INDUSTRY, AND ALL
4	CONTINUE TO BE IN DEVELOPMENT. SO THEY PROGRESSED
5	WELL COMPARED TO THE AVERAGE OUT THERE.
6	THE LAST ROUND OF TRAN, WHICH WAS ON
7	AUGUST 19TH, 24 APPLIED, 19 WERE FOUND ELIGIBLE, AND
8	11 OF THE 19 WERE APPROVED FOR FUNDING. FIVE OF THE
9	ACTIVE ARE FUNCTIONING THAT ARE SMALL INDUSTRY
10	APPLICANTS.
11	WHEN WE ACTUALLY WORK WITH THESE GRANTEES
12	FOR POTENTIAL APPLICATIONS, WE GET TO KNOW THEM A
13	LITTLE BIT BETTER. AND I JUST WANTED TO KIND OF
14	SHARE AN EXPERIENCE I'VE HAD WITH THREE OF THE
15	ELEVEN THAT ACTUALLY GOT THREE OF THE 26 THAT
16	APPLIED, 11 OF THEM WERE APPROVED, AND ALL THREE
17	REITERATED HOW GRATEFUL THEY WERE TO CIRM. AND ONE
18	STANDS OUT IN MY MIND BECAUSE THAT HAD, ON THE SMALL
19	INDUSTRY START-UP, MENTIONED THAT HE WAS USING HIS
20	FATHER'S TRUST MONEY TO SUPPORT THE CO-FUNDING. AND
21	FOR THAT REASON, WHEN STEVE DISCUSSED WITH US THE
22	POTENTIAL KIND OF CONSIDERATION OF MINIMIZING THE
23	CO-FUNDING OR REMOVING THE CO-FUNDING, IT STRUCK A
24	CHORD IN MY MIND TO LIKE HOW PEOPLE STRUGGLE IN
25	ORDER TO MAKE THAT CO-FUNDING REQUIREMENT IN ORDER

	Bern C. Brand, Gress No. 7132
1	TO ENABLE THEM TO APPLY TO US. AND REMEMBER, WE ARE
2	IN THE BUSINESS OF ACCELERATION. WE HELP THEM
3	ATTAIN THEIR GOALS, AND SO IT'S WITH THAT SPIRIT I
4	PROVIDED YOU ALL THAT DATA.
5	ANY QUESTIONS?
6	UNIDENTIFIED SPEAKER: SORRY I'M LATE.
7	APOLOGIES FOR THAT. I'LL CATCH UP WITH YOU
8	SEPARATELY.
9	DR. CREASEY: NO WORRIES. I WAS JUST
10	MENTIONING THE EXPERIENCES WE HAVE HAD WITH THE TRAN
11	APPLICANTS, ESPECIALLY THOSE FROM INDUSTRY, WHO
12	SPOKE ABOUT HOW DIFFICULT IT IS TO FIND CO-FUNDING
13	REQUIREMENT, WHICH AMOUNTS TO ABOUT A MILLION
14	DOLLARS. AND THE ONE EXPERIENCE I REITERATED WAS
15	THE ONE WHERE ONE OF THE APPLICANTS SAID THE SMALL
16	COMPANY HAD TO USE HIS FATHER'S TRUST MONEY TO
17	PROVIDE THAT CO-FUNDING REQUIREMENT.
18	THERE'S A QUESTION FROM DR. GOLDSTEIN. GO
19	AHEAD PLEASE.
20	DR. GOLDSTEIN: KIM WAS BEFORE ME. KIM,
21	ANY PROBLEM IF I GO AHEAD?
22	DR. BARRETT: YES.
23	DR. CREASEY: OH, I'M SORRY. I DIDN'T SEE
24	KIM.
25	DR. BARRETT: GO AHEAD, LARRY.

1	DR. GOLDSTEIN: THANK YOU, KIM.
2	I GUESS A COMMENT AND A QUESTION. IT'S
3	PRETTY WELL-KNOWN IN AND AROUND THE INDUSTRY THAT
4	CASH IS REALLY EXPENSIVE FOR SMALL COMPANIES.
5	THEY'VE GOT PLENTY OF EQUITY TO GIVE AWAY. THAT'S
6	SOMETHING TO KEEP AN EYE ON. BUT IT'S VERY HARD FOR
7	EARLY STAGE COMPANIES, PARTICULARLY THOSE BEFORE THE
8	CLINICAL STAGE, TO HAVE VERY MUCH CASH ON HAND.
9	ABLA, I GUESS THE QUESTION IS YOU GAVE A
10	VERY POIGNANT AND USEFUL EXAMPLE. HOW FREQUENT DO
11	YOU THINK IT IS THAT, A, COMPANIES THAT APPLY ARE
12	REALLY STRETCHING TO MEET THE CO-FUNDING
13	REQUIREMENT; AND, B, DO YOU HAVE ANY FEEL FOR
14	COMPANIES OUT THERE WHO ARE NOT APPLYING BECAUSE OF
15	THE CO-FUNDING REQUIREMENT? IS THAT COMMON? IS IT
16	RARE?
17	DR. CREASEY: AGAIN, GIVEN THE FACT THAT I
18	JUST TOOK CHARGE OF THIS EFFORT JUST RECENTLY, SO I
19	DON'T HAVE A HISTORICAL DATABASE, BUT THE IDEA
20	THOUGH, HAVING WORKED IN INDUSTRY BOTH IN LARGE
21	MOLECULE, SMALL MOLECULES, ET CETERA, IN GENERAL,
22	INDUSTRY AT VERY EARLY STAGE STRUGGLE. AND SO MY
23	SENSE IS THAT SOME ARE NOT ABLE TO APPLY TO US
24	BECAUSE OF THE CO-FUNDING REQUIREMENT. I'D SAY, IF
25	I WERE TO GUESS, PROBABLY MAYBE 20 PERCENT. BUT WE

1	ARE STARTING TO SEE AN INCREASE IN THE INDUSTRY
2	APPLICATIONS. IT'S BETTER THAN THE FIRST ROUND WE
3	SAW. THAT'S WHY, LIKE I SAID, WE BUDGETED ONLY FIVE
4	TO SIX, AND THIS TIME IT DOUBLED. BUT, AGAIN, I
5	THINK THE SOLVENCY ISSUE IS OFTEN, AS SHYAM COVERS,
6	MAYBE HE CAN ANSWER THAT QUESTION MORE CLEARLY.
7	DR. PATEL: AS ABLA MENTIONED, WE SUSPECT
8	THAT THERE ARE COMPANIES THAT SELF-SELECT, LOOKING
9	AT OUR ELIGIBILITY REQUIREMENTS AND APPLICATION
10	REQUIREMENTS. OF THE ONES WHO DO APPLY, THERE HAVE
11	BEEN SEVERAL CASES WHERE THEY HAVE NOT BEEN ABLE TO
12	MEET EITHER THE SOLVENCY OR CO-FUNDING ELIGIBILITY
13	REQUIREMENT AND HAD TO EITHER NOT SUBMIT THE
14	APPLICATION OR TO SUBMIT LATER. SO THAT IS AN
15	ONGOING CONCERN, THAT POTENTIALLY, WITH THIS SORT OF
16	REQUIREMENT BEING LIFTED, THE POTENTIAL TO GET MORE
17	APPLICATIONS COMING IN.
18	AND I THINK, AS ABLA MENTIONED, EVERY
19	SMALL COMPANY IS PUTTING IN A LOT OF THEIR OWN MONEY
20	TO FUND THE OPERATIONS OF THOSE COMPANIES.
21	ESPECIALLY IF IT'S THE LEAD CANDIDATE THEY'RE
22	PROGRESSING, THEN THEY'RE PUTTING A LOT OF FUNDING
23	INTO JUST KEEPING THE COMPANY GOING AND SUPPORTING
24	ALL THE ACTIVITIES NECESSARY OUTSIDE OF JUST THE
25	RESEARCH THAT IS BEING FUNDED BY CIRM.

1	CHAIRMAN JUELSGAARD: KIM.
2	DR. BARRETT: ACTUALLY I HAD BASICALLY THE
3	SAME QUESTION AS LARRY. DO WE HAVE A SENSE OF HOW
4	MUCH MORE COMPETITIVE THIS COMPETITION MIGHT BE IF
5	WE ARE OPENING THINGS UP BY REMOVING THIS
6	REQUIREMENT? AND I'M NOT SPEAKING AGAINST THE
7	ACTION THAT'S PROPOSED, BUT I JUST WANTED TO GET A
8	SENSE OF THE FLOODGATE'S OPEN, HOW MANY ARE OUT
9	THERE?
10	DR. CREASEY: FRANKLY, IT'S VERY HARD TO
11	GET TO A TRANSLATION STAGE WITH CELL AND GENE
12	THERAPY. AGAIN, AS A PERSON WHO'S WORKED IN THE
13	AREA, AND SO I'D SAY THE FLOODGATES MAY OPEN, BUT
14	NOT LIKELY BECAUSE YOU HAVE TO HAVE ESSENTIALLY A
15	CANDIDATE THAT YOU START OUT WITH. AND WE RECENTLY
16	HAD AN EXPERIENCE WHERE WE HAD TO TURN PEOPLE DOWN
17	BECAUSE THEY BELONGED MORE TO DISC2 THAN TO TRAN.
18	AND SO I'D SAY IT'S PROBABLY THERE, MAYBE SOME
19	INCREASE, BUT I DON'T THINK WE'RE GOING TO QUADRUPLE
20	OR WHATEVER, BUT THAT'S MY PERSONAL OPINION.
21	CHAIRMAN JUELSGAARD: BARRY.
22	DR. SELICK: THANKS, STEVE.
23	ABLA, THIS QUESTION IS EITHER FOR YOU OR
24	ON MAYBE SHYAM. IF SOMEONE IS UNABLE TO COME UP
25	WITH MATCHING FUNDS OR EVEN THE MINIMUM, WHAT SORT

1	OF DILIGENCE DO WE DO TO ENSURE THAT THEY ACTUALLY
2	HAVE THE INFRASTRUCTURE AND THE WHEREWITHAL TO
3	UTILIZE THE FUNDING THAT THEY'RE GOING TO GET FROM
4	CIRM?
5	DR. CREASEY: OUR TRAN APPLICATIONS ALSO
6	HAVE MILESTONES. IN FACT, PART OF BEING RESPONSIBLE
7	FOR IT, WE SET UP IMPORTANT MILESTONES UP FRONT,
8	CLOSELY MONITORING THEIR SPENDING AS WELL AS WHETHER
9	THEY ACHIEVE WHAT THEY PLANNED TO ACHIEVE DURING
10	THAT 30-MONTH EXERCISE. AND SO MY SENSE IS THAT WE
11	HAVE NOT WE ONLY HAD ONE WELL, WE HAD ONE
12	TERMINATED OUT OF THE 47 BECAUSE OF NOT BEING ABLE
13	TO MANAGE SOME OF THE WORK.
14	DR. SELICK: OKAY. THANK YOU.
15	CHAIRMAN JUELSGAARD: LET ME JUST ADD TO
16	THAT. SO IT'S A LITTLE BIT OF A CHICKEN AND EGG
17	SITUATION, HAVING A LITTLE PERSONAL EXPERIENCE IN
18	THIS AREA. SO SOMETIMES WHAT HAPPENS IS THE FACT
19	THAT YOU GET A CIRM GRANT IN THE TRANSLATIONAL AREA,
20	YOU GET THE ASSURANCE OF THAT MONEY, AND YOU GET THE
21	IMPRIMATUR OF THE GWG. IT ACTUALLY HELPS YOU RAISE
22	MORE MONEY TO KEEP GOING. SO THERE'S THAT HELPFUL
23	SITUATION WITH A CIRM GRANT FOR COMPANIES THAT ARE
24	STRUGGLING.
25	DAVE.

1	DR. MARTIN: THIS MAY BE A LITTLE BIT OUT
2	OF CONTEXT RATHER THAN DEBATING THE ISSUE ON THE
3	TABLE DIRECTLY. WHAT ABOUT PROVIDING AN OPTION TO
4	THE APPLICANT TO EITHER PAY THE, WHATEVER, 20
5	PERCENT IN CASH OR GRANT CIRM WARRANTS?
6	CHAIRMAN JUELSGAARD: RIGHT. SO WE HAVE
7	DISCUSSED THAT AMONGST OURSELVES WITH THE TEAM. IT
8	IS CERTAINLY SOMETHING THAT'S POTENTIALLY DOABLE.
9	IT'S GOING THE EXERCISE IS GOING TO BE ONE OF
10	FIGURING OUT HOW MANY WARRANTS TO ASK FOR. RIGHT?
11	WHAT METRIC ARE WE GOING TO USE TO DETERMINE THAT?
12	I TAKE IT THE WARRANTS WOULD BE GRANTED AT WHATEVER
13	THE CURRENT PRICE FOR THAT IS. THEY USE A VALUATION
14	MODEL CALLED 409A TO ESTABLISH VALUATION OF SHARES
15	IN VERY YOUNG COMPANIES OF THAT SORT. SO YOU'VE GOT
16	A PRICE THAT YOU CAN PAY. SO IT'S JUST THE NUMBER
17	OF SHARES, WHAT PERCENTAGE OF THE OUTSTANDING EQUITY
18	WOULD YOU ASK FOR.
19	I THINK IF WE'RE GOING TO DO THAT, AND I'M
20	NOT EITHER IN FAVOR OF OR OPPOSED TO, I THINK IT'S
21	SOMETHING THAT WE COULD TAKE A LOOK AT, BUT WE NEED
22	TO COME FORWARD WITH AN ACTUAL PROPOSAL OF HOW THAT
23	WOULD WORK. WHAT MODEL WOULD WE USE TO COME UP WITH
24	A NUMBER? SO AN INTERESTING NOTION.
25	LET ME PUT THAT ON THE TABLE FOR NOW
	47

1	BECAUSE LET'S SEE WHAT OTHER QUESTIONS THERE ARE AND
2	WHEN WE COME TO THAT. SO, MICHAEL, YOU'RE NEXT.
3	DR. STAMOS: THANKS. JUST SORT OF PILING
4	ON A LITTLE BIT. FIRST OF ALL, STEPHEN MAKES A
5	REALLY GOOD POINT ABOUT THE CHICKEN AND THE EGG
6	PART. I GET THAT. BUT THE QUESTION I HAVE REALLY
7	IS THE LACK OF SOLVENCY AND THE LACK OF ABILITY TO
8	CO-FUND SORT OF THE PART OF THE PROCESS OF NATURAL
9	SELECTION OF SURVIVAL OF THESE COMPANIES AND ABILITY
10	OF THEM TO PULL THIS OFF. THERE MAY WELL BE SOME
11	TRUTH TO THAT. WE DON'T KNOW UNLESS WE TEST IT.
12	IF WE DO APPROVE IT, I LIKE DAVID'S IDEA
13	PERSONALLY. SO THEY HAVE SOMETHING IN THE GAME,
14	SOME CONTRIBUTION.
15	CHAIRMAN JUELSGAARD: THANK YOU.
16	ANNE-MARIE.
17	DR. DULIEGE: I'M ON THE BOARD OF A
18	PRIVATE COMPANY, BUT SINCE I STARTED ON CIRM, I'VE
19	SWITCHED GEARS. AND MY FULL-TIME JOB IS IN A
20	PATIENT ADVOCACY ORGANIZATION NONPROFIT. THAT'S
21	PANCAN. SOME OF YOU MAY KNOW THAT. THE REASON WHY
22	I MENTION THAT IS BECAUSE NOW I'M PART OF AN
23	ORGANIZATION THAT LOOKS AT DRUG DEVELOPMENT
24	DIFFERENTLY, AND THAT IS TRYING TO HELP A FIELD THAT
25	STRUGGLES, PARTICULARLY BIOPHARMA, THAT STRUGGLES TO

1	GET MONEY, PANCREATIC CANCER BEING THE GRAVEYARD OF
2	DEVELOPMENT IN CANCER, VERY MUCH LIKE COMPANIES
3	WORKING ON STEM CELL RESEARCH STRUGGLE. IT'S VERY
4	SIMILAR.
5	AND WHAT WE ARE DOING TO ADVANCE THE FIELD
6	ARE PUTTING MONEY ON THE TABLE FOR PHASE II AND
7	PHASE III, BUT ASKING THE COMPANIES TO, I DON'T KNOW
8	IF IT'S AN EQUIVALENT AMOUNT OF MONEY, BUT TO PUT
9	MONEY ON THE TABLE AS WELL. ONE STEP FURTHER, WE
10	RECENTLY CREATED A THERAPEUTIC AWARD TO THE TUNE OF
11	\$5 MILLION TO HELP COMPANIES THAT ARE STRUGGLING
12	EARLIER IN THEIR DEVELOPMENT STAGE, BEING
13	TRANSLATIONAL, BUT ASKING THEM ALSO TO PUT MONEY ON
14	THE TABLE. AND, AGAIN, I KNOW IT'S A STRUGGLE FOR
15	COMPANIES TO DO THAT, BUT IT GUARANTEES TWO THINGS.
16	I DON'T KNOW THAT IT GUARANTEES, BUT IT HELPS
17	GUARANTEE TWO THINGS. ONE IS QUALITY AND TO SOME
18	EXTENT THE DARWINIAN EXPLANATION THAT YOU JUST GAVE
19	IS PRETTY RIGHT SPOT ON, AND SECOND, A COMMITMENT,
20	LONG-TERM COMMITMENT.
21	SO I WOULD STILL THINK THAT AS HARD AS IT
22	IS FOR COMPANIES, THIS IS GOOD TO DO.
23	CHAIRMAN JUELSGAARD: J.T.
24	CHAIRMAN THOMAS: SO QUESTION, SHYAM.
25	WHEN YOU WERE REVIEWING SORT OF THE DESCRIPTION, THE

1	FISCAL DESCRIPTION OF APPLICANTS THESE DAYS, DO WE
2	HAVE ANY WELL-HEELED TRANSLATIONAL APPLICANTS? OR
3	ARE VIRTUALLY ALL OF THEM VERY EARLY STAGE OF THE
4	KINDS YOU'RE DESCRIBING?
5	DR. PATEL: THEY TEND TO RANGE. SO THERE
6	ARE VENTURE BACKED COMPANIES THAT DO APPLY TO CIRM
7	AND HAVE GOTTEN CIRM FUNDING. THERE'S ALSO SO TO
8	CLEAR UP A LITTLE BIT, SO WITH RESPECT TO SOLVENCY,
9	EVERY FOR-PROFIT APPLICANT NEEDS TO DEMONSTRATE THAT
10	THEY HAVE AT LEAST SIX MONTHS OF RUNWAY WHEN THEY
11	APPLY TO CIRM. AND SO WE CONFIRM THAT WITH CASH ON
12	HAND.
13	WITH RESPECT TO CO-FUNDING, THEY COULD
14	EITHER HAVE THAT CASH ON HAND AT THE TIME OF
15	APPLICATION OR THEY NEED TO HAVE A PLAN SHOWING THAT
16	THEY ARE GOING TO BE ABLE TO RAISE THAT MONEY OVER
17	THE COURSE OF THE AWARD. AND THAT'S WHERE WE SEE A
18	LOT OF TIMES CONTINGENT FUNDING COMING IN FROM ANGEL
19	INVESTORS, FRIENDS AND FAMILY, OR VC'S AS PART OF
20	THAT COMMITMENT REQUIREMENT.
21	GOING BACK TO YOUR ORIGINAL QUESTION,
22	J.T., YES, THERE ARE COMPANIES APPLYING TO CIRM FOR
23	TRANSLATIONAL AWARDS, BUT THE VAST MAJORITY OF THOSE
24	ARE THE EARLIER STAGE COMPANIES THAT ARE LOOKING TO
25	DEVELOP THEIR FIRST CANDIDATE AND USING SEED STAGE

1	FINANCING OR REALLY EARLY SERIES A FINANCING.
2	CHAIRMAN THOMAS: SO IF THERE ARE SOME
3	WELL-HEELED COMPANIES, HAVE YOU GUYS TALKED ABOUT
4	SORT OF DIFFERENT TIERS OF FUNDING REQUIREMENTS
5	BASED ON HOW WELL-HEELED OR NOT AN APPLICANT IS? OR
6	ARE YOU LOOKING TO HAVE SORT OF AN ACROSS THE BOARD
7	POLICY REGARDLESS OF HOW WELL-HEELED ONE MIGHT BE
8	WHEN APPLYING?
9	CHAIRMAN JUELSGAARD: NO, WE HAVEN'T HAD
10	THAT DISCUSSION, AND I THINK IT'S ONE WORTH HAVING.
11	I'M GOING TO STOP JUST A MOMENT AND ASK
12	SHYAM. SO, SHYAM, PUBLIC COMPANIES, DO WE HAVE ANY
13	PUBLIC COMPANIES APPLYING FOR TRANSLATIONAL AWARDS
14	THAT YOU KNOW OF?
15	DR. PATEL: SO I CAN COMMENT ON THE TEN
16	THAT HAVE BEEN AWARDED BECAUSE THAT IS PUBLIC
17	INFORMATION. AND NONE OF THOSE
18	CHAIRMAN JUELSGAARD: AT THE TIME OF THE
19	AWARD?
20	DR. PATEL: AT THE TIME OF THE AWARD, NONE
21	OF THEM WERE PUBLIC.
22	CHAIRMAN JUELSGAARD: SO WE ARE DEALING IN
23	THE PRIVATE THE NONPUBLIC COMPANY WORLD. OKAY.
24	SO NOW WE ARE DIVIDING THEM UP BETWEEN, I GUESS,
25	WELL-HEELED AND NOT WELL-HEELED COMPANIES. SO I

1	THINK IT'S A LINE DRAWING EXERCISE, J.T. YOU HAVE
2	TO FIGURE OUT WHERE YOU THOUGHT THAT LINE WAS JUST
3	IN TERMS OF HOW MUCH CASH ON HAND THE ORGANIZATION
4	NEEDED TO HAVE BEFORE YOU SAID YOU'RE WELL-HEELED
5	ENOUGH THAT WE'RE GOING TO REQUIRE YOU TO PUT UP
6	MONEY. BUT ANYWAY, LET'S PUT THAT ASIDE FOR A
7	MOMENT BECAUSE, BARRY, YOU HAVE A QUESTION AND THEN
8	DAVE, OR A COMMENT AND THEN DAVE.
9	DR. SELICK: THANKS AGAIN, STEVE. ONE OF
10	THE GOALS OF THIS IS TO INCREASE THE NUMBER AND
11	DIVERSITY OF APPLICANTS THAT WE GET COMING INTO
12	CIRM.
13	SO, J.T., COMING BACK TO YOUR POINT ABOUT
14	WELL-HEELED AND NOT SO WELL-HEELED, IS THERE ANY
15	CORRELATION BETWEEN HOW INTERESTING AND POTENTIALLY
16	VALUABLE PROPOSALS ARE THAT COME FROM THE
17	WELL-HEELED COMPANIES AS OPPOSED TO THE LESS
18	WELL-HEELED COMPANIES? BECAUSE ONE COULD MAKE THE
19	ARGUMENT THAT ACTUALLY SOME OF THE MORE INTERESTING
20	ONES MAY COME FROM THE HIGHER RISK, LESS WELL-HEELED
21	COMPANIES.
22	CHAIRMAN JUELSGAARD: DAVE.
23	DR. MARTIN: JUST A QUICK COMMENT. IF AN
24	ENTITY HAD A CHOICE OF WARRANTS, GRANTING WARRANTS
25	OR PAYING CASH, MOST OF THE WELL-HEELED ONES WOULD

1	SAY STAY AWAY FROM THE WARRANTS. I'LL GIVE YOU THE
2	CASH. BUT THE OPPOSITE IF THEY DON'T HAVE THE CASH.
3	AND SO IT MAY BE SORT OF SELF-SELECTING, I THINK, IN
4	MY GUESS. IT'S A GUESS.
5	CHAIRMAN JUELSGAARD: NO, I THINK THAT'S
6	PROBABLY A FAIR POINT. AGAIN, WE ARE BACK TO TRYING
7	TO FIGURE OUT. AT SOME POINT EVEN A NONWELL-HEELED
8	COMPANY IS GOING TO BE RETICENT TO GIVE WARRANTS
9	DEPENDING UPON THE NUMBER THAT YOU'RE ASKING FOR
10	BECAUSE IT'S GOING TO IMPEDE DOWNSTREAM
11	FUND-RAISING. THERE'S ALREADY A DILUTION GOING ON
12	BEFORE EVEN THE FIRST MAJOR INVESTMENT IN SERIES A.
13	AND SOMETIMES YOU'LL SEE A SERIES A INVESTOR HAVING
14	CERTAIN REQUIREMENTS BEFORE THEY'LL FUND REGARDING
15	OUTSTANDING WARRANTS AT THAT POINT.
16	DR. MARTIN: BUT THEY HAD THE OPTION TO
17	PAY IT OFF.
18	CHAIRMAN JUELSGAARD: HOW WOULD YOU PAY AN
19	AWARD OFF?
20	DR. MARTIN: YOU ORIGINALLY SAID 20
21	PERCENT OF THE GRANT, ET CETERA, AND INSTEAD YOU
22	GRANTED OPTIONS. AND THEN AT THE TIME OF FUNDING
23	FROM A VENTURE FUND, THE ENTITY COULD PAY OFF
24	CHAIRMAN JUELSGAARD: BUY THE WARRANTS
25	BACK FOR A MILLION DOLLARS. IS THAT WHAT YOU'RE

1	SAYING?
2	DR. MARTIN: YES. SURE.
3	CHAIRMAN JUELSGAARD: OR ANY TIME ALONG
4	THE WAY.
5	DR. MARTIN: YEAH. RIGHT. YEAH.
6	CHAIRMAN JUELSGAARD: INTERESTING IDEA.
7	LET ME ASK. I SEE LARRY HAS GOT HIS HAND
8	RAISED. IF YOU WANT TO GO AHEAD, AND THEN I WANT TO
9	ASK SHYAM WHAT HE THINKS ABOUT THE WARRANT ISSUE.
10	DR. GOLDSTEIN: I WAS GOING TO MAKE THE
11	POINT THAT I THINK WE ARE ALL AWARE OF THE SORT OF
12	LONG-TERM EXPERIENCE IN THE INDUSTRY WHERE THERE ARE
13	SERIOUS INVESTMENT BUBBLES WHERE A LOT OF MONEY WILL
14	GO INTO A PARTICULAR AREA THAT'S VERY HOT. AND SO
15	YOU'LL HAVE A BUNCH OF WELL-HEELED COMPANIES IN THAT
16	AREA AND OTHERS THAT ARE DOING LESS SEXY STUFF AT
17	THE TIME THAT THE EMPHASIS IN THE FIELD CHANGED WHO
18	ACTUALLY HAVE LONG-TERM VALUE. AND SO I DON'T THINK
19	THAT THE PRESENCE OF MONEY IN A COMPANY'S BANK
20	ACCOUNT IS ALWAYS A GOOD GUIDE TO WHAT ITS LONG-TERM
21	PROSPECTS ARE GOING TO BE.
22	THINK ABOUT THE GENOMICS BOOM, WHICH I
23	THINK IN MANY WAYS KIND OF FIZZLED OUT. AND I THINK
24	IT WAS HARDER TO TURN THAT AREA INTO PRODUCTS THAN A
25	LOT OF INVESTORS REALIZED.

1	CHAIRMAN THOMAS: LET ME GO BACK TO ASKING
2	SHYAM WHAT HE THINKS ABOUT THE WARRANT ISSUE
3	REGARDING APPLICANTS.
4	DR. PATEL: SO WE WOULD LOOK AT THIS TWO
5	WAYS. FIRST OF ALL, WOULD IT BE SOMETHING THAT CIRM
6	CAN ACTUALLY DO? AND THAT'S A QUESTION WHERE THERE
7	IS SOME PRECEDENT HERE WITH RESPECT TO WHAT DR.
8	MILLAN HAS MENTIONED PREVIOUSLY, WHICH IS THE ATP3
9	PROGRAM THAT WAS A FUNDING OPPORTUNITY THAT WAS
10	EXPLORED A FEW YEARS AGO, AND THAT DID INVOLVE THIS
11	TYPE OF A MECHANISM BEING BUILT INTO THAT. SO THERE
12	COULD BE SOME PRECEDENT FOR CIRM TO BE ABLE TO ALLOW
13	THAT TYPE OF CO-FUNDING ARRANGEMENT.
14	AND THEN SECONDLY, IS THIS WITHIN SCOPE OF
15	A LOT OF THE COMPANIES THAT APPLY TO CIRM AT THE
16	TRANSLATIONAL STAGE? AND SO WE DO SEE A LOT OF
17	COMPANIES THAT ARE NO. 1 STAGE AND THEY HAVE
18	(INAUDIBLE) AS WELL. AND WHO ARE THEY GETTING THEM
19	FROM? SO THEY COULD BE ANGEL INVESTORS, ALSO A LOT
20	FROM INCUBATOR FACILITIES. SO IF THEY'RE SETTING UP
21	SHOP IN AN INCUBATOR FACILITY, THAT OFTEN COMES WITH
22	THAT TYPE OF ARRANGEMENT AS WELL. SO IN THAT
23	RESPECT, AT LEAST SOME OF THESE EARLIER STAGE
24	COMPANIES ARE ALREADY USED TO SEEING THOSE TYPES OF
<b>)</b> [	
25	TERMS FROM EVEN JUST THE FACILITIES WHERE THEY'RE

1	HOUSING THEIR COMPANIES. AND SO IT COULD BE
2	SOMETHING THAT THEY MIGHT BE AMENABLE TO IN SOME
3	RESPECT. SO THAT IS THE TWO AREAS.
4	ONE IS WHETHER IT'S SOMETHING THAT CIRM
5	CAN DO AND THERE COULD BE A PATHWAY FOR THAT, AND
6	SECONDLY, IS IT SOMETHING THAT THE COMPANIES THAT
7	APPLY TO CIRM ARE USED TO SEEING, AND THAT IS ALSO
8	TRUE.
9	CHAIRMAN JUELSGAARD: SO I JUST WANT TO
10	MAKE A FEW COMMENTS IF YOU DON'T MIND. THE FIRST IS
11	THAT I THINK ONE OF THE PRIORITIES OF CIRM IS TO
12	ENCOURAGE RESEARCH AND DEVELOPMENT FOR HOPEFULLY NEW
13	THERAPEUTICS IN THE REGENERATIVE MEDICINE AND GENE
14	THERAPY SPACE. AND I THINK THE MORE THAT WE CAN DO
15	TO ENCOURAGE THAT RESEARCH AND DEVELOPMENT, THE MORE
16	WE ARE MEETING WHAT I THINK IS ONE OF THE PRINCIPAL
17	MISSIONS OF CIRM, WHICH IS TO USE THE POWER OF THESE
18	TWO AREAS TO TRY AND HELP MEET UNMET MEDICAL NEEDS.
19	AND THE MORE WE CAN DO TO ENCOURAGE THAT, I THINK,
20	IS SOMETHING THAT CIRM OUGHT TO CONSIDER DOING.
21	THE SECOND IS IF YOU LOOK AT WHO THE OTHER
22	APPLICANTS ARE FOR TRANSLATIONAL AWARDS, IT'S
23	ACADEMIC INSTITUTIONS WHO DON'T HAVE A CO-FUNDING
24	OBLIGATION. AND THEY HAVE ALREADY BUILT-IN BENEFITS
25	OR ADVANTAGES OVER A SMALL FOR-PROFIT COMPANY.

1	THEY'VE GOT A WHOLE INFRASTRUCTURE THAT GETS
2	SUPPORTED OTHERWISE JUST ON AN ONGOING BASIS AND
3	THEN CIRM KICKS IN UP TO 50 PERCENT OF THE AWARD IN
4	SOME CASES TO HELP WITH RESPECT TO THE OVERHEAD
5	COSTS. AND THESE YOUNG COMPANIES HAVE CREATED THEIR
6	OWN INFRASTRUCTURE AND THEY'RE SUPPORTING THEM WITH
7	WHATEVER MONEY THEY'RE GETTING FROM WHOEVER THE
8	INVESTORS ARE THEY'RE GETTING THEM FROM. AND IN
9	ADDITION TO THAT, NOW THEY'RE SEEKING MONEY TO WORK
10	ON A POTENTIAL AWARD.
11	I JUST WANT TO ASK SHYAM BECAUSE MY
12	UNDERSTANDING IS THAT IN OUR GRANTS WE PROVIDE
13	EITHER NONE OR JUST A LITTLE IN TERMS OF THE
14	OVERHEAD OR INFRASTRUCTURE COSTS IN THE GRANTS TO
15	THE FOR-PROFIT COMPANY WORLD; IS THAT RIGHT?
16	DR. PATEL: SO WITH THE NONPROFIT AND
17	FOR-PROFIT, AT THE TRANSLATIONAL STAGE, AS YOU
18	MENTIONED, THE DIRECT PROJECT COSTS AMOUNT IS THE
19	SAME FOR BOTH. WITH RESPECT TO THE INDIRECTS AND
20	DIRECT FACILITIES, THE DIRECT FACILITIES THAT BOTH
21	NONPROFITS AND FOR-PROFITS CAN REQUEST, THERE'S AN
22	INDIRECT COST ON TOP OF THAT WHICH ONLY THE
23	NONPROFIT CAN REQUEST AND A FOR-PROFIT CANNOT. SO
24	THERE IS THAT ADDITIONAL FUNDING THAT A NONPROFIT
25	CAN GET THAT A FOR-PROFIT CANNOT WITH RESPECT TO

1	INDIRECT FUNDING.
2	CHAIRMAN JUELSGAARD: SO MY ONLY POINT IS
3	THAT THERE'S, AND IT'S NOT AN INTENTIONAL ONE, BUT
4	NONETHELESS, AND I'LL USE THE WORLD "BIAS," IT MAY
5	BE A BIT OF A PREJUDICIAL TERM, BUT A BIT OF A BIAS
6	FINANCIALLY BUILT IN IN FAVOR OF THE ACADEMIC AND
7	RESEARCH ORGANIZATION WORLD AND AGAINST THE
8	FOR-PROFIT WORLD. AND AGAIN, I'M NOT ARGUING FOR
9	ALL FOR-PROFITS GETTING A BREAK. I AM MORE FOCUSED
10	ON THE ONES THAT I THINK ARE MORE STRUGGLING AT THE
11	VERY BEGINNING, AND WHERE THEY STRUGGLE IS IN THE
12	TRANSLATIONAL AREA. AND I'M DOING THIS BASED UPON
13	SOME PARTICULAR EXPERIENCE THAT I'VE HAD RECENTLY
14	WITH AN ORGANIZATION THAT DID GET FUNDING, BUT
15	REALLY ULTIMATELY GOT FUNDING. THE GWG GRANTED THEM
16	A SCORE OF 85, BUT IT WAS DIFFICULT GETTING TO THE
17	TABLE FOR THEM. AND THEY MIGHT NOT HAVE MADE IT
18	OTHERWISE. AND I THOUGHT IN MY EXPERIENCE THAT
19	WOULD HAVE BEEN A SHAME FOR THAT TO HAPPEN.
20	I JUST WOULD REMIND EVERYBODY AT THE END
21	OF THE DAY, NO MATTER WHAT THE COMPANY IS, THEY
22	STILL HAVE TO HAVE A PROJECT THAT'S OF SCIENTIFIC
23	MERIT AS FAR AS THE GWG IS CONCERNED BECAUSE WE VERY
24	SELDOM GRANT AWARDS FOR ANYTHING THAT HAS A SCORE
25	UNDER AT LEAST 85.

1	SO I THINK THE ONE THING THAT'S COME OUT
2	OF THIS, WHICH IS KIND OF LEFT ONE THING, ANYWAY,
3	FOR ME KIND OF LEFT UNDONE IS WHETHER THERE'S AN
4	ALTERNATIVE TO MONEY AND THAT IS WARRANTS. AND I
5	DON'T WANT I THINK THAT'S AN IMPORTANT ENOUGH
6	ISSUE THAT MAYBE WE SHOULD TAKE THIS BACK AT THIS
7	POINT INTERNALLY AND HAVE SOME DISCUSSION ABOUT
8	WHETHER OR NOT WE COULD COME UP WITH A MODEL FOR
9	THINKING ABOUT THAT THAT WE CAN BRING BACK TO THIS
10	COMMITTEE. THAT'S ASSUMING WE'RE WILLING TO
11	CONSIDER THAT. SO IF THERE'S ENOUGH OF A VOTE IN
12	FAVOR OF RE-LOOKING AT THE MILLION DOLLAR OR 20
13	PERCENT CO-FUNDING REQUIREMENT, IF THERE'S ENOUGH
14	FAVORABLE SUPPORT FOR THAT, THEN I WOULD MOVE THAT
15	WE HAVE US GO BACK AND BASICALLY LOOK AT THE
16	ALTERNATIVE OF WARRANTS AND HOW THAT MIGHT WORK AND
17	THEN COME BACK TO THE COMMITTEE WITH A PROPOSAL
18	BUILT AROUND EITHER MONEY OR WARRANTS.
19	SO LET ME JUST PAUSE THERE AND SEE IF
20	THERE ARE ANY OTHER COMMENTS OR QUESTIONS.
21	DR. MARTIN: I THINK IF YOU PROPOSED A
22	MOTION THAT WE TRY TO ADDRESS THIS TO BENEFIT ALL
23	THE STATE PROGRAMS IN THIS, THE CALIFORNIA CITIZENS,
24	PATIENTS, AND SMALL, CREATIVE, STRUGGLING COMPANIES
25	BY TRYING TO SOLVE THIS PROBLEM. AND ONE OPTION IS

1	TO WAIVE FOR CERTAIN ENTITIES THE CASH REQUIREMENT.
2	THE OTHER IS TO DEVELOP A TYPE OF ALTERNATIVE THAT
3	PROVIDES A CHOICE OF HOW TO BENEFIT ALL THE
4	STAKEHOLDERS.
5	CHAIRMAN JUELSGAARD: ALL RIGHT. LARRY.
6	DR. GOLDSTEIN: SO AT THE RISK OF BORING
7	YOU ALL TO TEARS, NONETHELESS, LET ME POINT OUT THAT
8	THE OTHER PLACE WHERE WE SEE THIS KIND OF ISSUE WITH
9	SMALL START-UPS IS IN THE AREA OF ORPHAN
10	INDICATIONS, SO DISEASES THAT ARE VERY RARE AND
11	WHERE IT'S HARD TO GET LARGE AMOUNTS OF GRANT MONEY
12	OR VENTURE FINANCING OF ANY SORT BECAUSE THE PATIENT
13	POOLS ARE SMALL. AND SO YOU MIGHT SAY, WELL, WHY DO
14	WE CARE IF WE LOSE ORPHAN INDICATIONS FROM OUR
15	PORTFOLIO? IT'S ONLY A SMALL NUMBER OF PATIENTS.
16	BUT REMEMBER, IT IS OFTEN THE CASE THAT A THERAPY
17	THAT'S USED BROADLY ARE OR A METHOD THAT'S USED
18	BROADLY IN A POPULATION WAS INITIALLY DEVELOPED
19	USING ORPHAN INDICATIONS. SO JUST HAVE A LOOK AT
20	DON KOHN'S WORK WHERE REALLY HE'S MAKING PROGRESS
21	ALONG A VERY DIFFICULT PATH BUT WITH ORPHAN
22	INDICATIONS WHERE THE RISK IS VERY IT'S A
23	REASONABLY HIGH RISK, BUT THE POTENTIAL BENEFITS TO
24	THESE KIDS IS JUST ENORMOUS, AND THEY REALLY HAVE
25	UNMET MEDICAL NEEDS.

1	CHAIRMAN JUELSGAARD: THANKS. SO I THINK
2	WHAT I WOULD LIKE TO DO, AND THIS IS SORT OF A LESS
3	OFFICIAL WAY OF DOING IT, BUT IT'S KIND OF A TEST
4	THE WATERS APPROACH. I'D LIKE TO KIND OF FOR EACH
5	OF US, JUST SO I GET KIND OF A STRAW VOTE HERE, SO
6	THIS IS NOT WE CAN DO AN ACTUAL VOTE AFTER THIS,
7	BUT TO GET THE SENTIMENT OF THE GROUP. IF WE COULD
8	GO THROUGH KIND OF WITH EACH MEMBER AND EXPRESS
9	WHETHER YOU'RE, ONE, IN FAVOR OF CHANGING THE
10	FINANCIAL REQUIREMENT AND THEN, TWO, IF YOU ARE,
11	WHETHER YOU WOULD LIKE TO SEE WARRANTS AS AN
12	ALTERNATIVE TO CASH OR NOT. AND THEN I THINK WITH
13	THAT, SO WE CAN GET A SENSE BECAUSE IF THERE'S NOT
14	EVEN ANY SENTIMENT, ENOUGH SENTIMENT TO WANT TO
15	CHANGE THE CURRENT PARADIGM, THEN THERE'S NO REASON
16	TO EXPLORE THE SECOND PART, WHICH IS WARRANTS IN
17	LIEU OF CASH.
18	SO I GUESS WE COULD DO THIS IN A MOTION
19	SENSE AND THEN HAVE A SECOND MOTION, BUT I'D LIKE TO
20	AT LEAST TRY AND CLEAR THE UNDERBRUSH ON WHETHER
21	THIS CONCEPT OF SUBSTITUTION OR RELINQUISHMENT OF
22	THE REQUIREMENT OF THE CO-FUNDING, WHETHER THAT'S A
23	VIABLE ALTERNATIVE OR NOT FOR THIS GROUP. SO
24	WITHOUT DOING THIS AS A MOTION, I WOULD LIKE TO JUST
25	PROCEED THAT WAY, AND THEN WE CAN DO SOMETHING MORE

_	DETH G. DIAHN, CA CON NO. 7 132
1	FORMALLY.
2	SO, MARIANNE, WOULD YOU JUST CALL THE ROLL
3	OF PEOPLE AND LET'S SEE WHAT PEOPLE SAY ONE WAY OR
4	THE OTHER.
5	MS. DEQUINA-VILLABLANCA: KIM BARRETT.
6	DR. BARRETT: I'M IN FAVOR OF A CHANGE,
7	AND I'M IN FAVOR OF EXPLORING THE WARRANT QUESTION.
8	CHAIRMAN JUELSGAARD: OKAY. PERFECT.
9	MS. DEQUINA-VILLABLANCA: ANNE-MARIE
10	DULIEGE.
11	DR. DULIEGE: YES. SAME, YES FOR BOTH.
12	MS. DEQUINA-VILLABLANCA: LARRY.
13	DR. GOLDSTEIN: YES FOR BOTH.
14	MS. DEQUINA-VILLABLANCA: STEVE
15	JUELSGAARD.
16	CHAIRMAN JUELSGAARD: YES.
17	MS. DEQUINA-VILLABLANCA: DAVE MARTIN.
18	DR. MARTIN: I AGREE WITH WHAT WAS SAID,
19	YEAH.
20	MS. DEQUINA-VILLABLANCA: SHLOMO MELMED.
21	DR. MELMED: YES TO BOTH.
22	MS. DEQUINA-VILLABLANCA: BARRY SELICK.
23	DR. SELICK: YES TO BOTH AS WELL.
24	MS. DEQUINA-VILLABLANCA: MICHAEL STAMOS.
25	DR. STAMOS: YES TO BOTH.
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1	MS. DEQUINA-VILLABLANCA: JONATHAN THOMAS.
2	CHAIRMAN THOMAS: YES TO BOTH. ALTHOUGH,
3	STEVE, I STILL THINK WE MAY NEED TO TAKE A LOOK FROM
4	THE DATA ON WHETHER OR NOT THERE SHOULD BE A TIERED
5	APPROACH. IF YOU'VE GOT SOMEBODY APPLYING WHO'S GOT
6	A VERY HEALTHY SERIES A RAISE IN PLACE, THAT'S VERY
7	DIFFERENT FROM A COMPANY THAT MAY JUST BE DEALING
8	WITH EARLY SEED FUNDING AND STRUGGLING A LOT MORE.
9	SO
10	CHAIRMAN JUELSGAARD: FAIR POINT.
11	MS. DEQUINA-VILLABLANCA: ART TORRES.
12	MR. TORRES: AYE TO BOTH. THANK YOU FOR A
13	VALUABLE DISCUSSION.
14	MS. DEQUINA-VILLABLANCA: AND KAROL
15	WATSON. SHE'S NOT HERE.
16	CHAIRMAN JUELSGAARD: ALL RIGHT. WELL,
17	THEN, I SHOULD HAVE STAGED THIS AS A MOTION. SO
18	LET'S DO IT REAL QUICKLY FORMALLY AND CONSIDER THE
19	PEOPLE THAT APPROVED THIS AS HAVING APPROVED THE
20	MOTION SO WE DON'T GO THROUGH IT AGAIN. SO IS THERE
21	A MOTION THAT WE
22	MR. TORRES: SO MOVED.
23	CHAIRMAN JUELSGAARD: SENATOR TORRES. IS
24	THERE A SECOND?
25	DR. GOLDSTEIN: SECOND.

1	CHAIRMAN JUELSGAARD: ALL IN FAVOR JUST
2	SAY AYE.
3	(ALL SAY AYE.)
4	CHAIRMAN JUELSGAARD: FOR THE ROLL CALL,
5	MARIANNE, I JUST CONSIDER ALL THE PEOPLE THAT WE
6	WENT THROUGH AS HAVING BEEN IN FAVOR.
7	MS. DEQUINA-VILLABLANCA: OKAY. MOTION
8	CARRIED.
9	CHAIRMAN JUELSGAARD: AND THEN JUST AS A
10	SIDE, J.T., WE WILL TAKE A LOOK AT THE COMPANY
11	I'D BE INTERESTED IN SEEING WHAT WE ARE TALKING
12	ABOUT IN TERMS OF THE COMPANIES THAT ARE APPLYING
13	AND HOW MUCH WHEREWITHAL THEY HAVE. SO WE CAN
14	FACTOR THAT IN AS WELL IN OUR NEXT ANALYSIS.
15	SO WE'LL GO HOME AND DO SOME MORE HOMEWORK
16	AND COME BACK IN SOME PERIOD OF TIME AND VISIT THIS
17	AGAIN. BUT THANK YOU. IT'S BEEN A VERY HELPFUL
18	DISCUSSION, AT LEAST FOR ME ANYWAY.
19	MR. TORRES: THANK YOU, STEVE. TAKE CARE.
20	(THE MEETING WAS THEN CONCLUDED.)
21	
22	
23	
24	
25	
	34
	JT

### 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 PROCEEDINGS BEFORE THE IP AND INDUSTRY SUBCOMMITTEE OF THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON FEBRUARY 14, 2022, WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

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