BEFORE THE SCIENCE 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

AS INDICATED ON THE AGENDA LOCATION:

OCTOBER 10, 2011 2 P.M. DATE:

BETH C. DRAIN, CSR REPORTER:

CSR. NO. 7152

BRS FILE NO.: 90969

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	Britistens Reforming service
1	MONDAY, OCTOBER 10, 2011; 2 P.M.
2	
3	CHAIRMAN SHEEHY: ARE WE LIVE? SO ARE WE
4	READY TO START? OS, ARE YOU THERE?
5	DR. STEWARD: YES, I'M HERE.
6	CHAIRMAN SHEEHY: OKAY. SO I'LL CALL THE
7	MEETING TO ORDER. SHALL WE CALL THE ROLL?
8	MS. BONNEVILLE: JACOB LEVIN FOR SUSAN
9	BRYANT.
10	DR. LEVIN: HERE.
11	MS. BONNEVILLE: MARCY FEIT. MICHAEL
12	FRIEDMAN.
13	DR. FRIEDMAN: HERE.
14	MS. BONNEVILLE: BERT LUBIN.
15	DR. LUBIN: HERE.
16	MS. BONNEVILLE: SHLOMO MELMED.
17	DR. MELMED: HERE.
18	MS. BONNEVILLE: FRANCISCO PRIETO. PHIL
19	PIZZO. DUANE ROTH.
20	MR. ROTH: HERE.
21	MS. BONNEVILLE: JOAN SAMUELSON.
22	MS. SAMUELSON: HERE.
23	MS. BONNEVILLE: JEFF SHEEHY.
24	CHAIRMAN SHEEHY: HERE.
25	MS. BONNEVILLE: OS STEWARD.
	3
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1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

1	DR. STEWARD: HERE.
2	MS. BONNEVILLE: ART TORRES.
3	MR. TORRES: HERE.
4	MS. BONNEVILLE: JONATHAN THOMAS.
5	CHAIRMAN THOMAS: HERE.
6	MS. BONNEVILLE: KRISTINA VUORI.
7	DR. VUORI: HERE.
8	CHAIRMAN SHEEHY: WE HAVE A QUORUM?
9	MS. BONNEVILLE: WE DO.
10	CHAIRMAN SHEEHY: GREAT. SO WE HAVE OUR
11	FIRST ITEM IS CONSIDERATION OF THE STRATEGIC
12	PARTNERSHIP COMPONENT OF THE OPPORTUNITY FUND.
13	DR. STEWARD, WOULD YOU FEEL COMFORTABLE CONDUCTING
14	THIS PART OF THE MEETING SINCE YOU HAVE HAD THE
15	OVERLAP WITH THE IP INDUSTRY SUBCOMMITTEE AND RECENT
16	CONTINUITY THERE?
17	DR. STEWARD: SURE. I'D BE HAPPY TO. SO
18	AS EVERYONE PROBABLY KNOWS, THIS IS A CONTINUATION
19	OF THE CONSIDERATION OF THE OPPORTUNITY FUND THAT
20	WAS CREATED BY THE BOARD IN JUNE OF THIS YEAR. JUST
21	A LITTLE BIT OF BACKGROUND.
22	THE FUND HAD THREE COMPONENTS: THE BRIDGE
23	FUNDING COMPONENT, AN EXTERNAL INNOVATIVE PROGRAM,
24	AND A STRATEGIC PARTNERSHIP PROGRAM. WHAT IS MOVING
25	FORWARD TODAY IS THE CONSIDERATION OF THE STRATEGIC
	4
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1	FUNDING PARTNERSHIP PROGRAM.
2	WHAT HAPPENED WAS THAT THAT PROGRAM WAS
3	REFERRED TO THE INTELLECTUAL PROPERTY SUBCOMMITTEE.
4	THE SUBCOMMITTEE REVIEWED IT AND MADE
5	RECOMMENDATIONS FOR SOME MODIFICATIONS AND IS
6	PASSING THOSE RECOMMENDATIONS ON TO THE SCIENCE
7	SUBCOMMITTEE FOR OUR CONSIDERATION TODAY.
8	THE PURPOSE OF THE STRATEGIC FUNDING
9	PARTNERSHIP WAS TO ENHANCE REALLY THE LIKELIHOOD
10	THAT WE WOULD GET TO PHASE III CLINICAL TRIALS AND
11	GET FOLLOW-ON FINANCING FOR THAT TO PROVIDE A
12	POTENTIAL SOURCE OF CO-FUNDING FOR EARLY STAGE
13	THINGS AND TO PROVIDE CIRM-FUNDED PROJECTS WITH
14	ACCESS TO PHARMA AND BIOTECH PARTNERS THAT COULD
15	HELP OUT MOVING THINGS FORWARD TOWARD TRANSLATION.
16	I CAN SUMMARIZE VERY QUICKLY THE
17	MODIFICATIONS THAT THE IP SUBCOMMITTEE MADE TO THE
18	ORIGINAL PLAN. THE MAIN ONE IS THAT THE
19	SUBCOMMITTEE RECOMMENDED ALLOCATING THE FULL \$30
20	MILLION TO THE STRATEGIC PARTNERSHIP FUNDING PROGRAM
21	AND TO RECOMMEND ADDITIONAL ALLOCATIONS FOR THE
22	OTHER OPPORTUNITY FUND PROGRAMS SEPARATELY TO EXPAND
23	ELIGIBILITY TO INCLUDE EARLY STAGE PROJECTS. AND
24	JUST TO FLESH THAT OUT A LITTLE BIT, THE IDEA WAS
25	THAT THIS CONCEPT PLAN WOULD BE EXECUTED INITIALLY
	-

1	BY A PROGRAM ANNOUNCEMENT, THAT APPLICATIONS WOULD
2	BE ACCEPTED ON A ROLLING BASIS ABOUT TWICE A YEAR,
3	THAT ELIGIBLE PROJECTS WOULD BE BOTH EXISTING
4	PROJECTS IN GOOD STANDING, PROJECTS AT ANY STAGE OF
5	RESEARCH. AND THAT, I THINK, WAS MAYBE A LITTLE BIT
6	DIFFERENT THAN THE ORIGINAL CONCEPT PLAN. AND THAT
7	IS THINGS THAT FALL ANYWHERE BETWEEN BASIC RESEARCH
8	THROUGH AND INCLUDING PHASE II CLINICAL PROOF OF
9	CONCEPT. AND ONLY THOSE PROJECTS THAT HAVE
10	THIRD-PARTY COMMERCIAL VALIDATION WOULD BE
11	CONSIDERED.
12	AND THERE'S A LIST OF THINGS THAT
13	CONSTITUTE VALIDATION WHICH WOULD INCLUDE A TERM
14	SHEET OR LETTER OF INTENT TO PROVIDE FUNDING, A
15	DISEASE FOUNDATION FUNDING, OR OTHER SOURCES OF
16	THIRD-PARTY SUPPORT; FOR EXAMPLE, GOVERNMENT OR
17	SBIR.
18	AGAIN, THE PROPOSAL FROM THE IP
19	SUBCOMMITTEE WAS THAT THE STRATEGIC PARTNER PROGRAM
20	WOULD RECEIVE 30 MILLION WHICH, JUST TO PUT THE
21	NUMBERS IN PLACE, AS I UNDERSTAND IT, THE ORIGINAL
22	AMOUNT WAS 30 MILLION, BUT 5 MILLION OF THAT HAD
23	ALREADY BEEN EARMARKED FOR TECHNOLOGY TRANSFER
24	SUPPORT. SO THERE'S JUST A LITTLE BIT OF MAYBE
25	NUMBERS TO CLARIFY.

1	THE OTHER ASPECT OF THIS IS THAT THE IP
2	SUBCOMMITTEE RECOMMENDED A MAXIMUM SUPPORT OF 10
3	MILLION, BUT THAT WOULD EXCLUDE FUNDING FOR TECH
4	TRANSFER PATENT SUPPORT, AND THAT PER PROJECT
5	FUNDING COULD BE INCREASED AT THE DISCRETION OF THE
6	IP SUBCOMMITTEE. TERM OF AWARDS FOR FOUR YEARS.
7	AND SO JUST TO LAY THIS OUT, THIS WOULD BE
8	SOMETHING THAT WOULD GO THROUGH THE USUAL REVIEW
9	PROCESS AT CIRM. IT WOULD INCLUDE REVIEW BY THE
10	GRANTS WORKING GROUP. IT WOULD INCLUDE REVIEW BY
11	THE IP SUBCOMMITTEE OF THE PROPOSED TERM SHEETS, AND
12	THEN FINAL REVIEW AND APPROVAL BY THE ICOC.
13	DR. JUELSGAARD: THIS IS STEVE JUELSGAARD
14	AND I'M THE CHAIRMAN OF THE IP SUBCOMMITTEE. AND I
15	THINK OS PRESENTED A REALLY GREAT OVERVIEW, BUT I
16	HAVE A COUPLE THINGS THAT I'D LIKE TO ADD.
17	CHAIRMAN SHEEHY: PLEASE GO AHEAD.
18	DR. JUELSGAARD: I'M SURE YOU'RE
19	WONDERING, TO BEGIN WITH, HOW WE ARRIVED AT THE
20	NOTION OF FUNDING THIS PROGRAM FOR \$30 MILLION ON
21	ITS OWN GIVEN WHERE WE STARTED FROM. I THINK THERE
22	ARE TWO MAJOR REASONS BEHIND THAT. AND BEFORE I
23	DESCRIBE THAT, LET ME JUST SAY THAT ESSENTIALLY WHAT
24	THIS PROPOSAL WOULD REQUIRE IS ESSENTIALLY SEPARATE
25	FUNDING. SO IN ADOPTING THIS PROPOSAL, WE WOULD
	7

1	NEED TO ALSO AS A BOARD ADOPT SEPARATE FUNDING FOR
2	THE OTHER TWO PROGRAMS THAT WERE PART OF THE
3	OPPORTUNITY FUND; THAT IS, THE BRIDGE FUNDING
4	PROGRAM AND THE EXTERNAL INNOVATION FUNDING PROGRAM.
5	SO THERE WOULD HAVE TO BE ADDITIONAL FUNDING
6	COMMITTED TO THOSE. AND ALSO WE WOULD NEED TO
7	SEPARATELY APPROVE \$5 MILLION FOR THE TECHNOLOGY
8	TRANSFER FUNDING THAT HAS ALREADY BEEN AGREED TO.
9	SO THERE ARE SEVERAL MOVING PIECES THAT
10	WOULD NEED TO BE CONSIDERED CONTEMPORANEOUSLY AT THE
11	BOARD TO MAKE ALL THIS WORK. ESSENTIALLY IT WOULD
12	MEAN THE COMMITMENT OF ADDITIONAL FUNDS ALTOGETHER
13	FOR THESE FOUR DIFFERENT ACTIVITIES.
14	BACK TO WHY WE DECIDED THAT \$30 MILLION
15	DEDICATED TO THIS FUND WAS THE APPROPRIATE THING TO
16	DO. THE FIRST IS THAT IT WAS OUR VIEW THAT IN ORDER
17	FOR THIS PROGRAM TO BE EFFECTIVE, IT'S GOING TO
18	TAKE AND THE PROGRAM IS REALLY DESIGNED TO
19	INCENTIVIZE COMMERCIAL ENTERPRISE TO JOIN IN A
20	PROJECT AND TO TAKE A PROGRAM ESSENTIALLY THROUGH
21	PARTICULARLY THE LATTER STAGES OF CLINICAL
22	DEVELOPMENT, ALTHOUGH POSSIBLY EARLIER STAGES AS
23	WELL, TO TAKE ON THE MANUFACTURING RESPONSIBILITIES,
24	REGULATORY APPROVAL, AND THEN ULTIMATELY
25	COMMERCIALIZATION. SO IT'S REALLY DESIGNED TO BE AN

1	AID TO ATTRACTING COMMERCIAL BUSINESS.
2	IF WE NEVER REALLY NEED TO EMPLOY THIS
3	AID, THEN WE WOULDN'T DO IT, BUT THERE'S A SENSE
4	THAT WE MAY NEED TO AND, HENCE, THE NOTION OF
5	CREATING THE FUND IN THE FIRST PLACE. IF WE DO NEED
6	TO USE IT, BECAUSE THE AMOUNT OF MONEY THAT'S
7	INVOLVED IN THESE PROCESSES WHICH I JUST SPOKE OF IS
8	QUITE CONSIDERABLE IN NATURE, THE BELIEF WAS THAT WE
9	NEED TO HAVE ENOUGH WHEREWITHAL WITH RESPECT TO ANY
10	PARTICULAR COMMERCIAL ENTERPRISE TO REALLY MAKE IT
11	ATTRACTIVE TO THEM. AND THAT'S WHY WE THOUGHT
12	PROBABLY SOMETHING IN THE NEIGHBORHOOD OF \$10
13	MILLION WOULD SERVE THAT PURPOSE, ALTHOUGH I THINK
14	WE ALSO RECOGNIZED THAT IT MIGHT EVEN TAKE MORE. WE
15	HAVEN'T REALLY TRIED THIS OUT WITH ANYBODY ON THE
16	COMMERCIAL SIDE. SO THERE WILL BE A LITTLE BIT OF
17	SEEING HOW IT GOES AT THE BEGINNING.
18	SO THE FIRST ANSWER THAT WE PUT \$30
19	MILLION TO THIS WAS WE FELT THAT WE NEEDED A
20	SUBSTANTIAL SUM OF MONEY IN ORDER TO MAKE THIS
21	WORKABLE AT ALL AND THAT \$30 MILLION SERVED THAT
22	INITIALLY SUBSTANTIAL SUM OF MONEY.
23	THE SECOND REASON, AND THIS IS PROBABLY
24	MORE A REASON THAT I SEE THAN MAYBE OTHERS SEE, BUT
25	I THINK JUST IN THE NATURE OF THE WAY THE

1	OPPORTUNITY FUND WAS CONSTRUCTED IN THE FIRST PLACE
2	WITH HAVING THREE DIFFERENT PIECES DRAWING MONEY
3	FROM A SINGLE POT CREATES A BIT OF AN INTERNAL
4	CONFLICT ISSUE. SO WHEN YOU'RE OUT TALKING TO
5	SOMEBODY LIKE A COMMERCIAL ENTERPRISE AND
6	NEGOTIATING WITH THEM, AND YOU HAVE DISCUSSIONS AND
7	YOU COMMIT TO PROVIDING A CERTAIN LEVEL OF FUNDING
8	AS PART OF THOSE NEGOTIATIONS, YOU WANT TO BE SURE
9	THAT YOU ACTUALLY HAVE THE WHEREWITHAL TO DELIVER ON
LO	THAT AMOUNT OF MONEY. WHAT YOU DON'T WANT TO DO IS
L1	MAKE A COMMITMENT AND THEN COME BACK HOME ONLY TO
L2	FIND THAT THAT FUND HAS IN THE MEANTIME COMMITTED
L3	MONEY ELSEWHERE FOR ONE OF THE OTHER PROGRAMS AND
L4	SUDDENLY YOU DON'T HAVE THAT LEVEL OF FUNDING
L5	AVAILABLE TO YOU.
L6	SO HAVING THREE DIFFERENT FUNDING
L7	PRINCIPALS DRAWING FROM THE SAME FUND ALWAYS, AT
L8	LEAST FROM MY POINT OF VIEW, HAVE THAT POTENTIAL FOR
L9	CONCERN. AND THAT IS THAT YOU REALLY FIND OUT YOU
20	DON'T HAVE THE MONEY AVAILABLE BECAUSE IN THE
21	MEANTIME IT'S GONE IN A DIFFERENT DIRECTION. SO IN
22	ORDER TO AVOID THAT AS A POTENTIAL PROBLEM, AND I'M
23	NOT SAYING IT WOULD NECESSARILY OCCUR, BUT MIGHT
24	OCCUR, AND IN ORDER TO AVOID IT, WE THOUGHT IT BEST
25	TO HAVE THE OPPORTUNITY TO HAVE THE STRATEGIC

1	PARTNERSHIP FUND BASICALLY CALLED OUT SEPARATELY AS
2	ITS OWN SEPARATE PROGRAM WITH ITS OWN SOURCE OF
3	FUNDING SO AS TO AVOID THAT AS A POTENTIAL ISSUE.
4	SO I THINK THOSE ARE THE TWO MAIN POINTS
5	THAT I WANTED TO OUTLINE TO THE OUTLINE OS JUST
6	PROVIDED.
7	CHAIRMAN SHEEHY: COULD I ASK A QUESTION?
8	MR. JUELSGAARD: SURE. I IMAGINE JEFF IS
9	RUNNING THE MEETING.
10	CHAIRMAN SHEEHY: I'M TRYING TO PASS THE
11	CHAIR OFF TO OS, BUT I THINK IT'S BACK IN MY LAP. I
12	WAS GOING TO ASK A QUESTION. MY QUESTION IS IS THE
13	NUMBER YOU KNOW, NOW THAT WE'VE KIND OF
14	INTELLECTUALLY SEPARATED THIS FROM THIS 30 MILLION
15	THREE-PIECE PART, IS 30 MILLION SUFFICIENT? HAVE
16	YOU ACTUALLY THOUGHT ABOUT YOU'RE TALKING ABOUT
17	\$30 MILLION A PROJECT I MEAN \$10 MILLION A
18	PROJECT, TWICE A YEAR. YOU MAY BE THROUGH IT IN THE
19	FIRST TIME YOU GET UP TO THE PLATE.
20	JUST I'VE ALWAYS BEEN WILLING TO EXTEND
21	SOME OF THESE IF THERE'S A SENSE THAT THERE MIGHT BE
22	PROJECTS OUT THERE THAT WOULD BE VALUABLE FOR US TO
23	INVEST IN.
24	DR. JUELSGAARD: JEFF, I'LL ANSWER THAT AT
25	LEAST FROM MY POINT OF VIEW, AND I THOUGHT A LITTLE

BIT ABOUT THAT. I THINK \$30 MILLION IS SUFFICIENT
AT THIS POINT, NOT BECAUSE I THINK THAT THAT'S ALL
THE DEMAND THAT THERE WILL BE, BUT I THINK IT'S A
GREAT PLACE TO START. AND WE REALLY NEED TO SEE HOW
THIS IS GOING TO PLAY OUT AND WHAT THE EXPECTATIONS
OF PEOPLE ON THE OTHER SIDE WILL BE.

AND WHAT I DON'T WANT TO DO IS TO, IN THE FIRST INSTANCE, CAUSE THEM TO HAVE BIGGER EYES THAN WE WOULD LIKE THEM TO HAVE WHEN LOOKING AT FUNDING THAT CIRM MIGHT HAVE. I THINK IF WE SAY WE HAVE A LIMITED FUND, IT'S \$30 MILLION, WE HAVE A LIMITED GRANT AMOUNT, IT'S \$10 MILLION, THAT PUTS A LITTLE BIT OF A DAMPER ON WHAT THEY MIGHT OTHERWISE WANT TO EXPECT OR DEMAND OUT OF ONE OF THESE.

NOW, IT MAY TURN OUT THAT THOSE AMOUNTS OF MONEY AT THE END OF THE DAY DON'T SERVE THE PURPOSE FOR WHICH WE'RE HOPING IT WILL, AND THEN WE CAN COME BACK AND REVISIT THIS. BUT I'D RATHER START ON WHAT I WOULD CALL THE SMALLER END. SOME OF YOU MAY NOT THINK THIS IS THE SMALLER END, BUT IT IS FROM MY POINT OF VIEW, SMALLER END AND SEE HOW THIS ALL GOES. IF INDEED IT IS SERVING THE PURPOSE, BUT WE NEED TO EITHER AGREE TO A LARGER POOL TO DRAW FROM OR SOME OTHER CHANGES, WE CAN COME BACK ULTIMATELY TO THE IP SUBCOMMITTEE AND THEN TO THE SCIENCE

1	SUBCOMMITTEE AND THEN TO THE BOARD IF WE NEED TO DO
2	THAT. I THINK WE CAN DO THIS ON A FAIRLY FAST
3	TURNAROUND BASIS.
4	MS. FEIT: THIS IS MARCY AND I JUST JOINED
5	THE CALL. I AGREE. MY QUESTION WAS THE SAME. IS
6	THERE A WAY THAT WE COULD MAYBE STATE THAT WE WOULD
7	MONITOR THE DEMAND AND, THEREFORE, BE ABLE TO COME
8	BACK AND ASK OURSELVES IF WE NEED TO ADD ANOTHER
9	POOL OR INCREASE THE POOL?
10	DR. JUELSGAARD: SURE. I THINK SO,
11	ASSUMING WE IF THE BOARD AGREES TO MAKE THESE
12	CHANGES AND WE ESTABLISH THIS \$30 MILLION FUND AND
13	WE CAN GO OUT AND BEGIN TO TALK TO COMMERCIAL
14	ENTERPRISES ABOUT THEIR INVOLVEMENT IN ONE OR MORE
15	VARIOUS DISEASE TEAM PROGRAMS, AND ASSUMING THAT
16	THAT WOULD GET ALONG. I THINK THE STAFF WHO'S
17	INVOLVED CAN COME BACK AND REPORT TO THE BOARD AS TO
18	WHAT LEVEL OF INTEREST THERE IS, WHAT SORT OF
19	INTEREST IS BEING EXPRESSED BY THE COMMERCIAL
20	ENTERPRISES, WHAT THEIR CONCERNS ARE, AND WE CAN GET
21	NOT ONLY MONITORING IN TERMS OF NUMBERS, BUT
22	MONITORING IN TERMS OF QUALITY AND CONCERN.
23	DR. MELMED: MAY I ASK A QUESTION ON THAT
24	WHILE WE'RE DISCUSSING THIS QUESTION. WHO EXACTLY
25	IS THE RECIPIENT OF THIS GRANT? THE NONPROFIT OR

1	THE FOR-PROFIT OR BOTH?
2	DR. JUELSGAARD: THIS WILL BE FOR
3	FOR-PROFIT ENTERPRISES.
4	DR. MELMED: SO NONPROFIT CAN'T APPLY FOR
5	THIS?
6	DR. JUELSGAARD: IF A NONPROFIT I DON'T
7	KNOW. I DON'T THINK IT'S WRITTEN THAT WAY.
8	DR. MELMED: BUT IT DOESN'T MENTION THAT
9	IN THE DOCUMENTS. I'M TRYING TO UNRAVEL THE TARGET.
10	IT DOESN'T REALLY SAY WHO'S ELIGIBLE TO APPLY OR WHO
11	IS INELIGIBLE TO APPLY.
12	CHAIRMAN SHEEHY: COULD WE MAYBE BOTH
13	DR. TROUNSON AND ELONA BAUM HAVE BOTH SIGNALED.
14	SHOULD WE HEAR FROM THEM?
15	MS. SAMUELSON: I HAVE A QUESTION, JEFF.
16	DR. TROUNSON: I THINK WE'RE RESPONDING TO
17	THE EXTERNAL REVIEW PANEL TO TRY AND IDENTIFY WAYS
18	IN WHICH WE WOULD ENHANCE OUR RELATIONSHIP WITH
19	BUSINESS. SO IT WAS VERY SPECIFICALLY ORIENTATED TO
20	RELATIONSHIPS WITH BUSINESS, SO IT DOESN'T INCLUDE
21	THE NONPROFITS. THE ARGUMENT FROM THE PANEL WAS
22	THAT WE'RE ACTUALLY DOING PRETTY WELL ON THAT BASIS.
23	SO THIS IS REALLY TARGETED TOWARDS THE BUSINESS
24	SECTOR.
25	THE OTHER THING, I'M SUPPORTIVE

14

1	DR. MELMED: WHEN YOU SAY THAT, ALAN, ARE
2	WE EXCLUDING NONPROFITS?
3	DR. TROUNSON: YEAH. I THINK IT WAS VERY
4	SPECIFIED TO ENCOURAGING THE RELATIONSHIP WITH THE
5	INDUSTRIAL, WITH THE BUSINESS SECTOR. SO THIS
6	COMPONENT PART OF THE OPPORTUNITY FUND WAS REALLY
7	ORIENTATED VERY DIRECTLY TOWARDS THAT END.
8	AND JUST AN ADDITIONAL COMMENT. I THINK
9	IT'S USEFUL IN THE BEGINNING IF IT'S \$30 MILLION
10	BECAUSE IT ENABLES US TO GET THOSE BUSINESSES THAT
11	WANT TO SORT OF CO-FUND WITH US AN AREA, ESSENTIALLY
12	CO-FUND A PROJECT AREA THAT WOULD IF YOU HAVE IT
13	TOO LARGE, YOU ACTUALLY DISPERSE THE WAY YOU GO
14	ABOUT NEGOTIATING WITH THEM. BUT ESSENTIALLY IF
15	THERE'S A LIMITED NUMBER IN THE FIRST PLACE, YOU CAN
16	ACTUALLY GET THOSE PEOPLE WHO ARE REALLY KEEN TO
17	JOIN RELATIVELY QUICKLY.
18	SO I THINK IT'S A GOOD STRATEGY TO HAVE IN
19	THE FIRST PLACE A LIMITED AMOUNT OF FUNDS. AND IF
20	IT LOOKS VERY ENCOURAGING, THEN WE SHOULD EXPAND IT.
21	LET ME BE CLEAR ABOUT IT. THIS IS
22	RESEARCH THAT WOULD BE THIS WOULD BE MONEY THAT
23	WOULD COME FROM TWO SOURCES, CIRM AND FROM THE
24	BUSINESS SECTOR, TO SUPPORT PROJECT AREAS.
25	DR. VUORI: JUST A CLARIFICATION. WHERE
	15
	15

1	IS THE WORK THEN TO BE CARRIED OUT? IS IT DONE IN
2	THE COMPANY, OR IS IT DONE IN THE NONPROFIT
3	ORGANIZATION?
4	CHAIRMAN SHEEHY: ELONA WANTED TO ADD
5	SOMETHING.
6	MS. BAUM: I THINK THAT THE REASON WHY
7	IT'S NOT SPECIFIED IN THE CONCEPT IS BECAUSE, ONE,
8	IT'S A CONCEPT WHICH WILL ALLOW US TO BE MORE
9	SPECIFIC WHEN WE DO THE PROGRAM ANNOUNCEMENT. ONE
10	VISION AND ONE MODEL THAT COULD WORK IS THAT YOU'RE
11	ACTUALLY AWARDING IT TO A CURRENT GRANTEE WHO COULD
12	BE A NONPROFIT WHO THEN SEEKS TO ENTER INTO A
13	THREE-WAY AGREEMENT WITH CIRM AGREEING TO FUND A
14	CERTAIN AMOUNT OVER A PERIOD OF TIME AND WITH PHARMA
15	AGREEING TO FUND A CERTAIN AMOUNT OVER TIME. BUT
16	THE AWARD WOULD BE TO, FOR INSTANCE, OR COULD BE TO
17	THE NONPROFIT GRANTEE, BUT THERE WOULD BE THIS
18	UNDERLYING AGREEMENT WHICH THE IP SUBCOMMITTEE COULD
19	APPROVE THE TERMS OF.
20	THIS IS OFTEN DONE AND IT'S CALLED AN
21	OPTION AGREEMENT WHERE THE PHARMA WOULD HAVE AN
22	OPTION AFTER, FOR INSTANCE, PHASE II OF TAKING THE
23	WHOLE PROJECT AND FUNDING IT ALL THE WAY TO PHASE
24	III. SO WE WANTED TO LEAVE THAT ABILITY TO MODEL AN
25	AGREEMENT IN THAT WAY, WHICH IS WHY THAT WE ARE NOT

1	AS DESCRIPTIVE AS TO THE DIFFERENT MODELS THAT WOULD
2	BE FUNDED.
3	CHAIRMAN SHEEHY: OTHER QUESTIONS? DOES
4	THAT ANSWER YOUR QUESTION, DR. VUORI?
5	DR. VUORI: YES, I THINK SO. IF I
6	UNDERSTAND CORRECTLY, IT COULD BE ESSENTIALLY,
7	DEPENDING ON HOW THE PUBLIC PROJECT PLAN IS
8	STRUCTURED, THERE COULD BE WORK PROBABLY GOING ON IN
9	THE ACADEMIC LABORATORY IN THE COMPANY, THERE COULD
10	WORK PROJECT AT SOME POINT IN TIME AND CERTAIN
11	MILESTONES HAVE BEEN MET TO A COMPANY ALTOGETHER. I
12	GATHER THIS IS THE IDEA.
13	MS. BAUM: EXACTLY.
14	MR. JUELSGAARD: LET ME JUST ADD A LITTLE
15	BIT OF COLOR TO THAT. SO THERE WILL BE THREE
16	IMPORTANT END GAMES THAT NEED TO BE DEALT WITH
17	BEFORE A PRODUCT WILL BE ABLE TO COME TO THE
18	MARKETPLACE. THEY WILL INCLUDE PHASE III CLINICAL
19	DEVELOPMENT, WHICH IS LARGE-SCALE CLINICAL
20	DEVELOPMENT, GENERALLY OPERATING THROUGH SEVERAL
21	CLINICAL CENTERS IN WHATEVER JURISDICTIONS ARE
22	SELECTED, AND THEY ALL HAVE TO BE OVERSEEN AND
23	COORDINATED THROUGH A SINGLE BODY THAT ADDRESSES
24	THOSE CLINICAL TRIALS.
25	SO TYPICALLY COMPANIES HAVE THAT KIND OF
	17

1	IN-HOUSE EXPERTISE AND THAT CAPABILITY. THERE ARE
2	GOVERNMENT AGENCIES LIKE THE NIH THAT HAVE,
3	PARTICULARLY IN THE CANCER AREA, GROUPS THAT DO THAT
4	LIKE THE EASTERN COOPERATIVE ONCOLOGY GROUP AND
5	SEVERAL OTHERS. BUT THAT WILL NEED TO BE DONE, AND
6	IT'S PROBABLY NOT SOMETHING THAT A LOT OF SINGLE
7	ACADEMIC CENTERS HAVE HAD. THEY PROBABLY
8	PARTICIPATED IN INDIVIDUAL CLINICAL TRIALS, BUT NOT
9	COORDINATED SEVERAL CLINICAL TRIALS THAT ARE PUT
10	TOGETHER TO FORM THE COMPREHENSIVE PHASE WHEN
11	CLINICAL DATA THAT ARE NEEDED.
12	THE SECOND THING THAT'S GOING TO NEED TO
13	BE DONE IS ADDRESS THE REGULATORY APPROVAL ISSUES,
14	WHICH ARE THERE'S A LOT UNKNOWN ABOUT THAT. AGAIN,
15	MOST OF THAT REGULATORY EXPERTISE AIMED AT BOTH
16	APPROVAL OF THE PRODUCT AND APPROVAL OF THE PROCESS
17	BY WHICH THE PRODUCT IS MADE, THAT REGULATORY
18	EXPERTISE IS GOING TO EXIST WITH INSIDE COMMERCIAL
19	ORGANIZATIONS WHO ARE FAMILIAR WITH THOSE REGULATORY
20	PROCESSES.
21	AND THEN LASTLY, WE'RE GOING TO HAVE TO
22	ADDRESS COMMERCIAL PRODUCTION OF WHATEVER THE
23	PRODUCT IS THAT'S GOING TO BE APPROVED, WHETHER IT'S
24	A STABLE STEM CELL LINE, WHETHER IT'S SOME PROTEIN
25	THAT INTERDICTS AT THE LEVEL OF STEM CELLS OR

1	WHATEVER WE'RE TALKING ABOUT. AND AGAIN, THAT
2	MANUFACTURING CAPABILITY AND EXPERTISE SUFFICIENT
3	FOR FDA APPROVAL, LICENSURE AND APPROVAL, WILL MOST
4	LIKELY EXIST WITHIN A COMMERCIAL ENTERPRISE.
5	AND SO I THINK THAT'S WHERE THERE'S LIKELY
6	GOING TO BE A HAND-OFF FROM THE ACADEMIC CENTERS TO
7	A COMMERCIAL ENTERPRISE ARE AROUND THOSE THREE
8	ISSUES. AND THEN, OF COURSE, WE ALSO HAVE TO DEAL
9	WITH THE COMMERCIALIZATION ASPECT OF ALL OF THIS.
10	SO, FOR EXAMPLE, WE HAVE, JUST TO BEGIN WITH,
11	REIMBURSEMENT ISSUE AND ESTABLISHING REIMBURSEMENT
12	ON THE PART OF PRIVATE PAYORS AND PUBLIC PAYORS FOR
13	A NEW THERAPY AS WELL AS WHATEVER IS NEEDED TO
14	DISTRIBUTE THIS PRODUCT TO GET IT OUT INTO THE HANDS
15	OF PRACTITIONERS OR DISTRIBUTED TO CENTERS THAT ARE
16	GOING TO ADMINISTER THIS PRODUCT. A LOT OF THAT
17	STUFF YET TO BE DETERMINED.
18	SO I THINK IN ALMOST ALL CASES, I WON'T
19	SAY ALL, BUT PROBABLY ALMOST ALL CASES, IT'S GOING
20	TO BE NECESSARY TO ENGAGE COMMERCIAL INSTITUTIONS TO
21	GET ALL THAT STUFF DONE.
22	CHAIRMAN SHEEHY: DO WE HAVE
23	DR. LEVIN: COULD I MAKE ONE COMMENT? I
24	THINK EVEN GIVEN ALL THAT, IT'S VERY IMPORTANT THAT
25	WE NOT EXCLUDE NONPROFIT POTENTIAL APPLICANTS TO

1	THIS. THE WAY THAT THE STRATEGIC PARTNER PROGRAM
2	WAS FIRST BROUGHT UP WAS, AS ELONA JUST DESCRIBED
3	IT, AS A WAY TO TAKE PROMISING NEW IDEAS THAT WERE
4	CIRM-FUNDED, DEVELOPED UNDER, SAY, AN ETA GRANT OR
5	EVEN A BASIC BIOLOGY GRANT AND THAT HAD SOME
6	INTEREST FROM A PRIVATE THIRD PARTY AND BE ABLE TO
7	RAPIDLY MATCH INVESTMENT BY THE BUSINESS ENTITY TO
8	ENABLE IT TO GET DEVELOPED.
9	BUT THERE'S PLENTY OF SITUATIONS WHERE THE
10	MONEY WOULD NEED TO GO THROUGH THE NONPROFIT ITSELF
11	IF THEY WERE STILL RETAINING, FOR EXAMPLE, THE IP
12	RIGHTS OR THAT THEY WERE INTERESTED IN DEVELOPING
13	THE THERAPY INTO A PRODUCT, BUT IT WOULD STILL
14	THERE WOULD BE A THIS IS A WAY TO BETTER ENGAGE
15	INDUSTRY INTO THIS THREE-WAY PARTNERSHIP.
16	GIVEN THAT, I THINK IT'S REALLY IMPORTANT
17	THAT WE DON'T EXCLUDE NONPROFIT FROM BEING AN ACCESS
18	POINT FOR ONE OF THESE GRANTS.
19	DR. JUELSGAARD: LET ME JUST RESPOND TO
20	THAT. I THINK THAT'S FINE, BUT I THINK
21	REALISTICALLY, AGAIN, THIS IS MY POINT OF VIEW, BUT
22	REALISTICALLY, IF WE'RE GOING TO HOPE TO GET
23	THERAPIES ULTIMATELY OUT INTO USE, IN MANY, MANY,
24	MANY CASES WE'LL NEED TO INVOLVE COMMERCIAL
25	ENTERPRISE.

1	DR. LEVIN: OF COURSE.
2	DR. TROUNSON: IT WILL HAVE TO BE
3	AGREEABLE TO THE RESEARCH TEAM TO ENGAGE IN THIS
4	ANYWAY. SO IF THAT HAPPENED TO BE AN ACADEMIC
5	GROUP, THEY'D HAVE TO BE AGREEABLE TO IT ANYWAY.
6	MS. BAUM: SOME ACADEMICS WILL WANT TO DO
7	A SPIN-OUT COMPANY SOONER THAN OTHERS. SO I THINK
8	WE NEED TO MAINTAIN THE FLEXIBILITY.
9	BUT THE POINT BEING THAT EVEN IF IT'S A
10	SPIN-OUT COMPANY, THEY MIGHT NOT HAVE HIRED IN-HOUSE
11	ALL THE TALENT THEY NEED, WHICH IT MAKES IT
12	BENEFICIAL TO HAVE THEM LINK UP WITH LARGER
13	COMPANIES THAT HAVE ALL OF THAT EXPERIENCE.
14	REIMBURSEMENT DECISIONS NEED TO START MAKING THEIR
15	WAY INTO STUDY DESIGNS AT PHASE II OFTENTIMES, SO
16	THEY WILL NEED TO LINK UP.
17	DR. LUBIN: CAN I ASK A QUESTION NOW?
18	CHAIRMAN SHEEHY: GO AHEAD, BERT.
19	DR. LUBIN: SO I'M A NEW MEMBER OF THE
20	COMMITTEE, AND I HAVEN'T HEARD THE PREVIOUS
21	DISCUSSIONS RELATED TO THIS. IT'S MY UNDERSTANDING
22	THAT WE'RE SUPPORTING AN INVENTION THAT IS UNABLE TO
23	GET OTHER VENTURE CAPITAL DOLLARS TO CONTINUE MOVING
24	IT FORWARD, BUT OUR REVIEW PROCESS FEELS IT'S
25	SCIENTIFICALLY WORTHWHILE AND SHOULD GET DOLLARS

1	FROM CIRM. IS THAT A NAIVE STATEMENT, OR IS THAT
2	WHAT WE'RE TALKING ABOUT?
3	CHAIRMAN SHEEHY: I THINK ELONA WILL
4	RESPOND TO THAT.
5	MS. BAUM: I WOULD ACTUALLY DISAGREE WITH
6	THAT. ACTUALLY IF THE ENTITY, IF THE NONPROFIT WAS
7	TO DECIDE TO SPIN OUT AND COULD GET VENTURE CAPITAL,
8	THEY WOULD ALSO BE ELIGIBLE FOR THIS AWARD AS WELL.
9	SO THESE ARE NOT JUST ENTITIES THAT CAN'T ATTRACT
10	VENTURE CAPITAL. IN FACT, SOME ACTUALLY BELIEVE
11	THAT KEEPING THEM IN THE INSTITUTION LONGER, AS LONG
12	AS POSSIBLE, MIGHT BE MORE CAPITAL EFFICIENT BECAUSE
13	YOU DON'T HAVE TO HIRE ALL THE CEO, THE CFO, ETC.,
14	ETC. THAT'S ONE VIEWPOINT.
15	MS. SAMUELSON: I HAVE A FOLLOW-ON
16	QUESTION TO THAT, I THINK.
17	CHAIRMAN SHEEHY: GO AHEAD, JOAN.
18	MS. SAMUELSON: I GUESS THAT'S MY QUESTION
19	AS WELL. AND WHERE IN THE PROCESS DOES THAT
20	ASSESSMENT GET MADE? BECAUSE IT PROBABLY WOULDN'T
21	BE IN THE GRANT WORKING GROUP IF THEY'RE SEEING
22	THESE JUST ON A ROLLING BASIS. IT WOULDN'T BE
23	COMPARING THE UNIVERSE OF ACTIVITY, HAVE ANY KIND OF
24	SENSE OF HOW MERITORIOUS A GIVEN GRANT IS AND HOW
25	FAR THE SCIENCE HAS EVOLVED.
	22

1	I GUESS I KEEP THINKING OF AT THE
2	BEGINNING, AND I THOUGHT UNTIL AT LEAST PRETTY
3	RECENTLY OR UNTIL NOW, THE SENSE WAS THAT THE
4	SCIENCE WASN'T EVOLVED ENOUGH TO BE READY FOR
5	INDUSTRY. AND SO HOW IS IT THAT WE KNOW THAT AND
6	SO YOU TRUST THE NORMAL MARKET PROCESS, I GUESS,
7	WHICH PRESUMABLY IT MEANT THE MONEY ISN'T AVAILABLE
8	BECAUSE THE SCIENCE ISN'T READY. HOW DO WE KNOW
9	IT'S READY? AND WHERE HAVE WE MADE THAT ASSESSMENT
10	OR WILL WE IN OUR PROCESS?
11	CHAIRMAN SHEEHY: DR. TROUNSON IS GOING TO
12	RESPOND TO THAT.
13	DR. TROUNSON: THANKS, JEFF. ONE OF THE
14	THINGS, JOAN, THAT IS ATTRACTIVE TO PHARMACEUTICAL
15	COMPANIES AT THE MOMENT, AND WE KNOW THESE PEOPLE
16	ARE VERY INTERESTED, IS THE POSSIBILITY OF JOINING
17	RELATIVELY EARLY AND SAY THEY PUT IN LET'S CHOOSE
18	A FIGURE THEY PUT IN 10 PERCENT IN THE EARLY
19	STAGES AND THEN BUILD IT UP TO 30 PERCENT OR 50
20	PERCENT TO 90 PERCENT AND TAKE IT OVER BY PHASE II
21	SO THAT THEY'VE GOT A BUILDING THEY'RE BUILDING
22	THEIR FUNDING, AND WE'RE PROPORTIONALLY REDUCING OUR
23	FUNDING. SO THERE'S A SORT OF SHARING OF THE RISK,
24	IF YOU LIKE.
25	THAT'S ONE ISSUE WHICH IS IMPORTANT TO GET
	22

1	THEM ENGAGED. AND THE OTHER THING IS THAT THEY CAN
2	ACTUALLY HELP THE TEAMS BY DOING SOME OF THE REALLY
3	KEY COMPONENT PARTS EARLY ON SO THAT IF THEY DON'T
4	HAVE TO YOU DON'T HAVE TO REDO IT IF YOU HAPPEN
5	TO TAKE ON THIS PROJECT BY ITSELF LATER ON.
6	SO YOU SAVE A LOT OF TIME BY PROVIDING
7	ADVICE, BUT ALSO PROVIDING ADDITIONAL CAPACITY.
8	THESE COMPANIES OFTEN HAVE A LOT OF CAPACITY
9	IN-HOUSE, AND THEY CAN PROVIDE THAT CAPACITY TO
10	THESE TEAMS.
11	SO THE ASSESSMENT OF THIS WOULD BE, AS
12	ELONA SAID, IT WOULD BE MULTIFOLD. IT WOULD INVOLVE
13	THE IP BUSINESS SUBCOMMITTEE TO LOOK AT THE
14	CONTRACTUAL ARRANGEMENTS AND THE BUSINESS ENTERPRISE
15	COMPONENT PARTS, AND THE GRANTS WORKING GROUP AS
16	WELL LOOKING AT THE SCIENCE ISSUES. I THINK IT'S
17	ONLY GOING TO BE THOSE SCIENCE PROGRAMS THAT ARE
18	REALLY WELL HEELED AND MOVING FORWARD THAT WILL BE
19	DESIRABLE BY THIS SECTOR ANYWAY.
20	SO IT WILL BE I THINK IT WILL REALLY BE
21	QUITE STRAIGHTFORWARD. BUT IT WILL BE THOSE
22	PROJECTS THAT ARE ENHANCED AND OUR ABILITY TO
23	DELIVER THEM REALLY IMPROVED BY HAVING THESE
24	RELATIONSHIPS.
25	MS. SAMUELSON: THANK YOU.
	24

1	CHAIRMAN SHEEHY: ADDITIONAL QUESTIONS?
2	MR. ROTH: JEFF, I'M GOING TO HAVE TO
3	LEAVE. IT'S DUANE, BUT I'LL JUST COMMENT THAT I'M
4	VERY MUCH IN SUPPORT OF THIS PROGRAM. I THINK IT'S
5	WELL THOUGHT OUT, AND IT DOES INVOLVE THE AREA WHERE
6	THERE REALLY ISN'T VENTURE FUNDING GOING IN.
7	THERE'S VERY LITTLE VENTURE CAPITAL BEING INVESTED
8	IN STEM CELLS IN GENERAL AND I COULD SAY IN
9	THERAPEUTICS IN GENERAL, AND ESPECIALLY AT THE EARLY
10	STAGE. SO THIS PROGRAM IS INTENDED TO HELP ENTICE
11	PEOPLE TO PUT SOME MONEY IN, BUT ALSO TO ADD
12	COMPETENCY THAT DR. STEWARD WAS TALKING ABOUT TO
13	MOVE THESE THINGS FORWARD.
14	CHAIRMAN SHEEHY: IS THAT A MOTION?
15	MR. ROTH: I WOULD MAKE A MOTION THAT WE
16	APPROVE THIS RECOMMENDATION.
17	DR. FRIEDMAN: I WILL SECOND IT.
18	CHAIRMAN SHEEHY: IS THERE ANY ADDITIONAL
19	DISCUSSION, OR SHOULD WE MOVE TO A VOTE?
20	DR. FRIEDMAN: IF I COULD JUST MAKE ONE
21	POINT, PLEASE. IT WILL ONLY TAKE A MOMENT. I LIKE
22	THE IDEA OF BEGINNING WITH A MODEST AMOUNT, THE \$30
23	MILLION. I'D LIKE TO THEN BEFORE WE WILL ALSO
24	SEE WHAT IDEAS ARE OUT THERE AND HOW THIS IS
25	RECEIVED. I THINK THAT'S FINE. BUT I THINK WE ALSO
	25

1	WANT TO LOOK CAREFULLY AND BE CRITICAL OF HOW WE USE
2	THE MONEY AS WE COME AROUND TO THE NEXT TIME THAT WE
3	MIGHT WANT TO REAUTHORIZE OR PERHAPS ENLARGE THIS
4	PROGRAM.
5	I THINK IT'S A VERY USEFUL EXPERIMENT, AND
6	I SUPPORT IT, BUT I THINK WE OUGHT TO LOOK
7	CRITICALLY AT IT BEFORE WE DO IT AGAIN.
8	CHAIRMAN SHEEHY: ANY OTHER BOARD
9	COMMENTS?
10	DR. VUORI: I'M VERY SUPPORTIVE OF THIS
11	APPROACH AS WELL. JUST WANTED TO MAKE ONE COMMENT
12	OR QUESTION MAYBE FOR ELONA PRIMARILY. AND THAT IS
13	THAT WHAT I DEFINITELY AGREE WITH, ESPECIALLY WITH
14	DUANE, IS SORT OF UTILIZING CIRM AND THE PRIVATE
15	SECTOR IN LIEU OF VENTURE CAPITAL FUNDING, IF YOU
16	WILL, AND MOVING DISCOVERIES FORWARD IN THE PRIVATE
17	SECTOR, AND PARTICULARLY THAT WE INVOLVE THEN SOME
18	SORT OF A LICENSING TRANSACTION COMING FROM THE
19	ACADEMIC LAB IN THIS CASE, MANY TIMES A NONPROFIT
20	SECTOR.
21	NOW, MOST OF THE NONPROFIT ORGANIZATIONS
22	AND I THINK CIRM FUNDING AS WELL COMES FROM
23	TAX-EXEMPT BONDS. AND THERE ARE CERTAIN IRS RULES
24	AND REGULATIONS ABOUT PRIVATE BUSINESS USE, HOW
25	TAX-EXEMPT BONDS FACILITIES THAT HAVE BEEN

1	FINANCED WITH TAX-EXEMPT BONDS CAN OR CANNOT BE USED
2	FOR PRIVATE BUSINESS USE. AND IN THOSE LICENSING
3	TRANSACTIONS, THEN, A CERTAIN SAFE HARBOR RULES THAT
4	RELATE TO THESE NEGOTIATIONS. SO I JUST WANT TO
5	MAKE SURE THAT THE IP SUBCOMMITTEE OR WHOEVER IS THE
6	ENTERPRISE HAS A GOOD HANDLE ON THOSE THINGS SO THAT
7	BOND FUNDING THAT IS TAX-EXEMPT HERE TO START WITH
8	SUDDENLY DOES NOT BECOME TAXABLE FOR THE BOND
9	HOLDERS.
10	CHAIRMAN SHEEHY: J.T. HAS AN ANSWER TO
11	THAT.
12	CHAIRMAN THOMAS: KRISTINA, JUST TO SORT
13	OF CLARIFY, IT'S A LITTLE ESOTERIC, BUT THE BULK OF
14	THE BONDS THAT WE NOW HAVE ISSUED ARE ACTUALLY
15	TAXABLE. THERE WERE PORTIONS THAT WERE TAX-EXEMPT
16	THAT WENT TO FACILITIES. BUT ONCE THAT SORT OF RAN
17	ITS COURSE, WE'RE NOW, FOR EXAMPLE, GOING TO BE IN
18	THE NEXT GO ISSUE, WHICH IS NEXT WEEK, AS A TAXABLE
19	BOND COMPONENT.
20	NOW, HAVING SAID THAT, WE'RE IN THE MIDST
21	OF DISCUSSIONS WITH THE IRS WHERE WE ARE ATTEMPTING
22	TO RECAST THEIR THINKING ABOUT WHAT WE'RE DOING IN A
23	WAY THAT WOULD ULTIMATELY END UP GETTING TAX-EXEMPT
24	STATUS FOR OUR DEBT TO, AMONG OTHER THINGS, REDUCE
25	INTEREST COST, ETC., BUT FOR THE MOMENT WE'RE

1	PREDOMINANTLY TAXABLE.
2	IT'S LIKE, MR. CHAIR, JUST TO MAKE ONE
3	OTHER COMMENT, WHICH IS IN ADDITION TO THIS, I
4	THINK, BEING A SUBSTANTIVELY VERY PRUDENT PROGRAM
5	THAT EVERYBODY HAS PUT TOGETHER HERE, I WANTED TO
6	NOTE THAT WE'RE SENDING A VERY IMPORTANT AND STRONG
7	MESSAGE TO INDUSTRY THAT WE ARE SERIOUS ABOUT
8	INCREASING THEIR ENGAGEMENTS. AND I'VE HEARD FROM A
9	NUMBER OF PEOPLE CONNECTED TO THE CORPORATE WORLD
10	THAT THEY'RE PLEASED TO SEE THIS. AND I THINK THIS
11	IS AN EXCELLENT PROGRAM FOR US TO PUT IN PLACE. AND
12	I ECHO THOSE WHO NOTED THEY STRONGLY SUPPORT.
13	CHAIRMAN SHEEHY: ANY ADDITIONAL BOARD
14	COMMENTS?
15	MR. ROTH: JEFF, I'M GOING TO GO SO I VOTE
16	YES.
17	CHAIRMAN SHEEHY: WE'LL RECORD YOUR VOTE.
18	I'M GOING TO GO AHEAD.
19	WE HAVE A PUBLIC COMMENT HERE IN SAN
20	FRANCISCO.
21	MR. REED: THIS IS DON REED. I ATTENDED
22	THE WORLD STEM CELL SUMMIT, WHICH, BY THE WAY, WAS
23	VERY WELL REPRESENTED BY CIRM. IT WAS TREMENDOUS BY
24	ALL CONCERNED. BUT ONE OF THE BREAKOUT PANELS WAS
25	ON THE PRESENT CLIMATE TO GET MONEY FOR BIOMED. AND

THE PERSON IN CHARGE OF IT, THE HEAD OF PROTEUS
ENTERPRISES, DESCRIBED IT IN ONE WORD. HE SAID
BRUTAL. SO I THINK THIS IS HIGHLY APPROPRIATE AND
SHOULD BE SUPPORTED.
CHAIRMAN SHEEHY: DO WE HAVE ANY MORE
PUBLIC COMMENT ON THIS ISSUE?
DR. LEWICKI: JOHN LEWICKI FROM ONCOMED
PHARMACEUTICALS. AND WE RECENTLY RECEIVED A DISEASE
TEAM PLANNING AWARD. AND I WANTED TO EXPRESS FROM
OUR VANTAGE POINT, NO. 1, OUR REAL ENTHUSIASM TOWARD
WORKING WITH CIRM TO MOVE PRODUCTS FORWARD. WE
ACTUALLY HAVE A PRODUCT THAT'S THE SUBJECT OF THE
DISEASE TEAM GRANT THAT WE HOPE TO HAVE IN THE
CLINIC BY THE MIDDLE OF NEXT YEAR.
AND I ALSO WANTED TO SAY THAT I THINK THIS
PROGRAM HAS BEEN VERY WELL THOUGHT OUT. WE'RE VERY
SUPPORTIVE. AND THE \$10 MILLION THAT HAS BEEN
DISCUSSED CAN REALLY ALLOW A PROGRAM TO MOVE FORWARD
WHEN IT OTHERWISE MAY NOT HAVE. PARTICULARLY AT
THIS PARTICULAR STAGE WHERE VENTURE FUNDING, FOR
EXAMPLE, WHICH WAS JUST DISCUSSED, IS VERY TIGHT,
VERY DIFFICULT TO OBTAIN. AND SO I THINK THIS
STRATEGIC PARTNER PROGRAM IS VERY TIMELY, AND I
THINK INDUSTRY UNIFORMLY WILL RESPOND VERY
POSITIVELY TO IT.
20

1	CHAIRMAN SHEEHY: THANK YOU. ANY OTHER
2	PUBLIC COMMENT EITHER HERE IN SAN FRANCISCO OR AT
3	OTHER SITES? THEN, MARIA, CAN WE CALL THE ROLL.
4	MS. BONNEVILLE: SURE.
5	DR. JACOB LEVIN.
6	DR. LEVIN: YES.
7	MS. BONNEVILLE: MARCY FEIT.
8	MS. FEIT: YES.
9	MS. BONNEVILLE: MICHAEL FRIEDMAN.
10	DR. FRIEDMAN: YES.
11	MS. BONNEVILLE: BERT LUBIN.
12	DR. LUBIN: YES.
13	MS. BONNEVILLE: SHLOMO MELMED.
14	DR. MELMED: YES.
15	MS. BONNEVILLE: FRANCISCO PRIETO. PHIL
16	PIZZO. DUANE ROTH. JOAN SAMUELSON.
17	MS. SAMUELSON: YES.
18	MS. BONNEVILLE: JEFF SHEEHY.
19	CHAIRMAN SHEEHY: YES.
20	MS. BONNEVILLE: OS STEWARD.
21	DR. STEWARD: YES.
22	MS. BONNEVILLE: ART TORRES. JONATHAN
23	THOMAS.
24	CHAIRMAN THOMAS: YES.
25	MS. BONNEVILLE: KRISTINA VUORI.
	30

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1	DR. VUORI: YES.
2	CHAIRMAN SHEEHY: THE MOTION CARRIES.
3	THANK YOU.
4	I DO KNOW THAT WE HAVE IS DR. CREASEY
5	HERE? THAT HE HAD TALKED TO JON THOMAS AND WANTED
6	TO MAKE A PUBLIC COMMENT HERE TODAY, AND WE'LL DO
7	THAT.
8	DR. MELMED: I HAVE TO GO OFF THE LINE.
9	CHAIRMAN SHEEHY: THERE'S NO MORE ACTION
10	ITEMS, SO IF PEOPLE NEED TO GO.
11	DR. CREASEY: MY NAME IS GRAHAM CREASEY.
12	I AM THE PROFESSOR OF SPINAL CORD INJURY MEDICINE AT
13	STANFORD. AND I JUST WANTED TO MAKE SOME COMMENTS
14	WHICH THIS MAY BEAR ON THE PREVIOUS DISCUSSION
15	ANYWAY. YOU KNOW, MY COLLEAGUES, GARY STEINBERG,
16	PROFESSOR OF NEUROSCIENCE AT STANFORD, AND STEVEN
17	MCKENNA, A NEUROCRITICAL CARE PHYSICIAN AT SANTA
18	CLARA VALLEY, JUST A FEW WEEKS AGO PUT IN THE FIRST
19	IMPLANT USING EMBRYONIC STEM CELLS INTO A PATIENT IN
20	CALIFORNIA AS PART OF THE GERON TRIAL. SO WE'RE
21	VERY HAPPY TO BE INVOLVED IN THAT AND VERY
22	APPRECIATIVE OF ALL THAT CIRM HAS DONE TO MOVE THIS
23	FORWARD AND TO GET TO THE POINT OF CLINICAL TRIALS
24	IN HUMANS AND VERY HAPPY TO CONTRIBUTE WHATEVER
25	EXPERIENCE WE GET FROM THIS TO OTHERS TO GET MORE

1	CLINICAL TRIALS GOING IN CALIFORNIA.
2	I THINK IT'S ALREADY RECOGNIZED, BUT IT'S
3	BEEN BORNE HOME TO US ALL THE MORE THAT THESE TRIALS
4	ARE VERY EXPENSIVE AT THE HUMAN STAGE, PARTICULARLY
5	IF THEY'RE FUNDED EACH ONE INDIVIDUALLY. AND
6	ALTHOUGH THEY'RE COMPLEX, THERE ARE ACTUALLY A LOT
7	OF COMMON FACTORS IN EACH CLINICAL TRIAL. THE
8	REQUIREMENT FOR ACCESS TO PATIENTS, COMMITTED
9	CLINICAL TEAM, GOOD OUTCOME MEASURES, REGULATORY,
10	DATA MANAGEMENT, ALL OF THESE FACTORS ARE OFTEN
11	COMMON FROM ONE TRIAL TO ANOTHER. AND SO WE'RE
12	THINKING THAT THERE MIGHT BE ECONOMIES OF SCALE IF
13	IT WAS POSSIBLE TO THINK IN CALIFORNIA IN TERMS OF
14	HAVING CORE FACILITIES FOR FUNDING MORE THAN ONE
15	CLINICAL TRIAL SO THAT YOU DON'T HAVE TO REPLICATE
16	ALL OF THESE STRUCTURES FOR EVERY CLINICAL TRIAL.
17	SOME OF THESE EXIST IN ACADEMIC MEDICAL
18	CENTERS. SOME WOULD PERHAPS LEVERAGE FUNDING FROM
19	INDUSTRY OR FROM NIH OR OTHER BODIES. BUT BY NOT
20	HAVING TO REINVENT THE WHEEL FOR EVERY TRIAL, WE
21	THINK WE MIGHT BE ABLE TO GET MORE TRIALS DONE IN
22	CALIFORNIA. AS MORE COMPANIES AND MORE PRODUCTS
23	COME DOWN THE LINE, THEY COULD BE FOLDED INTO A
24	MACHINE, WELL-OILED MACHINE, AND COULD RUN THESE
25	CLINICAL TRIALS WITHOUT HAVING TO START FROM SCRATCH

1	WITH EVERY NEW PRODUCT OR COMPANY.
2	SO WE SIMPLY WANT TO OFFER THE EXPERIENCE
3	WE ARE GETTING OUT OF THE CURRENT CLINICAL TRIAL AND
4	INVITE THE SCIENTIFIC SUBCOMMITTEE TO THINK ABOUT
5	MECHANISMS THAT WOULD FOSTER THESE ECONOMIES OF
6	SCALE PERHAPS, AS AN EXAMPLE, CORE FACILITY FOR
7	CLINICAL TRIALS IN A FEW PLACES IN CALIFORNIA THAT
8	ATTRACT COMPANIES AND PRODUCTS TO THE STATE AND GET
9	ACCESS TO PATIENTS IN THIS STATE TO THESE TRIALS. I
10	THINK THAT WOULD HELP TO FULFILL THE VISION WE ALL
11	HAVE OF BRINGING THESE TREATMENTS TO CLINICAL
12	PRACTICE AND COMMERCIAL AVAILABILITY. SO JUST WANT
13	TO BRING THIS TO YOUR ATTENTION AND INVITE YOUR
14	THOUGHTS ABOUT IT.
15	CHAIRMAN SHEEHY: DR. TROUNSON AND DR.
16	FEIGAL.
17	DR. TROUNSON: I WAS JUST AT STANFORD
18	FRIDAY. ONE OF THE PROPOSALS, ONE OF THE AREAS
19	WE'RE LOOKING AT IS A CONCEPT OF ALPHA CLINICS
20	NETWORKED THROUGHOUT CALIFORNIA. SO WE HAVE NATALIE
21	DEWITT WHO HAS BECOME A SPECIAL PROJECT OFFICER FOR
22	US, AND ELONA AND ELLEN FEIGAL AND MYSELF AND
23	NATALIE HAVE ACTUALLY DEVELOPED A KIND OF BACKGROUND
24	PROPOSAL FOR THIS. AND I THINK THERE WAS A LOT OF
25	INTEREST, FOR EXAMPLE, AT STANFORD ON THIS AND MANY

1	OTHER PLACES. AND WE'RE STILL WORKING OUT THE
2	MODEL, BUT IT ADDRESSES A LOT OF WHAT YOU'RE TALKING
3	ABOUT.
4	AND I THINK IT'S VERY IMPORTANT IF WE CAN
5	HAVE A NETWORK ACROSS THE STATE, NOT ONLY
6	INSTITUTION, BUT ACROSS THE STATE THAT CAN REALLY
7	UTILIZE THE EXPERIENCE THAT YOU GET IN MOVING THE
8	CELL THERAPIES THROUGH TO CLINICAL TRIALS. AND SO
9	HOPEFULLY I'LL MAKE SURE THAT NATALIE SPEAKS TO YOU,
10	BUT SHE'S OUT THERE TALKING TO A LARGE NUMBER OF
11	PEOPLE. SO WE CAN GET THIS CONCEPT BROUGHT BACK TO
12	THE BOARD IN A WHITE PAPER THAT WE CAN THEN SORT OF
13	MOVE TOWARDS ESTABLISHING, LET'S HOPE, IN THE FUTURE
14	OR NEAR FUTURE SUCH A NETWORK THAT WOULD ADDRESS
15	SPECIFICALLY THE KIND OF THINGS YOU'RE TALKING
16	ABOUT.
17	DR. CREASEY: ABSOLUTELY. THANK YOU. THE
18	NETWORK WOULD BE HELPFUL.
19	DR. FEIGAL: I THINK, BUILDING ON WHAT
20	ALAN HAS SAID, IS THAT WE'RE ALSO TRYING TO LEVERAGE
21	EXISTING NETWORKS; FOR EXAMPLE, THE CLINICAL TRIAL
22	TRANSLATIONAL GROUP, CANCER CENTERS, A VARIETY OF
23	BIG CENTERS THAT ALREADY EXIST SO THAT WE'RE NOT
24	REINVENTING THE WHEEL AND TRYING TO TAKE THE BEST
25	PARTS OF IT. SO WE ARE TRYING TO THINK OF
	24

1	OPERATIONAL EFFICIENCIES AND THEN ALSO TRYING TO
2	THINK OF WHAT IS A UNIQUE ASPECT FOR STEM CELL-BASED
3	THERAPIES THAT PERHAPS SOME OF THESE CENTERS DO OR
4	DO NOT ACCOMMODATE.
5	SO WE ARE ALREADY THINKING ABOUT TRYING TO
6	MAKE CALIFORNIA A REAL HUB, A REAL CENTER FOR THIS
7	TYPE OF CLINICAL TRIAL TO GO FORWARD.
8	DR. CREASEY: I THINK IT'S A UNIQUE
9	OPPORTUNITY THAT CIRM HAS TO LEVERAGE THE UNIQUE
10	DESTINATIONS OF MEDICAL TRIALS.
11	CHAIRMAN THOMAS: DR. CREASEY AND HIS
12	COLLEAGUES CAME TO MEET WITH ME SEVERAL WEEKS AGO ON
13	THIS TOPIC, AND IT MAKES IMMINENT SENSE TO ME, AND I
14	ACTUALLY ENCOURAGED HIM AS THE NEXT STEP TO COME TO
15	OUR NEXT SCIENCE SUBCOMMITTEE MEETING TO LAY THIS
16	OUT FOR DISCUSSION. SO I FULLY ECHO WHAT ALAN AND
17	ELLEN SAID. THE TIME IS RIGHT FOR SOMETHING LIKE
18	THIS.
19	CHAIRMAN SHEEHY: DON REED. AND OTHER
20	PEOPLE ON THE CALL CAN CHIME IN AFTER DON. I'M
21	SORRY. EVERYBODY IS SITTING HERE, SO I CAN SEE
22	THEM.
23	MR. REED: THIS IS A TREMENDOUS IDEA WITH
24	SOLID COMMON SENSE. NATURALLY I WOULD THINK ANY
25	PATIENT ADVOCATE WOULD BE IN FAVOR OF CONCENTRATING
	25

1	THIS WEALTH OF TALENT AND OPPORTUNITY IN CALIFORNIA.
2	ON A COMPLETELY DIFFERENT SUBJECT, BUT
3	THIS IS THE ONLY TIME I HAVE TO BRING IT UP, WE ALL
4	KNOW ABOUT THE BREAKTHROUGH OR MAYBE A BREAKTHROUGH
5	ON SOMATIC CELL NUCLEAR TRANSFER. NOW, WE MAY HAVE
6	FORGOTTEN THAT WHEN PROPOSITION 71 WAS FIRST
7	DEVELOPED, ONE OF THE KEY REASONS FOR IT WAS TO
8	ADVANCE SOMATIC CELL NUCLEAR TRANSFER, WHICH IS
9	BEING DENIED SYSTEMATICALLY BY THE FEDERAL
10	GOVERNMENT. IN FACT, WE HAVE LANGUAGE IN THE BILL
11	ITSELF WHICH SAYS PREFERENCE WILL BE GIVEN TO
12	RESEARCH NOT FUNDED OR NOT LIKELY TO BE FUNDED BY
13	THE FEDERAL.
14	SO SCNT HAS ALWAYS BEEN VERY, VERY
15	DIFFICULT AND STILL IS. THERE'S STILL OBSTACLES IN
16	THE WAY, BUT I THINK IT HAS TREMENDOUS POTENTIAL.
17	I'D LIKE THERE TO BE CONSIDERATION GIVEN TO SOME WAY
18	TO ENCOURAGE SCNT FROM WHERE WE STAND BEFORE IT GETS
19	TOO LATE IN THE CYCLE. I THINK IT HAS THE POTENTIAL
20	TO BE A HOME RUN HIT. AND I THINK IF WE CAN
21	OVERCOME THE OBSTACLES, THAT WE CAN DO SOMETHING
22	FANTASTIC. SO I'D LIKE SCNT TO BE CONSIDERED IN
23	WHATEVER WAY IT CAN BE.
24	CHAIRMAN SHEEHY: WERE THERE OTHER BOARD
25	MEMBERS WHO HAD COMMENTS? ARE THERE ANY OTHER BOARD

1	COMMENTS AT ALL? ANY OTHER PUBLIC COMMENT?
2	DR. LEWICKI: JOHN LEWICKI FROM ONCOMED.
3	WITH THE STRATEGIC PARTNER PROGRAM, WILL THE AWARDS
4	TO INDUSTRY, ARE THEY CONTEMPLATED TO ONCE AGAIN BE
5	IN THE FORM OF LOANS? IS THAT THE CURRENT PLAN?
6	MS. BAUM: I WOULD SUGGEST THAT IF IT'S A
7	NONPROFIT, IT WOULD BE A GRANT. AND IF IT'S A
8	FOR-PROFIT, IT WOULD BE A LOAN.
9	DR. LEWICKI: OKAY. AND WHAT ABOUT
10	POTENTIAL REPAYMENT TERMS FOR THE LOAN?
11	MS. BAUM: OUR REGULATIONS WOULD APPLY.
12	DR. LEWICKI: ALL RIGHT. I JUST WANTED TO
13	SPEAK OUT BECAUSE WE HAVE BEEN INTERACTING WITH
14	RESPECT TO THE DISEASE TEAM AWARDS, AND I JUST
15	WANTED TO SPEAK OUT FOR THE ALTERNATIVE RISK PREMIUM
16	REPAYMENTS BEING A FEATURE THAT'S VERY ATTRACTIVE TO
17	INDUSTRY AS OPPOSED TO WARRANTS, WHICH CAN, NOT
18	INFREQUENTLY, BE COMPLICATED AND NOT AS ATTRACTIVE
19	TO SMALLER PRIVATE COMPANIES.
20	SO IN THE CONTEXT OF THE LOANS, I JUST
21	WANTED TO ADVOCATE FOR THE ALTERNATIVE RISK PREMIUM
22	REPAYMENTS. I UNDERSTAND THAT THAT OPTION MAY BE
23	GOING AWAY IN THE FUTURE, AND I JUST WANTED TO
24	ADVOCATE FOR IT.
25	CHAIRMAN SHEEHY: IT'S NOT GOING TO
	27

1	DISAPPEAR INTO THIN AIR. I THINK WE'RE GOING TO
2	HAVE AN ANALYSIS. THERE WILL BE A DISCUSSION, AND
3	IF IT'S A PROGRAM THAT'S WORKING OUT, I THINK THE
4	BOARD WILL
5	DR. LEWICKI: I JUST WANTED TO SAY FROM
6	OUR VANTAGE POINT WE FIND THAT TO BE A VERY
7	ATTRACTIVE OPTION.
8	CHAIRMAN SHEEHY: ANY OTHER COMMENTS FROM
9	ANY OTHER BOARD MEMBERS OR FROM THE PUBLIC? MEETING
10	IS ADJOURNED.
11	(THE MEETING WAS THEN CONCLUDED AT
12	02:54 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 TELEPHONIC PROCEEDINGS BEFORE THE SCIENCE SUBCOMMITTEE OF THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON OCTOBER 10, 2011, 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, CSR 7152 BARRISTER'S REPORTING SERVICE 1072 BRISTOL STREET SUITE 100 COSTA MESA, CALIFORNIA (714) 444-4100