BEFORE 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

VOLUME I

LUXE HOTEL LOCATION:

SUNSET BALLROOM

11461 SUNSET BOULEVARD LOS ANGELES, CALIFORNIA

DATE: MAY 5 AND 6, 2008

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

BRS FILE NO.: 80810, 80811

INDEX		
I TEM NO.	PAGE	
CALL TO ORDER	3, 162	
ROLL CALL	4, 166	
APPROVAL OF MINUTES FROM MARCH 12TH, 2008 ICOC MEETING.	43	
EXECUTIVE PRESENTATIONS:		
CHAIRMAN'S REPORT PRESIDENT'S REPORT	5 12	
ACTION ITEMS:		
CONSIDERATION OF NEW SCIENTIFIC MEMBERS FOR THE GRANTS WORKING GROUP.	43	
CONSIDERATION OF CONCEPT PLAN FOR TRAINING GRANTS II PROGRAM.	53	
CONSIDERATION OF CONCEPT PLAN FOR TECHNICAL TRAINING AWARDS.	59	
CONSIDERATION OF FINAL ADOPTION OF GRANTS ADMINISTRATION POLICY FOR FOR-PROFIT ORGANIZ	82 ZATI ONS.	
CONSIDERATION OF UPDATE FROM LOAN TASK FORCE	E. 85	
CONSIDERATION OF AMENDMENTS TO CIRM INTERIM GRANT ADMINISTRATION POLICY FOR MAJOR FACIL GRANTS.		
CONSIDERATION OF RECOMMENDATIONS FROM FACILITIES WORKING GROUP AND GRANTS WORKING MAJOR FACILITIES APPLICATIONS.		
DRAFT TERMS OF DISCOUNT OFFER	124, 190	
CONSIDERATION OF DEFINITION OF "CALIFORNIA SUPPLIER."	230	
CONSIDERATION OF EQUIPMENT FUNDING FOR MAJOR FACILITIES PROGRAM.	206	

2

PUBLIC COMMENT		253
	2	
	3	

1	LOS ANGELES CALIFORNIA; TUESDAY, MAY 6, 2008
2	04: 45 P. M.
3	
4	CHAIRMAN KLEIN: ALL RIGHT. IF WE CAN
5	CONVENE IN ABOUT TWO MORE MINUTES. IF I CAN HAVE
6	EVERYONE'S ATTENTION, WE'LL CONVENE THE MEETING. WE
7	HAVE A COUPLE OF MEMBERS ENJOYING LOS ANGELES
8	TRAFFIC. TRAFFIC IN LOS ANGELES, WE KNOW, IS NOT AS
9	GREAT AS THE LOS ANGELES WEATHER, WHICH IS
10	TREMENDOUS MOST OF THE TIME. BUT THANK YOU ALL FOR
11	JOINING US TODAY.
12	I WANT TO THANK JENNIFER PRYNE AND MELISSA
13	KING FOR PULLING THIS MEETING TOGETHER. I WANT TO
14	THANK MR. MONTES DE OCA HERE AT THE LUXE HOTEL AND
15	DON REED WHO HELPED IN THE LAST-MINUTE ADJUSTMENTS.
16	AND THERE'S AN AV TEAM OF DAVID ENTIN AND RANDY
17	MORRIS, ALONG WITH STEFAN BROADLEY, WHO HAVE BEEN
18	FLEXIBLE AND VERY SUPPORTIVE. THANK YOU AGAIN.
19	THERE HAVE BEEN A TREMENDOUS AMOUNT OF THE
20	DIFFERENT CONTRIBUTIONS LEADING UP TO THIS MEETING,
21	BUT JAMES HARRISON, AS FREQUENTLY IS TRUE, HAS MADE
22	A NUMBER OF DISTINGUISHED CONTRIBUTIONS, SO THANK
23	YOU, JAMES.
24	WE WOULD IN CALLING THIS MEETING TO
25	ORDER, I'D LIKE TO HAVE MELISSA KING LEAD THE PLEDGE
	4
	

	DARRISTERS REPORTING SERVICE
1	OF ALLEGIANCE AND THEN FOLLOW WITH THE ROLL CALL.
2	(THE PLEDGE OF ALLEGIANCE.)
3	MS. KING: DONALD DAFOE FOR RICARDO AZZIZ.
4	DR. DAFOE: HERE.
5	MS. KING: ROBERT PRICE FOR ROBERT
6	BI RGENEAU.
7	DR. PRI CE: HERE.
8	MS. KING: FLOYD BLOOM.
9	DR. BLOOM: HERE.
10	MS. KING: DAVID BRENNER.
11	DR. BRENNER: HERE.
12	MS. KING: SUSAN BRYANT.
13	DR. BRYANT: HERE.
14	MS. KING: MARSHA CHANDLER.
15	DR. CHANDLER: HERE.
16	MS. KING: MARCY FEIT. MICHAEL FRIEDMAN.
17	DR. FRI EDMAN: HERE.
18	MS. KING: LEEZA GIBBONS. MICHAEL
19	GOLDBERG. SAM HAWGOOD.
20	DR. HAWGOOD: HERE.
21	MS. KING: BOB KLEIN.
22	CHAIRMAN KLEIN: HERE.
23	MS. KING: SHERRY LANSING. GERALD LEVEY.
24	DR. LEVEY: HERE.
25	MS. KING: TED LOVE.
	_
	5

1072 BRISTOL STREET, COSTA MESA, CALIFORNIA 92626 1-800-622-6092 1-714-444-4100 EMAIL: DEPO@DEPO1.COM

ı	DIMINISTERS REPORTING SERVICE
1	DR. LOVE: HERE.
2	MS. KING: TINA NOVA. ED PENHOET. PHIL
3	PI ZZO.
4	DR. PI ZZO: HERE.
5	MS. KING: CLAIRE POMEROY.
6	DR. POMEROY: HERE.
7	MS. KING: FRANCISCO PRIETO.
8	DR. PRI ETO: HERE.
9	MS. KING: JOHN REED. DUANE ROTH.
10	MR. ROTH: HERE.
11	MS. KING: JOAN SAMUELSON. DAVID
12	SERRANO-SEWELL. JEFF SHEEHY.
13	MR. SHEEHY: HERE.
14	MS. KING: JONATHAN SHESTACK. OSWALD
15	STEWARD.
16	DR. STEWARD: HERE.
17	MS. KING: JANET WRIGHT.
18	CHAIRMAN KLEIN: THANK YOU VERY MUCH.
19	I'M GOING TO OPEN TODAY WITH THE
20	CHAIRMAN'S REPORT WHILE I POSTPONE THE CONSENT ITEMS
21	UNTIL WE HAVE THE LAST TWO OF OUR MEMBERS FOR THE
22	QUORUM. WE HAVE ADDITIONAL MEMBERS THAT ARE COMING
23	TOMORROW AS WELL.
24	IN MY OPENING TODAY I HAVE THE SPECIAL
25	PRIVILEGE OF COMPLIMENTING OUR DISTINGUISHED BOARD
	6

1	MEMBER SHERRY LANSING, WHO IS ON HER WAY, BUT NOT
2	OBVIOUSLY PRESENT. IF YOU'VE SEEN THE NEW YORK
3	TIMES TODAY, YOU'VE SEEN A FULL-PAGE AD WHERE SHERRY
4	AND HER FOUNDATION REMIND CALIFORNIANS ABOUT THE
5	TREMENDOUS VALUE OF THE UNIVERSITY OF CALIFORNIA
6	SYSTEM AND OUR OBLIGATION TO EXTEND ITS BENEFITS TO
7	FUTURE GENERATIONS.
8	SHERRY SPECIFICALLY REMINDS US THAT
9	GREATNESS HAS BEEN ACHIEVED THROUGH PRIVATE
10	DONATIONS, COMPLEMENTING STATE FUNDING, AND THAT
11	GREATNESS HAS BEEN SUSTAINED AND WILL CONTINUE TO BE
12	SUSTAINED ONLY TO THE EXTENT THAT PRIVATE DONATIONS
13	RISE AS STATE SUPPORT DROPS FROM 44 PERCENT TO
14	APPROXIMATELY 18 PERCENT.
15	OVER THE NEXT TWO DAYS, WE'LL CONSIDER THE
16	LARGEST BUILDING PROGRAM FOR A NEW AREA OF MEDICAL
17	RESEARCH IN THE HISTORY OF THE UNITED STATES. THIS
18	PROGRAM DERIVES FACILITIES AND NEW FACULTY EXPANSION
19	VALUED AT OVER 400 PERCENT OF THE STATE'S
20	CONTRIBUTION. IT CREATES GREAT LEVERAGE PROPELLED
21	BY PRIVATE DONORS AND INSTITUTIONAL COMMITMENTS FROM
22	THE GREAT RESEARCH AND ACADEMIC INSTITUTIONS OF
23	CALI FORNI A.
24	AS SHERRY SAID IN THE AD, "WHEN YOU NEED
25	TO GET FROM GOOD TO GREAT, IT, PRIVATE DONOR FUNDS,

1	CAN BE THE FAST-FORWARD BUTTON." IN THIS CONTEXT WE
2	SHOULD REMIND THE PUBLIC THAT MANY OF THE
3	INSTITUTIONS' COMMITMENTS INEVITABLY HAVE BEEN MADE
4	IN A BELIEF THAT THE PRIVATE DONOR MOMENTUM WILL
5	INCREASE AS THE BUILDINGS RISE ON THE CAMPUSES OF
6	THE NONPROFIT INSTITUTIONS AROUND THE STATE.
7	ELI AND EDITH BROAD HAVE SHOWN TREMENDOUS
8	LEADERSHIP THROUGH MORE THAN \$50 MILLION IN
9	ANNOUNCED CONTRIBUTIONS TO THE STEM CELL PROGRAMS.
10	OTHER GREAT PATRONS OF THIS RESEARCH HAVE JOINED
11	THEM THROUGHOUT THE STATE IN THE HISTORIC LEADERSHIP
12	OF THIS MEDICAL RESEARCH AND CLINICAL FACILITY
13	DEVELOPMENT PROGRAM. THIS LEADERSHIP INCLUDES, FOR
14	EXAMPLE, EDWARD AND VIVIAN THORPE, DONORS AT UC
15	IRVINE; RAY AND DAGMAR DOLBY, DONORS TO UC SAN
16	FRANCISCO; LARRY LOKEY, DONORS TO STANFORD;
17	LIKA-SHING, DONOR TO UC BERKELEY; WING FAT FAMILY,
18	DONOR TO UC DAVIS; AND ANGELO TSAKAPOULOUS, ALSO
19	CONTRIBUTOR AT UC DAVIS.
20	OVER THE NEXT TWO DAYS, WE'LL BE
21	MENTIONING OTHER DONORS THAT HAVE REALLY SHOWN
22	TREMENDOUS LEADERSHIP, AND WE HOPE THEY GET THE
23	RIGHT RECOGNITION IN THE PRESS THAT WILL BE WITH US
24	OVER THIS TIME PERIOD BECAUSE IT IS, IN FACT, THEIR
25	EXAMPLE THAT WILL BE EXTREMELY IMPORTANT TO THESE

1	INSTITUTIONS IN CARRYING FORWARD WITH THE PROMISE OF
2	THESE PROGRAMS.
3	THE PROGRAM THAT WE WILL GO THROUGH LATER
4	TODAY WILL CONSIDER REQUESTS FOR 288 MILLION OF
5	STATE OF CALIFORNIA FUNDS FROM PROPOSITION 71 WITH
6	APPROXIMATELY 540 MILLION IN DONOR AND INSTITUTIONAL
7	COMMITMENTS FOR THE BUILDING PROGRAM WITH AN
8	ADDITIONAL \$328 MILLION FOR NEW FACULTY START-UP
9	SUPPORT FOR A TOTAL OF JUST SHORT OF \$900 MILLION IN
10	LEVERAGE FROM DONOR AND INSTITUTIONAL FUNDS.
11	UNLESS WE ARE EXTREMELY CREATIVE AND
12	CAREFUL, CUTTING OUT 25 MILLION IN STATE FUNDS COULD
13	COST THE PROGRAM \$100 MILLION IN VALUE. OR IF THE
14	CUTS ARE DEEP ENOUGH, ENTIRE BUILDING PROGRAMS COULD
15	BE LOST BECAUSE THE INSTITUTIONAL CONTRIBUTIONS
16	BECOME TOO LARGE. SPEAKING ON BEHALF OF THIS BOARD,
17	I WOULD LIKE TO EXPRESS OUR SINCERE GRATITUDE TO THE
18	DONORS AND INSTITUTIONS FOR THEIR INCREDIBLE
19	COMMITMENT TO THIS CRITICAL STEM CELL FACILITIES
20	DEVELOPMENT PROGRAM. THEIR COMMITMENTS HAVE BEEN
21	EXTRAORDINARY, AND THE BENEFITS WILL ACCRUE TO
22	GENERATIONS OF CALIFORNIANS AND THEIR FAMILIES WITH
23	CHRONIC DISEASE AND INJURY.
24	THE MAJOR FACILITIES ITEMS CONSIDERATION
25	WILL COMMENCE TONIGHT WITH THE FINAL VOTES TOMORROW

1	MORNI NG.
2	ANOTHER MAJOR INITIATIVE THAT PROVIDES
3	LEVERAGE FOR OUR PROGRAM IS THE LOAN TASK FORCE.
4	THE LOAN TASK FORCE FINISHED THEIR RECOMMENDATIONS
5	TO THE FINANCE SUBCOMMITTEE EARLIER TODAY. THE
6	RECOMMENDATIONS WILL FIRST GO TO THE FINANCE
7	SUBCOMMITTEE OF THE BOARD. IT WILL CONSIDER
8	PORTFOLIO AND RESOURCE ALLOCATION OPTIONS BEFORE
9	BRINGING THE REPORT TO THE BOARD IN JUNE WITH
10	POTENTIAL FINAL ACTION IN AUGUST.
11	I BELIEVE WE SHOULD PROVIDE DUANE ROTH, AS
12	CHAIRMAN OF THAT TASK FORCE, A ROUND OF APPLAUSE FOR
13	HIS LEADERSHIP AND DRIVE IN MOVING THIS IMPORTANT
14	PROGRAM FORWARD.
15	(APPLAUSE.)
16	CHAIRMAN KLEIN: DUANE WILL PRESENT A
17	SUMMARY OF THOSE RECOMMENDATIONS LATER THIS EVENING.
18	HE WILL OUTLINE THE POTENTIAL FOR A SUSTAINABLE LOAN
19	PROGRAM THAT COULD PRESERVE CAPITAL AND POSSIBLY
20	INCREASE CAPITAL BY 500 MILLION OR MORE WITH A
21	HUNDRED PERCENT LEVERAGE EXPECTED FROM PRIVATE
22	FUNDS. FOR EXAMPLE, PART OF THE CONSIDERATION TODAY
23	DISCUSSED HOW A \$500 MILLION LOAN PORTFOLIO COULD BE
24	EXPECTED TO GENERATE A BILLION DOLLARS IN PROGRAM
25	ACTIVITY THROUGH MATCHING FUNDS FROM PRIVATE
	10

1	SOURCES.
2	THIS CRITICAL PROGRESS OF THE LOAN TASK
3	FORCE WOULD NOT HAVE BEEN POSSIBLE WITHOUT THE
4	DEDICATED EFFORTS OF SCOTT TOCHER ON THE NARRATIVE
5	MATERIALS AND LYNN HARWELL ON THE OVERALL PROGRAM
6	DEVELOPMENT, DRIVING DAILY SUPPORT FOR DUANE, THE
7	CONSULTANTS, AND THE TASK FORCE MEMBERS.
8	I WOULD ALSO PERSONALLY LIKE TO EXPRESS MY
9	GRATITUDE TO LYNN FOR HER REMARKABLE COMMITMENT TO
10	THIS MISSION. OFTEN I WOULD TALK TO HER AT 7 OR 8
11	P.M. AT THE CIRM OFFICE AS WELL AS WEEKENDS AND
12	HOLIDAYS. SHE IS AN EXTREMELY TALENTED AND
13	COMMITTED INDIVIDUAL OF IMMENSE CHARACTER, EMPATHY,
14	AND IDENTIFICATION WITH OUR MISSION. IT IS,
15	THEREFORE, REGRETTABLE THAT THE ECONOMICS OF LIVING
16	IN SAN FRANCISCO HAVE DRIVEN HER TO ACCEPT ANOTHER
17	JOB OFFER AT A SUBSTANTIALLY HIGHER INCOME WITH
18	EXTREME FLEXIBILITY AND RADICALLY SHORTER HOURS.
19	WHEN WE LOSE SOMEONE LIKE LYNN, EVERY PATIENT, EVERY
20	SCIENTIST, EVERY CLINICIAN, EVERY CALIFORNIAN LOSES
21	A GREAT ADVOCATE, IN THIS CASE AN ADVOCATE WITH BOTH
22	A HARVARD MBA AND A HARVARD LAW DEGREE. I WOULD TO
23	SEE IF EVERYONE COULD STAND WITH ME AND APPLAUD LYNN
24	HARWELL'S CONTRIBUTION.
25	(APPLAUSE.)

1	CHAIRMAN KLEIN: AS WE ENTER THE AGENDA
2	TODAY, THERE WILL BE A NUMBER OF ITEMS THAT WE HAVE
3	EXTREME SCRUTINY OF CONFLICTS AS WE RIGOROUSLY MAKE
4	CERTAIN THAT WE ARE ADVANCING THE PUBLIC'S INTEREST
5	WHILE AVOIDING ANY CONFLICTS. AS WE GO THROUGH
6	PARTICULAR ITEMS, I WILL ASK JAMES HARRISON TO LEAD
7	US THROUGH THE SPECIAL CONFLICTS PROVISIONS THAT
8	APPLY. IT IS IMPORTANT TO NOTE THAT IN THE CASE OF
9	MAJOR FACILITIES, THOSE VOTES ARE TAKEN FROM
10	INDIVIDUALS WITHOUT ANY CONFLICTS WITH ANY
11	I NSTI TUTI ONS.
12	STAFF HAS PROVIDED EACH BOARD MEMBER WITH
13	A LIST OF INSTITUTIONS THAT HAVE SUBMITTED
14	APPLICATIONS, AND EACH BOARD MEMBER HAS LISTED AND
15	CERTIFIED THOSE INSTITUTIONS WITH WHICH THE MEMBER
16	HAS A CONFLICT OF INTEREST.
17	IN ADDITION, STAFF HAS REVIEWED THE
18	STATEMENTS OF ECONOMIC INTEREST, FORM 700, FOR EACH
19	BOARD MEMBER TO IDENTIFY ANY ADDITIONAL CONFLICTS OF
20	I NTEREST.
21	AS WE GO THROUGH SPECIFIC ITEMS, I WILL,
22	AGAIN, AS I REFERENCED EARLIER, ASK FOR A SPECIFIC
23	REVIEW OF THOSE CONFLICTS PROVISIONS FOR THE BENEFIT
24	OF THE PUBLIC AND THE PRESS, AS WELL AS TO REMIND
25	BOARD MEMBERS OF THE EXTRAORDINARY MEASURES WE'RE
	10

1	TAKI NG.
2	I WOULD, SINCE WE NOW HAVE DAVID
3	SERRANO-SEWELL HERE, ALSO LIKE TO THANK DAVID VERY
4	SPECIFICALLY FOR HIS LEADERSHIP AS VICE CHAIR OF THE
5	MAJOR FACILITIES COMMITTEE. AND I THINK YOU WILL BE
6	EXTREMELY PLEASED WITH THE EXTRAORDINARY WORK OF
7	THAT COMMITTEE.
8	(APPLAUSE.)
9	CHAIRMAN KLEIN: AND SHERRY, AS ALWAYS,
10	THE MEDIA QUEEN HAS FOUND A WAY TO GET RECOGNIZED
11	TWICE BECAUSE, SHERRY, EARLIER TODAY I THANKED
12	EVERYONE FOR THE TREMENDOUS AD YOU DID IN THE NEW
13	YORK TIMES FOR THE UC SYSTEM AND THE RECOGNITION YOU
14	GAVE TO THE IMPORTANCE OF DONORS, WHICH, OF COURSE,
15	IS CENTRAL TO THE LEVERAGE WE'RE GETTING THROUGH THE
16	MAJOR FACILITIES PROGRAM. SO THANK YOU, SHERRY.
17	(APPLAUSE.)
18	CHAIRMAN KLEIN: WITH THAT, I WOULD LIKE
19	THE PRESIDENT, OUR PRESIDENT, ALAN TROUNSON, TO
20	PRESENT HIS REPORT. DR. TROUNSON.
21	DR. TROUNSON: THANK YOU, CHAIR AND
22	MEMBERS OF THE COMMITTEE. IT'S MY TRADITION TO
23	START THIS SESSION WITH SCIENCE, AND I'LL CONTINUE
24	TO DO THAT BECAUSE IT IS EXTRAORDINARY WHAT'S GOING
25	ON.
	12

1	NEXT SLIDE. SO I WANT TO PRESENT TO YOU
2	FOUR PAPERS, THE FIRST OF WHICH IS A STUDY WHICH HAS
3	JUST BEEN PUBLISHED IN NATURE IN APRIL BY THE GROUP
4	AT THE MCEWEN CENTER OF REGENERATIVE MEDICINE UNDER
5	GORDON KELLER'S LEADERSHIP AT TORONTO, BUT ALSO
6	NOTABLY INVOLVING THE VISTAGEN THERAPEUTICS COMPANY
7	HERE IN CALIFORNIA WHERE THEY HAVE DEVELOPED
8	CARDIOVASCULAR PROGENITORS, A CELL WHICH CAN
9	ACTUALLY PRODUCE CARDIOMYOCYTES, BUT ALSO VASCULAR
10	CELLS AND ENDOTHELIAL CELLS. THESE ARE REALLY
11	CRITICAL CELLS FOR THE CARDIOVASCULAR SYSTEM, AND
12	THEIR SYSTEM OF PRODUCING THIS IS ROBUST. IT LOOKS
13	COMPLETELY USEFUL. IT INVOLVES SOME PARTICULAR
14	GROWTH FACTORS WHICH WOULD BE RECOGNIZABLE TO MOST
15	SCIENTISTS IN A SEQUENCE THAT TAKES ABOUT 14 DAYS.
16	SO IT'S NOT A VERY LONG PERIOD.
17	THIS PROGENITOR POPULATION IS USED IN AN
18	ANIMAL MODEL OF INFARCT DAMAGE IN THE HEART, AND
19	THEY'RE ABLE TO SHOW THAT THESE HUMAN CELLS
20	TRANSPLANTED TO THESE ANIMALS IMPROVE BY 31 PERCENT
21	THE HEART EJECTION FRACTION, WHICH IS A REAL STRONG
22	MEASURE OF HEART FUNCTION. SO WE'RE ON THE WAY WITH
23	THE EMBRYONIC STEM CELLS TO, I THINK, WITH THIS WORK
24	TO ENVISAGE THAT THERE WILL BE A PROPOSAL COMING
25	DOWNSTREAM FOR CLINICAL TRIALS. INTERESTINGLY, IN

1	THESE STUDIES THERE WAS NO ANY OBSERVATION OF
2	TERATOMAS OR UNWANTED CELL TYPES.
3	THE NEXT STUDY IS A VERY INTERESTING STUDY
4	THAT WAS REALLY LED BY CATRIONA JAMIESON FROM UCSD
5	AS A CIRM-FUNDED SCIENTIST. AND NOTABLY, THE FIRST
6	AUTHOR WAS A CIRM TRAINEE WHO RECEIVED MONEY IN THE
7	FIRST ROUND OF THE TRAINEESHIPS. AND WHAT THEY
8	SHOWED IS THAT THE JAK2 GENE IS VERY CRITICAL IN THE
9	PATHWAY FOR BLOOD PRODUCTION. AND INHIBITION OF
10	THAT JAK2 PATHWAY PREVENTS A MYELOPROLIFERATIVE
11	DISORDER KNOWN AS POLYCYTHEMIA VERA, PV, WHICH
12	ITSELF, THIS CONDITION CAUSES THROMBOSIS,
13	MYELOFIBROSIS, AND ACUTE LEUKEMIA.
14	SO IT'S A VERY DANGEROUS CONDITION. IT'S
15	ESTIMATED THERE'S ABOUT A HUNDRED THOUSAND PATIENTS
16	IN THE U.S. THEY'RE ABLE TO SHOW THAT BY
17	OVEREXPRESSING THE JAK2 GENE, THAT THEY CAN GET
18	THIS IN HUMAN CELLS THEY CAN GET THIS CONDITION
19	IN MOUSE MODELS. AND INTERESTINGLY, THEY FOUND A
20	COMPANY CALLED TARGEGEN, A CALIFORNIA COMPANY, I
21	THINK, WHO HAD ON THE SHELF A SPECIFIC INHIBITOR FOR
22	THE JAK2 PATHWAY. AND THIS PREVENTED THE EXCESSIVE
23	MYLOID PRODUCTION, THE EXCESSIVE RED BLOOD CELL
24	PRODUCTION IN THESE ANIMALS. AND IT WAS VERY, VERY
25	EFFECTI VE.
	15

YOU WILL NOTICE THAT THIS STUDY HAS BEEN
DONE WITH A NUMBER OF GROUPS, AND I POINT THAT OUT
TO YOU, THAT I THINK THIS IS A VERY SIGNIFICANT TYPE
OF STUDY BECAUSE IT INVOLVED GROUPS AT STANFORD AS
WELL AS UCSD AND OTHERS IN THE SCIENTIFIC COMMUNITY.
SO THESE ARE GROUPS COMING TOGETHER TO ADD PART OF
THE SOLUTION TO A VERY SIGNIFICANT PAPER. AND I
GUESS THE OUTCOME OF THIS IS TWOFOLD, THAT IF YOU
CAN INHIBIT THIS MYELOPROLIFERATION OR EXCESSIVE
BLOOD CELL PRODUCTION AND THE SEQUELAE, WHICH IS
POSSIBLE LEUKEMIA FOR THE 10,000 CALIFORNIA PATIENTS
WITH THIS CONDITION, YOU HAVE A VERY GOOD CLINICAL
TRIAL WHICH IS NOW CURRENTLY UNDERWAY.
SO IN LESS THAN 18 MONTHS, HERE'S A STUDY
THAT'S GONE FROM THE BASIC SCIENCE TO THE CLINIC.
AND I THINK IT'S A FANTASTIC EXAMPLE OF WHAT CAN BE
DONE IN THIS SPACE. AND HATS OFF TO THE GROUP AND
PARTICULARLY TO CATRIONA JAMIESON, WHO I HAD THE
PLEASURE OF SPENDING AN EVENING TALKING TO HER ABOUT
HER WORK. IT WAS JUST WONDERFUL.
I THINK THE NEXT STUDY IS INTERESTING, AND
I'M BRINGING IT TO YOUR ATTENTION BECAUSE IT'S MORE
ABOUT ADULT STEM CELLS. AND THEY SHOWED IT IN MICE
IF YOU ACTUALLY BLOCK THREE PRIMARY GENES CALLED
P16, P19, AND TRP, YOU GET A MULTIPLICATION IN THE

1	MULTIPROGENITOR CELLS OF THE HEMATOPOIETIC SYSTEM,
2	THAT IS THE BLOOD CELL. YOU WILL KNOW THAT IN THIS
3	AREA THAT ONE OF THE BIG PROBLEMS IS MULTIPLICATION
4	OF THE HEMATOPOIETIC PROGENITORS IN CULTURE. IF YOU
5	TAKE OUT A BLOOD STEM CELL, YOU CANNOT MULTIPLY IT.
6	SO THEY'VE REALLY IDENTIFIED THAT THESE THREE GENES
7	AND THEIR GENE PRODUCTS ARE REALLY QUITE CRITICAL IN
8	THE PROCESS. AND IN CANCERS, THE INHIBITION IN
9	THESE GENES IS LIFTED. SO CANCERS IN THIS AREA CAN
10	RELATE TO MUTATIONS IN THESE PARTICULAR GENES THAT
11	ARE CLUSTERED TOGETHER.
12	SO THESE STUDIES MAY PROVIDE DIRECTION FOR
13	THE DEVELOPMENT OF HEMATOPOLETIC CELL EXPANSION.
14	IT'S REALLY THE GOLD NUGGET THAT'S BEEN LOOKED AT
15	FOR A VERY LONG TIME. PHIL NOTTING (PHONETIC), OF
16	COURSE, AND MANY OF HIS SCIENTISTS IN HIS
17	INSTITUTION HAVE BEEN AFTER THIS. AND I THINK IT'S
18	TERRIFIC. IT'S MICHAEL CLARKE'S LAB AT STANFORD
19	TOGETHER WITH A GROUP OF SCIENTISTS AT MICHIGAN AND
20	PUBLISHED IN <i>NATURE</i> IN APRIL 2008.
21	THESE PROTEINS MAY ALSO BE USEFUL TARGETS
22	TO CONTROL EXCESSIVE EXPANSION OF BLOOD CELLS IN
23	CANCER. SO IT'S GOT TWO TALES TO IT, AND I THINK
24	IT'S A TERRIFIC TALE. I LOVED READING THIS PAPER.
25	I THINK IT'S SOMETHING THAT WE'VE BEEN LOOKING FOR

1	FOR SOME TIME.
2	THERE'S ALSO AN EXTREMELY INTERESTING
3	PAPER THAT I HAD THE PRIVILEGE OF REVIEWING FOR
4	NATURE MEDICINE WHICH INVOLVED THE SCIENTISTS AT
5	LORENZ STUDER'S LABORATORY AT THE SLOAN-KETTERING
6	AND WAKAYAMA'S LABORATORY AT THE RIKEN IN KOBE.
7	THESE LABS ARE A LONG WAY APART, AS YOU RECOGNIZE.
8	WHAT THEY DID WAS THEY TOOK CELLS FROM MICE, INBRED
9	STRAIN OF MOUSE, THEY TOOK INDIVIDUAL MICE, TOOK THE
10	CELLS FROM THEM, SENT THE CELLS OVER TO WAKAYAMA IN
11	JAPAN, AND HE MADE BY NUCLEAR TRANSFER, BY
12	THERAPEUTIC CLONING, IF YOU LIKE, EMBRYONIC STEM
13	CELL LINES FOR THOSE INDIVIDUAL MICE.
14	SO BACK IN STUDER'S LABORATORY, THEY
15	TURNED THOSE MICE INTO PARKINSONIAN MICE
16	ARTIFICIALLY, AND THEN THEY BROUGHT THESE EMBRYONIC
17	STEM CELLS BACK, THEY DIFFERENTIATED THEM INTO THE
18	NEURAL PROGENITOR LINEAGE, AND THEN TRANSPLANTED
19	THEM BACK INTO THE BRAINS OF THE MICE, INDIVIDUAL
20	MICE OR ACROSS MICE.
21	WHAT HAPPENS IF THEY TAKE THESE CELLS AND
22	PUT THEM INTO DIFFERENT MICE, NOT THE MOUSE THEY GOT
23	THEM FROM AS THEY LOST THOSE CELLS, THE CELLS THAT
24	COULD POTENTIALLY REPAIR PARKINSON'S DISEASE, THEY
25	LOST THEM. THEY WERE THERE FOR A WHILE, BUT THEN

1	THEY LOST THEM. THE CELLS, WHICH THEY GOT FROM THE
2	INDIVIDUAL MICE WHICH THEY TURNED INTO EMBRYONIC
3	STEM CELLS AND THEN INTO NEURAL PROGENITORS, THEY
4	WORKED BEAUTIFULLY FOR THE ENTIRE LENGTH OF THE
5	EXPERIMENT AND INCLUDING SOME OVERPROLIFERATION.
6	THAT IS, THEY PUT TOO MANY OF THESE CELLS IN THERE.
7	SO THIS IS TELLING YOU TWO THINGS IN MY
8	MIND. IT'S A DEMONSTRATION THAT THE GENOMIC
9	IDENTITY IS IMPORTANT. THAT IS, THE IMMUNE SYSTEM
10	IS LOOKING AROUND TO SEE WHETHER THERE'S FOREIGN
11	CELLS IN THERE AND I'LL SAY EVEN MINOR DIFFERENCES
12	AND REJECT THOSE CELLS. SO THERE'S AN IMPORTANT
13	ISSUE HERE THAT WE HAVE TO ADDRESS IN TERMS OF
14	IMMUNOLOGY, BUT ALSO THE IMPORTANCE MAYBE OF NUCLEAR
15	TRANSFER STILL ON OUR SCALE OF INTEREST. I WOULDN'T
16	LIKE TO TAKE THAT OFF THE TABLE AT THE PRESENT TIME.
17	I WOULDN'T LIKE TO TAKE THE NUCLEAR TRANSFER OFF THE
18	TABLE AT THE MOMENT, BUT IT ALSO MAY BE VERY
19	IMPORTANT IF WE'RE ABLE TO GET THE INDUCED
20	PLURIPOTENTIAL CELLS BECAUSE YOU TAKE THEM FROM
21	INDIVIDUAL PATIENTS. AND IN CASE OF PARKINSON'S
22	DISEASE, IN THIS PARTICULAR MODEL, IT MIGHT BE VERY,
23	VERY IMPORTANT. SO I THINK IT'S A KEY PAPER AND ONE
24	WHICH WILL BE REFLECTED UPON BY A LARGE NUMBER OF
25	THE INSTITUTIONS.

1	I THINK I'M THROUGH WITH THOSE FIRST FEW
2	SLIDES. I THINK I'M WANTING TO INTRODUCE A COUPLE
3	OF PEOPLE TO YOU. MARIE CSETE, WHO IS NOT HERE WITH
4	US. I SENT HER TO AN NIH STEM CELL MEETING. I FELT
5	IT WAS IMPORTANT TO BE AT NIH, AND I'LL COME BACK TO
6	NIH SHORTLY. YOU SEE PART OF HER CV UP THERE.
7	SHE'S A MAGNIFICENT ADDITION TO THE GROUP, AND I
8	THANK THE BOARD FOR ENDORSING HER APPOINTMENT. IT'S
9	MADE A HUGE DIFFERENCE TO US TO HAVE HER CAPACITY
10	ALREADY, AND SHE IS FOCUSING ON THE CLINICAL END OF
11	THE SPECTRUM. AS WE GO DOWN THE PIPELINE TOWARDS
12	THE CLINIC, SHE'S GOING TO BE VERY, VERY IMPORTANT.
13	SHE HOLDS A TREMENDOUS RANGE OF APPOINTMENTS OR DID
14	WHEN SHE WAS IDENTIFIED, AND SHE'S MOVED OVER TO
15	WORK WITH US FULL TIME.
16	I THINK I WAS ALSO WANTING TO INTRODUCE TO
17	YOU ROSA CANET-AVILES, WHO IS HERE IN THE RED, OUR
18	WONDERFUL NEW APPOINTMENT AS ONE OF THE KEY
19	SCIENTISTS. AND WILL BE HEARING FROM HER AS WE GO
20	THROUGH THE MEETING. SHE'S REALLY ONE OF THE
21	BRIGHTEST OF THE BRIGHTEST JOINING US AS A YOUNG
22	SCIENTIST. ANYONE WHO IS YOUNGER THAN ME IS
23	INCREDIBLY YOUNG, AND I KNOW SHE'S VERY, VERY YOUNG.
24	BUT SHE'S JOINED US AFTER A VERY IMPRESSIVE CAREER,
25	AND I THINK IT'S A GREAT IT REALLY DOES SPEAK

1	VERY LOUDLY FOR THE INITIATIVE TO BE ABLE TO ATTRACT
2	PEOPLE OF ROSA'S CALIBER.
3	THE GRANT REVIEWS THAT WE'VE BEEN THROUGH,
4	OF COURSE, MAJOR FACILITIES, YOU KNOW THAT THAT HAS
5	BEEN COMPLETED, AND THE PART 2 PART IS GOING TO BE
6	CONSIDERED HERE. WE'VE ALSO BEEN THROUGH THE
7	DISEASE TEAM PLANNING AWARDS AND THE NEW CELL LINE
8	AWARDS. WE'VE DONE THOSE REVIEWS, AND THEY'RE
9	COMING UP FOR YOUR CONSIDERATION IN JUNE. THERE'S
10	ALSO AN UPCOMING REVIEW ON THE CIRM NEW FACULTY
11	AWARDS II. SO THAT WE HAVE TO DO.
12	UPCOMING RFA'S, THE FIRST ONE, I THINK, IS
13	POSTED NOW, TOOLS AND TECHNOLOGY. IT'S BEEN THROUGH
14	CONCEPT STAGE HERE AT THE BOARD. AND THE NEXT
15	COUPLE YOU ARE GOING TO HEAR FROM DURING THIS
16	MEETING, THE TRAINING GRANTS II FOR CIRM SCHOLARS.
17	YOU WILL REMEMBER, OF COURSE, THEY WERE THE FIRST
18	GRANTS INITIATED HERE BY THE BOARD, AND THEY'RE
19	COMING TO AN END, IF YOU LIKE, THE THREE-YEAR PERIOD
20	AT MIDDLE OF NEXT YEAR. WE THINK IT'S BEEN A
21	FANTASTIC PROGRAM, AND WE'D LIKE TO DEMONSTRATE THAT
22	TO YOU REALLY WITH THE PRODUCTIVITY THAT WE'RE
23	GETTING FROM THESE YOUNG PEOPLE. IT'S JUST
24	ABSOLUTELY WONDERFUL. I PICKED UP A SCIENCE PAPER
25	AT IRVINE. I WAS JUST ABSOLUTELY THRILLED TO SEE
	21

1	ONE OF THESE TRAINEES AS LEAD AUTHOR ON A SCIENCE
2	PAPER. THE WORK THEY'RE DOING IS JUST FABULOUS.
3	AND THEN THE BRIDGES TO STEM CELL
4	RESEARCH, WHICH IS AN INTERNSHIP PROGRAM AIMED AT
5	THE CALIFORNIA STATE UNIVERSITY SYSTEM TO DRAW THOSE
6	PEOPLE INTO OUR AREA. AND I'LL ALLOW THE STAFF TO
7	SORT OF TALK YOU THROUGH THAT, BUT I THINK IT'S A
8	VERY, VERY IMPORTANT PROGRAM, WHICH I THINK I'M SURE
9	YOU WILL ENDORSE. AND I HOPE YOU SEE THE WAY WE'VE
10	TRIED TO FORMULATE THAT IS VERY MUCH IN THE
11	INTERESTS OF THESE YOUNG PEOPLE GETTING A CAREER IN
12	STEM CELLS.
13	EARLY TRANSLATIONAL RESEARCH, WE'RE
14	WORKING NOW ON THE CONCEPT CLEARANCE ON THE CONCEPT.
15	WE HOPE TO BRING YOU THE CONCEPT FOR CLEARANCE IN
16	THE JUNE MEETING. YOU WILL SEE THAT WE'RE COMING
17	DOWN THAT PIPELINE TOWARDS THE CLINIC.
18	I'M PROPOSING THAT WE HAVE A NUMBER OF
19	WORKSHOPS. I JUST WANT TO ALERT YOU TO THEM. ONE
20	IS IN PREDICTIVE TOXICOLOGY. YOU WILL BE AWARE NOW
21	THAT WE CAN MAKE LIVER CELLS, WE CAN MAKE HEART
22	CELLS. WE'VE BROUGHT THAT TO YOU IN THE PAST.
23	YOU'LL BE AWARE OF IT READING LITERATURE AND HEARING
24	ABOUT IT. IT IS AN OPPORTUNITY TO SEE WHETHER THESE
25	CELLS ARE USEFUL IN PREDICTIVE TOXICOLOGY, EITHER AS

1	NEW DRUGS. REMEMBER, THERE ARE HUNDREDS OF
2	THOUSANDS OF ANIMALS USED FOR DRUG SCREENING AT THE
3	MOMENT. AND IF WE COULD REPLACE SOME OF THAT WITH
4	THESE CELL CULTURES, HUMAN CELLS WHICH MAY MORE
5	REFLECT WHAT WE'D EXPECT TO HAPPEN IN A HUMAN, IT
6	WOULD BE A REALLY EXCITING ENDEAVOR.
7	ALSO, THE ENVIRONMENTAL ISSUES THERE.
8	TOXICOLOGY AND THE ENVIRONMENT IS VERY IMPORTANT. I
9	REMEMBER WHEN I FIRST MET BOB AND MEMBERS OF THE
10	COMMITTEE WHEN THEY INVITED ME TO DINNER TO TALK TO
11	ME, I SPENT A LOT OF TIME TALKING ABOUT BISPHENOL A,
12	WHICH IS A PLASTIC THAT'S IN THE ENVIRONMENT. AND
13	THEY MAKE TRILLIONS OF POUNDS OR MILLIONS OF TONS OF
14	THIS STUFF A YEAR. IT'S AN ESTROGEN, AND YOU CAN
15	DETECT IT AS A BINDER TO THE ESTROGEN RECEPTOR. AND
16	IT HAS A FIX, IF YOU LOOK AT IT IN A TRADITIONAL
17	ENDOCRINE WAY, OF VERY SEVERE IMPACTS IN ANIMALS AND
18	IN CELLS AT LOW LEVELS, AND YOU DON'T SEE THE IMPACT
19	WHEN YOU RAISE THE LEVEL HIGH.
20	SO I ACTUALLY GOT MY SON TO DO A STUDY FOR
21	HIS SCHOOL ON EARTHWORMS, AND WE FED THEM BISPHENOL
22	A. AND THE POPULATION WHAT WOULD HAPPEN IN AN
23	EARTHWORM IS THAT IT'S A HERMAPHRODITE, YOU SEE, SO
24	IF YOU FED THEM BISPHENOL, THE THEORY WAS THAT YOU'D
25	TURN THEM ALL INTO FEMALES. AND WE DIDN'T GET

1	THROUGH THE SEXING COMPONENT BECAUSE BOB TOLD ME I
2	HAD TO GET HERE, BUT WE GOT A MUCH REDUCED
3	POPULATION SO THAT THE YOUNG WORMS DISAPPEARED. YOU
4	COULD SEE THIS AT THE LOW LEVELS, BUT NOT AT THE
5	HIGH LEVELS.
6	WELL, THE ANSWER TO THIS WHOLE STORY, YOU
7	MIGHT WONDER WHAT I'M GOING ON ABOUT, IS CANADA
8	BANNED BISPHENOL A ABOUT THREE WEEKS AGO, AND IT WAS
9	THE FIRST COUNTRY IN THE WORLD TO BAN IT. BUT WE
10	COULD BE LOOKING AT THOSE KIND OF SUBSTANCES IN OUR
11	TOXICOLOGY SCREENS. I THINK THE COMMUNITY WOULD
12	WELCOME THIS PART OF IT.
13	SO I'D LIKE TO SEE US HAVE A WORKSHOP.
14	WE'RE NOW WELL AND TRULY INTO THE PLANNING OF THAT,
15	AND I THINK IT WILL BE QUITE AN INTERESTING AND
16	EXCITING ENDEAVOR. MAYBE AN RFA MIGHT PROGRESS FROM
17	IT.
18	I'M ALSO INTERESTED IN GETTING INTO
19	IMMUNOLOGY, PARTICULARLY IMMUNOLOGICAL TOOLS, TOOLS
20	OF IMMUNOLOGY TO EXPLORE THE USE OF IMMUNOLOGY IN
21	THE LABORATORY. I THINK WE NEED IT. IT'S TIME. WE
22	NEED TO KNOW WHETHER OUR CELLS ARE IMMUNOGENIC, HOW
23	FAR THEY GO, WHAT ARE THE KIND OF REACTIONS THAT WE
24	SEE. WE'RE UNDERDONE IN THIS AREA. I THINK IT'S
25	TIME FOR US TO HAVE A WORKSHOP, TALK TO THE PEOPLE

1	IN THIS AREA, AND START TO GET A BIT OF TRACTION ON
2	THAT AREA.
3	I THINK WE ALSO NEED TO LOOK AT CELL
4	PRODUCTION FACILITIES. I'M TALKING ABOUT FOR
5	THERAPEUTIC AND RESEARCH PURPOSES. THERE ARE NOW
6	PROPOSALS FOR CLINICAL TRIALS, PHASE 1 CLINICAL
7	TRIALS, COMING UP. I THINK SOME OF THEM WILL BEGIN
8	THIS YEAR, BUT THERE WILL BE AN INCREASING NEED FOR
9	CELLS IN THERAPEUTIC USAGE. I'M ALSO TOLD BY THE
10	SCIENTISTS THAT THEY'RE SPENDING A LOT OF TIME,
11	TECHNICIAN TIME, IN JUST MAKING CELLS FOR RESEARCH.
12	AND I THINK WE NEED TO GET EVERYBODY TOGETHER AND
13	SEE WHAT SORT OF PROGRAM WE OUGHT TO INITIATE IN
14	TERMS OF CELL PRODUCTION FACILITIES.
15	THERE'S A VERY IMPORTANT MEETING COMING UP
16	IN SEPTEMBER. WE'RE BRINGING ALL THE CIRM GRANTEES
17	TOGETHER AT A CONFERENCE. WE'RE GOING TO HAVE SPEED
18	DATING AT THIS CONFERENCE, NOT IN THE WAY YOU
19	NORMALLY THINK OF SPEED DATING, BUT SCIENCE DATING
20	WHERE THEY INTRODUCE ONE ANOTHER OF THEIR SCIENCE IN
21	A SPEED MECHANISM, SO YOU DON'T HAVE ENTRENCHED
22	GROUPS OF PEOPLE GOING TO A CONFERENCE AND THEN
23	GOING AWAY WITHOUT MEETING ANYONE, BUT TO GET ALL
24	MIXED UP, GET AN IDEA THAT SOMEBODY IS DOING
25	SOMETHING IN ANOTHER LAB, IN ONE OF OUR OTHER
	25
۷3	

1	LABORATORIES, AND TO INCREASE THE CHANCES OF
2	COLLABORATION IN THE WHOLE SECTOR.
3	SO THIS IS A VERY INTERESTING MEETING.
4	PAT HAS HER COLLEAGUES WORKING ON THIS, AND WE'VE
5	HAD A TREMENDOUS RESPONSE. SO THAT'S GOING TO
6	HAPPEN IN SEPTEMBER, AND WE'RE ALL LOOKING FORWARD
7	TO THAT.
8	FEW OTHER UPDATES. I'VE PUT TO THE
9	EXECUTIVE OF THE MANAGEMENT THAT I'D LIKE TO UPDATE
10	OUR STRATEGIC PLAN. THERE'S A NEW GROUP OF PEOPLE
11	HERE. THE LAST TIME THE PLAN WAS DONE WAS IN MID TO
12	LATER PART OF 2006. I THINK THERE'S A LOT OF THINGS
13	HAPPENED. I THINK IT'S TIME FOR REVISION, AND WE
14	ARE GOING TO GO THROUGH THAT.
15	I'M INTERESTED, IN RESPONSE TO THE
16	REVIEWERS, THAT DO WE HAVE ANY VIEWS ON A CAP ON THE
17	NUMBER OF GRANT APPLICATIONS PER PI. WE STARTED TO
18	THINK ABOUT THAT IN RESPONSE TO THE REVIEWERS ASKING
19	US THOSE QUESTIONS, WANTING SOME KIND OF FEEDBACK.
20	WE HAVE A REPORT WE WERE ASKED TO REPORT ON THE
21	DIVERSITY OF THE GRANTS WORKING GROUP NUMBERS. AND
22	IN RESPONSE TO THAT REQUEST, WE'VE CONDUCTED A
23	SURVEY OF GRANT WORKING GROUP MEMBERS TO DETERMINE
24	THE OVERALL DIVERSITY OF THE GROUP. ABOUT
25	ONE-THIRD, IT'S A VERY LOW RESPONSE UNFORTUNATELY,

1	HAVE RESPONDED TO THE SURVEY AT THIS POINT IN TIME.
2	SO WE NEED TO CONTINUE TO COMPILE AND MONITOR THIS
3	DATA. IT DOESN'T SEEM DIFFERENT AT THIS STAGE FROM
4	THE GENERAL POPULATIONS IN THE SCIENCE SECTOR, IN
5	OUR STEM CELL SECTOR, BUT I THINK WE NEED TO GET A
6	BIT BETTER IN THE THIRD RESPONSE, AND WE CAN'T
7	MANDATE THEIR RESPONSE. WE CAN ONLY ENCOURAGE IT.
8	SO WE'LL MAKE OUR BEST EFFORT AND PROVIDING IT'S
9	CONSISTENT WITH THE LAW TO ENCOURAGE THE RECRUITMENT
10	OF INDIVIDUALS WHO WILL ENHANCE THIS PARTICULAR
11	DI VERSI TY.
12	SO I WANTED TO RESPOND TO LCOC MEMBERS WHO RAISED
13	THIS LAST TIME.
14	HAD A MEETING, PAT OLSON AND I WENT TO A
15	MEETING WITH CANADA/CALIFORNIA STEM CELL MEETING IN
16	TORONTO. THIS IS A CONSORTIUM OF CANADIANS, CANADA
17	GENOME, OTHER MEMBERS OF THE CANADIAN RESEARCH
18	COMMUNITY WHO'VE COME TOGETHER AND WANT TO FUND
19	CANCER STEM CELLS AND HAVE IDENTIFIED CALIFORNIA AS
20	A PARTNER IN THEIR FUNDING PROCESS. AND I THINK THE
21	CANADIANS HAVE GOT MUCH MORE ADVANCED IN THEIR
22	THINKING THAN WE HAD BECAUSE IT WAS CLEAR FROM THAT
23	MEETING THEY HAD A MODEL WHICH WOULDN'T WORK FOR US.
24	IT JUST WOULDN'T FIT IN THE WAY WE'RE ALLOWED TO
25	BECOME PART OF THAT KIND OF PROGRAM. BUT WE ARE

1	GOING TO HAVE FURTHER MEETINGS WITH CANADA GENOME
2	WITH A VIEW TO EXCHANGING MOU'S IN THE AREA TO LOOK
3	FOR MAYBE WAYS TO ENHANCE A RELATIONSHIP BETWEEN
4	CANADA AND CALIFORNIA IN CANCER STEM CELLS.
5	I ALSO THINK THAT WE NEED TO GET INTO SOME
6	DIALOGUE WITH OUR KEY THOUGHT PEOPLE, SCIENTISTS
7	PARTICULARLY, IN THIS AREA BECAUSE CANCER IS A VERY
8	BIG SUBJECT. AND I'D LIKE SOME INPUT FROM THE KEY
9	CANCER RESEARCHERS ON HOW THEY SEE THIS. I DID
10	EXPRESS TO THE CANADIANS THAT I FELT IT WOULD ONLY
11	WORK IF WHAT WE'RE DOING TOGETHER IS SOMETHING THAT
12	WE COULDN'T DO INDIVIDUALLY. SO THERE'S NOT MUCH
13	POINT IN TRYING TO DO THIS UNLESS IT IS REALLY AN
14	INCREMENT ON WHAT WE CAN DO EITHER IN CALIFORNIA
15	ALONE OR IN CANADA. I THINK THEY'RE IMPORTANT
16	I NI TI ATI VES.
17	I DID MEET WITH DR. ZERHOONI AT THE NIH,
18	THE DIRECTOR OF NIH. I HAVE TO SAY HE WAS
19	COMPLETELY CHARMING AND SUPPORTIVE AND WELCOMING,
20	AND SO IS HIS SENIOR STAFF. WE BELIEVE THAT WE'RE
21	NOT IN COMPETITION, AND WE WILL WORK TOWARDS
22	ENHANCING WHAT WE CAN DELIVER ACROSS THE SPECTRUM OF
23	BOTH NIH AND CALIFORNIA. WE REALIZE THAT IT WILL
24	TAKE SOME REVISION OF THE ADMINISTRATION'S ATTITUDE
25	THERE, BUT WE DO HAVE A LIKELY ALTERATION COMING UP

1	IN THE PRESIDENTIAL ELECTION. SO I THINK THAT WOULD
2	BE PROBABLY SUPPORTIVE AS I READ IT. BUT THE IDEA
3	OF DOING THINGS TOGETHER WAS CERTAINLY SOMETHING
4	THAT APPEALED TO DR. ZERHOONI AND HIS SENIOR
5	COLLEAGUES. SO I THINK I WILL CONTINUE TO WORK
6	TOWARDS THAT AS A GENUINE LINKAGE TO FORM BENEFIT TO
7	OUR SCIENTISTS AND SORT OF MAKE SURE WE DON'T END UP
8	IN ANY KIND OF COMPETITIVE SITUATION.
9	I WANT TO JUST ASK A COUPLE OF MEMBERS OF
10	STAFF TO REPORT ON THREE THINGS IN ADDITION. THE
11	SCO AUDIT THAT YOU REMEMBER WAS REQUESTED FOR BY THE
12	CONTROLLER HAS BEEN COMPLETED. AND CAN I ASK TAMAR
13	TO ADDRESS THAT FOR US? WOULD YOU LIKE TO DO THAT,
14	TAMAR?
15	MS. PACHTER: YES. ALTHOUGH THE STATE
16	CONTROLLER HAS NOT FORMALLY RELEASED THE AUDIT, THE
17	FINDINGS WERE EXTREMELY MINIMAL, WE'RE PLEASED TO
18	SAY. AND WE PARTICULARLY THANK AMY LEWIS, HEAD OF
19	OUR GRANTS MANAGEMENT OFFICE, WHO DID A FINE JOB
20	WALKING THE MEMBERS OF THE STATE AUDITOR'S TEAM
21	THROUGH OUR PROCESSES. WE EXPECT THAT REPORT TO BE
22	RELEASED SOMETIME BEFORE THE MEETING OF THE CITIZENS
23	FINANCIAL ACCOUNTABILITY OVERSIGHT COMMITTEE.
24	DR. TROUNSON: THANKS, TAMAR. AND THE
25	NEXT TWO POINTS, ONE OF THEM WAS, AGAIN, REQUESTED

1	BY MEMBERS OF THE BOARD, THE COMMITTEE, ON FORECAST
2	OF CIRM PORTFOLIO, SO CAN I INVITE PAT TO SPEAK TO
3	THAT AND ALSO TO MAKE SOME COMMENTS ON THE RECENT
4	FDA CLINICAL TRIALS MEETING THAT WAS HELD.
5	DR. OLSON: OKAY. AT THE LAST BOARD
6	MEETING, THERE WAS A REQUEST FOR SOME INFORMATION ON
7	OUR PORTFOLIO. SO WHAT I'D LIKE TO DO IS JUST
8	REMIND YOU THAT THIS IS HOW WE LOOK AT OUR
9	PORTFOLIO, AS A PIPELINE, ESSENTIALLY, FROM THE
10	BASIC RESEARCH THROUGH DISCOVERY THROUGH EARLY
11	PRECLINICAL RESEARCH AND THEN INTO CLINICAL STUDIES.
12	AND AS YOU CAN SEE THERE, YOU CAN SEE THAT MANY OF
13	THE RFA'S THAT WE PUT OUT TO DATE TEND TO BE, I'D
14	SAY, MORE FIRMLY SET IN THE BASIC AND PERHAPS EARLY
15	TRANSLATI ONAL.
16	I THINK WITH THE UPCOMING RFA'S, SO THE
17	DISEASE TEAM PLANNING IS STARTING TO MOVE ALONG THE
18	TRANSLATIONAL PIPELINE. TOOLS AND TECHNOLOGIES, WE
19	EXPECT TO SEE THINGS THAT ARE APPLICABLE TO BASIC
20	RESEARCH OR THAT COULD BE HELPFUL IN THE PRECLINICAL
21	AND TRANSLATIONAL AREAS. SO I THINK WHAT YOU CAN
22	SEE FROM THIS IS THAT NOT JUST IN THE WE'RE
23	MOVING ALONG THE PIPELINE. WE'RE MOVING FROM BASIC
24	RESEARCH, AND WE'RE MOVING INTO THE TRANSLATIONAL
25	PIPELINE WHILE, AGAIN, RECOGNIZING THAT WE NEED TO

1	DO THAT.
2	SO IF WE LOOK AT THE NEXT, WE LOOK AT WHAT
3	WE PLAN TO HAVE UPCOMING, AS YOU CAN SEE, AGAIN, YOU
4	ALREADY HAVE OUT NEW FACULTY II. TOOLS AND
5	TECHNOLOGIES, THE RFA SHOULD BE POSTED, IF NOT
6	TODAY, THEN CERTAINLY BY TOMORROW, BUT I EXPECT IT
7	TO BE UP TODAY. YOU'RE GOING TO HEAR TODAY ABOUT
8	CONCEPT CLEARANCE FOR THE TWO NEW TRAINING AWARDS,
9	BOTH AT THE SCHOLAR LEVEL AND AT THE INTERNSHIP
10	LEVEL. AND I THINK THE RESEARCH THERE, I THINK YOU
11	CAN SAY, SPANS BOTH THE BASIC AND A LOT OF THE EARLY
12	PRECLI NI CAL.
13	WE HAVE EARLY TRANSLATIONAL RESEARCH
14	COMING UP, WHICH I EXPECT TO BE, IF YOU LOOK AT THE
15	PROCEEDINGS SLIDE, YOU CAN SEE IS PROBABLY WE'RE
16	TARGETING IT, THE IDEA THERE IS THE END GAME
17	THERE IS A DEVELOPMENT CANDIDATE OR SOMETHING OR A
18	MAJOR BOTTLENECK IN THE FIELD. SO THAT'S HOW, AT
19	LEAST, WE'RE STARTING TO THINK ABOUT THAT ONE.
20	THEN WE HAVE I THINK YOU ALL KNOW ABOUT
21	THE DISEASE TEAM RESEARCH AWARDS THAT ARE COMING UP
22	IN THE FALL. THEN I WANT TO REMIND YOU ABOUT THE
23	INNOVATION AWARDS THAT WE SEE COMING UP. AND THIS
24	IS WHAT WE HOPE TO PUT FORTH TO PROVIDE AN

OPPORTUNITY FOR PEOPLE WHO HAVE HAD SEED GRANTS TO

25

1	COMPETE IN THE CONTEXT OF AN INNOVATION AWARD. SO
2	THAT WOULD BE ONE THING THERE.
3	WE ARE ALSO LOOKING AT THE POSSIBILITY NOW
4	OF STARTING TO PUT IN PLACE A CLINICAL PROGRAM, SO
5	THAT'S DOWN THERE AT THE BOTTOM AND MORE TO COME. I
6	MEAN, AS I SAY, OUR THINKING IS JUST BEGINNING ON
7	THIS. AND I THINK, YOU KNOW, HAVING A LOAN PROGRAM
8	IN PLACE WILL CERTAINLY PROBABLY BE AN IMPORTANT
9	ELEMENT BEFORE WE MOVE FORWARD ON THAT. THAT'S WHAT
10	I WANTED TO SAY ABOUT THE PIPELINE OF UPCOMING
11	RFA' S.
12	I ALSO THEN WANTED TO JUST TELL YOU A
13	LITTLE BIT ABOUT THE FDA ADVISORY COMMITTEE MEETING.
14	THIS MEETING WAS HELD ON APRIL 10TH, AND IT WAS A
15	MEETING OF THE CELL TISSUE AND GENE THERAPY ADVISORY
16	COMMITTEE, WHICH IS PART OF THE CENTER FOR BIOLOGICS
17	EVALUATION. WHAT IT WAS SPECIFICALLY CALLED TO
18	ADDRESS WAS THE SAFETY OF CELL THERAPIES DERIVED
19	FROM HUMAN EMBRYONIC STEM CELLS.
20	SO WHAT CBER IS DOING IS THEY ARE
21	ANTICIPATING, AND YOU CAN GO TO ANY MEETING NOW AND
22	YOU WILL HEAR SEVERAL COMPANIES TALKING ABOUT HOW
23	THEY'RE GOING TO BE COMING FORTH WITH THEIR HUMAN
24	EMBRYONIC-DERIVED STEM CELL THERAPIES IN VARIOUS
25	AREAS. SO I THINK THAT CBER IS TRYING TO GET AHEAD

1	OF THE GAME, AND THEY WANTED SOME ADVICE FROM THEIR
2	COMMITTEE ON THESE POINTS.
3	IN PARTICULAR, THE TOPICS THAT THEY ASKED
4	THEM TO DISCUSS WERE INAPPROPRIATE DIFFERENTIATION
5	AND TUMORIGENICITY. SPECIFICALLY HOW DO WE LOOK AT
6	THIS IN PRECLINICAL MODELS? THEY WANTED TO KNOW
7	WHAT KIND OF CHARACTERIZATION SHOULD THEY BE LOOKING
8	FOR IN HESC-DERIVED CELLULAR POPULATIONS. WHAT DO
9	YOU DO HOW DO YOU CHARACTERIZE YOUR STARTING
10	POPULATION, PRESUMABLY THE EMBRYONIC STEM CELL
11	POPULATION? HOW DO YOU CHARACTERIZE YOUR PRODUCT
12	POPULATION? WHAT ARE ACCEPTABLE LIMITS OF DIFFERENT
13	CELL TYPES? WHAT KINDS OF MEASURES ARE YOU LOOKING
14	AT? AND THEN HOW DO YOU MONITOR PATIENTS FOR THESE
15	CELLS? AND WHAT KIND OF TRIAL DESIGN SHOULD YOU
16	THI NK ABOUT?
17	SO DR. CSETE AND MYSELF BOTH ATTENDED THIS
18	MEETING, SO WE'LL JUST PROVIDE A LITTLE BIT OF A
19	HIGHLIGHT. THERE WERE PRESENTATIONS FROM FOUR
20	COMPANIES, FROM NOVOCELL, ACT, AND PARDON ME
21	FROM THREE COMPANIES AND FROM GERON.
22	NOVOCELL FOCUSED ON THEIR HESC-DERIVED
23	INSULIN PRODUCING CELLS. AND I WOULD JUST MAKE THE
24	POINT THAT WHAT WAS REALLY EMPHASIZED DURING THE
25	PRESENTATION WAS CHARACTERIZATION OF THE CELLS, THE

1	STARTING POPULATION THROUGHOUT DIFFERENTIATION, AND
2	THE FINAL PRODUCT. THE POINT WAS MADE ACTUALLY THAT
3	IN THEIR STARTING POPULATION, THEY DO SEE
4	PERIODICALLY ANEUPLOID POPULATIONS ARISING. SO NO
5	ONE HAS YET SAID WHAT DOES ANEUPLOIDY MEAN, AND IS
6	THERE AN ACCEPTABLE LIMIT OF ANEUPLOIDY? SO THAT
7	POINT WAS ACTUALLY RAISED.
8	ACT TALKED ABOUT HUMAN EMBRYONIC STEM CELL
9	DERIVED RETINAL CELLS, AND THE EMPHASIS THERE WAS
10	THAT EYE IS, IN FACT, UNIQUELY SUITED TO CLINICAL
11	APPLICATION OF CELL TRANSPLANT BECAUSE THE SITE CAN
12	BE READILY MONITORED. IT'S A CONTAINED SITE. YOU
13	HAVE LESS WORRIES ABOUT WHERE THE CELLS MIGHT GET
14	TO, AND YOU CAN ACTUALLY VISUALLY SEE WHAT'S GOING
15	ON IN IT.
16	GERON TALKED ABOUT HESC-DERIVED
17	OLIGODENDROCYTE PRECURSORS, AND THE EMPHASIS, OR AT
18	LEAST NOT AN EMPHASIS, BUT A POINT THAT WAS OF
19	INTEREST WAS THE TERATOMA FORMATION IS PROPORTIONAL
20	TO THE NUMBER OF UNDIFFERENTIATED HESC CELLS IN THE
21	FINAL POPULATION. SO THAT WAS ACTUALLY THEY'VE DONE
22	A NUMBER OF SPIKING EXPERIMENTS TO SHOW THAT THAT'S
23	THE CASE.
24	OF INTEREST TO BOTH MARIE AND I, BECAUSE I
25	GUESS WE HADN'T REALIZED THIS, WAS THAT ALL

1	COMPANIES ARE RELYING ON THE EFFICIENCIES OF
2	DIFFERENTIATION. THERE ARE NO SEPARATION STEPS IN
3	THIS FROM STARTING MATERIAL TO FINAL PRODUCT. SO
4	THESE ARE MULTISTEP DIFFERENTIATION PROTOCOLS, AND
5	THE COMPANIES ARE REALLY RELYING ON HIGH EFFICIENCY
6	DI FFERENTI ATI ON.
7	OTHER POINTS THAT WERE MADE IS THAT REALLY
8	THE RISK OF TUMORIGENESIS IS SIMPLY NOT KNOWN AT
9	THIS POINT. AND SO YOU HAVE TO DIFFERENTIATE
10	TERATOMA FORMATION FROM TUMORIGENESIS AND IT'S JUST
11	NOT KNOWN. THE POINT WAS MADE IS THERE ANY
12	ACCEPTABLE LEVEL OF TERATOMA FORMATION? WELL, AS
13	PEOPLE POINTED OUT IN THE CNS OR THE BRAIN, NO,
14	THERE IS NO ACCEPTABLE THERE IS NO ACCEPTABLE
15	RISK FOR TERATOMA FORMATION.
16	THE POINT WAS RAISED THAT ANIMALS DO NEED
17	TO BE FOLLOWED FOR LONG TIME HORIZONS FOR TUMOR
18	FORMATION. ACTUALLY THIS IS AN ISSUE BECAUSE IN
19	MANY CASES IT'S DIFFICULT TO FOLLOW ANIMALS FOR LONG
20	TIMES. IT'S HARD TO GET APPROVAL FOR THOSE KINDS OF
21	STUDIES. THERE IS NO QUESTION THAT THERE WILL BE
22	LONG-TERM PATIENT FOLLOW-UP. I MEAN THOSE OF YOU
23	WHO FOLLOW GENE THERAPY KNOW THAT THERE'S LONG-TERM
24	PATIENT FOLLOW-UP IN THAT TO, I THINK, UP TO 15
25	YEARS.

1	CELL CHARACTERIZATION OF THE STARTING
2	HUMAN EMBRYONIC STEM CELL POPULATION AND THE PRODUCT
3	MUST BE ESTABLISHED UNDER MANUFACTURING CONDITIONS
4	USED FOR CLINICAL PRODUCTION. THOSE OF YOU WHO'VE
5	WORKED IN BIOLOGICS KNOW THAT THE PROCESS DEFINES
6	THE PRODUCT. THAT IS CLEARLY GOING TO BE TRUE IN
7	THIS CASE TOO. DON'T EVEN THINK ABOUT DOING YOUR
8	TOXICITY STUDIES WITH MATERIAL THAT YOU HAVEN'T
9	PREPARED UNDER THE CONDITIONS THAT YOU ARE GOING TO
10	USE TO TAKE INTO THE CLINIC.
11	I MEAN THESE POPULATIONS ARE NOT
12	HOMOGENEOUS POPULATIONS. THEY DO HAVE EARLIER STAGE
13	PROGENITORS IN THEM AND MAYBE EVEN A SMALL ABSOLUTE
14	LEVEL OF HUMAN EMBRYONIC STEM CELLS. IT'S NOT
15	CLEAR. BUT THE POINT WAS THAT IF YOUR CELL
16	POPULATION IS HETEROGENEOUS, YOU HAVE TO HAVE
17	DEFINED CRITERIA, AND IT HAS TO BE CONSISTENT. I
18	MEAN YOU HAVE TO HAVE A CONSISTENCY IN YOUR
19	HETEROGENEI TY.
20	AGAIN, THE POINT WAS MADE, I THINK, TIME
21	AND TIME AGAIN THAT EVERY EFFORT MUST BE MADE TO
22	AVOID TRANSPLANTING ON DIFFERENTIATED HUMAN
23	EMBRYONIC STEM CELLS. AND THAT BECAUSE OF THE
24	NOVELTY OF THESE THERAPIES AND THE UNCERTAINTIES
25	AROUND THEM, THAT THEY WOULD LIKE A PHASE 1 STUDY

1	DESIGN TO INCORPORATE EFFICACY AS WELL AS SAFETY.
2	SO NORMALLY, AS YOU ALL KNOW, PHASE 1 STUDIES
3	TYPICALLY ONLY HAVE A SAFETY END POINT, BUT I THINK
4	THEY'RE HOPING THAT THERE'LL BE SOME SORT OF
5	BIOMARKERS OR SOMETHING TO SUGGEST THAT AT LEAST
6	YOU'RE HAVING SOME OF THAT EFFECT. AGAIN, AS YOU
7	ALL KNOW, THE NUMBERS THAT ARE TYPICALLY IN A PHASE
8	1 STUDY CERTAINLY DON'T GIVE YOU ANY STATISTICAL
9	EVIDENCE OF EFFICACY WITH ANY REASONABLE CONFIDENCE
10	LEVELS. BUT, YOU KNOW, IF YOU CAN GET SIGNALS, THAT
11	MIGHT BE HELPFUL.
12	I THINK THE POINT WAS ALSO MADE THAT THERE
13	ARE CURRENTLY NO GOOD NONINVASIVE METHODS TO TRACK
14	INFUSED OR TRANSPLANTED CELLS, AND THAT DELIVERY
15	SHOULD BE OPTIMIZED IN THE PRECLINICAL MODEL AS MUCH
16	AS POSSIBLE BECAUSE THERE ARE VERY FEW APPROVED, I
17	THINK THERE'S ONLY ONE APPROVED, IRON OXIDE OR
18	DERIVATIVE FOR IMAGING, AND THERE ARE JUST VERY FEW
19	THINGS. ALSO THE SPONSORS WILL NEED TO DEMONSTRATE
20	AN ADEQUATE IMMUNOSUPPRESSIVE REGIMEN.
21	SO AS I SAY, THIS WAS THE FDA'S FIRST, I
22	THINK, FORAY INTO TRYING TO GET A SENSE OF, YOU
23	KNOW, HEAR FROM THEIR ADVISORS AND FROM CONSULTANTS
24	THAT THEY INVITED TO SIT ON THE PANEL OF HOW THEY
25	SHOULD APPROACH SOME OF THESE POINTS. NEEDLESS TO

1	SAY, THERE WAS REQUESTS FOR A GUIDANCE DOCUMENT. I
2	SHOULD SAY THAT I STAYED THE NEXT DAY, AND THEY PUT
3	OUT A GUIDANCE DOCUMENT THAT HAD BEEN TWO YEARS IN
4	THE WORKING. SO, YOU KNOW, THIS IS GOING TO BE AN
5	ONGOING DIALOGUE, AND I THINK THAT'S SOMETHING THAT
6	WE ALL HAVE TO BE COGNIZANT OF AND WILLING TO WORK
7	WI TH.
8	DR. TROUNSON: THANKS, PAT. I'D JUST LIKE
9	TO SAY THAT IT'S NOT ONLY A PLEASURE WORKING WITH
10	THE STAFF HERE, BUT IT'S ALSO WITH THE MEMBERS OF
11	THE BOARD WHO REALLY HELPED IN MANY OF THESE
12	DIFFERENT ASPECTS. AS I GO AROUND, I'M ACTUALLY
13	GETTING A LOT OF INPUT, BUT I'D HAVE TO SAY, YOU
14	KNOW, THAT SOME OF THE INPUTS HAVE BEEN JUST
15	ABSOLUTELY SUPERB. I WANT TO SAY MICHAEL GOLDBERG
16	HAS BEEN A GREAT HELP TO US IN FORMULATING BUDGETS
17	AND FINANCES. AND JEFF SHEEHY AND SHERRY LANSING
18	HAVE BEEN REALLY TERRIFIC AT HELPING US INTO SOME OF
19	THESE MORE COMPLEX SOCIAL ISSUES WHICH I'VE DARED TO
20	TREAD. BUT I THINK IMPORTANTLY TO, YOU KNOW, LOOK
21	AT WHAT IS GENUINELY THERE. AND, YOU KNOW, EVERY
22	ONE OF THE BOARD MEMBERS PHIL IS NODDING BECAUSE
23	WE'VE HAD SOME CONVERSATIONS, BUT THEY'RE HELPING US
24	TO MATURE OUR THINKING. AND WE REALLY DO APPRECIATE
25	IT. SO ALL OF THE CONVERSATIONS THAT I'VE HAD,

1	PARTICULARLY WITH MEMBERS WHERE I GO OUT AND VISIT
2	THEM, HAS BEEN INCREDIBLY IMPORTANT. AND I SEE US
3	ALL SORT OF LIKE SALMON FACING IN THE RIGHT
4	DIRECTION, AND IT'S BEEN A REAL, REAL PLEASURE.
5	AND WE WOULD MR. CHAIRMAN, IF THERE WAS
6	ANYTHING THAT WE SAID THAT WAS TOO CONTROVERSIAL OR
7	NEEDED EXPLANATION, I'M SURE THAT WE WOULD ANSWER
8	ANYONE'S QUESTION.
9	CHAIRMAN KLEIN: ARE THERE ANY QUESTIONS
10	FOR THE PRESIDENT AT THIS TIME?
11	DR. PIZZO: JUST A COUPLE OF COMMENTS
12	MAYBE IN REVERSE ORDER. FIRST, STARTING WITH THE
13	VERY ILLUMINATING DISCUSSION ABOUT THE FDA, I THINK
14	THAT WAS A PRETTY REMARKABLE DISPLAY OF INFORMATION.
15	AND THANK YOU FOR SHARING THAT WITH US.
16	I THINK THAT THE ISSUES THAT YOU RAISED
17	ARE IMPORTANT AND A BIT DAUNTING, AND PARTICULARLY
18	THE DIFFERENTIATED VERSUS UNDIFFERENTIATED CELL
19	POPULATIONS IS GOING TO BE A KEY FACTOR. I THINK
20	ONE OF THE THINGS, DESPITE ALL OF OUR EAGERNESS TO
21	MOVE FORWARD, I THINK WE ALL OF US TOO HAVE TO BE
22	COGNIZANT OF HISTORY. AND YOU ALLUDED TO GENE
23	THERAPY. AS WE'VE WATCHED THAT FIELD GO TOO QUICKLY
24	IN SOME WAYS AND THEN FALL ON ITS FACE, I THINK WE
25	HAVE TO BE VERY SENSITIVE TO THAT ISSUE. IT'S GOING

1	TO BE AN IMPORTANT DYNAMIC INDEED.
2	THE ISSUE ABOUT PHASE 1 STUDIES WAS ALSO
3	QUITE INTERESTING BECAUSE, IN FACT, THAT'S WHAT
4	HAPPENED IN THE EARLY DAYS OF HIV RESEARCH. THERE
5	BECAME A COMBINATION OF PHASE 1 STUDIES THAT
6	ACTUALLY EARLY SURROGATE MARKERS BEGAN TO PROVE
7	EFFICACY. AND THE ADVANTAGE TO THAT IS THAT IT
8	MEANS SMALLER POPULATIONS, WHICH IS GOING TO BE
9	IMPORTANT TO NOT CREATING TOO LARGE A RISK ISSUE.
10	SO NOW MOVING BACKWARD ONE STEP. I THINK
11	ALAN'S COMMENT ABOUT THE NIH WAS INTERESTING, AND I
12	WANT TO MAKE TWO OBSERVATIONS THERE. ONE OF THEM IS
13	THAT FROM ALL THAT I KNOW, AND I THINK EVERYONE IN
14	THIS ROOM HAS BASICALLY THE SAME ENLIGHTENMENT, THE
15	NIH BUDGET IS GOING TO BE VERY PROBLEMATIC, NOT JUST
16	IN THE PAST FIVE YEARS, BUT GOING FORWARD FOR A
17	NUMBER OF YEARS TO COME. AND EVEN IF THERE IS A
18	CHANGE OR THERE WILL BE A CHANGE OF ADMINISTRATION,
19	I THINK THE LIKELIHOOD THAT THERE'S GOING TO BE
20	SIGNIFICANT FUNDING FOR STEM CELL RESEARCH, JUST
21	BASED UPON THE ABSOLUTE DOLLARS, IS VERY LOW, WHICH
22	MAKES THE EFFORTS IN CALIFORNIA ALL THE MORE
23	IMPORTANT. THAT'S ONE POINT.
24	THE SECOND POINT IS THAT I'M SURE THAT
25	OTHER ACADEMIC CENTERS, INSTITUTES IN CALIFORNIA
	40

1	WILL ECHO THIS, BUT CIRM, WHEN IT STARTED, WAS
2	REALLY FOCUSED ON PROMOTING STEM CELL RESEARCH. AND
3	THANKFULLY IN THE LAST YEAR WE'RE NOW REALLY MOVING
4	IN THAT DIRECTION. BUT IT'S ACTUALLY SERVING
5	ANOTHER REALLY IMPORTANT ROLE THAT WOULDN'T HAVE
6	BEEN ANTICIPATED FOUR YEARS AGO, WHICH IS THAT IT'S
7	HELPING TO SUSTAIN OUR BIOMEDICAL RESEARCH ENGINE IN
8	CALIFORNIA DURING THIS TREMENDOUS CHANGE OF TIME. I
9	THINK THAT'S A REALLY KEY FACTOR FOR ALL OF US. I
10	THINK THIS IS SOMETHING SADLY THAT IS NOT GOING TO
11	BE AVAILABLE IN OTHER PARTS OF THE COUNTRY.
12	AND THEN THE LAST POINT I WANTED TO MAKE
13	WAS TO THANK ALAN. I THINK YOU STARTED OUT BY
14	PRESENTING DATA TO US, AND YOU DID THIS LAST TIME
15	TOO. AND I THINK THAT IT'S SUCH A WELCOME POINT
16	BECAUSE IT REALLY UNDERSCORES WHAT WE'RE ABOUT. AND
17	I KNOW THAT IN THE DISCUSSIONS ABOUT WHO WOULD SERVE
18	AS PRESIDENT, THERE WAS APPROPRIATE DIALOGUE ABOUT
19	WHAT WAS THE RIGHT CRITERIA, WHAT WERE THE RIGHT
20	CREDENTIALS FOR THE INDIVIDUAL. AND SHOULD IT BE
21	SOMEONE WHO HAD A STRONG SCIENCE BACKGROUND IN
22	ADDITION TO A MANAGEMENT BACKGROUND. AND I THINK,
23	ALAN, YOU'VE GOT BOTH, AND THE SCIENCE BACKGROUND
24	COMES VERY CLEAR BOTH IN TERMS OF THE WAY YOU
25	PRESENT THE DATA AND THE WAY THE INFORMATION IS

1	BEING SHAPED IN THE AGENDA.
2	SO I THINK THESE ARE REALLY WONDERFUL
3	THINGS TO SEE HAPPENING. SO THANK YOU.
4	CHAIRMAN KLEIN: THANK YOU, DR. PIZZO.
5	OTHER POINTS, QUESTIONS, OR COMMENTS FROM THE BOARD?
6	SHERRY LANSING.
7	MS. LANSING: I JUST WANT TO SAY,
8	EMPHASIZE A LITTLE BIT BECAUSE I WAS GOING TO SAY
9	SOMETHING VERY SIMILAR, BUT I'LL PUT IT MORE FROM A
10	PATIENT ADVOCATE POINT OF VIEW. I THOUGHT THIS WAS
11	A GREAT REPORT, JUST EXTRAORDINARY, ONE OF THE BEST
12	WE'VE EVER HAD BECAUSE THOSE OF US, WHICH IS MOST OF
13	US, WHO HAVE BEEN HERE SINCE THE BEGINNING, IT'S
14	REALLY WONDERFUL TO BE ABLE TO SEE THAT THE SCIENCE
15	IS BEGINNING TO WORK AND THAT WE CAN SEE YOU
16	KNOW, WE SPENT AT LEAST TWO YEARS, AND I DON'T MEAN
17	THIS IN A NEGATIVE WAY, IN A BUREAUCRATIC SITUATION
18	WHERE OUR REPORTS WOULD BE THAT WAY. AND IT WAS
19	JUST THRILLING TO SAY, WELL, THIS IS HAPPENING, AND
20	THAT'S HAPPENING, AND WE'RE HELPING THIS, AND WE'RE
21	PARTNERING WITH THIS. SO I CAN'T THANK YOU ENOUGH
22	FOR THIS REPORT. IT WAS EXCEPTIONAL, AND I REALLY
23	LOOK FORWARD TO EVERY REPORT YOU GIVE US. WE'RE
24	VERY, VERY GRATEFUL AND HAPPY TO HAVE YOU.
25	CHAIRMAN KLEIN: IN FACT, HE'S BEEN SUCH A
	42

1	CAN HAVE A WORKSHOP THAT ADDRESSES THIS TOPIC.
2	I'D LIKE TO MOVE, IF WE CAN, TO THE AGENDA
3	ITEM 4, WHICH WE PAST AS WE WENT FORWARD WAITING FOR
4	THE LAST MEMBERS TO SHOW UP. AND I'M WONDERING IF
5	WE HAVE A MOTION TO APPROVE THE CONSENT CALENDAR,
6	WHICH ARE THE MINUTES FROM THE MARCH 12, 2008,
7	MEETI NG.
8	DR. BLOOM: SO MOVED.
9	CHAIRMAN KLEIN: SO MOVED BY DR. BLOOM.
10	IS THERE A SECOND?
11	DR. PRI ETO: SECOND.
12	CHAIRMAN KLEIN: SECOND BY DR. PRIETO.
13	COMMENTS FROM THE BOARD? SEEING NO COMMENTS,
14	COMMENTS FROM THE PUBLIC? SEEING NO COMMENTS, ALL
15	IN FAVOR. MOTION PASSES.
16	IF WE CAN GO FORWARD, THEN, AT THIS POINT
17	WITH THE AGENDA. ITEM 7 IS NOT NECESSARY, SO WE'LL
18	NOT BE COVERING THAT THIS EVENING.
19	ITEM 8 ADDRESSES CONSIDERATION OF NEW
20	SCIENTIFIC MEMBERS FOR THE GRANTS WORKING GROUP.
21	DR. TROUNSON, WHO WOULD YOU LIKE TO PRESENT THIS
22	ITEM? DR. GIL SAMBRANO, IF YOU WOULD ADDRESS THE
23	BOARD AND THE PUBLIC.
24	DR. SAMBRANO: THANK YOU VERY MUCH, MR.
25	CHAIR AND BOARD MEMBERS. BEFORE I PRESENT THE
	4.4
	44

1	NOMINEES, I JUST WANT TO REPORT TO YOU THAT ONE OF
2	OUR REGULAR GRANTS WORKING GROUP MEMBERS,
3	DR. JEFFREY MACKLIS, RESIGNED HIS POST AS A REGULAR
4	MEMBER OF THE WORKING GROUP. THE BOARD HAD
5	PREVIOUSLY APPROVED DR. IAN DUNCAN FROM THE
6	UNIVERSITY OF WISCONSIN AS THE FIRST ALTERNATE TO BE
7	APPOINTED TO FILL THE NEXT AVAILABLE POSITION. AND
8	AS SUCH, DR. DUNCAN HAS ASSUMED THE POSITION OF A
9	REGULAR GRANTS WORKING GROUP MEMBER.
10	WE WISH TO THANK DR. MACKLIS FOR HIS TIME
11	AND EFFORT HE PROVIDED OVER THE LAST TWO YEARS, AND
12	WE ALSO WISH TO CONGRATULATE DR. DUNCAN WHO HAS BEEN
13	VERY DEDICATED AND INVOLVED IN THE MISSION.
14	I ALSO WANT TO REPORT THAT TWO ALTERNATE
15	WORKING GROUP MEMBERS HAVE RESIGNED. DR. RAY
16	MACDONALD FROM UT SOUTHWESTERN AND DR. THOMAS RAY
17	FROM THE UNIVERSITY OF WASHINGTON.
18	SO TODAY WE'RE BRINGING FOR YOUR
19	CONSIDERATION NOMINEES FOR ALTERNATE GRANTS WORKING
20	GROUP MEMBERS WHO WILL EXPAND OUR OVERALL EXPERTISE
21	IN THE AREAS OF CANCER, MUSCULAR DYSTROPHY, TISSUE
22	ENGINEERING, LUNG AND LIVER DISEASE, BRAIN TUMOR, AS
23	WELL AS RETINAL NEUROGENESIS IN THE EYE.
24	AMONG THE GROUP ARE INDIVIDUALS WITH
25	CLINICAL EXPERTISE, INCLUDING EXPERTISE IN

1	TRANSPLANTATION, THAT CAN MAKE IMPORTANT
2	CONTRIBUTIONS TO OUR REVIEWS OF APPLICATIONS IN THE
3	TRANSLATIONAL AND DISEASE TEAM AREAS. AMONG THEM
4	ARE ALSO AT LEAST TWO INDIVIDUALS WHO WILL VERY
5	LIKELY CONTRIBUTE TO OUR OVERALL ETHNIC DIVERSITY.
6	I WILL REMIND YOU THAT AS ALTERNATE GRANTS
7	WORKING GROUP MEMBERS, THESE INDIVIDUALS MAY BE
8	CALLED UPON TO PARTICIPATE IN A GRANTS WORKING GROUP
9	MEETING AS AN AD HOC REVIEWER OR ASKED TO BECOME A
10	REGULAR MEMBER OF THE GRANTS WORKING GROUP TO
11	REPLACE CURRENT MEMBERS AS NECESSARY. THE ALTERNATE
12	GRANTS WORKING GROUP MEMBERS ARE SUBJECT TO AND MUST
13	AGREE TO ABIDE BY THE SAME CONFLICT OF INTEREST AND
14	FINANCIAL DISCLOSURE POLICY AS REGULAR WORKING GROUP
15	MEMBERS.
16	THE NOMINEES ARE SHOWN AND LISTED WITH
17	THEIR BIOS IN YOUR TAB NO. 8. THESE INDIVIDUALS
18	INCLUDE DR. JUDY ANDERSON FROM THE UNIVERSITY OF
19	MANITOBA IN CANADA. DR. JONATHAN AUERBACH FROM
20	GLOBAL STEM, INC. DR. BARBARA BOYAN FROM EMORY
21	UNIVERSITY. DR. JOSE CIBELLI FROM MICHIGAN STATE
22	UNIVERSITY. DR. GARY GIBBONS FROM THE MOREHOUSE
23	SCHOOL OF MEDICINE. DR. BRIAN HARFE, UNIVERSITY OF
24	FLORIDA. DR. JOHN HASSELL, MCMASTER UNIVERSITY IN
25	CANADA. DR. JOHN LAKE FROM THE UNIVERSITY OF

1	MINNESOTA. DR. GRACE PAVLATH, EMORY UNIVERSITY.
2	DR. PAMELA RAYMOND, UNIVERSITY OF MICHIGAN. DR.
3	MAURICIO ROJAS FROM EMORY UNIVERSITY. DR. JOSH
4	RUBIN FROM WASHINGTON UNIVERSITY.
5	CIRM REQUESTS YOUR APPROVAL AND
6	APPOINTMENT OF THESE NOMINEES AS ALTERNATE MEMBERS
7	OF THE GRANTS WORKING GROUP.
8	DR. LEVEY: THANK YOU VERY MUCH. I'M NOT
9	BOB KLEIN. BOB HAD TO STEP OUT FOR A MINUTE. SO
10	ARE THERE ANY COMMENTS FROM THE BOARD MEMBERS? ANY
11	COMMENTS FROM THE PUBLIC? CAN WE
12	MS. KING: YOU ACTUALLY CAN'T TAKE A VOTE
13	UNTIL BOB IS BACK.
14	MR. HARRISON: WE NEED A QUORUM.
15	MR. ROTH: WHILE WE'RE WAITING, JUST A
16	QUESTION ABOUT ANTICIPATING THAT WE'RE GOING TO HAVE
17	PRODUCT LOANS IN THE FUTURE AS PART OF THESE
18	APPLICATIONS, PERHAPS IN THE DISEASE GRANT
19	APPLICATIONS. HAVE YOU THOUGHT ABOUT REVIEWERS THAT
20	CAN ACTUALLY LOOK AT CLINICAL TRIALS AND LOOK AT THE
21	SCOPE OF THE WORK THAT IS BEING PROPOSED? AS ONE
22	BIOTECH PERSON HERE.
23	DR. SAMBRANO: SURE. AS WE CONTINUE TO
24	MOVE FORWARD, I THINK, CERTAINLY INDIVIDUALS THAT
25	HAVE A BACKGROUND FROM INDUSTRY AND BIOTECH WILL BE

1	IMPORTANT AS MEMBERS OF OUR GRANTS WORKING GROUP.
2	BUT I WILL ALSO REMIND YOU THAT WHENEVER WE HAVE A
3	GRANTS WORKING GROUP MEETING, WE ALSO RELY VERY MUCH
4	ON SPECIALISTS WHO ADD EXPERTISE TO THE ALREADY
5	EXISTING MEMBERS.
6	CHAIRMAN KLEIN: DR. LOVE.
7	DR. LOVE: I WAS GOING TO SAY, ONE, I
8	THINK IT'S A VERY IMPRESSIVE LIST OF CANDIDATES, AND
9	I WOULD MOVE THAT WE APPROVE THE LIST AS YOU
10	RECOMMENDED.
11	BUT I WANTED ASK AT THE BEGINNING OF YOUR
12	REPORT, YOU STARTED OUT WITH LISTING A NUMBER OF
13	RESIGNATIONS. SO I JUST WANTED TO ASK YOU TO
14	COMMENT ON WHETHER OR NOT THERE'S SOMETHING THERE
15	THAT WE SHOULD PONTIFICATE ON OR THINK ABOUT OR GET
16	IN FRONT OF.
17	DR. SAMBRANO: I THINK SERVING FOR THE
18	GRANTS WORKING GROUP IS A VERY CHALLENGING AND
19	TIME-CONSUMING TASK FOR ANYBODY WHO TAKES IT ON.
20	AND THE INDIVIDUALS THAT WE SEEK AND WHO AGREE TO
21	SERVE DO A VERY FINE JOB AND ARE OFTEN
22	OVERCOMMITTED. SO USUALLY THEY COME TO ME AND SAY,
23	"YOU KNOW, I LOVE DOING THIS, BUT I CAN'T DO IT
24	ANYMORE. SORRY I CAN'T HELP." AND SO I THINK, AS
25	AN ONGOING PROCESS, WE NEED TO JUST CONTINUE TO LOOK

1	FOR OTHER INDIVIDUALS TO COME INTO THE GROUP.
2	DR. PIZZO: JUST TO FOLLOW UP ON THAT,
3	TED, BECAUSE I THINK IT'S AN IMPORTANT POINT. YOU
4	KNOW, IF YOU FRAME THIS ON A BROADER SCALE AND LOOK
5	AT THE PEER REVIEW SYSTEM AT THE NIH, WHICH IS UNDER
6	REVIEW NOW, ONE OF THE BIG PROBLEMS HAS BEEN THE
7	DETERIORATION OF THE QUALITY OF THE PEER REVIEWERS
8	AND THE FACT THAT SENIOR SCIENTISTS ARE NOT ENGAGED.
9	AND THERE'S A LOT OF THOUGHT BEING GIVEN TO HOW TO
10	REENGAGE THEM.
11	SO IN REALITY, WE ARE ACTUALLY DOING
12	AMAZINGLY WELL. WE HAVE A MUCH HIGHER QUALITY OF
13	CRITICAL REVIEWERS POUND FOR POUND THAN CERTAINLY
14	EXISTS ON STUDY SECTIONS THESE DAYS. I THINK IT'S
15	BECAUSE OF THE EXCITEMENT OF THE FIELD AND THE
16	IMPORTANCE OF IT. BUT I DO THINK THAT PEOPLE WILL
17	BURN OUT, AND WE NEED TO MAYBE THINK ABOUT
18	ANTICIPATING THAT SO THAT THEY HAVE CYCLES, AND THEN
19	WE MIGHT BE ABLE TO RECALL THEM AT SOME POINT IN
20	TIME RATHER THAN JUST LET THEM DISAPPEAR INTO THE
21	WI LDERNESS.
22	CHAIRMAN KLEIN: PERHAPS DR. TROUNSON.
23	DR. TROUNSON: I THINK IT'S VERY IMPORTANT
24	POINT. I THINK IT IS ONE OF THE ISSUES THAT'S
25	CAUSING US THE BIGGEST HEADACHE, TO TRY AND KEEP UP
	40

1	WITH THIS. AND THERE IS A NEED TO ALLOW PEOPLE TO
2	COME OFF THE DEMANDS. BUT I'M TALKING TO THE ISSCR,
3	THE SOCIETY, THE INTERNATIONAL STEM CELL RESEARCH
4	SOCIETY, TO SEE THAT BEING A REFEREE GETS A HIGHER
5	RECOGNITION RATE THAN IT CURRENTLY DOES. AND SO,
6	PHIL, I THINK THAT MIGHT ALSO HELP IF YOU AND YOUR
7	COLLEAGUES, IN LOOKING AT PEOPLE'S CV'S FOR
8	PROMOTIONS AND SO ON, WOULD ACTUALLY GIVE SOME
9	WEIGHT TO THOSE THINGS, WHICH YOU PROBABLY DO, BUT
10	MAYBE NOT AS MUCH WEIGHT AS SOME OF THE OTHER
11	ACTIVITIES THAT THEY DO. IF WE COULD DO THAT, I
12	THINK THEY COULD SEE IT AS PART OF THEIR THE
13	SCIENTISTS AS PART OF THEIR TOOLS OF TRADE.
14	I THINK IT WILL BE A LITTLE EASIER, TO BE
15	HONEST. SO I THINK THERE'S A CHALLENGE HERE AMONGST
16	DEANS AND ACADEMICS TO RECOGNIZE THIS AS WELL AS
17	GETTING SOCIETIES TO REALLY RECOGNIZE THE BENEFITS
18	TO US ALL OF BEING INVOLVED.
19	DR. PIZZO: ABSOLUTELY. I THINK ONE OF
20	THE OTHER IMPORTANT THINGS WHICH WE SHOULDN'T LOSE
21	SIGHT OF IS THAT THOSE WHO ARE SERVING ON NATIONAL
22	STUDY SECTIONS ARE REALLY QUITE DISMAYED THESE DAYS,
23	RIGHT. SO THERE'S JUST A REVIEW OF THIS RECENTLY.
24	PEOPLE ARE FEELING DESPONDENT BECAUSE THEY'RE GOING
25	AND MOST OF THE GRANTS ARE BEING TURNED DOWN. SO

1	ONE OF THE BIG DIFFERENCES HERE IS THAT THERE'S
2	ACTUALLY A CHANCE FOR SOMETHING TO HAPPEN. AND I
3	THINK EVEN THOUGH SUE AND I WERE WHISPERING ABOUT
4	THIS. EVEN THOUGH THESE INDIVIDUALS ARE NOT GOING
5	TO BENEFIT IN THEIR HOME INSTITUTIONS, I THINK
6	SCIENTISTS ARE INHERENTLY ALTRUISTIC AND WANT GOOD
7	SCIENCE TO GO FORWARD NO MATTER WHAT. THIS IS A
8	GOOD WAY OF THEM BEING ABLE TO PROMOTE THAT.
9	DR. LEVEY: I JUST WANT TO ASK TWO VERY
10	SHORT QUESTIONS. DID THE INCREASE IN HONORARIUM
11	THAT WE PROVIDED HELP IN RETAINING OR ATTRACTING
12	REVI EWERS.
13	AND SECOND QUESTION TO ASK, SEVERAL YEARS
14	AGO WE TALKED ABOUT MAKING IT POSSIBLE FOR THEM
15	SOMETIMES TO CONNECT USING TELECONFERENCING TO STOP
16	SOME OF THE TRAVEL. I WONDER IF WE'VE IMPLEMENTED
17	THAT. IF SO, IF IT'S BEEN HELPFUL.
18	DR. TROUNSON: I CAN ANSWER BOTH OF THOSE.
19	YES AND YES. I THINK THE PAYMENT CERTAINLY HELPS.
20	IT CERTAINLY OFFSET SOME OF THE ISSUES ASSOCIATED
21	WITH HAVING TO TRAVEL AND TO BE INVOLVED IN THE TIME
22	TAKEN TO REVIEW BECAUSE WE ASK THEM TO REVIEW A LOT
23	OF APPLICATIONS.
24	THE OTHER THING IS THAT WE'VE NOW GOT A
25	VIDEOCONFERENCING CAPACITY AT CIRM. AND WE'RE GOING

1	TO ACTUALLY TRY FOR THE FIRST TIME COMING UP SOON AN
2	EAST COAST VENUE, AND WE'LL PROBABLY SEND SOMEBODY,
3	STAFF MEMBER, OVER THERE TO ENSURE THE RECLUSING AND
4	OTHER THINGS HAPPEN PROPERLY THERE. BUT WE HAVEN'T
5	TRIED THAT. I THINK WE CAN PROBABLY EXPAND THAT IN
6	DUE COURSE, BUT WE'RE NOW GOING TO TRY THAT COMING
7	UP SOON.
8	CHAIRMAN KLEIN: ADDITIONAL COMMENTS?
9	OKAY. WE HAVE A MOTION BY DR. LOVE. DO WE HAVE A
10	SECOND?
11	DR. LEVEY: SECOND.
12	CHAIRMAN KLEIN: SECOND BY DR. LEVEY. DO
13	WE HAVE PUBLIC COMMENT?
14	MR. REED: CAN WE HAVE PUBLIC COMMENT ON A
15	PREVIOUS MATTER THAT WASN'T ALLOWED AT THAT TIME,
16	THE FDA?
17	CHAIRMAN KLEIN: THE FDA? LET'S WAIT.
18	WE'RE GOING TO HAVE A LATER POINT FOR PUBLIC COMMENT
19	THAT'S GENERAL PUBLIC COMMENT, BUT IS THERE ANY
20	PUBLIC COMMENT ON THIS MOTION? ALL RIGHT. MOTION
21	HAS BEEN MADE AND SECONDED. WOULD THE COUNSEL
22	PLEASE REPEAT THE INTENT OF THE MOTION?
23	MR. HARRISON: THE MOTION IS TO APPROVE
24	THE LIST OF NEW MEMBERS OF THE GRANTS WORKING GROUP
25	TO SERVE AS ALTERNATES.

1	CHAIRMAN KLEIN: THANK YOU. WITH THAT ON
2	THE RECORD, ALL IN FAVOR. OPPOSED? MOTION PASSES.
3	THANK YOU, GIL.
4	CONSIDERATION OF CONCEPT PLAN FOR TRAINING
5	GRANTS II, THE SCHOLARS PROGRAM. AND, GIL, DR.
6	SAMBRANO, IF YOU WILL PLEASE LEAD US THROUGH THIS.
7	I'D LIKE TO REMIND EVERYONE THAT, AS I THINK
8	DR. TROUNSON ALLUDED TO, OUR FIRST TRAINING GRANT
9	ROUNDS WERE ACTUALLY APPROVED IN SEPTEMBER 2005. ON
10	APRIL 16TH OF 2006, WE APPROVED THE FIRST 16
11	PROGRAMS. THOSE 16 INSTITUTIONS HAVE HAD REMARKABLE
12	PRODUCTIVITY WITH A NUMBER OF OUR YOUNG SCHOLARS
13	HAVING PUBLISHED IN SCIENCE OR NATURE OR OTHER
14	FIRST- AND SECOND-TIER PUBLICATIONS.
15	AGAIN, WE HAVE TO BE FOCUSED ON THE FACT
16	THAT THE FIRST-TIME GRANTS FOR PI, AT THE NIH THE
17	AVERAGE AGE IS NOW 43 YEARS OLD, WHICH DEVASTATES AN
18	ENTIRE GENERATION OF CLINICIANS AND CLINICIAN
19	SCIENTISTS. AND OUR PROGRAM IS, THEREFORE,
20	EXTREMELY IMPORTANT FOR YOUNG SCIENTISTS IN THIS
21	COUNTRY AND IN THIS FIELD SPECIFICALLY.
22	I THINK WE HAVE A RESPONSIBILITY WITH A
23	NEW ADMINISTRATION COMING IN TO MAKE CERTAIN WE'RE
24	THERE PULLING OUR WEIGHT FOR THE BENEFIT OF EVERYONE
25	IN THIS COUNTRY FOR GETTING ADDITIONAL NIH FUNDS.

1	DR. PIZZO IS RIGHT. IT WILL BE EXTREMELY DIFFICULT.
2	I THINK THAT THERE'S SOME CREATIVE WAYS TO WORK WITH
3	THE PAY-AS-YOU-GO FUNDING SYSTEM AND REALLY ANALYZE
4	INVESTMENTS IN THIS FIELD WITH A PARADIGM SHIFT TO
5	FOCUS ON LONG-TERM FUNDING OF THESE DEVELOPMENTS
6	INSTEAD OF LOOKING AT SHORT-TERM FUNDING, REALLY
7	VIEWING THESE, AS WE SAID FROM THE VERY BEGINNING,
8	AS A CAPITAL INVESTMENT IN THE INTELLECTUAL
9	INFRASTRUCTURE OF THIS COUNTRY. I THINK WE'RE GOING
10	TO HAVE TO MAKE THIS SHIFT IMMEDIATELY. IT IS NOT
11	SUFFICIENT FOR CALIFORNIA TO BE THE ONLY PLACE WHERE
12	YOUNG SCIENTISTS CAN REALLY GET A CHANCE TO SHOW
13	THEIR BRILLIANCE.
14	DR. SAMBRANO.
15	DR. SAMBRANO: OKAY. THANK YOU VERY MUCH.
16	SO I'M VERY PLEASED TO BRING TO YOU A CONCEPT
17	PROPOSAL FOR THE CIRM RESEARCH TRAINING GRANTS II.
18	AND JUST TO REITERATE, YOU ARE ALL VERY FAMILIAR
19	WITH THE ORIGINAL TRAINING PROGRAM THAT IS CURRENTLY
20	FUNDING 16 INSTITUTIONS. THAT FUNDING BEGAN IN
21	APRIL OF 2006 AND WILL END THE LAST DAY OF MARCH IN
22	2009.
23	THAT PROGRAM CURRENTLY SUPPORTS 170
24	TRAINEES PER YEAR. AND YOU MAY RECALL THAT A FEW
25	MONTHS AGO I BROUGHT TO YOU A REPORT ON THE ANNUAL

1	TRAINEE MEETING WHERE WE BROUGHT TOGETHER BOTH
2	TRAINEES AND THEIR MENTORS TOGETHER. WE HAD ABOUT
3	200 ATTENDEES OF THAT MEETING. IT RESULTED IN ABOUT
4	115 ABSTRACTS OR POSTERS THAT WERE PRESENTED. IT
5	WAS A GREAT OPPORTUNITY FOR US TO MEET THEM AND SEE
6	THE TYPES OF TRAINEES AND THE CALIBER OF TRAINEES
7	THAT ARE THERE. AND AS HAS BEEN NOTED EARLIER, WE
8	SEE OFTEN THEIR NAMES IN PUBLICATIONS.
9	THERE WAS ALSO A MEETING BOOKLET THAT WAS
10	DISTRIBUTED TO ALL OF YOU, AND THAT'S STILL
11	AVAILABLE IF ANYBODY WOULD LIKE A COPY.
12	SO TODAY WE WANT TO CONTINUE MOVING
13	FORWARD WITH THIS TYPE OF TRAINING INITIATIVE. THE
14	INITIATIVE GOALS, OF COURSE, ARE TO FOSTER AND
15	ENHANCE THE RESEARCH EXPERIENCE OF BOTH THE BASIC
16	AND CLINICAL SCIENCE IN STEM CELL BIOLOGY DURING THE
17	DOCTORAL AND IMMEDIATE POSTDOCTORAL STAGES OF THEIR
18	CAREER. AND, OF COURSE, ALSO TO ENCOURAGE TRAINEES
19	TO DEVELOP CAREERS IN STEM CELL SCIENCE AND
20	REGENERATIVE MEDICINE.
21	THE CONCEPT FEATURES MENTORED RESEARCH
22	WITH A FACULTY MEMBER AT THE HOST INSTITUTION DOING
23	WORK IN STEM CELL SCIENCE AND REGENERATIVE MEDICINE.
24	TRAINEES CAN BE AT ANY OF THE LEVELS OF PREDOCTORAL,
25	POSTDOCTORAL, OR CLINICAL FELLOW. ALL PROGRAMS MUST

1	SPONSOR A COURSE IN STEM CELL BIOLOGY AS WELL AS
2	ETHICAL, LEGAL, AND SOCIAL ISSUES IN WHICH ALL
3	TRAINEES PARTICIPATE. AND, OF COURSE, ALREADY WE
4	HAVE OTHER RELEVANT POLICIES IN PLACE IN THE GRANTS
5	ADMINISTRATION POLICY.
6	THERE ARE THREE CATEGORIES IN WHICH
7	APPLICANTS MAY COMPETE IN. THESE ARE THE SAME AS
8	CURRENTLY EXIST. THE TYPE 1 IS THE COMPREHENSIVE
9	TRAINING PROGRAMS, WHICH PROVIDES AN ANNUAL BUDGET
10	OF 1.31 MILLION FOR TRAINING UP TO 16 TRAINEES AT
11	ALL TRAINEE LEVELS. SO THESE ARE FOR LARGER
12	PROGRAMS THAT HAVE EXTENSIVE STEM CELL RESEARCH
13	PROGRAMS THAT RANGE FROM PREDOCTORAL TRAINING
14	PROGRAMS THROUGH CLINICAL FELLOWS, SO THEY'LL
15	USUALLY HAVE MEDICAL SCHOOLS.
16	THE TYPE II ARE FOR INTERMEDIATE TRAINING
17	PROGRAMS. THESE ARE SLIGHTLY LESS EXTENSIVE
18	PROGRAMS. IT OFFERS 840,000 PER YEAR FOR UP TO TEN
19	TRAINEES, AND IT CAN HOST TWO TRAINEE LEVELS, EITHER
20	PREDOCTORAL AND POSTDOCTORAL, FOR EXAMPLE, OR A
21	CLINICAL FELLOW AND POSTDOCTORAL.
22	THE TYPE III ARE MORE SPECIALIZED AND MORE
23	FOCUSED TRAINING PROGRAMS THAT OFFER 125,000 PER
24	YEAR, CAN HOST UP TO SIX TRAINEES, AND ONE OR TWO
25	TRAINEE LEVELS, DEPENDING ON THE FOCUS OF THEIR

1	PROGRAM. AND YOU WILL NOTE THAT THESE ANNUAL BUDGET
2	LEVELS REPRESENT A 5-PERCENT INCREASE OVER THE
3	PREVIOUS RFA.
4	THE AWARDS COVER TRAINEE-RELATED COSTS,
5	SUCH AS THE STIPENDS, TUITION AND FEES FOR
6	PREDOCTORAL FELLOWS, HEALTH INSURANCE, AN ALLOWANCE
7	FOR RESEARCH SUPPLIES, AND TRAVEL. IT ALSO COVERS
8	PROGRAM ADMINISTRATION COST, FOR EXAMPLE, FOR
9	PUTTING COURSES AND SEMINARS TOGETHER, AS WELL AS
10	PARTIAL COVERAGE OF THE PROGRAM DIRECTOR SALARY.
11	THE OVERALL SCOPE AND BUDGET, THESE
12	PROGRAMS ARE AVAILABLE TO NONPROFIT COLLEGES,
13	UNIVERSITIES, AND RESEARCH INSTITUTIONS IN
14	CALIFORNIA. CIRM WILL ACCEPT ONE APPLICATION PER
15	INSTITUTION. THE PROGRAMS ARE INTENDED TO BE FUNDED
16	FOR UP TO THREE YEARS AND TO HAVE UP TO 18 PROGRAMS
17	FUNDED. THE TOTAL PROGRAM COST WOULD BE ABOUT \$48
18	MI LLI ON.
19	THE PROVISIONAL TIMETABLE IS AS FOLLOWS.
20	THE RFA WOULD BE ISSUED IN JUNE, GRANTS WORKING
21	GROUP REVIEW IN NOVEMBER OF THIS YEAR, AND APPROVAL
22	IN EARLY 2009 BEFORE THE TERMINATION OF THE CURRENT
23	AND EXISTING TRAINING PROGRAM.
24	CHAIRMAN KLEIN: THANK YOU VERY MUCH.
25	QUESTION, GIL. THERE IS ROOM FOR 18 AS PROPOSED BY

1	THE STAFF AS VERSUS THE 16 WE PREVIOUSLY APPROVED.
2	DR. SAMBRANO: THAT'S CORRECT.
3	CHAIRMAN KLEIN: IF TWO NEW INSTITUTIONS
4	ARE APPROVED, UNLIKE THE OTHER 16, THEY WILL NOT
5	HAVE FUNDS AVAILABLE. THE OTHER 16 WILL HAVE FUNDS
6	THROUGH THE FOLLOWING JUNE. QUESTION FOR YOU IS IF
7	THERE ARE NEW PROGRAMS APPROVED, WOULD WE BE, AFTER
8	THE APPROVAL, IN EARLY 2009, COULD THEY BEGIN THEIR
9	PROGRAMS IMMEDIATELY WITH FUNDING THAT WOULD RELATE
10	TO THAT DATE OF THE APPROVAL, OR WOULD THEY HAVE TO
11	WAIT TILL JUNE TO BEGIN THEIR PROGRAM?
12	DR. SAMBRANO: SO IF WE HAVE A NEW
13	PROGRAM, THEY'RE NOT NECESSARILY SUBJECT TO
14	FOLLOWING ON A CONTINUATION FROM A PREVIOUS PROGRAM.
15	SO THIS IS A COMPLETELY NEW RFA. I THINK MOST OF
16	THE PROGRAMS WILL LIKELY START AT AROUND THE SAME
17	TIME, WHICH WOULD PROBABLY BE APRIL OF 2009.
18	CHAIRMAN KLEIN: GOOD. OKAY. ADDITIONAL
19	QUESTIONS FROM THE BOARD? I'LL ENTERTAIN A MOTION,
20	IF THERE'S A MOTION, AND THEN PUBLIC COMMENTS.
21	DR. FRIEDMAN: SO MOVED.
22	DR. LEVEY: SECOND.
23	CHAIRMAN KLEIN: DR. FRIEDMAN MOTION,
24	SECONDED BY DR. LEVEY. ANY ADDITIONAL BOARD
25	COMMENTS BEFORE I GET PUBLIC COMMENTS?
	5.9

1	DR. PIZZO: IT'S FANTASTIC.
2	CHAIRMAN KLEIN: THAT'S POIGNANT AND
3	TREMENDOUS. PUBLIC COMMENT, PLEASE.
4	MR. SIMPSON: JOHN SIMPSON FROM THE
5	ORGANIZATION THAT NOW CALLS ITSELF CONSUMER
6	WATCHDOG. THIS IS A FANTASTIC PROGRAM. IT'S GREAT.
7	I MEAN YOU JUST EXPLAINED THE VALUE OF IT WITH A SAD
8	STATISTIC ABOUT THE AVERAGE AGE OF AWARDS TO
9	SCIENTISTS. BUT THIS IS ALSO ANOTHER OPPORTUNITY.
10	AND THAT IS A PLACE WHERE YOU COULD OPEN UP YOUR
11	GRANTS REVIEW PROCESS A LITTLE BIT SO THAT PEER
12	REVIEW WOULD BE UNDERSTOOD BY THE PUBLIC. YOU'RE
13	NOT GOING TO BE TALKING HERE ABOUT INDIVIDUALS.
14	YOU'LL BE TALKING ABOUT INSTITUTIONS' PROGRAMS, SO I
15	WOULD SUGGEST THAT YOU CONSIDER AS PART OF THIS THAT
16	THIS PARTICULAR PEER REVIEW BE OPEN TO THE PUBLIC
17	JUST AS THE FACILITIES WORKING GROUP EXPERT REVIEW
18	WAS OPEN TO THE PUBLIC. I THINK PEOPLE WOULD BETTER
19	UNDERSTAND HOW PEER REVIEW IS DONE. THEY WOULD HAVE
20	A BETTER FAITH IN THE WHOLE PROCESS. AND, INDEED,
21	WE'RE NOT TALKING ABOUT INDIVIDUALS. WE'RE TALKING
22	ABOUT INSTITUTIONS. AND I THINK THAT THEY'RE ALL OF
23	THEM TOUGH ENOUGH TO BE ABLE TO WITHSTAND PUBLIC
24	REVIEW. SO I WOULD SUGGEST THAT YOU CONSIDER THAT
25	APPROACH IN THIS EXCELLENT PROGRAM. THANK YOU.

1	CHAIRMAN KLEIN: THANK YOU VERY MUCH.
2	ADDITIONAL PUBLIC COMMENT? SEEING NONE, CALL THE
3	QUESTION. ALL IN FAVOR. OPPOSED? MOTION PASSES.
4	THANK YOU VERY MUCH, DR. SAMBRANO.
5	IF WE CAN GO TO WELL, LET ME TAKE THE
6	TEMPERATURE OF THE BOARD HERE. ARE WE PREPARED FOR
7	A FIVE-MINUTE BREAK AT THIS POINT. FIVE-MINUTE
8	BREAK. AND I AM OPTIMISTIC THAT YOU CAN REALLY COME
9	BACK WITHIN FIVE MINUTES.
10	(A RECESS WAS TAKEN.)
11	CHAIRMAN KLEIN: IF WE COULD RECONVENE,
12	PLEASE. WE WILL RECONVENE. THANK YOU. ALL RIGHT.
13	THANK YOU VERY MUCH. WE ARE MOVING FORWARD, AND WE
14	WOULD LIKE TO GO INTO THE ITEM NO. 10, CONSIDERATION
15	OF CONCEPT, AND IT'S LISTED AS TECHNICAL TRAINING
16	AWARDS. THE ACTUAL NAME IS INTERNSHIP TRAINING
17	AWARDS. IT INVOLVES A PARTNERSHIP BETWEEN THE
18	RESEARCH INSTITUTIONS IN THE STATE WITH ESTABLISHED
19	PROGRAMS ALONG WITH THE STATE UNIVERSITY SYSTEM AND
20	THE COMMUNITY COLLEGES AS POTENTIAL PARTICIPANTS.
21	IF WE COULD ASK DR. YAFFE.
22	DR. YAFFE: MR. CHAIRMAN AND MEMBERS OF
23	THE BOARD, I PRESENT FOR YOUR CONSIDERATION A
24	CONCEPT PROPOSAL FOR A NEW CIRM INITIATIVE, THE
25	BRIDGES TO STEM CELL RESEARCH AWARDS. THE KEY GOAL,
	40

1	A CENTRAL GOAL OF THIS INITIATIVE IS TO EXPAND
2	CALIFORNIA'S WORKFORCE IN STEM CELL SCIENCE AND IN
3	REGENERATIVE MEDICINE. AN EQUALLY IMPORTANT GOAL IS
4	TO PROVIDE RESEARCH AND TRAINING OPPORTUNITIES FOR
5	STUDENTS REPRESENTING THE DIVERSITY OF CALIFORNIA'S
6	POPULATION. IN PARTICULAR, TO FACILITATE
7	INVOLVEMENT OF STUDENTS WHO DO NOT HAVE READY ACCESS
8	TO OPPORTUNITIES AND PARTICIPATION IN STEM CELL
9	RESEARCH.
10	A KEY FEATURE OF THIS PROGRAM IS A SERIES
11	OF RESEARCH INTERNSHIPS IN WHICH STUDENTS WILL
12	PARTICIPATE DIRECTLY IN BIOMEDICAL RESEARCH IN STEM
13	CELL LABORATORIES. THIS RESEARCH WILL BE AUGMENTED
14	WITH TECHNIQUES COURSES AT CIRM-FUNDED SHARED LAB
15	FACILITIES. AND THESE RESEARCH ACTIVITIES WILL BE
16	INTEGRATED WITH ESTABLISHED OR NEW UNDERGRADUATE AND
17	MASTER'S LEVEL EDUCATIONAL PROGRAMS AT THE HOME
18	APPLICANT INSTITUTIONS.
19	ADDITIONALLY, THE PROGRAMS WILL FEATURE
20	SUPPORTIVE AND COMPLEMENTARY EDUCATIONAL ACTIVITIES,
21	INCLUDING SEMINARS, AUXILIARY COURSES, MENTORING
22	ACTIVITIES, AND TRACKING OF STUDENT ACHIEVEMENT.
23	THIS PROGRAM WILL BE OPEN TO APPLICANT OR HOME
24	INSTITUTIONS WHICH ARE PUBLIC AND PRIVATE CALIFORNIA
25	EDUCATIONAL INSTITUTIONS WHICH DO NOT HAVE A

1	CIRM-FUNDED SHARED LAB FACILITY. SUCH INSTITUTIONS
2	IN PARTICULAR AS CALIFORNIA STATE UNIVERSITY
3	CAMPUSES, CALIFORNIA COMMUNITY COLLEGES, AND PRIVATE
4	CALIFORNIA COLLEGES AND UNIVERSITIES WILL BE
5	ELIGIBLE TO PARTICIPATE IN THIS PROGRAM.
6	THESE INSTITUTIONS, THESE HOME
7	INSTITUTIONS, WILL FORM PARTNERSHIPS WITH INTERNSHIP
8	HOST INSTITUTIONS. THESE ARE OUR RESEARCH INTENSIVE
9	UNIVERSITIES, RESEARCH INSTITUTES, AND PRIVATE
10	SECTOR COMPANIES IN CALIFORNIA ENGAGED IN STEM CELL
11	RESEARCH. THESE ORGANIZATIONS WILL PROVIDE THE
12	SETTING AND ENVIRONMENT FOR THE RESEARCH INTERNSHIP
13	THAT THE STUDENTS WILL PARTICIPATE IN.
14	THE CIRM AWARDS WILL FUND STUDENT
15	STIPENDS, EDUCATIONAL EXPENSES, AND RESEARCH
16	SUPPLIES DURING THE INTERNSHIP. ADDITIONALLY, THEY
17	WILL SUPPORT TRAINING COURSES AT THE SHARED LAB
18	FACILITIES AND PROVIDE PROGRAM ADMINISTRATION AND
19	EDUCATIONAL ENHANCEMENT ACTIVITIES AT THE HOME
20	I NSTI TUTI ONS.
21	EACH AWARD WILL SUPPORT UP TO TEN INTERNS
22	PER YEAR, AND INTERNSHIPS WILL HAVE SIX TO 12 MONTHS
23	DURATION. PROGRAMS WILL BE FUNDED FOR UP TO THREE
24	YEARS, AND WE PLAN FOR CIRM TO FUND TEN SUCH
25	PROGRAMS.
	4.2

1	THE OVERALL PROGRAM COST IS UP TO \$18
2	MILLION. OUR PROVISIONAL TIMETABLE FOR THESE AWARDS
3	IS THAT THE RFA WILL BE POSTED IN JUNE, GRANTS
4	REVIEW WORKING GROUP REVIEW OF THE APPLICATIONS WILL
5	OCCUR IN NOVEMBER, AND WE WILL SEEK YOUR APPROVAL
6	FOR THE TOP APPLICATIONS TO BE FUNDED IN EARLY 2009.
7	WE BELIEVE THIS PROGRAM WILL ADDRESS A
8	VITAL NEED OF STEM CELL RESEARCH AND WILL PROVIDE
9	UNIQUE OPPORTUNITIES FOR PROMISING STUDENTS FROM
10	THROUGHOUT CALIFORNIA. AND WE REQUEST YOUR APPROVAL
11	OF THIS PROPOSAL. THANK YOU.
12	CHAIRMAN KLEIN: THANK YOU VERY MUCH. IF
13	I COULD HAVE DR. CHANDLER, WHO WOULD LIKE TO MAKE A
14	COMMENT.
15	DR. CHANDLER: FOR THE RFA, THIS IS FOR
16	THE HOME INSTITUTIONS ARE THE ONES THAT APPLY?
17	DR. YAFFE: THE HOME INSTITUTIONS WILL BE
18	THE APPLICANTS.
19	DR. CHANDLER: SO THEN WHAT'S THE
20	MECHANISM FOR THE HOST INSTITUTION?
21	DR. YAFFE: THE HOME INSTITUTIONS WILL
22	HAVE A PROGRAM DIRECTOR AND A COMMITTEE THAT WILL
23	ESTABLISH PARTNERSHIPS WITH INDIVIDUAL RESEARCHERS
24	OR WITH PROGRAMS AT INTERNSHIP HOST INSTITUTIONS,
25	THE INSTITUTIONS THAT HAVE STEM CELL LABS. IN MANY

1	CASES LIKELY APPLICANTS ALREADY HAVE SUCH
2	RELATIONSHIPS ESTABLISHED. FOR EXAMPLE, IF SAN
3	DIEGO STATE UNIVERSITY ESTABLISHED SUCH A PROGRAM,
4	ONE COULD ENVISION PLACEMENT OF STUDENTS AT UCSD, AT
5	THE SALK IF THEY WANT VERY GOOD TRAINING, AT THE
6	BURNHAM, OR AT OTHER INSTITUTIONS WITHIN SAN DIEGO.
7	DR. CHANDLER: SO ESSENTIALLY, THEN, THE
8	HOME INSTITUTIONS ARE THE ONES THAT ACTUALLY GATHER
9	THE HOSTS?
10	DR. YAFFE: THAT'S CORRECT. BUT OUR STAFF
11	WILL COOPERATE AND PARTICIPATE IN HELPING TO GET
12	HOST INSTITUTIONS AND HOME INSTITUTIONS CONNECTED TO
13	ONE ANOTHER.
14	DR. CHANDLER: THAT'S REALLY WHAT I WAS
15	INTERESTED IN.
16	CHAIRMAN KLEIN: DUANE ROTH.
17	MR. ROTH: SO THE THOUGHT I HAVE, I AGREE
18	WITH THE TEN TIMES TEN, A HUNDRED STUDENTS, BUT I'M
19	CONCERNED ABOUT THE DEPTH OF SOME INSTITUTIONS TO DO
20	TEN AND OTHER INSTITUTIONS WHO COULD CERTAINLY DO
21	DOUBLE THAT AMOUNT. AND I'D LIKE TO SUGGEST PERHAPS
22	THAT THERE BE A RANGE OF WHAT CAN BE APPLIED FOR
23	BECAUSE MAKING THAT MATCH, THE HOST INSTITUTIONS
24	HAVE GOT TO HAVE THE CAPACITY TO TAKE THE STUDENTS,
25	AND THE HOME INSTITUTIONS OR THE HOST

ı	INSTITUTIONS HAVE TO HAVE THE CAPACITY TO FIND
2	ENOUGH INTEREST TO DO THAT, AND THE HOME I'M
3	SAYING IT WRONG. YOU UNDERSTAND MY DRIFT. BUT I
4	THINK YOUR RANGE THAT YOU'RE GOING TO TREAT TEN OF
5	THESE EXACTLY THE SAME AS OPPOSED TO GIVING A RANGE,
6	THAT YOU COULD DO AS FEW AS FIVE, OR YOU COULD DO AS
7	MANY AS 20.
8	DR. YAFFE: WE ENVISION THAT YOU COULD DO
9	AS FEW AS A FEW. IN FACT, IT'S UP TO TEN. WE DREW
10	THE LINE AT TEN INITIALLY IN THE THOUGHT IN A SENSE
11	THIS IS A PILOT PROGRAM. WE WOULD LIKE, IF IT IS
12	SUCCESSFUL, TO COME BACK WITH ADDITIONAL PROGRAMS OF
13	THIS TYPE PERHAPS FINALLY ADJUSTED BY OUR EXPERIENCE
14	IN THE PROGRAM. SO I AGREE 100 IS A SOMEWHAT
15	ARBITRARY NUMBER. AND ESSENTIALLY THIS PROGRAM WILL
16	TRAIN 300 STUDENTS IN THREE YEARS, BUT
17	CHAIRMAN KLEIN: IF I COULD DO A
18	CLARIFICATION, IT MAY BE HELPFUL, DUANE. MY
19	UNDERSTANDING IS YOU ARE GOING TO FUND AN EQUIVALENT
20	TO TEN, BUT MANY OF THESE INSTITUTIONS, STATE
21	UNIVERSITIES OR COMMUNITY COLLEGES, MAY, IN FACT,
22	HAVE THE RESOURCES FROM MATCHING FUNDS. SO THAT IF
23	THEY WERE TO PUT UP MATCHING FUNDS FROM STATE
24	UNIVERSITY ENDOWMENTS OR FROM INDIVIDUAL DONORS,
25	THAT THIS IS A VERY ATTRACTIVE PROGRAM. AS LONG AS

1	THE HOME INSTITUTION CAN FIND A PLACE FOR THESE
2	STUDENTS, AS LONG AS THERE'S HIGH QUALITY, AND
3	THERE'S A THE HOST INSTITUTION OR MULTIPLE HOST
4	INSTITUTIONS ARE PREPARED TO ACCOMMODATE THEM, THEY
5	COULD, IN FACT, USE THE FUNDS THAT ARE EQUIVALENT TO
6	TEN TO DO 20 IF THEY HAD MATCHING FUNDS. IS THAT A
7	CORRECT UNDERSTANDING?
8	DR. YAFFE: ABSOLUTELY.
9	CHAIRMAN KLEIN: AND THE KEY HERE IS IF WE
10	CAN LOOK AT JUST THE INSTITUTIONS THAT ARE GOING TO
11	BE CONSIDERED FOR MAJOR FACILITIES AWARDS TONIGHT,
12	THERE'S RESEARCH CAPACITY FOR 2200 SCIENTISTS. AND
13	THAT DOESN'T INCLUDE INSTITUTIONS AND A NUMBER OF
14	OTHER FINE INSTITUTIONS THAT HAVE BUILDING PROGRAMS
15	AT ANOTHER STAGE, SOME COMPLETED, LIKE THE
16	GLADSTONE. SO THE TECHNICAL CAPACITY THAT WE NEED
17	MAY, IN FACT, BE SUBSTANTIALLY GREATER THAN WHAT
18	WE'RE FUNDING HERE. THESE INDIVIDUALS MAY REALLY BE
19	OF VALUE OVER THE NEXT TWO YEARS AS THESE NEW
20	FACILITIES COME ONLINE TO THE HOST INSTITUTIONS IN
21	SUPPORTING TECHNICALLY SOME OF THE EQUIPMENT WITH
22	REFINED TECHNICIANS AND SUPPORT INDIVIDUALS, AS WELL
23	AS UNDERSTANDING THAT SOME OF THESE INDIVIDUALS MAY
24	BE INSPIRED AND MOVE ON INTO A DOCTORAL PROGRAM AS A
25	FOLLOW-ON.
	66
	1 00

1	DR. TROUNSON: THANK YOU, CHAIR. I ASKED
2	DR. RICH MURPHY TO REMAIN PART OF THIS PROGRAM. AND
3	HE HAS BEEN GUIDING THIS. AND I'VE REALLY
4	APPRECIATED THAT BECAUSE OF THE HISTORY, AS YOU WILL
5	KNOW BETTER THAN I, IN THIS AREA. HE HAD ALSO
6	TALKED TO SUE BAXTER, A PERSON WHO IS QUITE KEY TO
7	ALL THESE INSTITUTES, AND I SUPPOSE THE ONLY AREA
8	THAT WE WILL HAVE SOME DISAGREEMENT ON IS THAT WE
9	WANTED TO KEEP IT BIOLOGY RATHER THAN TO LAW AND
10	ARTS, SOME OTHER THINGS. WE WANTED TO TRY AND
11	RETAIN THE BIOLOGICAL COMPONENT HERE RATHER THAN
12	SPREAD IT TOO MUCH WIDER. YOU KNOW, THE SENSE
13	THAT WAS THE ONLY KIND OF DISAGREEMENT WE HAD. I
14	THINK WE CAN GET A GENUINE LINKAGE HERE.
15	I WANTED TO BRING THIS HAVE THE STAFF
16	BRING THIS TO YOU FIRST, AND THEN GO TALK TO THE
17	VICE CHANCELLORS. HAVING MADE A CONNECTION AT LEAST
18	WITH SUE BAXTER, I FEEL THAT WE'RE PROBABLY IN THE
19	SPACE. I'VE HAD THE STAFF TALK TO THE PEOPLE WHO
20	DELIVER THE HOME PROGRAMS. THEY'RE VERY EXCITED.
21	THEY KIND OF THINK THE NUMBERS WE'RE TALKING ABOUT,
22	THEY CAN PROBABLY DO MORE, BUT, YOU KNOW, THERE WILL
23	BE PERHAPS SOME OF THE INSTITUTES THAT PROBABLY
24	WOULDN'T BE WISE TO DO MORE. BUT, OF COURSE, THAT
25	WILL COME THROUGH THE REVIEW, AND WE WOULD GET AN

1	INDICATION, I THINK, AT THAT STAGE ABOUT THE
2	RELATIVE MERITS.
3	BUT I DO THINK YOU'VE HAD THIS ON YOUR
4	MIND FOR SOME TIME, I THINK, BECAUSE IT'S BEEN
5	BROUGHT TO YOU BEFORE, BUT I THINK WITH RICH
6	MURPHY'S HELP, I THINK WE'VE GOT SOMETHING THAT IS
7	PROBABLY A BIT CLOSER TO WHAT WE THINK WAS
8	PALATABLE.
9	MR. ROTH: IF I COULD JUST FOLLOW UP. MY
10	CONCERN ISN'T THE TOTAL NUMBER. IT'S DO WE HAVE TEN
11	QUALITY PROGRAMS OUT THERE TO FUND? AND MY INSTINCT
12	WOULD SAY THERE'S PROBABLY NOT TEN OF THE CALIBER
13	THAT WE'RE TALKING ABOUT, ESPECIALLY WITH A BIOLOGY
14	DEGREE. AND SUE AND OTHERS COULD CERTAINLY ANSWER
15	THAT QUESTION. IF THAT'S NOT TRUE AND THERE AREN'T
16	TEN QUALITY PROGRAMS, THEN I WOULD LIKE TO SEE THE
17	CAP LIFTED OR RAISED A BIT.
18	DR. TROUNSON: I THINK, DUANE, THAT'S WHY
19	WE HAVE THE REVIEW PROCESS. I AGREE WITH YOU. OF
20	COURSE, IF IT DOESN'T GET UP TO STANDARD, I THINK WE
21	WOULD HAVE TO SAY COME BACK TO THE BOARD AND SAY,
22	WELL, WE ONLY FOUND EIGHT OR SEVEN. BUT LET'S
23	SUE WAS CONFIDENT THAT WE COULD DO TEN, BUT I THINK
24	WE HAVE TO WAIT AND SEE WHEN WE GET THE RESPONSE TO
25	OUR RFA.

1	CHAIRMAN KLEIN: AND, DR. TROUNSON,
2	RESPONSE TO THE SUBPOINT THAT DUANE RAISED, THAT IF
3	THERE WERE FEWER THAN TEN, BUT THERE WERE SOME THAT
4	WERE VERY HIGH QUALITY, COULD WE EXPAND USE THE
5	FUNDS TO EXPAND THE HIGH QUALITY PROGRAM?
6	DR. TROUNSON: I WOULD BE PERSONALLY
7	COMFORTABLE. YOU KNOW, I'D ASK MURPHY AND THE GROUP
8	TO CONSIDER THAT. I CAN'T SEE WHY THAT WOULDN'T BE
9	THE CASE. AND THEN I THINK, OF COURSE, THE BOARD
10	WOULD HAVE A VIEW IN THE LONGER TERM. SO, YES, I
11	DON'T SEE THAT THERE'S REALLY ANY DIFFICULTY. I
12	THINK IF YOU COME TOO LOW, PERHAPS WE'RE NOT GOING
13	TO GET ENOUGH OF THE STUDENTS AS A SORT OF CORE
14	ENTITY TO MAKE WORTHWHILE TO LAY ON SOME SPECIAL
15	ACTIVITIES. THAT'S THE ONLY THING.
16	MR. ROTH: I CERTAINLY DON'T WANT TO HOLD
17	UP THE PROGRAM MOVING FORWARD. THIS GRANT'S BEEN
18	AROUND AND DISCUSSED MANY TIMES. BUT I THINK GIVING
19	OURSELVES A LITTLE CAP ROOM HERE SO WE DON'T HAVE TO
20	BRING IT BACK IS ALL I'M SUGGESTING. IF YOU FIND
21	TEN TIMES TEN, THAT'S GREAT, BUT LET'S NOT LOCK
22	OURSELVES IN THAT WE CAN'T ACCEPT MORE IF THE
23	QUALITY IS NOT THERE.
24	CHAIRMAN KLEIN: AND, DR. PIZZO, I THINK
25	YOU HAD A COMMENT.

1	DR. PIZZO: I DID. AND IT SORT OF FOLLOWS
2	THROUGH WITH SOME OF THE COMMENTS THAT HAVE ALREADY
3	BEEN MADE. THAT IS, IN TERMS OF THE METRICS, THE
4	OUTCOME METRICS THAT YOU'RE GOING TO LOOK TO ASSESS
5	HOW THIS PROGRAM IS WORKING, COULD YOU ELABORATE A
6	LITTLE BIT ON THAT?
7	DR. YAFFE: WE WOULD BE HAPPY TO SEE
8	STUDENTS WITH A JOB IN A LABORATORY ENTERING A
9	MASTER'S DEGREE PROGRAM, ENTERING A PH.D. PROGRAM,
10	AN M.D. PROGRAM, RUNNING A STEM CELL LAB EVENTUALLY,
11	AND BEING A CIRM GRANTEE. SO WE'RE NOT TRYING TO
12	FOCUS THIS LOW OR HIGH. WE WANT TO PROVIDE
13	OPPORTUNITIES FOR THE STUDENTS. I THINK THE
14	OUTCOMES WILL BE SUCCESSFUL IF STUDENTS ARE THEN
15	ABLE TO PARTICIPATE IN AND CONTRIBUTE TO THE STEM
16	CELL RESEARCH EFFORT.
17	DR. PIZZO: CRITICAL TO THAT, OBVIOUSLY,
18	IS MAKING SURE THAT INSTITUTIONS SUPPORTING STUDENTS
19	HAVE THE RIGHT MENTORING AND GUIDANCE PROGRAMS. AND
20	I'M SURE YOU'RE THINKING ABOUT THIS, BUT IT MAY BE
21	IMPORTANT TO BE A BIT MORE PROSCRIPTIVE IN TERMS OF
22	WHAT THE EXPECTATIONS ARE BECAUSE THESE ARE
23	REALLY THESE ARE IMPORTANT OPPORTUNITIES. THESE
24	ARE YOUNG PEOPLE WHO ARE GOING TO BE ENERGETIC,
25	EXCITED, READY TO GO, AND IT'S EASY FOR THEM I
	70

1	THINK THIS IS WHAT DUANE WAS ALLUDING TO TO
2	EITHER RISE TO A NEW LEVEL OR TO NOT HAVE THAT
3	OPPORTUNITY. AND I THINK IT'S INCUMBENT ON US TO
4	MAKE SURE THAT WE DO ALL WE CAN TO GET THROUGH AND
5	TO KIND OF RISE UP. AND THAT REQUIRES MORE THAN
6	JUST AN EXPOSURE TO A LAB OR A RESEARCH PROJECT. IT
7	MANDATES THAT WHOEVER IS GOING TO TAKE ON THESE
8	STUDENTS REALLY OWN RESPONSIBILITY FOR HELPING THEM
9	IN TERMS OF THEIR CAREER AND DEVELOPMENTAL ADVICE AS
10	WELL.
11	DR. YAFFE: ABSOLUTELY. WE COULD ENVISION
12	SOMETHING SUCH AS A MENTORING CONTRACT WHERE IT'S
13	LAID OUT VERY CLEARLY WHAT TYPE OF SUPPORT AND
14	ADVICE THE STUDENT WILL RECEIVE DURING THEIR
15	I NTERNSHI P.
16	DR. PIZZO: AND I WOULD THINK THAT'S VERY
17	GOOD, AND I'M GLAD TO HEAR YOU'RE THINKING ABOUT
18	THAT. I THINK THAT THAT OUGHT TO BE THE KIND OF
19	THING THAT GETS ASSESSED SO THAT IN THE FUTURE,
20	BECAUSE THERE MAY BE AN OPPORTUNITY FOR THIS AGAIN,
21	PROGRAMS THAT DO THAT WELL DO IT. AND THOSE THAT
22	DIDN'T, EITHER GO THROUGH REMEDIATION OR DON'T GET
23	FUNDED BECAUSE YOU DON'T WANT TO REPEAT THAT.
24	CHAIRMAN KLEIN: MY UNDERSTANDING, DR.
25	TROUNSON, IS ALSO THAT WITHIN THE ADMINISTRATIVE

1	BUDGET FOR THE HOME INSTITUTIONS, THERE'S SUFFICIENT
2	FUNDS FOR THEM TO CONDUCT A BASELINE INTRODUCTORY
3	STEM CELL COURSE TO CREATE KIND OF A CONSISTENT
4	FLOOR. AND THEY CAN DO THAT IN COLLABORATION WITH
5	THE HOST INSTITUTION; IS THAT CORRECT?
6	DR. TROUNSON: THAT'S CORRECT. THE MONEY
7	SET ASIDE IS CERTAINLY SUFFICIENT TO ACCOMMODATE
8	THAT. IT IS, WE THINK, REASONABLY GENEROUS. IT'S
9	CERTAINLY AT THE LEVEL THAT THE BIOLOGICAL TEACHERS
10	WOULD FIND VERY SUITABLE. I THINK THAT WAS, MIKE,
11	THAT WAS A RESPONSE THAT YOU GOT.
12	CHAIRMAN KLEIN: THANK YOU.
13	DR. POMEROY: I WOULD LIKE TO SPEAK IN
14	FAVOR OF APPROVING THIS PROPOSAL. THE FUNDS FOR
15	CIRM COME FROM ALL THE TAXPAYERS IN THIS STATE, AND
16	I THINK THE BENEFITS NEED TO RETURN TO ALL THE
17	TAXPAYERS IN THE STATE, AND THAT INCLUDES THE
18	EDUCATIONAL BENEFITS THAT WE PROVIDE. AND THERE'S A
19	GREAT NEED FOR TECHNICAL WORKERS IN THESE PROGRAMS.
20	THE STATE UNIVERSITIES AND THE COMMUNITY COLLEGES
21	HAVE A VERY STRONG TRACK RECORD IN THIS STATE OF
22	DOING THIS EXTRAORDINARILY WELL. THIS IS WHAT THEY
23	DO. AND I HAVE EVERY CONFIDENCE THAT WE WILL GET
24	SOME HIGH QUALITY APPLICATIONS. I DON'T THINK WE
25	NEED TO PREDETERMINE HOW MANY OF THEM WILL RISE TO

1	THE LEVEL THAT WE WANT TO FUND. THAT'S WHAT THE
2	APPLICATION PROCESS IS FOR. SO I WOULD SUPPORT THE
3	PROPOSAL AS PRESENTED BY STAFF.
4	CHAIRMAN KLEIN: THANK YOU. DR. POMEROY,
5	WOULD THAT BE A MOTION?
6	DR. POMEROY: THAT COULD JUST VERY WELL
7	TURN INTO ONE, SO I SO MOVE.
8	CHAIRMAN KLEIN: AND A SECOND.
9	DR. PRIETO: I'LL SECOND.
10	CHAIRMAN KLEIN: DR. PRIETO.
11	DR. PRIETO: I'D LIKE TO MAKE A COMMENT
12	ALSO.
13	CHAIRMAN KLEIN: WOULD YOU LIKE TO ADDRESS
14	THE MOTION?
15	DR. PRIETO: YES. I JUST WOULD LIKE TO
16	SAY THAT IF WE HOPE TO EXTEND THE IMPACT OF THE
17	INITIATIVE BEYOND THE LIFE SPAN OF WHAT IT IS
18	PREDETERMINED TO INCLUDE, THAT I THINK THIS, FOR
19	VERY SMALL INVESTMENT, IS A REALLY POWERFUL WAY TO
20	DO THAT. AND THE IMPACT BOTH TO OUR EDUCATIONAL
21	INSTITUTIONS AND TO BIOMEDICAL INDUSTRY IN
22	CALIFORNIA IS GOING TO BE TREMENDOUS.
23	CHAIRMAN KLEIN: AND DR. LOVE.
24	DR. LOVE: I WAS JUST GOING TO MAKE ONE
25	POINT, AND THAT IS THAT I THINK IT IS IMPORTANT THAT
	73
	, ,

1	WE TRACK WHAT THESE STUDENTS ULTIMATELY DO AND NOT
2	PREJUDGE WHAT IS A GOOD OUTCOME BECAUSE I WOULD
3	SUGGEST THAT THESE STUDENTS GOING ON TO BECOMING
4	REAL ESTATE MOGULS THAT SUPPORT STEM CELL RESEARCH
5	MAY BE VERY GOOD.
6	DR. PRIETO: THAT'S A POSITIVE OUTCOME.
7	DR. YAFFE: WE'LL HAVE A SPECIAL ALLOTMENT
8	OF TEN SLOTS FOR THAT.
9	CHAIRMAN KLEIN: THE BROAD AND INCLUSIVE
10	APPROACH TO THIS IS APPRECIATED BECAUSE I CAN ATTEST
11	TO THE FACT THAT SUCH A STRONG EARLY EDUCATION WOULD
12	BE VERY HELPFUL LATER.
13	IT'S IMPORTANT HERE TO HAVE AN OPPORTUNITY
14	TO SPEAK TO LEVERAGE, THAT WE REALIZE THAT IF THERE
15	IS AN OPPORTUNITY AMONG VERY HIGH QUALITY
16	APPLICATIONS, AND I WILL BE OPTIMISTIC THAT WE WILL
17	RECEIVE COMPETITIVE HIGH QUALITY APPLICATIONS, THAT
18	IN THE COMPETITIVE CRITERIA WE CAN CONSIDER NOT
19	BEING DISPOSITIVE, BUT AS AN ELEMENT THE LEVERAGE
20	THAT IS BROUGHT BY THESE HOME INSTITUTIONS, THAT
21	THAT REALLY COULD EXPAND THE OPPORTUNITY TO A
22	BROADER BASE, WHICH WOULD BENEFIT THE STEM CELL
23	PROGRAM AND OPPORTUNITY AMONG OUR STATE UNIVERSITIES
24	AND COMMUNITY COLLEGES.
25	IS THERE ANY ADDITIONAL BOARD COMMENT
	74
	, ı

1	BEFORE I GO TO PUBLIC COMMENT?
2	MR. ROTH: BOB, I'D JUST FOLLOW THAT UP.
3	SOME OF THESE STATE AND COMMUNITY COLLEGES, THEY
4	DON'T KNOW WHAT AN ENDOWMENT LOOKS LIKE. THEY HAVE
5	ZERO FUNDS TO DO THIS. SO I WOULD HATE TO SEE US
6	PENALIZE THOSE AND MAKE THEM GO INTO
7	CHAIRMAN KLEIN: I'VE SERVED ACTUALLY ON
8	COMMITTEES FOR INDIVIDUAL STATE UNIVERSITY. EVEN IN
9	THE CENTRAL VALLEY, THEY DO HAVE ENDOWMENTS. IT'S
10	PRETTY PERVASIVE. IT'S NOT A LOT OF MONEY, BUT FOR
11	PROGRAMS LIKE THIS, IT GIVES THEM AN OPPORTUNITY TO
12	MOTIVATE CONTRIBUTIONS. AND WITH COMMUNITY
13	COLLEGES, IT ALSO IS AN OPPORTUNITY TO REALLY
14	MOTIVATE ALUMNI INVOLVEMENT AND PATRON INVOLVEMENT
15	WITH THEIR INSTITUTIONS. ONCE THOSE PATRONS BECOME
16	INVOLVED WITH AN INSTITUTION, THEY'RE APT TO BE
17	FOLLOW-ON GIVERS IF IT'S A GOOD EXPERIENCE, AND THIS
18	IS A VERY HIGH PROFILE POPULAR DONOR TARGET.
19	ADDITIONAL COMMENTS? PUBLIC COMMENT?
20	MR. REICHARD: HOW DO YOU DO. MY NAME IS
21	GARY REICHARD. I'M THE EXECUTIVE VICE CHANCELLOR
22	AND CHIEF ACADEMIC OFFICER OF THE CALIFORNIA STATE
23	UNI VERSI TI ES.
24	ON BEHALF OF THE CSU, ITS FACULTY,
25	STUDENTS, STAFF, I WANT TO EXPRESS DEEP APPRECIATION

1	FOR YOUR TAKING UP THE CONCEPT OF SUPPORTING
2	SPECIALIZED TRAINING ACTIVITIES THAT WILL HELP
3	STUDENTS IN A WIDE RANGE OF CALIFORNIA EDUCATIONAL
4	INSTITUTIONS SO THAT THEY CAN MOVE FORWARD TO ACTIVE
5	PARTICIPATION IN STEM CELL SCIENCE AND RESEARCH.
6	THE CSU IS COMMITTED TO PROVIDING STUDENTS
7	WITH OPPORTUNITIES FOR HANDS-ON LEARNING, AND WE'RE
8	ALSO COMMITTED TO PROVIDING ACADEMIC PROGRAMS THAT
9	WILL MEET THE NEEDS OF TOMORROW. THE SPECIALIZED
10	TRAINING PROGRAMS THAT ARE ENVISIONED HERE ARE
11	COMPLETELY CONSISTENT WITH THESE TWO COMMITMENTS.
12	AS YOU KNOW, CHANCELLOR REED IS VERY COMMITTED TO
13	SEEING THE CSU'S VERY DIVERSE STUDENTS HAVE
14	OPPORTUNITIES TO WORK AND SERVE IN THIS CRITICALLY
15	IMPORTANT FIELD.
16	WITH SUPPORT TO FUND AND PREPARE LARGE
17	NUMBERS OF STUDENTS FOR SUCH CAREERS AS PART OF OUR
18	UNDERGRADUATE MASTER'S AND CERTIFICATE PROGRAMS, NOT
19	ONLY CAN WE GIVE OUR STUDENTS THE OPPORTUNITIES THEY
20	NEED AND DESERVE, BUT WE CAN HELP TO IMPROVE THE
21	QUALIFICATIONS AND THE DIVERSITY OF CALIFORNIA'S
22	STEM CELL COMMUNITY.
23	WE'RE EXCITED ABOUT THIS DIRECTION CIRM IS
24	TAKING A LOOK AT, AND WE LOOK FORWARD TO
25	PARTICIPATING ACTIVELY AND AT A VERY HIGH

1	QUALITATIVE LEVEL IF THIS PROGRAM IS ADOPTED. I
2	WANT TO ASSOCIATE MYSELF WITH THE PHRASES USED BY
3	ONE OF THE SPEAKERS HERE JUST A FEW MOMENTS AGO,
4	THAT FOR SUCH A SMALL INVESTMENT, WE CAN MAKE AN
5	ENORMOUSLY POWERFUL IMPACT FOR THE STATE AND FOR OUR
6	STUDENTS.
7	CHAIRMAN KLEIN: THANK YOU VERY MUCH.
8	DR. BAXTER: I'D ALSO LIKE TO INTRODUCE
9	MYSELF. I AM THE INFAMOUS SUSAN BAXTER. I'M THE
10	EXECUTIVE DIRECTOR OF THE CSU PROGRAM FOR EDUCATION
11	AND RESEARCH IN BIOTECHNOLOGY. AND REALLY I JUST
12	WANT TO ADD MY THANKS TO THE CIRM STAFF FOR REALLY
13	RESPONDING TO A LOT OF THE IDEAS WE'VE HAD OVER THE
14	LAST COUPLE YEARS. AND WE ALSO REALLY WANT TO
15	APPLAUD THE CIRM STAFF FOR ENSURING THAT HOST
16	INSTITUTIONS ARE NOT REQUIRED TO HAVE CIRM FUNDING
17	IN HAND SO THAT STUDENTS MIGHT ALSO GAIN ACCESS TO
18	CLINICAL TRIAL SETTINGS OR GLP/GMP CELL PRODUCTION
19	SETTINGS AT PRIVATE OR PUBLIC COMPANIES.
20	AND SO WE'D REALLY LIKE TO GO FORWARD AND
21	WORK WITH YOU, AS GARY SAID, AND WE HOPE YOU CAN
22	MAKE ALLOWANCES IN THE RFA FOR HAVING THOSE BASIC
23	AND CLINICAL OPPORTUNITIES FOR THE STUDENTS AND
24	STUDENT INTERNSHIPS. THANK YOU AGAIN.
25	CHAIRMAN KLEIN: THANK YOU, DR. BAXTER.
	77
	1 /

1	DR. JOHNSTON: I'M DR. WENDY JOHNSTON.
2	I'M A PROFESSOR OF BIOLOGY AT PASADENA CITY COLLEGE,
3	AND I'M THE DIRECTOR OF THE L.A./ORANGE COUNTY
4	BIOTECHNOLOGY CENTER FUNDED BY THE CHANCELLOR'S
5	OFFI CE.
6	ON BEHALF OF THE COMMUNITY COLLEGE FACULTY
7	AND STUDENTS, WE THANK YOU FOR RECOGNIZING OUR
8	POTENTIAL TO CREATE A TECHNICAL WORKFORCE AND OUR
9	RECORD OF PREPARING STUDENTS FOR ADVANCED RESEARCH
10	DEGREES ALL WITH THE STRENGTH OF OUR DIVERSITY.
11	YOU MAY NOT KNOW, PASADENA CITY COLLEGE IS
12	32,000 STUDENTS. PASADENA CITY COLLEGE AND CITY
13	COLLEGE OF SAN FRANCISCO EACH GIVE CERTIFICATE
14	PROGRAMS IN STEM CELL CULTURE. THE PROGRAMS ARE
15	EACH FOUR YEARS OLD, AND I WILL SAY THAT THEY DID IT
16	WITH GOVERNOR'S DISCRETIONARY MONEY. WE DID IT WITH
17	A \$2500 GRANT, AND WE'RE FURNISHED IN EARLY AMGEN AT
18	BOTH WORKS.
19	AT PASADENA CITY COLLEGE THE CERTIFICATE
20	REQUIRES 17 WEEKS OF MAMMALIAN CELL CULTURE,
21	FOLLOWED BY 17 WEEKS OF MOUSE EMBRYO STEM CELL
22	CULTURE. THE COURSES ARE CSU TRANSFERABLE, UC
23	TRANSFERABLE. WE CAP THE PROGRAM AT 12 STUDENTS.
24	MOST OF THOSE STUDENTS COME IN WITH BACHELOR'S
25	DEGREES, SO WE'RE A COMMUNITY COLLEGE DOING
	78
	, ~

1	POSTBACCALAUREATE TRAINING. ALL OF OUR CERTIFICATE
2	STUDENTS ARE EMPLOYED. OUR STUDENTS GO FORWARD, IN
3	ADDITION, TO FURTHER TRAINING AT CIRM-SUPPORTED
4	RESEARCH LABS. WE HAVE EXISTING PARTNERSHIPS WITH
5	USC, WITH CHILDREN'S, WITH CALTECH, AND CITY OF HOPE
6	FOR INTERNSHIPS.
7	PARTNERING WITH OUR CSU COLLABORATORS WITH
8	WHOM WE HAVE A LONG HISTORY WILL ALLOW OUR TRAINING
9	PROGRAMS TO SHARE CURRICULUM, RESOURCES, VALUABLE
10	INDUSTRY PARTNERSHIPS, AND CONTRIBUTE OUR VERY
11	TALENTED AND VERY DIVERSE STUDENT POPULATIONS TO THE
12	STATE'S WORKFORCE. WE HOPE THE RFA WILL ALLOW THESE
13	EXISTING PARTNERSHIPS TO COLLABORATE IN APPLYING FOR
14	THIS FUNDING WHICH WILL INDEED BRIDGE OUR STUDENTS
15	TO THE WORKFORCE, WHICH CALIFORNIA NEEDS TO SUPPORT
16	THE RESEARCH THAT CIRM HAS PREVIOUSLY SUPPORTED.
17	THANK YOU.
18	CHAIRMAN KLEIN: THANK YOU, DR. JOHNSTON.
19	I'D LIKE TO SAY THAT IT'S COME TO OUR ATTENTION THAT
20	PASADENA HAS QUITE A GREAT REPUTATION ALONG WITH A
21	NUMBER OF THE STATE UNIVERSITIES FOR ADVANCEMENT IN
22	THIS FIELD. SO THANK YOU FOR YOUR CONTRIBUTION.
23	DR. AMBOSE: THANK YOU. MY NAME IS DR.
24	ELIZABETH AMBOSE. I'M AT THE CALIFORNIA STATE
25	UNIVERSITY AS ASSISTANT VICE CHANCELLOR FOR RESEARCH
	70

1	INITIATIVES AND PARTNERSHIPS. I'D LIKE TO JOIN MY
2	COLLEAGUES AND COLLABORATORS WHO HAVE SPOKEN OVER
3	THE LAST FEW MINUTES IN APPLAUDING AND THANKING THIS
4	BODY AND THE CIRM STAFF FOR THEIR DILIGENT WORK IN
5	PUTTING THIS RFA INTO A PROPOSAL FORMAT. WE ARE
6	VERY GRATEFUL FOR THE OPPORTUNITY TO CONTRIBUTE TO
7	THE WORKFORCE DEVELOPMENT, AND WE'RE VERY URGENTLY
8	INTERESTED IN BEING PARTNERS WITH ALL OF THE OTHER
9	ENTITIES THAT ARE CONTRIBUTING SO MUCH TO THIS
10	EFFORT.
11	WE HAVE REMARKED UPON OUR DIVERSITY.
12	AGAIN, WE HAVE GIVEN YOU EVIDENCE IN OUR PRIOR
13	TESTIMONY OF THE FACT THAT THE THREE MILLION
14	STUDENTS THAT OUR COLLECTIVE INSTITUTIONS REPRESENT
15	AND EDUCATE ARE THE FACE OF CALIFORNIA, THE
16	CALIFORNIA STATE UNIVERSITY, REPRESENTING MORE THAN
17	40 PERCENT OF THE BIOLOGY WORKFORCE IN TERMS OF OUR
18	DEGREE GRADUATES AND BACCALAUREATE MASTER'S
19	GRANTI NG.
20	TO ECHO MY COLLEAGUE, DR. WENDY JOHNSTON,
21	WE WOULD MERELY ASK ONE, PERHAPS, CHANGE IN THE
22	CONSIDERATION OF THE RFA. AND THAT IS TO ALLOW THE
23	REGIONAL PARTNERSHIPS GIVEN THAT OUR INDUSTRY
24	SEGMENTS TEND TO BE REGIONALLY BASED AND OUR
25	EXISTING PARTNERSHIPS BETWEEN CSU, CCC, AND DOCTORAL
	80
	OU.

1	GRANTING INSTITUTIONS TEND TO BE SIMILARLY
2	FUNCTIONAL. THANK YOU VERY MUCH FOR THE OPPORTUNITY
3	TO SPEAK.
4	CHAIRMAN KLEIN: THANK YOU VERY MUCH, DR.
5	AMBOSE. NOW, COULD WE GET A STAFF RESPONSE TO THIS
6	LAST REQUEST FOR REGIONAL PARTNERSHIPS. DR.
7	TROUNSON, IS THIS SOMETHING THAT WE CAN TAKE UNDER
8	SUBMISSION AS A PART OF THIS PROPOSAL TO SEE IF WE
9	CAN ACCOMMODATE THAT REQUEST?
10	DR. TROUNSON: MR. CHAIR, I THINK WE CAN
11	ACCOMMODATE THE REQUEST. I ALSO THINK, THOUGH,
12	MYSELF, AND IT'S REALLY A PERSONAL VIEW HERE, IS
13	THAT IT WOULD BE TERRIFIC FOR SOME OF THESE STUDENTS
14	TO MAKE THEIR WAY TO SOME OF OUR REALLY TOP-LINE
15	UNIVERSITIES, WHICH ARE NOT REGIONAL, NOT NEXT DOOR,
16	AND WE WOULD LIKE TO HELP THOSE STUDENTS IF THEY
17	HAVE TO LIVE AWAY FROM HOME IN ORDER TO DO THAT. SO
18	I'D LIKE TO ENCOMPASS THE POSSIBILITY THAT WE'LL NOT
19	ONLY WORK TOGETHER WITH THE REGIONAL UNIVERSITY OR
20	BUSINESS, BUT ALSO ALLOW, YOU KNOW, AN OPPORTUNITY
21	TO GO TO ONE OF OUR, YOU KNOW, VERY HIGH-RANKED
22	UNIVERSITIES THAT ARE WORKING WITH US ALREADY.
23	CHAIRMAN KLEIN: ALL RIGHT. DR. YAFFE,
24	DID YOU HAVE ANOTHER COMMENT BEFORE MR. SIMPSON?
25	MR. SIMPSON: JOHN SIMPSON FROM CONSUMER

1	WATCHDOG. THIS IS A TREMENDOUS PROGRAM. MY ONLY
2	SUGGESTION WOULD BE TO REITERATE WHAT I SAID BEFORE.
3	THIS IS ANOTHER FINE OPPORTUNITY FOR THE REVIEW
4	PROCESS TO BE COMPLETELY AS TRANSPARENT AS THE
5	WORKING GROUP PROCESS WAS. SO I FELT I SHOULD PUT
6	THAT IN, BUT THIS IS EXACTLY THE KIND OF PROGRAM
7	THAT'S NECESSARY TO PUT THE PEOPLE WHO ARE GOING TO
8	BE WORKING IN THOSE LABS THAT YOU'RE GOING TO BE
9	FUNDING. IF WE DIDN'T HAVE THIS PROGRAM, WE'D HAVE
10	EMPTY LABS. SO THIS IS FANTASTIC.
11	CHAIRMAN KLEIN: THANK YOU VERY MUCH. I'D
12	ALSO LIKE TO EXPRESS MY APPRECIATION TO STAFF, THE
13	UC SYSTEM, AND THE COMMUNITY COLLEGES, THEIR
14	CHANCELLORS AND STAFFS. AND MANY OF THE PEOPLE
15	BEFORE US TODAY CAME BEFORE THIS BODY 18 MONTHS AGO.
16	WE'VE HAD A DIFFICULT JOURNEY WITH GETTING OUR COURT
17	APPROVALS. AND NOW THAT WE HAVE ACCOMPLISHED OUR
18	THRESHOLD OBJECTIVES, IT IS GRATIFYING TO SEE THE
19	STAFF EMBRACE THIS REQUEST AND COME UP WITH SUCH AN
20	EFFECTIVE INITIAL RESPONSE TO THE NEEDS OF THESE
21	INSTITUTIONS AND THESE STUDENTS AS WELL AS TO THE
22	FI ELD.
23	ANY ADDITIONAL COMMENTS? WE HAVE A MOTION
24	ON THE FLOOR. WOULD THE COUNSEL LIKE TO RESTATE THE
25	MOTION?

1	MR. HARRISON: THE MOTION TO IS APPROVE
2	THE CONCEPT PLAN FOR THE BRIDGES TO STEM CELL
3	RESEARCH INTERNSHIP PROGRAM.
4	CHAIRMAN KLEIN: ALL IN FAVOR. OPPOSED?
5	THANK YOU VERY MUCH. AND I'D LIKE TO THANK THE
6	INDIVIDUAL REPRESENTATIVES OF THE STATE UNIVERSITY
7	SYSTEM AS WELL AS THE COMMUNITY COLLEGES FOR BEING
8	HERE TONIGHT FOR THEIR PRESENTATION.
9	WE ARE GOING TO TAKE A DINNER BREAK. WE
10	HAVE THE CONSIDERATION OF FINAL ADOPTION OF THE
11	GRANTS ADMINISTRATION POLICY FOR FOR-PROFIT
12	ORGANIZATIONS. I DON'T EXPECT THIS TO BE A LONG
13	ITEM. SCOTT TOCHER OR DR. TROUNSON, COULD YOU
14	ADVISE ME ON HOW LONG YOU THINK THIS ITEM IS, ITEM
15	NO. 11?
16	MR. TOCHER: SHOULDN'T BE BUT JUST A
17	MOMENT.
18	CHAIRMAN KLEIN: SCOTT, ARE YOU MAKING THE
19	PRESENTATI ON?
20	MR. TOCHER: I WOULD BE HAPPY TO.
21	CHAIRMAN KLEIN: WOULD YOU TAKE THE FLOOR,
22	PLEASE.
23	MR. TOCHER: MR. CHAIRMAN AND BOARD
24	MEMBERS, IT'S BEHIND TAB NO. 11. THIS IS THE GRANTS
25	ADMINISTRATION POLICY FOR FOR-PROFIT ORGANIZATIONS.
	Q Q

1	YOU HAVE ALREADY APPROVED THIS DOCUMENT AS IT'S
2	WRITTEN FOR ADOPTION FOR BEGINNING THE PROCESS OF
3	ADOPTION FORMALLY WITH THE OFFICE OF ADMINISTRATIVE
4	LAW. THIS IS THE LAST PROCEDURAL STEP FOR YOU
5	BEFORE IT GOES BACK TO THE OFFICE OF ADMINISTRATIVE
6	LAW FOR THEIR FINAL REVIEW. AND THERE HAVE BEEN NO
7	CHANGES TO THIS SINCE YOU INITIALLY APPROVED IT.
8	AND SO WE WOULD SEEK YOUR APPROVAL TO FINISH THE
9	PROCESS OF ADOPTION.
10	MR. ROTH: MOTION TO APPROVE.
11	CHAIRMAN KLEIN: MOVED BY DUANE ROTH.
12	DR. PRICE: SECOND.
13	CHAIRMAN KLEIN: SECONDED BY DR. PRICE.
14	ADDITIONAL COMMENTS? PUBLIC COMMENT? ALL IN FAVOR.
15	OPPOSED? MOTION PASSES. THANK YOU.
16	MELISSA KING, WILL YOU ADVISE US ON OUR
17	DI NNER?
18	MS. KING: DINNER WILL BE IN THE ROOM
19	RIGHT NEXT DOOR WHERE THE LOAN TASK FORCE WAS
20	EARLIER TODAY. SO IF BOARD MEMBERS AND STAFF COULD
21	FOLLOW ME OVER THERE, THAT WOULD BE GREAT. AND
22	MEMBERS OF THE PUBLIC THAT ARE HERE WITH US TONIGHT,
23	OBVIOUSLY THERE'S A RESTAURANT HERE AT THE LUXE
24	HOTEL. AND IF YOU NEED ANY OTHER RECOMMENDATIONS, I
25	KNOW THE FRONT DESK WOULD BE HAPPY TO HELP YOU WITH

1	THAT. THANK YOU.
2	CHAIRMAN KLEIN: ALL RIGHT. AND I'D LIKE
3	TO SAY FOR ALL OF YOU AFTER DINNER WE WILL HAVE A
4	PREVIEW AND THEN THE MAIN FEATURE. THE PREVIEW WILL
5	FOCUS ON THE LOAN TASK FORCE MEETING REPORT,
6	FOLLOWED BY WHAT IS A LONG MAIN FEATURE, WHICH WILL
7	NOT BE COMPLETED UNTIL TOMORROW MORNING, BUT WE WILL
8	GO INTO MAJOR FACILITIES. FIRST, THE FIRST PART OF
9	THE MAJOR FACILITIES PROCESS DISCUSSION UPON THE
10	RETURN. THANK YOU.
11	MS. KING: CHAIRMAN KLEIN, IF YOU COULD
12	JUST ADVISE APPROXIMATELY HOW LONG YOU THINK WE'LL
13	BE AT DINNER.
14	CHAIRMAN KLEIN: FORTY-FIVE TO 50 MINUTES,
15	DOES THE COMMITTEE THINK THAT'S APPROPRIATE? NO, 45
16	TO 50. I THINK IT'S 35 TO 45 MINUTES IS MY EXPERT
17	ADVI CE.
18	WE'RE ADJOURNED FOR DINNER.
19	(A RECESS WAS TAKEN.)
20	CHAIRMAN KLEIN: ALL RIGHT. WE'RE GOING
21	TO RECONVENE HERE. ALL RIGHT. WE'RE GOING TO OPEN
22	THE MEETING. AND I THINK MOST OF THE PUBLIC IS
23	WAITING FOR ITEM 14. BUT, DUANE, IF YOU COULD GIVE
24	US AN UPDATE FROM THE LOAN TASK FORCE BECAUSE THIS
25	HAS TREMENDOUS POTENTIAL FOR OUR FUTURE. AND IT'S

1	BEEN AN EXTRAORDINARY JOB YOU'VE DONE WITH THE TASK
2	FORCE.
3	MR. ROTH: SO THANK YOU, MR. CHAIRMAN.
4	BEFORE I BEGIN, LET ME POINT OUT THAT I THINK I'M
5	THE ONLY MEMBER OF THIS BOARD THAT HAS ABSOLUTELY NO
6	INTEREST IN THE INDIANA OR NORTH CAROLINA PRIMARY
7	TONIGHT. I'M FEELING VERY LONELY.
8	DR. PIZZO: AS YOU SHOULD. I HOPE THAT
9	IT'S THIS PLURALITY THAT EXISTS IN NOVEMBER.
10	CHAIRMAN KLEIN: I'D LIKE TO SAY THAT IT
11	IS ALWAYS IMPORTANT TO HAVE A FALLBACK STRATEGY, AND
12	THERE'S GREAT WEIGHT ON DUANE'S SHOULDER ON OUR
13	FALLBACK STRATEGY.
14	MR. ROTH: I FEEL THE PRESSURE. ANYWAY,
15	SO I'D LIKE TO BEGIN BY JUST QUICKLY THANKING THE
16	TASK FORCE. EVERYBODY CONTRIBUTED A GREAT DEAL TO
17	THE INPUT. WE SAT THROUGH MANY MEETINGS TOGETHER,
18	AND I THINK WE CAME UP WITH SOMETHING THAT IS QUITE
19	WORKABLE AND WILL HAVE A VERY POSITIVE IMPACT ON THE
20	ABILITY OF CIRM TO FUND PRODUCT LINES. AND THAT'S
21	WHAT WE WERE REALLY TALKING ABOUT.
22	THESE PRODUCT LOANS CAN COME FROM ONE OF
23	TWO PLACES. THEY CAN COME FROM INSTITUTIONS THAT
24	WANT TO ADVANCE A PRODUCT THAT'S IDENTIFIABLE, OR
25	THEY CAN COME FROM COMPANIES LARGE AND SMALL THAT

1	ARE LOOKING FOR ASSISTANCE IN ADVANCING THE
2	PRODUCTS.
3	THE FOCUS, AS IT WAS IN THE STRATEGIC
4	PLAN, IS THAT WE WOULD FUND THE GAPS. THE GAPS MEAN
5	WHERE THERE'S NO AVAILABLE FINANCING OR VERY LITTLE
6	AVAILABLE FINANCING THAT WOULD ALLOW THE TECHNOLOGY
7	TO MOVE AHEAD. SO BY DEFINITION, THAT MEANS IT'S
8	FAIRLY HIGH RISK IN TERMS OF THE LOANS THAT WE'RE
9	GOING TO MAKE.
10	THERE ARE TWO PARTS THAT WE DEALT WITH.
11	ONE IS WHICH THINGS SHOULD REALLY BE PART OF THE RFA
12	PROCESS AND WHICH THINGS SHOULD BE PART OF THE
13	POLICY. AND IN THE RFA PROCESS WE LEFT OPEN HOW BIG
14	THE SCOPE OF THE TOTAL AMOUNT OF MONEY THAT WILL BE
15	INVESTED, WHETHER IT WILL BE 400, 500, OR A BILLION.
16	THAT WILL BE UP TO EACH INDIVIDUAL RFA, AND WE WILL
17	DETERMINE THOSE AS WE GO. THE SECOND PART THAT WILL
18	BE LEFT TO THE RFA IS THE SIZE OF THE INDIVIDUAL
19	GRANTS THAT WE GIVE. SO THAT WILL BE SPECIFIC TO
20	THE RFA I SAID GRANTS LOANS THAT WE GIVE. SO
21	THAT WILL BE SPECIFIC TO THE GIVEN RFA THAT ALLOWS
22	FOR A LOAN COMPONENT. SO IT COULD BE, AS WE USED
23	JUST FOR WORKING THROUGH THE NUMBERS, ONE MILLION TO
24	FIVE MILLION, BUT IT COULD EASILY GROW FROM THERE
25	AND BE LARGER, MAYBE UP TO 10 OR 15 OR EVEN LARGER,

1	DEPENDING ON WHAT THIS BOARD DETERMINES THAT SHOULD
2	BE ON THE BASIS OF RECOMMENDATIONS FROM CIRM.
3	INTEREST RATES WOULD ALSO BE RFA SPECIFIC.
4	SO THEN THE THINGS THAT ACTUALLY WENT INTO
5	THE LOAN POLICY AFTER WE TOOK ALL THIS INPUT FROM
6	ALL THE CONSTITUENTS, THE FOLLOW-ON FUNDERS, THE
7	COMPANIES THEMSELVES, WE EVEN TALKED WITH THE
8	LEGISLATORS ABOUT THE PROGRAM. AND TAKING ALL THAT
9	INPUT, WE ENDED UP, AND I'M JUST GOING TO GIVE YOU
10	FOUR THINGS THAT ARE HIGHLIGHTS THAT ARE THINGS YOU
11	NEED TO KNOW OR WILL NEED TO KNOW AS WE GO AHEAD.
12	BUT THERE ARE TWO TYPES OF PRODUCT LINES. ONE CAN
13	BE ON THE PRODUCT ITSELF. YOU TAKE A LOAN ON THE
14	PRODUCT. AND THE OTHER IS YOU WOULD TAKE A LOAN ON
15	BEHALF OF THE COMPANY ON A GIVEN PRODUCT. SO ONE OF
16	THEM WOULD BE A RECOURSE LOAN, MEANING THAT IF THE
17	PRODUCT FAILS, YOU STILL OWE US THE PAYBACK. IF THE
18	PRODUCT FAILS, YOU STILL OWE US THE MONEY BACK.
19	AND THE SECOND IS A NONRECOURSE LOAN THAT
20	SAYS IF THE PRODUCT FAILS, YOU DON'T OWE US BACK THE
21	MONEY. NOW, TO MANAGE THE RISK THERE, BECAUSE THOSE
22	ARE VERY DIFFERENT RISK PROFILES, WE ASKED FOR
23	EQUITY AND WARRANT COVERAGE THAT'S GOING TO BE
24	DIFFERENT AS A RISK PREMIUM, AN INTEREST RATE
25	PREMIUM. AND THE INTEREST RATE PREMIUM FOR A
	0.0

1	NONRECOURSE LOAN, WHEREAS, IF IT FAILS, THEY DON'T
2	OWE US THE MONEY, IS WHAT WE CALL A HUNDRED PERCENT
3	WARRANT COVERAGE. THAT MEANS THAT WE GET AN AMOUNT
4	OF STOCK OR THE RIGHT TO BUY AN AMOUNT OF STOCK
5	EQUAL TO THE SIZE OF THEIR LOAN. AND THE BASIS OF
6	THAT PRICE IS THE LAST FUNDING THEY DID.
7	CHAIRMAN KLEIN: AND, DUANE, WOULD IT BE
8	APPROPRIATE TO SAY THAT THE WARRANT COVERAGE THAT
9	YOU ARE DESCRIBING IS IN LIEU OF EQUITY, SINCE WE
10	CAN'T TAKE EQUITY, THAT IT IS ESSENTIALLY A YIELD
11	PREMIUM ON THE INTEREST ON THE LOAN IN THE FORM OF A
12	WARRANT?
13	MR. ROTH: THAT'S CORRECT. SO IT IS A
14	YIELD PREMIUM. I USED A RISK PREMIUM, BUT IT IS
15	INTENDED FOR THAT. FOR THE COMPANIES THAT TAKE OR
16	THE INSTITUTIONS THAT TAKE A NONRECOURSE LOAN, THEY
17	WILL HAVE THE HUNDRED PERCENT WARRANT COVERAGE. THE
18	ONES THAT AGREE TO PAY IT BACK REGARDLESS IF THE
19	PRODUCT WORKS OR NOT, THEY'LL HAVE 10 PERCENT
20	WARRANT COVERAGE. SO IT'S VERY DIFFERENT WARRANT
21	COVERAGES.
22	THE TERMS OF LOAN VARY AS WELL. YOU CAN
23	MAKE A SELECTION FOR A SIX-YEAR TERM, AND IT HAS
24	ONLY TWO TRIGGERS FOR EARLY REPAYMENT IF YOU TAKE A
25	SIX-YEAR TERM. YOU MERGE WITH ANOTHER COMPANY AND

I	THE VALUE OF THAT NEW COMPANY IS A HUNDRED MILLION
2	OR GREATER, THEN THE LOAN BECOMES DUE. OR IF YOU DO
3	AN INITIAL PUBLIC OFFERING, AN IPO, FOR AT LEAST \$20
4	MILLION, THE LOAN COMES DUE. FOR THE NONRECOURSE
5	I'M SORRY. FOR THE TEN-YEAR LOAN PERIOD. SO YOU
6	HAVE A SIX-YEAR LOAN PERIOD, TWO TRIGGERS FOR EARLY
7	REPAYMENT.
8	FOR THE TEN-YEAR LOAN, THERE ARE THOSE TWO
9	TRIGGERS PLUS THREE MORE. AND THE FIRST ONE IS IF
10	THE COMPANY GOES THROUGH AT LEAST IF THE COMPANY
11	RAISES AN ADDITIONAL 20 TIMES THE AMOUNT WE LOAN
12	THEM, SO IF YOU LOAN THEM \$1 MILLION AND THEIR
13	SUBSEQUENT FINANCINGS REACH 20 MILLION CUMULATIVE,
14	THEN THE LOAN BECOMES DUE. SO THAT TAKES IT DOWN
15	FROM THE TEN-YEAR PERIOD IF THAT HAPPENS.
16	THE SECOND EARLY ONE IS DEALING WITH
17	MEDICAL DEVICES AND DIAGNOSTICS, IN WHICH CASE THEY
18	FILED WITH THE FOOD AND DRUG ADMINISTRATION ASKING
19	FOR APPROVAL. WITHIN 90 DAYS OF THAT FILING, THE
20	LOAN IS DUE. AND IF IT'S A THERAPEUTIC, IT'S WITHIN
21	SIX MONTHS, 180 DAYS, FROM THE COMMENCEMENT OF A
22	PIVOTAL CLINICAL TRIAL, WHICH MEANS A TRIAL THAT, IF
23	SUCCESSFUL, COULD BE SUBMITTED AS THE BASIS FOR
24	APPROVAL.
25	SO ON THE TEN-YEAR SELECTION, YOU HAVE
	90

1	FIVE EARLY REPAYMENTS. ON THE SIX-YEAR SELECTION,
2	YOU HAVE TWO.
3	AND I THINK THAT'S REALLY ALL THE THINGS
4	THAT ARE MATERIAL THAT WE NEED TO TALK ABOUT, BUT I
5	WANT TO REMIND YOU THAT ALL THE THINGS THAT WERE IN
6	THE IP POLICY IN TERMS OF PUBLICATION, IN TERMS OF
7	ACCESS PLANS, ALL OF THAT IS CARRIED OVER AS
8	COVENANTS IN THE LOAN POLICY. SO WITH THAT, THAT'S
9	A VERY QUICK RUN-THROUGH. YOU WILL SEE MORE OF THE
10	DETAILS HERE.
11	BUT I DO WANT TO JUST TAKE A MINUTE AND
12	THANK LYNN HARWELL AND SCOTT TOCHER. BOB DID AN
13	EXCELLENT JOB OF BRINGING THAT TO EVERYBODY'S
14	ATTENTION, BUT THEY DID FANTASTIC WORK. IT WAS
15	GREAT WORK. THANKS.
16	CHAIRMAN KLEIN: THANK YOU VERY MUCH,
17	DUANE. COULD YOU GIVE THEM A LITTLE BIT MORE DETAIL
18	ON THE MILESTONE-DRIVEN NATURE OF THIS SO THAT THE
19	COMMITTEE THE BOARD UNDERSTANDS THAT THIS MONEY
20	DOESN'T GO OUT THE DOOR DAY ONE, THAT IT'S
21	PERFORMANCE DRIVEN?
22	MR. ROTH: IT WOULD BE VERY DIFFICULT FOR
23	US TO TIME RFA'S FOR WHEN THE COMPANIES ARE IN
24	POSITION AND NEED THE MONEY. SO THE SUGGESTION WE
25	MADE WAS THAT YOU COULD APPLY FOR A BROAD RANGE FROM

1	PRECLINICAL ALL THE WAY THROUGH PHASE 2A IN AN RFA.
2	THERE WILL BE AN RFA, YOU MAY DECIDE YOU WANT TO GO
3	ALL FOR THE 2A BECAUSE THAT'S WHERE YOU ARE, BUT YOU
4	ALSO MAY BE IN THE PRECLINICAL PHASE, AND YOU DON'T
5	WANT TO FINISH THAT AND HAVE TO WAIT FOR THE NEXT
6	ROUND AND SO ON.
7	SO WE SUGGESTED YOU HAVE A BROAD
8	APPLICATION PROCESS THAT LET'S PEOPLE BE MILESTONE
9	DRIVEN. SO IF THE TOTAL SCOPE OF WHAT YOU ARE
10	ASKING FOR IS FIVE MILLION AND ONE MILLION OF THAT
11	IS FOR THE PRECLINICAL, WHEN THAT MILESTONE IS
12	ACHIEVED AND YOU FILE WITH THE FDA FOR AN IND, THEN
13	YOU'RE ELIGIBLE FOR THE SECOND TRANCHE OF THE TOTAL
14	LOAN SO THAT YOU DON'T HAVE TO COME BACK AS LONG AS
15	YOU CONTINUE TO MAKE PROGRESS THROUGH. AND THAT
16	ALLOWS US TO GIVE LOANS THAT CAN PROGRESS, IF YOU
17	WILL, THROUGH MULTIPLE MILESTONES.
18	AND THEN JUST A COUPLE OTHER THINGS WITH
19	THAT. THE ONE THING THAT I THINK IS VERY IMPORTANT
20	ABOUT ALLOWING THESE PROGRESSIONS TO TAKE PLACE IS
21	THAT IT REDUCES OUR RISK, BUT IT ALSO GIVES THE
22	COMPANIES AND THE SPONSORS BEHIND THESE PRODUCTS
23	FLEXIBILITY SO THAT THEY DON'T HAVE TO COME BACK
24	EACH TIME.
25	CHAIRMAN KLEIN: AND THE OTHER ITEM, I
	92
	14

1	THINK, OR TWO ITEMS I THINK MIGHT BE VERY HELPFUL TO
2	EMPHASIZE A LITTLE FURTHER IS THE POTENTIAL AND
3	REQUIREMENTS FOR MATCHING FUNDS FROM THE PRIVATE
4	SECTOR SO THEY HAVE A MAJOR COMMITMENT TO ANY
5	PROGRAM THAT WE ARE PUTTING FUNDS AT RISK AT.
6	MR. ROTH: THE WAY WE'RE SUGGESTING,
7	THERE'S A BUSINESS REVIEW SECTION, WHICH IS TO BE
8	WRITTEN. THERE'S A TEMPLATE THAT WILL BE PART OF
9	THE APPLICATION PROCESS. AND IN THERE YOU WILL
10	DESCRIBE YOUR MILESTONES AND THE TOTAL AMOUNT OF
11	MONEY THAT'S NEEDED. AND IF IT'S A TRANCHED
12	PROGRAM, MULTIPLE MILESTONES, YOU WILL SHOW US THAT
13	YOU CAN SECURE THE FUNDS NECESSARY TO DO THE NEXT
14	PHASE OF THE WORK, WHICH INCLUDES OUR FUNDS. SO IF
15	THE NEXT PHASE COSTS FIVE MILLION AND YOU GET TWO
16	MILLION FROM US, YOU WILL HAVE TO SECURE THE THREE
17	MILLION BEFORE YOU MOVE TO THE NEXT PHASE.
18	AND THEN FINALLY, JUST IN TERMS OF
19	LEVERAGE, IT WILL BE VERY EASY TO CALCULATE THE
20	IMPACT THIS PROGRAM HAS BECAUSE WE'LL ASK EACH
21	COMPANY OR EACH SPONSOR TO PROVIDE US WITH THE
22	CONTINUATION OF THEIR FINANCING ALL THE WAY THROUGH
23	APPROVAL. AND YOU WILL SEE THAT WILL BECOME AN
24	ENORMOUS NUMBER AT SOME POINT IN THE FUTURE. SO OUR
25	FUNDING AT THIS EARLY STAGE WILL LEVERAGE A LOT OF
	93

1	FOLLOW-ON FUNDING IF IT'S MANAGED PROPERLY.
2	CHAIRMAN KLEIN: OKAY. AND IN TERMS OF
3	THE RISK PROFILE, THE DISTRIBUTION OF RISK BY
4	DIFFERENT LOAN TYPES, THERE'S A CONSERVATIVE
5	PROJECTION THAT PWC MADE. IF YOU'D MAYBE JUST
6	CAPTURE IN SUMMARY WHAT THE RISK LEVELS ARE THAT
7	WERE PROFILED AT EACH LEVEL AND THE POTENTIAL
8	THEIR CONCLUSION AS TO THE POTENTIAL TO HAVE A
9	CAPITAL PRESERVATION PROGRAM THAT WOULD GO FORWARD.
10	MR. ROTH: SO I WON'T GO INTO ALL THOSE
11	DETAILS BECAUSE I DON'T HAVE THEM IN FRONT OF ME,
12	AND I THINK THE GROUP WILL PROBABLY LYNCH ME IF I
13	KEEP GOING ON. BUT LET ME JUST SAY THAT I THINK WE
14	WERE VERY COMFORTABLE WITH THE PROFILING THEY DID ON
15	THE VARIOUS SCENARIOS IN TERMS OF THE FAILURE RATE
16	AND HOW MUCH MONEY WOULD BE INVESTED IN EACH PHASE,
17	LIKE PRECLINICAL PHASE 1, PHASE 1B, PHASE 2A. SO
18	THEY CALCULATED THAT THE RISK GOES DOWN AS THE
19	PRODUCT ADVANCES FURTHER.
20	SO I THINK THAT CAPTURES IT, AND IT REALLY
21	SAYS THAT IN A VERY CONSERVATIVE ESTIMATE, AS YOU
22	MENTIONED AT THE BEGINNING OF THE MEETING, YOUR 500
23	MILLION, IF THAT'S WHAT YOU PUT INTO IT, WOULD COME
24	OUT TO BE MORE THAN A BILLION IN A STATIC MODEL.
25	THAT MEANS YOU DIDN'T TAKE THE NEW MONEY AS IT

1	CYCLED IN AND BACK OUT. SO JUST IN A STATIC MODEL
2	IT DOUBLES IN THE PERIOD OF TIME WE'RE TALKING
3	ABOUT.
4	CHAIRMAN KLEIN: AND IN TERMS OF
5	CONSERVATISM, AT THE PRECLINICAL STAGE, YOU'RE
6	LOOKING AT A 50-PERCENT DEFAULT AND ZERO RECOVERY
7	RATE. AND AS YOU GO UP IN THE STAGES OF PROCESSING,
8	I THINK IT WENT TO A 40 PERCENT AT A 1A AND 30
9	PERCENT AT A 2A, BUT VERY HIGH PERCENTAGES OF
10	DEFAULT WITH A ZERO ASSUMPTION OF RECOVERY FROM
11	DEFAULTED LOANS OTHER THAN THE RECOURSE PORTION,
12	WHICH WAS RECOURSE LOANS WERE VERY SMALL, AND IT
13	STILL SHOWED NOT ONLY A CAPITAL RECOVERY AT THE
14	MINIMUM CASE, BUT WITH THE WARRANTS, IT SHOWED THAT
15	AT THE END OF A TEN-YEAR PERIOD, YOU HAD A BILLION
16	DOLLARS IN CAPITAL WHEN STARTING WITH 500 MILLION
17	BEFORE CONSIDERING THE LEVERAGE THAT YOU'D ACHIEVE.
18	SO I'D LIKE TO AGAIN THANK DUANE FOR HIS
19	LEADERSHIP, LYNN HARWELL, AND SCOTT TOCHER.
20	(APPLAUSE.)
21	MR. ROTH: BOB, I FAILED TO MENTION
22	PRICEWATERHOUSECOOPERS, AND I WANT TO DO THAT
23	PUBLICLY BECAUSE THEY DID A PHENOMENAL JOB ON THE
24	TASK WE GAVE THEM, THE TURNAROUND TIMES. I THINK
25	ALL THE TASK FORCE MEMBERS WOULD AGREE THAT WAS
	O.E.

1	MONEY WELL SPENT.
2	CHAIRMAN KLEIN: IT WAS EXCELLENT
3	PERFORMANCE.
4	DR. TROUNSON: I WONDER, MR. CHAIR, IF I
5	COULD ASK DUANE ABOUT THIS AREA OF INTELLECTUAL
6	PROPERTY. IN THE AREA OF STEM CELLS, IT'S LITTERED
7	WITH INTELLECTUAL PROPERTY. WE CALL THEM WOMBAT
8	HOLES. AND THERE'S BEEN ALREADY SOME PRETTY MAJOR
9	PAYOUTS FOR NOT GETTING IT RIGHT. DID YOU CONSIDER
10	THE ISSUES IN DWELLING ON THIS, AND WHETHER WE WOULD
11	BE EXPOSED OURSELVES FURTHER THAN, SAY, WHAT WE'D
12	LOAN TO THE COMPANY? WOULD THERE BE ANY WHAT I'M
13	ASKING IS IS THERE SORT OF ANY FOLLOW-THROUGH TO THE
14	AGENCY OR THE STATE BECAUSE WE'VE MADE LOANS TO
15	COMPANIES THAT MIGHT BE IN A SITUATION WHERE THEY
16	TRANSGRESSED IN THIS AREA?
17	MR. ROTH: SO THAT'S SOMETHING THAT I
18	WOULD LEAVE TO THE COUNSEL PROBABLY TO ANSWER. WE
19	DIDN'T SPECIFICALLY LOOK AT THAT. AND I WOULD
20	HAVE I'D BE HARD-PRESSED TO THINK OF ANY SCENARIO
21	WHERE THAT, IN FACT, COULD HAPPEN SINCE WE'RE JUST
22	MAKING LOANS AND THEY'RE REPRESENTING TO US WHAT IT
23	IS THEY'RE ADVANCING.
24	WE DID DISCUSS OUR ABILITY TO REVIEW
25	INTELLECTUAL PROPERTY AND MAKE SOME JUDGMENT OUT OF

1	THAT. AND WE'RE QUICKLY ADVISED THAT THAT'S NEARLY
2	IMPOSSIBLE. IT WOULD INVOLVE A LOT OF
3	ATTORNEY-CLIENT PRIVILEGE AND THINGS THAT WE SHOULD
4	JUST STAY AWAY FROM. I SUPPORT THAT. HAVING BEEN
5	IN THIS INDUSTRY FOR A LONG TIME, YOU'RE NOT GOING
6	TO KNOW WHAT THE TRUE IP POSITION IS UNTIL A PRODUCT
7	GETS COMMERCIALIZED. AND EVEN THEN, IF YOU STUDY,
8	IT TAKES DECADES IN SOME CASES TO RESOLVE ALL THAT,
9	SO I THINK WE'D BE LONG OUT OF IT BEFORE.
10	DR. TROUNSON: I GUESS THE AREA OF THE
11	WISCONSIN PATENTS, FOR EXAMPLE, IN THE EMBRYONIC
12	STEM CELLS AND THE JAPANESE PATENTS OF RIPE ES
13	CELLS, WHAT HAVE BECOME AN AREA OF INTEREST FOR US
14	IN THIS AREA, I'D SUGGEST, MR. CHAIRMAN, BECAUSE I
15	THINK IT'S GOING TO AFFECT A LOT OF THIS, WHETHER
16	IT'S THE LOANS OR CLINICAL PROGRAMS. AND I THINK WE
17	PROBABLY NEED TO HAVE AN UNDERSTANDING OF THAT, A
18	BETTER UNDERSTANDING THAN WE CURRENTLY HAVE. AND I
19	JUST WONDERED IF THAT'S NOT SOMETHING, THE FREEDOM
20	TO OPERATE OR FREEDOM TO GO FORWARD, MIGHT BE
21	SOMETHING THAT WE WOULD NEED TO AT LEAST HAVE AS AN
22	ITEM WHEN WE'RE APPROACHING CLINICAL APPLICATIONS OR
23	FUNDING OF COMMERCIAL.
24	MR. ROTH: ALAN, BECAUSE OF THE VERY ISSUE
25	YOU'RE RAISING, U.S. SOME YEARS AGO PASSED A SAFE

1	HARBOR PROVISION WHERE YOU CAN'T REALLY BRING A SUIT
2	AGAINST SOMEBODY TRYING TO ADVANCE A PRODUCT UNTIL
3	IT IS TRIED TO BE COMMERCIALIZED. SO YOU CAN GO ALL
4	THE WAY UP THROUGH YOUR FDA APPROVAL, AND STILL THEY
5	CANNOT BRING THE SUIT UNTIL YOU TRY TO COMMERCIALIZE
6	IT. THAT STOPPED PEOPLE TRYING TO STOP COMPANIES
7	VERY EARLY, THREATENING THEM THAT THEY HAD PRIOR ART
8	OVER THEIR IP, AND SO THAT EXISTS TODAY.
9	DR. TROUNSON: THE VALLEY OF DEATH IS
10	AROUND THAT AREA, IS IT NOT? THE VALLEY OF DEATH IS
11	CLOSE AROUND THAT AREA?
12	CHAIRMAN KLEIN: I THINK, DUANE, ALAN,
13	CORRECT ME IF I'M WRONG, YOU'RE LOOKING AT IT, ALAN,
14	AS AN AREA OF RISK FOR ACTUALLY GETTING A PAYOFF ON
15	THE LOAN, FOR THEM ACTUALLY BEING ABLE TO
16	COMMERCIALIZE, EVEN THOUGH THEY MEET ALL THEIR
17	MILESTONES, WHETHER THERE WOULD BE A BLOCKAGE AND
18	THE ABILITY TO GET TO THE PATIENT AS A RISK AREA.
19	AND THAT'S NOT WITHIN THE LOAN TASK FORCE
20	PARAMETERS, BUT I THINK IT IS A VERY IMPORTANT AREA
21	THAT WE SHOULD SET UP A TASK FORCE TO LOOK AT WITH
22	THE STAFF BECAUSE WE HAVE TO ANTICIPATE THE RISK AND
23	HAVE A STRATEGY FOR DEALING WITH THIS AREA OF RISK.
24	IT'S GOING TO BE
25	MR. ROTH: KEEP IN MIND THAT BOTH IN OUR
	98
	, 7U

1	SIX-YEAR AND TEN-YEAR LOANS, SIX-YEAR, IT'S NOT
2	LIKELY SOMEBODY IS GOING TO GET COMMERCIALIZATION IN
3	THAT TIMEFRAME. THE TEN-YEAR, ANY TIME YOU FILE,
4	WE'RE OUT BEFORE THAT PRODUCT GETS APPROVED.
5	CHAIRMAN KLEIN: I THINK ALAN IS FOCUSED
6	ON WE KNOW THERE ARE SOME CLINICAL TRIALS COMING UP
7	THAT MAY WELL COME TO THIS AGENCY FOR LOANS. AND
8	THOSE CLINICAL TRIALS MAY BE IN THE NEXT 24 TO 36
9	MONTHS. SO THE ISSUE IS WE NEED TO ANTICIPATE THIS
10	AND FOCUS ON IT, BUT IT'S NOT WITHIN THE SCOPE AND
11	THE TIME PARAMETERS THAT THIS PARTICULAR LOAN TASK
12	FORCE HAD FOR IT.
13	DR. TROUNSON: THANK YOU.
14	CHAIRMAN KLEIN: ALL RIGHT. MOVING
15	FORWARD THIS EVENING
16	DR. POMEROY: DUANE, CAN YOU TELL US,
17	THEN, WHAT YOUR ANTICIPATED TIMELINE OF AN OFFICIAL
18	RECOMMENDATION COMING OUT OF THE WHAT ARE THE
19	NEXT STEPS?
20	MR. ROTH: SO THIS RECOMMENDATION THAT WE
21	VOTED ON TODAY IN THE TASK FORCE GOES TO THE FINANCE
22	COMMITTEE, AND THE FINANCE COMMITTEE WILL REVIEW IT,
23	AND THEN IT WILL COME TO THE ICOC FOR FINAL
24	APPROVAL. AND WE HOPE THAT IS IN AUGUST, AS BOB
25	SAID, AT THE LEAST, BUT THAT WOULD BE THE TIMEFRAME

1	THAT WE'D LIKE. WE'D LOVE TO HAVE THIS IN PLACE FOR
2	THE DISEASE TEAM GRANTS THAT ARE COMING UP IN THE
3	FALL, THE BIG ONES, BECAUSE I THINK WE COULD EXPAND
4	THE SCOPE IF IT'S AVAILABLE AS PART OF THAT DISEASE
5	TEAM.
6	CHAIRMAN KLEIN: DR. PRIETO.
7	DR. PRIETO: FROM A QUESTION ABOUT OUR
8	RISK EXPOSURE, IF YOU COULD HELP ME UNDERSTAND THIS
9	BETTER. WHAT IS OUR EXPOSURE IF A COMPANY FAILS?
10	AND THEN A RELATED QUESTION IS IF YOU CAN EXPLAIN A
11	LITTLE BETTER TO ME WHAT THESE WARRANTS ARE AND HOW
12	THOSE PROTECT US.
13	MR. ROTH: SO IF THE COMPANY FAILS AND
14	THERE'S INTELLECTUAL PROPERTY THAT'S AVAILABLE, PART
15	OF THE REQUEST IS THAT THEY WILL HELP US FIND A HOME
16	FOR THAT, AND IT WOULD THE LOAN WOULD FOLLOW THE
17	INTELLECTUAL PROPERTY. IN THE EVENT THAT THERE'S NO
18	ONE TO TAKE IT OVER, EVERYBODY ABANDONS, THEN WE
19	WOULD HAVE THE RIGHT TO GET OUR HANDS ON THE IP AND
20	EITHER THROUGH A THIRD PARTY TRY TO WORK THE VALUE
21	OUT THAT WAY. SO THAT WOULD BE ONE IF IT'S A
22	PRODUCT FAILURE.
23	IF IT'S A COMPANY FAILURE, A BANKRUPTCY IS
24	GOING TO ENSUE, AND, AGAIN, WE WOULD, ASSUMING
25	THERE'S NO OTHER DEBT IN THE COMPANY, WE COULD

1	INHERIT THE IP, WHICH WE WOULD, AGAIN, TRY TO PLACE
2	WITH SOMEONE.
3	DR. PRIETO: WHAT IF THERE WASN'T YET ANY
4	VIABLE IP?
5	MR. ROTH: THEN THAT WOULD BE THE 50
6	PERCENT THAT BOB TALKED ABOUT THAT WE ASSUME WE'LL
7	NEVER SEE A PENNY FROM. WE'LL HAVE THE WARRANTS,
8	BUT WE WON'T SEE A PENNY FROM IT.
9	THE WARRANTS ARE SIMPLY THE RIGHT TO
10	PURCHASE EQUITY IN A TEN-YEAR PERIOD AT A CERTAIN
11	STRIKE PRICE.
12	DR. PRIETO: WE CAN'T THE STATE CAN'T
13	ACTUALLY PURCHASE
14	MR. ROTH: NO. SO WE ARE WORKING THROUGH
15	THAT. WE WILL NEVER OWN EQUITY. WE OWN THE RIGHT
16	TO OWN EQUITY. WE HAVE THE RIGHT TO OWN EQUITY AND
17	WE CAN SELL THAT RIGHT TO A THIRD PARTY WHO CAN THEN
18	EXERCISE. THAT'S STILL BEING LOOKED AT, BUT THAT'S
19	HOW WE BELIEVE IT WOULD BE HANDLED. THERE WOULD BE
20	A THIRD PARTY WHO WOULD BUY OUR WARRANTS AND
21	EXERCISE THEM, AND THEY PAY US. IT'S SORT OF A
22	SIMULTANEOUS TRANSACTION, AND THEY'RE GOING TO GET
23	PROFIT FOR DOING THAT.
24	THERE'S A MARKET THERE IS A MARKET FOR
25	WARRANTS IN THESE COMPANIES IF THEY'RE IN THE MONEY.

1	SO SOMEBODY WILL PLAY TRIAGE, BUT THEY'LL WANT A
2	PROFIT FOR DOING THAT. THAT'S HOW WE CAN HANDLE THE
3	WARRANTS.
4	IF YOU TAKE THE WARRANTS OUT OF THIS
5	PROGRAM, IT'S NOT VERY INTERESTING. BUT KEEPING THE
6	WARRANTS IN MAKES IT'S VERY INTERESTING FOR US TO
7	RECYCLE MORE MONEY BACK IN. IT'S THE MOST SENSITIVE
8	PART OF THE ANALYSIS THAT WE DID IS THE WARRANT
9	COVERAGE. AND WE KNOW THAT JUST FROM VENTURE BANKS
10	AND OTHERS THAT DO THIS AS A BUSINESS, THAT THE
11	WARRANTS ARE TERRIBLY IMPORTANT.
12	DR. PRIETO: I GUESS MAYBE A RELATED
13	QUESTION. IF WE'RE LOOKING AT FUNDING THINGS THAT
14	OTHERWISE MIGHT HAVE DIFFICULTY FINDING FUNDING, CAN
15	WE REALLY GET THE MATCHING FUNDS OR THE LEVERAGE
16	OR CAN COMPANIES GET THOSE MATCHING FUNDS THAT YOU
17	TALKED ABOUT?
18	MR. ROTH: SO THE LEVERAGE COMES IN THE
19	LATER MILESTONES. SO IF THE SCOPE OF THE PROGRAM
20	IS, LET'S SAY, PRECLINICAL THROUGH PHASE 1 AND THERE
21	ARE THREE TRANCHES, BUT WE'RE PUTTING UP \$5 MILLION,
22	BUT IT COST 15 TO DO THE WHOLE PROGRAM, WE WANT THE
23	COMPANIES TO TELL US, FIRST, WHEN THEY HIT THE
24	MILESTONE AND, SECOND, WHEN THEY HAVE THE ADDITIONAL
25	FUNDS ON TOP OF OURS THAT WILL BE NECESSARY. SO
	102

THEY CAN USE THAT TO GO TO THE MARKET AND SAY I HAVE
TWO MILLION OF THE FIVE MILLION WE NEED. IF YOU PUT
IN THREE, THE TWO MILLION IS NONDILUTIVE.
DR. PRIETO: WE'LL BE THE SEED MONEY.
MR. ROTH: WE'RE THE SEED MONEY, BUT WE'RE
ALSO LEVERAGING IN THE LATER PHASES OF THESE
MULTIPLE MILESTONE-DRIVEN GRANTS. AND THEN THE
OTHER LEVERAGE WE GET IS WHAT I DESCRIBED THAT WILL
BE ADDITIONAL FOLLOW-ON FINANCING WHICH WE'LL BE
ABLE TO TRACK.
CHAIRMAN KLEIN: OKAY. THANK YOU VERY
MUCH. MOVING THIS ALONG TONIGHT, WE'RE GOING TO
MOVE ITEM 13 TO TOMORROW AFTER OUR KEY VOTE ON THE
FINAL APPROVAL OF THE MAJOR FACILITIES. SO WE'RE
GOING TO ITEM 14, CONSIDERATION OF RECOMMENDATIONS
FROM THE FACILITIES WORKING GROUP AND GRANT WORKING
GROUP ON MAJOR FACILITIES APPLICATIONS. AND THIS IS
AN ITEM WE'RE GOING TO OPEN TONIGHT, BUT WE WON'T
FINISH TONIGHT.
IT'S IMPORTANT TO SEE IF BOARD MEMBERS
HAVE QUESTIONS FOR THE APPLICANTS THAT ARE HERE, OR
WE CAN RESPOND TO PUBLIC COMMENT TONIGHT BECAUSE
TOMORROW MORNING WE'RE GOING TO BE MOVING VERY
QUICKLY TO FINISH THIS AREA.
IN OPENING THIS, JAMES HARRISON, COULD YOU
103

1	GO THROUGH WITH THE BOARD MEMBERS THE CONSERVATIVE
2	POSITION THAT HAS BEEN TAKEN TO ASSURE THE HIGHEST
3	DEGREE OF CONFLICT AVOIDANCE AND PUBLIC SCRUTINY.
4	MR. HARRISON: SURE. FOR THE BENEFIT OF
5	THE PUBLIC, LET ME TAKE A STEP BACK AND EXPLAIN WHAT
6	OUR CONFLICT PROCESSES INVOLVE. PRIOR TO THE
7	MEETING, EACH OF THE BOARD MEMBERS COMPLETED A
8	CONFLICT OF INTEREST FORM TO IDENTIFY CONFLICTS
9	ASSOCIATED WITH THE MAJOR FACILITIES GRANT
10	APPLICATIONS. STAFF THEN REVIEWED EACH OF THE BOARD
11	MEMBER STATEMENTS OF ECONOMIC INTEREST TO DETERMINE
12	WHETHER THERE WERE ANY ADDITIONAL CONFLICTS THAT
13	HADN'T BEEN CAPTURED.
14	WE HAVE PROVIDED EACH BOARD MEMBER WITH A
15	LIST OF THE APPLICATIONS IN WHICH THE MEMBER HAS AN
16	INTEREST. AND IF YOU HAVE AN INTEREST IN AN
17	APPLICATION, YOU WILL BE PROHIBITED FROM
18	PARTICIPATING IN THE DISCUSSION OF OR THE VOTE ON
19	THAT PARTICULAR APPLICATION. AND AS WE HAVE ALWAYS
20	DONE, WE WILL REMIND YOU AT THE OUTSET OF THE
21	DISCUSSION OF EACH ITEM WHICH OF YOU HAVE CONFLICTS
22	OF INTEREST AND NEED TO REFRAIN FROM PARTICIPATING
23	IN THE DISCUSSION.
24	SOME ITEMS THAT WE'LL DISCUSS, INCLUDING
25	THE DISCOUNT PROPOSAL THAT WE'LL DISCUSS LATER THIS
	104

1	EVENING, HAVE THE POTENTIAL TO AFFECT ALL OF THE
2	APPLICATIONS FOR CIRM MAJOR FACILITIES GRANTS. AS A
3	RESULT, MEMBERS WITH AN INTEREST IN ANY APPLICATION
4	WILL BE PRECLUDED FROM MAKING OR PARTICIPATING IN
5	MAKING A DECISION ON THESE ITEMS. THAT LEAVES THE
6	FOLLOWING MEMBERS WHO CAN PARTICIPATE IN THE
7	DISCUSSION REGARDING THE DISCOUNT PROPOSAL. THEY
8	ARE MEMBERS KLEIN, GIBBONS, LOVE, NOVA, ROTH,
9	SAMUELSON, SERRANO-SEWELL, SHESTACK, AND WRIGHT.
10	TO THE EXTENT THAT IT BECOMES NECESSARY TO
11	REVIEW INDIVIDUAL APPLICATIONS, WE'LL FOLLOW THE
12	SAME PROCEDURES THAT WE FOLLOWED WITH RESPECT TO
13	PART 1 OF THE MAJOR FACILITIES GRANT APPLICATIONS ON
14	JANUARY 16TH AND 17TH. AND, MR. CHAIR, IT MIGHT BE
15	BEST FOR ME TO DELAY DISCUSSING THOSE PROCEDURES
16	UNTIL SUCH TIME AS WE REACH THAT POINT SO THAT IT'S
17	FRESH IN THE BOARD MEMBERS' MINDS.
18	CHAIRMAN KLEIN: THAT'S FINE. THANK YOU,
19	COUNSEL.
20	I'D LIKE TO NOW TURN TO DAVE LICHTENGER,
21	WHO'S CHAIRMAN OF THE MAJOR FACILITIES WORKING
22	GROUP. AS REAL ESTATE EXPERT, HE WAS CHAIR; DAVID
23	SERRANO-SEWELL WAS THE VICE CHAIR OF THAT GROUP.
24	AND IT IS WITH GREAT APPRECIATION FOR DAVID
25	LICHTENGER AND DAVID SERRANO-SEWELL THAT WE ARE ABLE

1	TO MOVE TONIGHT TO CONSIDER THEIR RECOMMENDATIONS.
2	IT'S TREMENDOUS THE AMOUNT OF WORK THAT HAS BEEN PUT
3	IN BY THIS COMMITTEE, AND WE THANK YOU BOTH.
4	MR. LICHTENGER: THANK YOU, BOB. IT'S A
5	PLEASURE TO BE HERE TODAY TO ADVISE THE ICOC OF THE
6	RECOMMENDATIONS OF THE FACILITIES WORKING GROUP AS A
7	RESULT OF THE REVIEW OF THE MAJOR RESEARCH
8	FACILITIES RFA.
9	PROP 71 INDICATES THE FUNCTION OF THE
10	FACILITIES WORKING GROUP INCLUDES MAKING
11	RECOMMENDATIONS TO THE ICOC ON INTERIM AND FINAL
12	CRITERIA, REQUIREMENTS, AND STANDARDS FOR
13	APPLICATIONS FOR AND THE AWARDING OF GRANTS AND
14	LOANS FOR BUILDINGS. THE FACILITIES WORKING GROUP
15	BEGAN WORK ON THIS RFA SHORTLY AFTER THE ICOC
16	CONCEPT APPROVAL OF THE MAJOR FACILITIES RFA IN
17	APRIL 2007.
18	WE SOON DECIDED THAT IT WOULD BE IMPORTANT
19	FOR THE FACILITIES WORKING GROUP TO SECURE PUBLIC
20	INPUT ON THE GOALS AND THE PROCESS THAT WE WOULD
21	FOLLOW IN MEETING OUR CHARGE. WITH THE LEADERSHIP
22	OF ICOC CHAIRMAN BOB KLEIN AND DAVID SERRANO-SEWELL,
23	THE VICE CHAIR OF THE FACILITIES WORKING GROUP, WE
24	DECIDED TO HOLD A SERIES OF PUBLIC MEETINGS TO
25	SOLICIT INPUT ON THIS RFA.
	104

1	FOUR PUBLIC MEETINGS WERE HELD IN THE
2	SUMMER OF 2007 TO PROVIDE THAT INPUT. OUR MEETINGS
3	IN SAN FRANCISCO, SACRAMENTO, LOS ANGELES, AND SAN
4	DIEGO PROVIDED THE OPPORTUNITY FOR POTENTIAL
5	APPLICANTS AND THE PUBLIC TO GIVE THE FACILITIES
6	WORKING GROUP INPUT. AFTER MANY HOURS OF TESTIMONY
7	AND DISCUSSION, WE SETTLED ON THE PROCEDURES AND THE
8	CRITERIA THAT WERE APPROVED BY THE ICOC IN AUGUST
9	2007.
10	THE PART 1 RFA WAS ISSUED SHORTLY AFTER
11	THAT MEETING WITH THE GRANTS WORKING GROUP HAVING
12	RESPONSIBILITY FOR THE INITIAL REVIEW FOR THE
13	SCIENTIFIC MERIT OF THE APPLICANTS IN THE PART 1
14	REVIEW PROCESS. IN JANUARY THE ICOC APPROVED 12 OF
15	THE 17 APPLICANTS FOR FURTHER CONSIDERATION BASED ON
16	THE GRANTS WORKING GROUP'S RECOMMENDATION.
17	SHORTLY THEREAFTER THE APPLICATION
18	INSTRUCTIONS FOR PART 2 OF THE RFA ADDRESSING THE
19	TECHNICAL AND FINANCIAL MERITS OF THE PROPOSALS WERE
20	ISSUED. APPLICATIONS WERE RECEIVED IN LATE FEBRUARY
21	THAT INCLUDED TOTAL REQUESTS OF \$336 MILLION IN CIRM
22	FUNDING. THIS EXCEEDED THE \$262 MILLION THAT HAD
23	BEEN DESIGNATED FOR THIS RFA BY 74 MILLION. CLEARLY
24	OUR WORK WAS CUT OUT FOR US IN THE FACILITIES
25	WORKING GROUP HOW TO BEST ALLOCATE OUR FUNDS.

1	THE REVIEW OF THE APPLICATIONS OCCURRED ON
2	APRIL 4TH AND 45TH WITH THE REAL ESTATE MEMBERS OF
3	THE FACILITIES WORKING GROUP ACTING AS THE REVIEWERS
4	OF THE APPLICATIONS. I'M PLEASED TO TELL YOU THAT
5	THESE APPLICATIONS WERE INNOVATIVE AND VERY
6	RESPONSIVE TO THE RFA. THE RESULTS OF OUR MEETING
7	ARE CONTAINED IN THE BINDERS THAT HAVE BEEN
8	DISTRIBUTED TO ALL THE MEMBERS.
9	FOR EACH APPLICATION THE INFORMATION
10	PROVIDED IN EACH APPLICATION INCLUDES THE FOLLOWING:
11	THE SUMMARY REVIEW OF THE FACILITIES WORKING GROUP.
12	THAT'S ON THE GOLDENROD PAPER. SECOND IS THE
13	SUMMARY OF THE GRANTS WORKING GROUP, WHICH IS ON
14	WHITE PAPER. YOU PREVIOUSLY REVIEWED THIS IN THE
15	JANUARY MEETING. NEXT ARE THE EXECUTIVE SUMMARIES
16	OF THE APPLICATION AND THE STAFF ANALYSIS ON BLUE
17	PAPER. NEXT IS THE REVIEW BY CIRM'S LABORATORY
18	PLANNING EXPERT STEVEN COPENHAGEN OF COPENHAGEN AND
19	CANNON WHO WAS ENGAGED BY CIRM TO HELP IN THE
20	REVIEW PROCESS. FINALLY, THE APPLICANTS WERE
21	AFFORDED THE OPPORTUNITY TO REVIEW THE STAFF
22	ANALYSIS PRIOR TO THE REVIEW MEETING TO CONFIRM THE
23	ACCURACY OF THE ANALYSIS. THE RESPONSES FROM EACH
24	OF THE APPLICANTS ARE ALSO INCLUDED IN YOUR BINDER,
25	AND THEY'RE ON YELLOW PAPER.
	108

AFTER THE GRANTS WORKING GROUP
COMPLETED FACILITIES WORKING GROUP COMPLETED A
THOROUGH AND DETAILED TECHNICAL REVIEW OF EACH
APPLICATION, THE VICE CHAIR, DAVID SERRANO-SEWELL,
PRESIDED OVER THE PROGRAMMATIC REVIEW PORTION OF THE
EVALUATION. WITH SOME KEY ADVICE FROM CIRM
PRESIDENT ALAN TROUNSON, WE DECIDED THAT OUR
RECOMMENDATIONS TO THE ICOC ON FUNDING SHOULD MIRROR
OUR TECHNICAL REVIEW OF THE APPLICATIONS.
THEREFORE, WE APPLIED EACH APPLICANT'S SCORE TO THE
AMOUNT OF FUNDS REQUESTED TO ARRIVE AT A RECOMMENDED
FUNDING AMOUNT.
AS YOU CAN SEE FROM THE SLIDE, THIS
PROCESS RESULTED IN A RECOMMENDED AMOUNT OF \$288.6
MILLION, WHICH IS MUCH CLOSER TO THE TARGETED BUDGET
OF \$262 MILLION THAN THE TOTAL OF THE INITIAL
REQUESTS. RATHER THAN HAVING THE WORKING GROUP
CONSIDER FURTHER REDUCTION, WE ELECTED TO RECOMMEND
THAT AMOUNT THAT THE TECHNICAL REVIEW SCORE
INDICATED. THIS WAY THE ICOC COULD ADDRESS THE
REMAINING \$27 MILLION GAP BY CONSIDERING A VARIETY
OF OPTIONS, INCLUDING INCREASING THE TARGET BUDGET
FOR THIS RFA.
MR. CHAIRMAN, THIS CONCLUDES MY REPORT. I
HOPE THAT THE ICOC FINDS THE RECOMMENDATIONS OF THE
109

1	FACILITIES WORKING GROUP USEFUL IN YOUR
2	DELIBERATIONS ON FUNDING. I'M VERY PLEASED TO BE
3	PART OF THIS REVIEW PROCESS, WHICH I FELT ALLOWED US
4	TO MAKE A COMPLETE, THOROUGH, AND FAIR EVALUATION OF
5	THE APPLICATIONS, AND I'D BE HAPPY TO ANSWER ANY
6	QUESTI ONS.
7	CHAIRMAN KLEIN: BEFORE QUESTIONS, I'D
8	LIKE, DAVID SERRANO-SEWELL, WOULD YOU LIKE TO ADD
9	YOUR COMMENTS?
10	MR. SERRANO-SEWELL: I WOULD. JUST VERY
11	BRIEFLY, THIS WAS THE FIRST INSTANCE IN WHICH THE
12	ICOC REALLY HAD TO ROLL UP ITS SLEEVES AND GET INTO
13	DRAFTING OF THE RFA. NORMALLY WE DELEGATE TO STAFF
14	THAT AUTHORITY. THEY COME BACK TO US, AS THEY HAVE
15	TODAY, WITH SORT OF A VERY DETAILED OUTLINE. WE
16	GIVE THEM THE AUTHORIZATION AND WE ALL GO ON DOWN
17	THE ROAD. IT REALLY WAS 13 MONTHS AGO IN WHICH THE
18	FACILITIES WORKING GROUP THAT WAS ENDORSED BY THE
19	ICOC WE ASKED FOR THE TIME TO DO THE DUE DILIGENCE,
20	COME UP WITH THE CRITERIA, HAVE THE HEARINGS, AS
21	DAVID HAS REPORTED. AND IT'S EASY TO SAY THAT, BUT
22	THOSE WERE REAL MEETINGS WE HAD WITH SUPPORT FROM
23	STAFF. BUT IT WAS REALLY CRUCIAL, AND I WAS REALLY
24	PROUD THAT THE ICOC HAD DELEGATED TO THE FACILITIES
25	WORKING GROUP TO COME UP WITH THIS PROCESS.

1	AND AS DAVID MENTIONED, EVERYBODY ON THAT
2	GROUP TOOK IT VERY SERIOUS, THE REAL ESTATE MEMBERS
3	OBVIOUSLY. BUT ALSO I WANT TO THANK AND ACKNOWLEDGE
4	THE ICOC AND PATIENT ADVOCATE MEMBERS THAT HAD TO GO
5	THROUGH THIS PROCESS AS WELL BECAUSE THEY ARE
6	MANDATED UNDER PROP 71 TO SERVE ON THAT WORKING
7	GROUP. AND IT WAS A LITTLE DIFFERENT I'LL SPEAK
8	FOR MYSELF FOR ME BECAUSE THROUGHOUT THIS
9	PROCESS, ONE, IT WAS IN PUBLIC, ABOUT 95 PERCENT OF
10	IT WAS IN PUBLIC, WHICH IS DIFFERENT THAN THE GRANTS
11	WORKING GROUP. AND THEN, TWO, THE PATIENT ADVOCATES
12	WERE ON EQUAL FOOTING WITH THE REAL ESTATE EXPERTS,
13	MEANING OUR VOTE HAD THE SAME WEIGHT AT THE WORKING
14	GROUP MEETINGS. THERE WAS SOME QUESTIONS. HOW
15	WOULD THAT WORK OUT EXACTLY? BUT IT WORKED OUT
16	REALLY VERY WELL.
17	SO THIS IS THE PROCESS WE CAME UP WITH,
18	COLLEAGUES, THROUGH WHATEVER AWARDS WE UNCOVER. I
19	THINK THE PROCESS REALLY DID WORK OUT AND IT WAS
20	EQUITABLE AND IT WAS TRANSPARENT AND IT WAS FAIR. I
21	NEVER THOUGHT FOR ONE MOMENT APRIL OF LAST YEAR WHEN
22	THIS DAY WOULD FINALLY COME. I HAD NO IDEA WHAT THE
23	OUTCOME MIGHT BE AND I STILL DON'T, BUT I KNEW WE
24	WOULD GET HERE. AND WE DID AND IT'S THROUGH THE
25	HARD WORK OF THIS ICOC THAT REALLY PUT THE EMPHASIS

1	ON LET'S THINK ABOUT HOW WE WANT TO DO THIS AND
2	LET'S DO THIS IN SORT OF A THOUGHTFUL AND MEANINGFUL
3	WAY.
4	AND I DON'T WANT TO DO THAT FOR ALL THE
5	RFA'S, NOR SHOULD WE, BUT FOR THIS ONE IT WAS THE
6	IT WAS REALLY THE RIGHT THING TO DO. AND SO I KNOW
7	THERE WILL BE TIME TOMORROW WITH THE PRESS
8	CONFERENCES AND PRESS RELEASES TO SAY WHAT A GREAT
9	JOB EVERYBODY DID, BUT I DID WANT TO REMIND EVERYONE
10	AND JUST EXPAND ON WHAT YOU SAY, DAVID, WHERE WE
11	STARTED FROM. THAT WAS A LONG 13 MONTHS.
12	CHAIRMAN KLEIN: I'D JUST LIKE TO FOLLOW
13	UP ON DAVID'S COMMENTS BY SAYING THAT THE BOARD
14	MEMBERS ARE EXTREMELY APPRECIATIVE OF RICK'S
15	COMMITMENT AND EXTRAORDINARY WORK EFFORT BECAUSE
16	WITHOUT ALL OF HIS TECHNICAL SUPPORT AND THE
17	CONSULTANTS HE BROUGHT INTO THE PROCESS
18	QUALITATIVELY, WE WOULD HAVE NOT HAD THE PROCESS
19	THAT ENDED UP HERE, WHICH WE'RE ALL VERY PROUD OF.
20	SO THANK YOU, RICK.
21	I'D LIKE TO SEE ARE THERE ANY QUESTIONS
22	FROM THE BOARD AT THIS POINT BEFORE WE HAVE
23	DR. TROUNSON'S PRESENTATION? WOULD YOU LIKE TO HOLD
24	YOUR QUESTIONS? OKAY. THANK YOU, DAVID.
25	DR. TROUNSON: THANK YOU, CHAIR. AND I
	112

1	CAME INTO THIS PROCESS RATHER LATE, BUT I WAS
2	PERSUADED TO COME OVER FOR THE SCIENCE DISCUSSIONS,
3	AND IT WAS A WAY OF INTRODUCING ME TO THE INCREDIBLE
4	POWER OF THE INSTITUTIONS THAT WERE PUTTING FORWARD
5	THESE PROGRAMS. AND IN MY DISCUSSIONS WITH THE
6	SCIENTISTS, IT'S VERY CLEAR FROM THESE INSTITUTIONS
7	THAT THEY'VE PUT IN AN ENORMOUS AMOUNT OF TIME. AND
8	I THINK THEY'VE HAD TO TAKE THAT AWAY FROM THEIR
9	RESEARCH TIME TO GET THIS DONE. AND I THINK WE NEED
10	TO ACKNOWLEDGE THAT FROM THE POINT OF VIEW OF THE
11	INSTITUTIONS. IT'S BEEN A REALLY HEAVY LOAD THAT
12	WAS IMPLIED, THAT YOU REALLY NEEDED TO PUT IN A VERY
13	STRONG APPLICATION TO MAKE IT SO.
14	SO HATS OFF TO ALL THE INSTITUTIONS FOR
15	PARTICULARLY THOSE SCIENTISTS WHO WERE SO CRITICAL
15 16	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF
16	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF
16 17	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO
16 17 18	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO LOOKED AT THE BUILDINGS. AND I CAN ONLY SAY IF I
16 17 18 19	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO LOOKED AT THE BUILDINGS. AND I CAN ONLY SAY IF I WAS A SCIENTIST STARTING OFF MY CAREER OR EVEN
16 17 18 19 20	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO LOOKED AT THE BUILDINGS. AND I CAN ONLY SAY IF I WAS A SCIENTIST STARTING OFF MY CAREER OR EVEN CHANGING MY CAREER, TO GO INTO SOME OF THESE, ANY OF
16 17 18 19 20 21	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO LOOKED AT THE BUILDINGS. AND I CAN ONLY SAY IF I WAS A SCIENTIST STARTING OFF MY CAREER OR EVEN CHANGING MY CAREER, TO GO INTO SOME OF THESE, ANY OF THESE INSTITUTIONS, THEY'RE JUST SOME OF THEM
16 17 18 19 20 21	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO LOOKED AT THE BUILDINGS. AND I CAN ONLY SAY IF I WAS A SCIENTIST STARTING OFF MY CAREER OR EVEN CHANGING MY CAREER, TO GO INTO SOME OF THESE, ANY OF THESE INSTITUTIONS, THEY'RE JUST SOME OF THEM ABSOLUTELY PHENOMENAL. AND I THINK THEY INCLUDE
116 117 118 119 220 221 222 233	IN THE SCIENTIFIC PHASE IN PARTICULAR. AND THEN, OF COURSE, AS DAVID SAYS, YOU KNOW, THE SPECIALISTS WHO LOOKED AT THE BUILDINGS. AND I CAN ONLY SAY IF I WAS A SCIENTIST STARTING OFF MY CAREER OR EVEN CHANGING MY CAREER, TO GO INTO SOME OF THESE, ANY OF THESE INSTITUTIONS, THEY'RE JUST SOME OF THEM ABSOLUTELY PHENOMENAL. AND I THINK THEY INCLUDE DESIGN ASPECTS THAT WILL REALLY ENHANCE THE WORKING

1	SO THE OBJECTIVE OF THIS RFA WAS REALLY TO
2	INCREASE THE CAPACITY OF STEM CELLS IN CALIFORNIA.
3	AND REALLY THE RESEARCH INITIATIVE WAS SET UP FOR
4	THIS PARTICULAR RFA BACK IN PROPOSITION 71. SO BACK
5	THEN THERE WERE ALREADY INSTITUTIONS THAT I VISITED
6	AS A SCIENTIST HERE WERE ALWAYS SWOLLEN WITH GOOD
7	PEOPLE. AND IT'S ALWAYS HARD TO FIND THOSE
8	ADDITIONAL SPACES IN A FAST GROWING FIELD. DEANS
9	AND OTHERS, VICE CHANCELLORS, GROUP LEADERS HAVE TO
10	WORK REALLY HARD TO SHOEHORN IN NEW SCIENTISTS IN AN
11	EXPANDING AREA. AND SO THERE WAS A NEED IDENTIFIED
12	THAT'S NOT GONE AWAY FOR THE NEED FOR THE RESEARCH
13	SPACE, BUT TO ACTUALLY DRAW IT TOGETHER SO THAT YOU
14	BROUGHT THE SCIENTISTS FROM THE WHOLE CAMPUS OR, IN
15	FACT, IN SOME OF THE APPLICATIONS TO DRAW THEM FROM
16	INSTITUTIONS AND REFORMAT THEM INTO ONE FACILITY IS
17	JUST AN EXTRAORDINARY ACCOMPLISHMENT.
18	AND THAT I KNOW BECAUSE I'VE SET UP
19	SEVERAL MAJOR INSTITUTES IN MY TIME. AND I JUST
20	KNOW HOW FANTASTICALLY THEY WORK WHEN YOU BRING
21	SCIENTISTS TOGETHER AND YOU ACTUALLY GET THEM TO
22	SUPPORT ONE ANOTHER, COMPETE WITH ONE ANOTHER,
23	CRITICIZE ONE ANOTHER, AND GENERALLY, YOU KNOW, WANT
24	TO TAKE THE FIELD WITH AN ACCELERANT FORWARD. THIS
25	IS WHAT THIS RFA IS ABOUT. SO IT'S PROMOTION OF

1	COLLABORATION, IT'S MULTIDISCIPLINARY, THE SENSE
2	THAT WE WANTED TO HAVE THE BASIC CONNECTED TO
3	TRANSLATION CONNECTED TO THE CLINIC. I THINK THAT'S
4	THE PIPELINE; AND AS I'VE SAID TO YOU BEFORE, THAT'S
5	WHERE WE'VE GOT TO GO. AND IF YOU JOIN THESE PEOPLE
6	TOGETHER, YOU WILL GET THEM MOVING BETWEEN THESE
7	SPACES, IN FACT, PARTICULARLY WITH PHYSICIAN-BASED
8	RESEARCHERS, GOING DOWN THE PIPELINE RIGHT FROM THE
9	BASIC DISCOVERY RIGHT TO THE CLINIC.
10	THE AWARD OF \$262 MILLION REFLECTS, I
11	THINK, A CAP THAT WAS PUT ON BY THE DESIGNERS OF
12	PROPOSITION 71 SO AS NOT ALL THE MONEY THAT WAS
13	BEING RAISED WOULD BE SORT OF PUT INTO BRICKS AND
14	MORTAR. SO THERE WAS A CAP SET THERE, AND THAT'S A
15	CAP WHICH WE CAN'T REALLY DO MUCH ABOUT, NOR MAYBE
16	SHOULD WE BECAUSE I THINK THE DESIGNERS OF PROP 71
17	GOT IT RIGHT. AND IT WAS AT THAT TIME A NECESSITY
18	TO PROVIDE SPACE THAT WAS FREE OF FEDERAL FUNDING,
19	AND THE ISSUES OF DECONTAMINATION, IF YOU LIKE, OF
20	THE DEMANDS OF NIH FUNDING NOT BEING ABLE TO BE
21	COUNTED IN YOUR INFRASTRUCTURE WHEN YOU DID YOUR
22	GRANT RETURNS. IT'S A VERY COMPLICATED PROCESS. IF
23	THE NIH SAYS YOU ONLY CAN DO THIS ACTIVITY IN THIS
24	BUILDING, AND IF YOU HAVE, THEN, A NUMBER OF PEOPLE
25	WORKING IN THAT SPACE THAT ARE OUTSIDE THAT, THEN

1	HOW THE HECK DO YOU DIVIDE THE ELECTRICITY, THE
2	WATER, EVERYTHING THROUGH IT. IT MAKES IT REALLY,
3	REALLY DIFFICULT, AND I'VE SEEN INSTITUTIONS
4	STRUGGLING IN THIS SPACE FROM MY TIME IN
5	REPRODUCTION AND ALSO THEN IN STEM CELL.
6	THE RECOMMENDED FUNDING CAME FROM
7	TENTATIVE CONTRIBUTIONS TO BUCKETS, SO-CALLED
8	BUCKETS, SO THAT CIRM INSTITUTES WHICH COULD GET UP
9	TO \$50 MILLION AS A CEILING, THE TENTATIVE VALUE
10	THERE RECOMMENDED BY THE ICOC AT 215 MILLION, AND
11	THEN THE NEXT CATEGORY 29 MILLION, AND THE LAST
12	CATEGORY 18 MILLION. AND YOU CAN SEE THAT THE
13	FACILITIES WORKING GROUP UNDER THE TWO DAVIDS CAME
14	UP WITH A RECOMMENDATION WHICH WAS A LITTLE
15	DIFFERENT, BUT, YOU KNOW, CLOSE, RELATIVELY CLOSE, I
16	THINK, TO THOSE ESTIMATES. AND I UNDERSTOOD THAT
17	THOSE ESTIMATES HAD BUILT-IN FLEXIBILITY OR A WAY IN
18	WHICH TO SORT OF HELP LEAD THE CONSTRUCTION PART OF
19	IT.
20	SO THE TOTAL WHICH WAS ON THE ICOC
21	TENTATIVE WAS \$262 MILLION, AND THE FACILITIES
22	WORKING GROUP 288.6 MILLION. SO YOU CAN SEE THERE'S
23	A DIFFERENCE THERE, THAT THERE WAS A LACK OF AN
24	ALLOCATION HERE OR AVAILABILITY OF 26.6 MILLION.
25	NOW, APPROVING THE FUNDING PLAN, THERE'S

1	APPROVED CAPITAL FUNDS FROM THE ICOC OF 227 MILLION
2	AND A \$35 MILLION ADDITIONAL EQUIPMENT CONTRIBUTION
3	OF 35 MILLION THAT MADE UP THE \$262 MILLION. AGAIN,
4	JUST BEEN THROUGH THIS A COUPLE OF TIMES IN THE
5	FACILITIES WORKING GROUP, AND THE DIFFERENCE 26.6
6	MI LLI ON.
7	WELL, YOU'VE GOT TO CLOSE THE GAP OR
8	YOU'VE GOT TO ASK THE INSTITUTES TO TAKE A FURTHER
9	CUT TO MAKE UP FOR THE 26.6 MILLION. THERE ARE
10	SEVERAL OPPORTUNITIES HERE FOR CLOSING THE GAP. SO
11	WE COULD, YOU KNOW, THE ICOC COULD SAY, WELL, LOOK,
12	YOU JUST CARVE OFF 26.6 MILLION FROM THOSE
13	INSTITUTES IN SOME SORT OF INDEX WAY AND WE'LL GET
14	TO THAT. BUT THROUGH SOME REALLY INNOVATIVE
15	FINANCIAL THINKING THAT GENUINELY DOESN'T COME FROM
16	ME, BUT YOU ALL KNOW WHERE IT COMES FROM, AND IT'S
17	CLEARLY ONE OF THE REASONS WHY WE LOVE TO HAVE THE
18	CHAIRMAN INVOLVED IN THESE THINGS, THE UP-FRONT
19	FUNDING DISCOUNTS THAT WE CAN NEGOTIATE ARE AROUND
20	17.6 MILLION. AND YOU CAN HAVE SOME FURTHER DETAILS
21	OF HOW THAT'S ARRIVED AT.
22	BUT IF THE INSTITUTES THAT HAVE THE
23	CAPACITY TO DO THAT AND THE INCLINATION, WHICH I'D
24	HAVE TO SAY IS JUST ABOUT ALL THE INSTITUTES THAT
25	COULD, GIVES A DISCOUNT, IF YOU LIKE, OF 17.6

1	MILLION. SO THAT CLOSES THE GAP CONSIDERABLY. I
2	THINK IN THESE AWARDS THERE IS A SIGNIFICANT AMOUNT
3	OF VITAL EQUIPMENT IN THESE INSTITUTES, AND THIS
4	EQUIPMENT WE'VE LOOKED AT, AND IT IS ABSOLUTELY
5	NECESSARY IN A LARGE PROPORTION OF THE CASES AND
6	IT'S EXTREMELY INNOVATIVE AS WELL. SO I DON'T THINK
7	WE WOULD HAVE ANY REAL DIFFICULTY IN SAYING TO THE
8	ICOC THAT FROM THE MANAGEMENT'S POINT OF VIEW AN
9	ADDITIONAL NINE MILLION TO ADD TO THE 35 MILLION
10	WOULD CLOSE THE GAP TO 26.6 MILLION.
11	YOU CAN TAKE IT FROM ME THAT I'D RATHER
12	SEE US DO THAT THAN TO SHAVE ANYTHING OFF THE
13	INSTITUTES BECAUSE I THINK THEY VE ALREADY TAKEN THE
14	TOUGH DOSE. I THINK THE DAVIDS DELIVERED THEM THE
15	TOUGH DOSE REALLY THROUGH THE FACILITIES WORKING
16	GROUP, AND I THINK, YOU KNOW, THEY RESPONDED IN A
17	MAGNIFICENT WAY TO THAT. I THINK WE, AS A
18	HUMANISTIC COMPONENT, THAT WE OUGHT TO CLOSE THE GAP
19	OUR WAY AND GET THESE INSTITUTES OFF AND START
20	BUILDING ALL OF THEM.
21	SO, MR. CHAIRMAN, I HOPE I DIDN'T GO TOO
22	FAR IN THAT REGARD, BUT I'M EXPRESSING THE VIEW OF
23	MANAGEMENT HERE, THAT THERE IS A WAY OF RESOLVING
24	THIS. AND THAT I'D HOPE THAT THE ICOC WOULD SEE A
25	WAY OF CLOSING THAT GAP TO ENABLE THE INSTITUTES TO

1	GET UNDERWAY FIERCELY ALMOST IMMEDIATELY. THANKS
2	VERY MUCH.
3	CHAIRMAN KLEIN: THANK YOU VERY MUCH, DR.
4	TROUNSON. SO WE ARE GOING TO GO INTO THE FIRST OF
5	THESE ELEMENTS THAT WE LOOK AT FOR CLOSING THE GAP.
6	WE'RE GOING TO FIND HERE THAT THE OPTIONS IN CLOSING
7	THIS GAP VARIOUSLY RANGE FROM 23 MILLION TO 17
8	MILLION. AND THERE IS, OF COURSE, AS HAS BEEN
9	DISCUSSED BY SOME MEMBERS OF THE BOARD, THE OPTION
10	OF CUTTING THE \$27 MILLION RATHER THAN DOING
11	FRONT-END FUNDING, AND THERE IS THE OPTION OF, IN
12	FACT, ACCEPTING FRONT-END DISCOUNTS AND CUTTING NINE
13	MILLION WITHOUT ANY EQUIPMENT FUNDS GOING UP.
14	SO WITH THE BENEFIT OF DR. TROUNSON'S
15	RECOMMENDATION AS A CONTEXT FOR WHAT WE'RE ABOUT TO
16	REVIEW, WE HAVE HAD A VERY ROBUST DISCUSSION AT THE
17	BOARD OF THE SCIENCE SCORES WHICH LED TO CUTTING OUT
18	FIVE OF THE 17 DIFFERENT APPLICANT INSTITUTIONS. WE
19	HAD A IN-DEPTH AND ANIMATED AND HIGHLY, HIGHLY
20	DETAILED DISCUSSION AT THE FACILITIES WORKING GROUP
21	THAT LED TO THE SCORES AND THE \$47 MILLION BEING
22	CUT.
23	IN GOING INTO THIS NEXT ELEMENT, JAMES
24	HARRISON, IF YOU COULD DISCUSS THE BASIC CONTEXT IN
25	WHICH THE FRONT-END DISCOUNTS AROSE AND THE POSITION
	110

1	OF THE FACILITIES WORKING GROUP IN RECOMMENDING THAT
2	THAT BE PURSUED.
3	MR. HARRISON: AT THE FACILITIES WORKING
4	GROUP'S APRIL 4TH AND 5TH MEETING, THE FACILITIES
5	WORKING GROUP CONSIDERED THE FACILITIES GRANT
6	ADMINISTRATION POLICY WHICH YOU ALL WILL REVIEW
7	TOMORROW. ONE COMPONENT OF THAT POLICY AUTHORIZES
8	THE ICOC TO APPROVE THE UP-FRONT DISBURSEMENT OF
9	GRANT FUNDS IN EXCHANGE FOR THE APPLICANT'S
10	AGREEMENT TO ACCEPT A DISCOUNT ON THE AMOUNT OF THE
11	GRANT AWARD THAT IT HAS REQUESTED.
12	THE FACILITIES WORKING GROUP CONSIDERED
13	THE FACILITIES GRANT ADMINISTRATION POLICY, AND IN
14	THAT CONTEXT ENDORSED THE CONCEPT OF HAVING THE
15	CHAIR APPROACH THE INSTITUTIONS THAT HAD SUBMITTED
16	PART 2 APPLICATIONS TO EXPLORE WITH THEM THE
17	POSSIBILITY OF ACCEPTING AN UP-FRONT DISCOUNT IN
18	EXCHANGE FOR A REDUCTION IN THE GRANT AMOUNT AS A
19	WAY OF REDUCING THE \$26.6 MILLION GAP THAT REMAINED
20	AFTER THE FACILITIES WORKING GROUP MADE ITS
21	RECOMMENDATIONS. AND WITH THAT DIRECTION, AFTER THE
22	FACILITIES WORKING GROUP HAD CONCLUDED ALL OF ITS
23	WORK, THE CHAIR UNDERTOOK THE TASK OF COMMUNICATING
24	WITH THE APPLICANTS IN HIS CAPACITY AS CHAIRMAN OF
25	THE ICOC AND NOT AS A MEMBER OF THE FACILITIES
	100

1	WORKING GROUP TO EXPLORE THE POSSIBILITY OF THIS
2	DI SCOUNT PROPOSAL.
3	CHAIRMAN KLEIN: THANK YOU, MR. HARRISON.
4	IN LOOKING AT THE POTENTIAL DISCOUNTS
5	DR. LOVE: IN LOOKING OVER THE MATERIALS,
6	MY RECOLLECTION WAS THAT THIS DISCOUNT WAS ABOUT 9
7	PERCENT.
8	CHAIRMAN KLEIN: 9 PERCENT. WELL, WHAT
9	I'M ABOUT TO SHOW YOU IS THAT THERE WAS A RANGE OF
10	DISCOUNTS THAT RESPONDED TO THE PROPOSALS INITIALLY
11	MADE, REQUESTS FOR PROPOSALS, AND THEN TRYING TO
12	RECONCILE THAT RANGE. THAT'S HOW WE GOT TO A
13	9-PERCENT RECONCILED AMOUNT, WHICH IS WHAT
14	DR. TROUNSON IS SHOWING.
15	DR. LOVE: SO THE TWO QUESTIONS WERE
16	HOW I'M PRESUMING THAT THE DISCOUNT IS DERIVED
17	BECAUSE YOU GET THE MONEY EARLIER; THEREFORE, YOU
18	CAN INVEST THE MONEY AND GROW AND ESSENTIALLY
19	THROUGH YOUR ENDOWMENT OR WHATEVER CREATE THE
20	ADDITIONAL MONEY. SO I GUESS THAT QUESTION LEADS TO
21	HOW QUICKLY WHAT AMOUNT OF TIME ARE YOU GETTING
22	THIS MONEY IN ADVANCE? ARE YOU GETTING IT 12 MONTHS
23	OR 24 MONTHS?
24	THE OTHER QUESTION I HAD WAS IN KIND OF
25	GOING DOWN THIS LIST, I NOTICE THAT SOME OF THE
	121

1	AMOUNTS REQUESTED VERSUS AMOUNT RECOMMENDED ON A
2	PERCENTAGE BASIS WERE ACTUALLY PRETTY BIG. AND IT
3	JUST LEADS ME TO WONDER ABOUT ARE WE COMFORTABLE
4	THAT THE AMOUNT THAT WE'RE GIVING ACTUALLY WILL
5	ALLOW THE PROJECT TO ACTUALLY GO FORWARD IN THOSE
6	KIND OF CASES WHERE THE DELTA IS EIGHT OUT OF \$30
7	MI LLI ON.
8	CHAIRMAN KLEIN: WELL, YOU HAVE TWO
9	QUESTIONS. FIRST, I WOULD LIKE TO ANSWER THE SECOND
10	QUESTION, WHICH IS WE'RE OPERATING AT THIS TIME,
11	BEFORE ADDITIONAL CUTS ARE MADE, UNDER LETTERS THAT
12	WE BELIEVE ARE STILL OPERATIONAL THAT SAYS THAT IF
13	OUR FUNDS ARE ACCEPTED, THEY WILL BUILD THE FULL
14	SCIENTIFIC MISSION THAT IS PROPOSED AT THE PROPOSED
15	QUALITY WITHOUT COMPROMISING THAT QUALITY.
16	NOW, ONE OF THE CONCERNS THAT I HAVE
17	PERSONALLY AND HAVE SAID PUBLICLY, WHICH WAS THE
18	REASON THAT I INITIALLY IN THE FACILITIES WORKING
19	GROUP PROCESS SUGGESTED THE FRONT-END DISCOUNTS, IS
20	TO TRY AND AVOID ADDITIONAL DEEP CUTS THAT MIGHT, IN
21	FACT, COMPLETELY DESTROY ONE OF THE APPLICANT'S OR
22	MULTIPLE APPLICANTS' ABILITY TO PERFORM.
23	SO WITHIN THE RANGES OF THE \$47 MILLION
24	CUTS, WE BELIEVE THESE PROJECTS AT THIS TIME ARE
25	STILL VIABLE. IN TERMS OF THE DISCOUNTS, IT'S

1	IMPORTANT AND AS A PART OF OUR PROCESS I WANT TO
2	SHOW YOU THE ORIGINAL RESPONSE TO THE PROPOSAL, BUT
3	FIRST I WANT TO LAY OUT THE MOTIVATION, PART OF
4	WHICH YOU COVERED, FOR THESE DISCOUNTS BEING
5	OFFERED.
6	UNDER OUR STANDARD PROCESS, WE WOULD
7	PROVIDE THESE FUNDS AS THE LAST FUNDS IN QUARTERLY
8	IN ARREARS. IN ADDITION, WE WOULD HOLD BACK A
9	10-PERCENT RETAINAGE. IN ADDITION, THE GAP POLICY
10	PROVIDES THAT FOR EVERY MONTH THAT YOU GO BEYOND 24
11	MONTHS TO CREATE THE PRIORITY GRANTING, THERE'S A
12	1-PERCENT PENALTY POTENTIAL, AT THE DISCRETION OF
13	THE PRESIDENT, OF THE GRANT AMOUNT YOU RECEIVE.
14	SO AS WE GO THROUGH THESE TERMS, YOU WILL
15	SEE THERE'S A NUMBER OF MOTIVATIONS TO ACCEPT
16	THIS TO PROPOSE AND AGREE TO A VOLUNTARY
17	COOPERATIVE DISCOUNT. FROM A POLICY BASIS, THE
18	FACILITIES COMMITTEE DISCUSSION, I THINK, DAVID
19	SERRANO-SEWELL, WOULD BE APPROPRIATE TO SAY WAS ON
20	THE SIDE OF TRYING TO MAINTAIN THE PORTFOLIO OF
21	INSTITUTIONS BECAUSE THEY HAD ALL BEEN
22	SCIENTIFICALLY RECOMMENDED FROM SCIENTIFIC SCORES
23	AND FROM A PORTFOLIO BASIS. IF WE DEVELOP MORE
24	CAPACITY, OUR CHANCES OF HAVING A GREATER ARRAY OF
25	POSITIVE SUCCESSES IN THE SCIENTIFIC EXPLORATION

1	WOULD BE ENHANCED. WE DON'T KNOW WHERE ANY
2	INDIVIDUAL SUCCESS IS GOING TO BE; BUT BY HAVING A
3	BROADER PORTFOLIO OF HIGH QUALITY, WE WOULD INCREASE
4	OUR CHANCES.
5	MR. SERRANO-SEWELL: YES, IT IS, BOB.
6	JUST TO AMPLIFY ON THAT, THE FACILITIES WORKING
7	GROUP TOOK VERY SERIOUSLY THE ICOC'S CHARGE TO LEAD
8	WITH THE SCIENCE. WE WERE LEFT TO FIGURE THAT OUT
9	EXACTLY. WE HAD THE RAW DATA AND INFORMATION FROM
10	THE GRANTS WORKING GROUP, SO THAT REALLY HELPED
11	GUIDE US IN OUR POLICY DISCUSSION. AND WE ALSO
12	LOOKED AT PROP 71'S MANDATE, WHICH IS, AS BOB SAID,
13	TO FUND AS MUCH AS POSSIBLE ON THE FACILITIES SIDE.
14	AND WE COULD HAVE GOTTEN INTO THE BUSINESS AND WE
15	STILL CAN OF TAKING THE KNIFE AND JUST START CUTTING
16	AND CUTTING AND CUTTING. WE DIDN'T WANT TO DO THAT.
17	THERE WAS A PROPOSAL TO TALK ABOUT THE
18	DISCOUNT OPTION, TO AUTHORIZE BOB IN HIS CAPACITY AS
19	CHAIR OF THE ICOC TO HAVE THOSE DISCUSSIONS WITH THE
20	APPLICANTS, AND SEE IF IT WOULD BEAR FRUIT. I THINK
21	IT DID. WE'LL HAVE THAT DISCUSSION NOW IF IT MAKES
22	GOOD SENSE. THAT'S UP FOR DEBATE. BUT I THINK
23	THAT'S WHAT REALLY DROVE THE WORKING GROUP.
24	CHAIRMAN KLEIN: THAT'S RIGHT. BUT AT THE
25	BOTTOM LINE, BY PROVIDING MONEY UP FRONT RATHER THAN

DEPENDING UPON THE PROJECT 18 TO 22 MONTHS IN THE
FUTURE, NOT ONLY DO THEY HAVE THE ABILITY TO HOLD
CERTAIN FUNDS IN ENDOWMENT AT HIGHER YIELDS
DEPENDING UPON THE INSTITUTIONS. THE UC SYSTEMS
DON'T HAVE THAT OPTION FULLY. SOME OF THEM HAVE
LITTLE DIFFERENT PROCEDURES, BUT GENERALLY THEY
DON'T HAVE THAT OPTION. THE PRIVATE INSTITUTIONS
HAVE SOME OPTIONS IN THAT REGARD. BUT THEY ALSO
HAVE THE OPTION OF GETTING FUNDS EARLY, WHICH IN A
SOFT CONSTRUCTION MARKET MAY ENABLE THEM TO BUY DOWN
CERTAIN CONSTRUCTION COSTS. MONEY IS POWERFUL IN
THIS MARKET. AND IT MAY HELP THEM, IN FACT, TO
ACCELERATE THEIR CONSTRUCTION, WHICH SAVES CARRYING
COST AND PUTS SCIENCE FASTER.
WITH THAT, JAMES, COULD YOU GO THROUGH THE
TERMS, WHICH HAVE BEEN DISTRIBUTED TO THE PUBLIC, AS
DISCUSSED IN PRINCIPLE IN MY PROPOSAL TO THE WORKING
GROUP. AND THEN IF YOU COULD, AFTER WE GO THROUGH
THE TERMS, THEN WE WILL WALK THROUGH THE CHART THAT
SUMMARIZES THE FIRST AND SECOND ROUND OF THESE
DI SCUSSI ONS.
DISCUSSIONS. MR. HARRISON: SO YOU ALL SHOULD HAVE A
MR. HARRISON: SO YOU ALL SHOULD HAVE A

1	ON THE SCREEN REFLECTS WHAT YOU HAVE IN FRONT OF
2	YOU. IT'S IN THE POCKET OF YOUR BINDERS IN THE
3	FRONT, AND IT'S LABELED "ITEM NO. 14 - PROPOSED
4	TERMS OF DISCOUNT OFFER."
5	CHAIRMAN KLEIN: WHAT JAMES HARRISON IS
6	ABOUT TO GO THROUGH ARE THE RECONCILED TERMS. TO
7	PROVIDE CLARITY TO ALL THE APPLICANTS, THE INITIAL
8	TERMS THAT WERE EXPLORED, AS WE'LL SEE LATER, LOOKED
9	AT A 10-PERCENT ANNUALIZED DISCOUNT WHICH PRODUCED
10	HIGHER NUMBERS IN SOME CASES AND LOWER IN SOME CASES
11	FOR REASONS WE'LL EXPLAIN YET LATER.
12	MR. HARRISON: SO AS BOB STATED, WHAT WE
13	HAVE PRESENTED TO THE APPLICANTS WHO ARE WILLING TO
14	PARTICIPATE IN THIS PROGRAM ARE THE FOLLOWING TERMS.
15	FIRST, THE APPLICANTS MUST AGREE TO ACCEPT A NOMINAL
16	OR ONE-TIME DISCOUNT OF 9 PERCENT. IF AN
17	APPLICANT'S DISCOUNT OFFER IS ACCEPTED BY THE ICOC,
18	THE APPLICANT WILL NOT BE SUBJECT TO ANY FURTHER
19	REDUCTION IN THE AMOUNT OF THE GRANT AWARD
20	RECOMMENDED BY THE FACILITIES WORKING GROUP OTHER
21	THAN THE DISCOUNT THAT IT HAS AGREED TO. IF THE
22	APPLICANT IS ABLE TO UTILIZE THE EARLY ADVANCE OF
23	GRANT FUNDS TO OBTAIN CONSTRUCTION SAVINGS THAT
24	DON'T REDUCE OR COMPROMISE THE SCIENTIFIC VALUE OF
25	THE FACILITY OR THE SCOPE AND SPECIFICATION OF THE
	10/

1	FACILITY AS OUTLINED IN THE APPLICATION, THEN THE
2	SAVINGS BELONG TO THE APPLICANT. THEY WILL NOT BE
3	SUBJECT TO RECAPTURE BY CIRM.
4	LIKEWISE, ANY ADDITIONAL BENEFITS TO THE
5	APPLICANT FROM THE UP-FRONT DISBURSEMENT OF GRANT
6	FUNDS ACCRUE TO THE APPLICANT, NOT TO CIRM. AS BOB
7	MENTIONED A MOMENT AGO, UNDER THE OTHER DISBURSEMENT
8	OPTION, WHICH IS A LAST FUNDS IN PAYMENT, CIRM WOULD
9	WITHHOLD THE FINAL 10 PERCENT OF THE GRANT AWARD.
10	IN THE CASE OF APPLICANTS WHO ARE PARTICIPATING IN
11	THE UP-FRONT OR DISCOUNT PROGRAM, CIRM WOULD NOT
12	WITHHOLD THE FINAL 10 PERCENT OF THE GRANT AWARD,
13	BUT THE APPLICANT WOULD BE REQUIRED TO AGREE TO
14	OCCUPANCY AND COMPLETION GUARANTEES AS PART OF THE
15	NOTICE OF GRANT AWARD.
16	THE NEXT TERM IS THAT AS LONG AS THE
17	APPLICANT MAKES A GOOD-FAITH EFFORT TO COMPLETE THE
18	PROJECT ACCORDING TO THE PROPOSED SCHEDULE SET FORTH
19	IN THE APPLICATION AND UNDERTAKES ALL COMMERCIALLY
20	REASONABLE EFFORTS TO COMPLETE ON THE PROPOSED
21	SCHEDULE, THEN ANY PENALTY FOR THE DELAY WOULD BE
22	OFFSET BY THE APPLICANT'S WOULD BE OFFSET UP TO
23	THE APPLICANT'S FRONT-END DISCOUNT AS LONG AS ANY
24	ADDITIONAL TIME TO COMPLETE DOES NOT EXCEED SIX
25	MONTHS. BOB MENTIONED A MOMENT AGO THAT UNDER A

1	LAST FUNDS IN DISBURSEMENT, THE APPLICANT COULD BE
2	SUBJECT TO PENALTIES FOR DELAY OF 1 PERCENT A MONTH.
3	CHAIRMAN KLEIN: AND THE APPLICANT STILL
4	WOULD UNLESS THEY COULDN'T SHOW GOOD-FAITH
5	COMMITMENT TO MAKING THE ORIGINAL SCHEDULE.
6	MR. HARRISON: ANOTHER COMPONENT OF THE
7	UP-FRONT DISCOUNT PROPOSAL WOULD REQUIRE THE
8	APPLICANT TO SUBMIT A POSTCOMPLETION AUDIT CONDUCTED
9	AT THE APPLICANT'S EXPENSE OF PROJECT EXPENDITURES
10	TO ENSURE THAT ALL STATE FUNDS HAD BEEN SPENT ON
11	QUALIFIED COSTS. THE AUDIT WOULD HAVE TO BE
12	SUBMITTED WITHIN 120 DAYS OF PROJECT COMPLETION.
13	ALL THE OTHER TERMS OF THE FACILITIES
14	GRANT ADMINISTRATION POLICY WOULD APPLY TO THE
15	APPLICANT INCLUDING ANY AMENDMENTS THAT THE ICOC MAY
16	APPROVE TOMORROW TO IMPLEMENT THE PROVISIONS OF THIS
17	DI SCOUNT PROGRAM.
18	FOR EVERY DAY OF DELAY BY CIRM IN
19	DISTRIBUTING FUNDS AFTER JUNE 30TH, THE APPLICANT'S
20	PROPOSED DISCOUNT WOULD BE ADJUSTED DOWNWARDS BY
21	1/169TH, WHICH IS THE NUMBER OF DAYS IN 22 MONTHS AS
22	THE DENOMINATOR AND ONE IS THE NUMERATOR, 22 MONTHS
23	BEING THE LIKELY AVERAGE TIME OF DISBURSEMENT UNDER
24	THE LAST FUNDS IN OPTION. CIRM WOULD ONLY ADJUST
25	THE AMOUNT OF THE DISCOUNT FOR DELAYS CAUSED BY CIRM
	128

1	PURSUANT TO THIS PROVISION.
2	IF THE ICOC APPROVES THE DISCOUNT
3	PROPOSAL, CIRM WOULD EXECUTE A NOTICE OF GRANT AWARD
4	WHICH WOULD INCLUDE CERTAIN ADMINISTRATIVE
5	CONDITIONS SUBSEQUENT WITH COMPLIANCE OF THOSE
6	CONDITIONS TO BE COMPLETED WITHIN 90 DAYS
7	THEREAFTER. THESE CONDITIONS WOULD ADDRESS THE
8	REQUIREMENTS INCLUDED IN THE FACILITIES GRANT
9	ADMINISTRATION POLICY, INCLUDING THE REQUIREMENT
10	THAT NO ELEMENT OF THE DISCOUNT AGREEMENT, IN THE
11	OPINION OF THE PRESIDENT OF CIRM, WOULD BE
12	INTERPRETED TO COMPROMISE THE SCIENTIFIC VALUE OF
13	THE FACILITY OR THE SCOPE AND SPECIFICATIONS OF THE
14	FACILITY.
15	FINALLY, TO PARTICIPATE IN THE UP-FRONT
16	DISBURSEMENT PROGRAM, APPLICANTS HAD TO MEET A
17	CERTAIN CREDIT STANDARD. THEY EITHER HAD TO HAVE A
18	LONG-TERM MOODY'S OR S&P CREDIT RATING OF A OR
19	BETTER, BE A CAMPUS OF THE UNIVERSITY OF CALIFORNIA
20	SYSTEM, OR POST A GUARANTEE UNTIL THE DATE THAT THE
21	FUNDS WOULD HAVE BEEN DISBURSED UNDER THE LAST FUNDS
22	IN PROVISION BY AN ENTITY WITH A LONG-TERM MOODY'S
23	OR S&P CREDIT RATING OF A OR BETTER.
24	SO THAT SUMMARIZES THE ESSENTIAL TERMS OF
25	THE DISCOUNT PROPOSAL WHICH HAS BEEN ACCEPTED
	120

1	CONDITIONALLY BY EIGHT APPLICANTS.
2	CHAIRMAN KLEIN: OKAY. SO THE IMPORTANT
3	POINT HERE IN TERMS OF THIS LAST BULLET POINT IS
4	THAT WE COULDN'T BE IN A POSITION OF PROVIDING
5	UP-FRONT FUNDS UNLESS WE HAD AN EXTRAORDINARILY
6	DEFENSIBLE CASE ON THE CREDIT OF THE APPLICANT AND
7	THEIR ABILITY TO PERFORM. SO IF WE HAVE A
8	PERFORMANCE GUARANTEE AND AN A OR BETTER CREDIT
9	RATING, WE'RE IN A POSITION TO TAKE THAT RISK. OR
10	IF THEY ARE A PART OF THE STATE OF CALIFORNIA, WE
11	CAN TAKE THAT RISK, BUT WE COULD NOT TAKE THAT RISK
12	UNLESS AN INSTITUTION THAT DID NOT MEET THOSE
13	STANDARDS PUT UP A GUARANTEE FROM AN A OR BETTER
14	CREDIT SOURCE, LIKE A LETTER OF CREDIT FROM AN A OR
15	BETTER BANK.
16	IF WE CAN NOW GO TO THE CHART. SO THIS
17	FIRST CHART, IF YOU SEE IN THE FAR RIGHT COLUMN, THE
18	DISCOUNTS THAT WERE ORIGINALLY RECEIVED ON THE FIRST
19	ROUND WERE 22,856,000. THOSE REMAIN OUTSTANDING
20	OFFERS THAT ARE BINDING. IT IS NOT MY POSITION AS
21	THE BOARD CHAIR, NOR THE PRESIDENT'S POSITION TO
22	TAKE A FINAL POSITION ON THOSE DISCOUNT OFFERS
23	BECAUSE THAT IS A DECISION LEFT TO THE BOARD.
24	NOW, IN ANALYZING THIS, THERE ARE
25	INDIVIDUAL LETTERS THAT ARE IN THIS THAT ARE IN
	120

1	THIS OFFER THAT ARE CONDITIONAL UPON OTHER
2	INSTITUTIONS OFFERING THE SAME LEVEL OF DISCOUNT.
3	AND AS THESE DISCOUNTS, IF YOU WERE TO CALCULATE,
4	YOU'D SHOW PERCENTAGE DISCOUNTS FROM 5.71 PERCENT TO
5	20 PERCENT. NOW, PART OF THAT IS CAUSED BY THE FACT
6	THAT INDIVIDUAL INSTITUTIONS, BEING ENTREPRENEURIAL,
7	IMMEDIATELY REALIZED THAT THEY COULD MAKE A
8	COUNTEROFFER DIFFERENT THAN THE TERMS OF THE
9	PROPOSAL. AND OTHERS IN THIS SPIRIT OF TEAMWORK
10	WANTED TO RESPOND EXACTLY TO WHAT WAS REQUESTED.
11	ONE OF THE THINGS THAT YOU LOOK FOR AND REWARD IN
12	SCIENTIFIC DISCOVERY IS THAT SPIRIT OF ADVENTURE,
13	WHICH CERTAINLY WAS BROADLY DISTRIBUTED HERE SINCE
14	NO TWO DISCOUNT PERCENTAGES WERE EQUIVALENT.
15	LOOKING AT THIS AND TRYING TO BRING A
16	RESPONSIBLE AND EQUITABLE AND FAIR PROPOSAL TO THE
17	BOARD, IN MEETING WITH DR. TROUNSON AND RICK KELLER
18	AND IN DISCUSSIONS WITH DAVID LICHTENGER AND DAVID
19	SERRANO-SEWELL, THE PROPOSAL HERE WAS RECONCILED BY
20	PUTTING OUT ANOTHER COUNTEROFFER WITH THIS ONE
21	REMAINING A BINDING OPPORTUNITY OR OPTION FOR THE
22	BOARD. AND THAT COUNTEROFFER COULD WE SHOW THAT
23	SLI DE PRODUCED \$17, 630, 000.
24	NOW, NOTE THE SAN DIEGO CONSORTIUM IS A
25	NEW ENTITY, SO IT LACKED THE CREDIT TO MAKE A

1	PROPOSAL. THE BUCK INSTITUTE IS A NEW, RELATIVELY
2	YOUNG ENTITY WHO LACKED THE CREDIT TO MAKE A
3	PROPOSAL. AND IN ADDITION, UC SANTA CRUZ AND THE
4	SAN DIEGO CONSORTIUM ARE TWO ENTITIES THAT FACE
5	COASTAL ZONE APPROVAL. SO THEY HAVE A CONTINGENT
6	PROVISION WHICH THEY PROVIDED EVIDENCE THAT SAYS
7	THEY'RE GOING TO BE SUCCESSFUL, YET IT'S DIFFICULT
8	TO RAISE MONEY ON A DEFINITIVE PROGRAM UNLESS YOU
9	KNOW WHETHER YOU'RE GOING TO GET PAST THE CALIFORNIA
10	COASTAL ZONE, WHICH IS NOT A HUNDRED PERCENT
11	PREDI CTABLE.
12	THE ISSUE HERE, THEREFORE, WAS THAT YOU
13	HAVE A COUPLE OF ENTITIES THAT HAD TROUBLE PUTTING
14	TOGETHER A PROPOSAL BECAUSE THEY DIDN'T HAVE THE
15	CREDIT, AND GETTING A GUARANTEE WOULD BE A PROBLEM,
16	PARTICULARLY WITH THE SAN DIEGO CONSORTIUM'S
17	CONTINGENCY, IN FACT, GETTING DONOR SUPPORT UNTIL
18	THAT CONTINGENCY IS CONCLUDED.
19	NOW, IN ANY CASE, UNTIL THOSE
20	CONTINGENCIES ARE CONCLUDED, OUR GAP POLICY WOULD
21	INDICATE THERE ARE NO FUNDS, AS IN ZERO FUNDS, THAT
22	WILL BE ADVANCED. WE'RE NOT TAKING ANY RISK ON
23	WHETHER THAT IS ACCOMPLISHED.
24	SO WITH UC MERCED, WE HAVE A NEW ENTITY, A
25	BRAND-NEW ENTITY THAT IS NOT IN A POSITION TO MAKE

1	AN INSTITUTIONAL COMMITMENT ON THE COME WITHOUT
2	HAVING ALL THE FUNDS IN HAND. AND IT SHOULD BE
3	DISCLOSED HERE THAT IN THE QUESTIONING OF THE MAJOR
4	FACILITIES WORKING GROUP, IT WAS PUT ON THE TABLE
5	THAT THEY PROBABLY HAVE AN EXTRA MILLION TWO BEYOND
6	THE FIGURES SHOWN THERE TO RAISE FOR ADDITIONAL
7	EQUIPMENT. THEY CAN BECOME OPERATIONAL WITH THIS
8	AMOUNT, BUT TO BECOME OPTIMALLY OPERATIONAL,
9	QUESTIONS RAISED BY DAVID SERRANO-SEWELL RESULTED IN
10	AN ANSWER THAT THEY ARE GOING TO COMMIT THEMSELVES
11	TO RAISING A MILLION TWO BEYOND WHAT IS SHOWN.
12	SO WE HAVE A COMPLICATED FACT PATTERN
13	HERE. FACING THAT FACT PATTERN, WE HAVE EIGHT OUT
14	OF THE 12 INSTITUTIONS, INCLUDING ALL THE
15	INSTITUTIONS IN THE INSTITUTE CATEGORY AND THE
16	CENTERS OF EXCELLENCE CATEGORY, WHO HAD THE CREDIT
17	TO MAKE PROPOSALS WHO DID MAKE PROPOSALS. AND THE
18	KEY QUESTION HERE FOR THE BOARD TO CONSIDER IS
19	WHETHER A 9-PERCENT DISCOUNT IS ACCEPTABLE, WHICH
20	WOULD YIELD 17,630,000, OR WHETHER THEY PREFER TO GO
21	WITH THE 23 MILLION, UNDERSTANDING THAT SOME OF
22	THOSE DISCOUNTS MAY BE DEEP ENOUGH AND THESE
23	INSTITUTIONS MAY HAVE STRETCHED FAR ENOUGH THAT IT
24	WOULD CREATE A REAL PROBLEM. AND THE OTHER ISSUE IS
25	HOW DO YOU APPLY DIFFERENTIAL RATES UNDER THE SAME

1	PROGRAM TO SCIENTIFIC ORGANIZATIONS THAT ARE ALL
2	RECOMMENDED AND ARE ALL DOING THIS VOLUNTARILY TO
3	TRY AND MAKE THIS PROGRAM WORK? SO THERE WERE
4	EQUITY CONSIDERATIONS HERE AS WELL.
5	WITH THOSE FACTS BEING ON THE TABLE, WE
6	WANTED THE BOARD TO BE ABLE TO ASK ANY OF THE
7	APPLICANTS THAT ARE REPRESENTED IF THEY HAD ANY
8	SPECIFIC QUESTIONS. I'VE PUT ON THE TABLE, AS IS
9	REFLECTED IN THE PUBLIC TRANSCRIPT OF THE MAJOR
10	FACILITIES MEETING, SOME VERY SPECIFIC FACTS THAT
11	YOU MAY WANT TO ASK ABOUT. BUT IN ADDITION, YOU MAY
12	HAVE QUESTIONS ABOUT THE PROGRAM, REALIZING, OF
13	COURSE, AS I SAID, THAT WE HAD A ROBUST DISCUSSION
14	ON SCIENTIFIC SCORES BEFORE, AND THERE'S BEEN A VERY
15	VIBRANT DISCUSSION AT THE FACILITIES COMMITTEE.
16	ARE THERE ANY QUESTIONS THE BOARD WANTS TO
17	ADDRESS TO ANY OF THE APPLICANTS IN THE ROOM?
18	WELL
19	DR. LOVE: I'M NOT SURE THIS IS A QUESTION
20	OF THE APPLICANTS, BUT IF WE'RE TRYING TO CLOSE THE
21	\$26.6 MILLION GAP, THE OTHER PROPOSAL LOOKED MORE
22	FAVORABLE. IT'S CLOSER. BUT THERE ARE ISSUES HERE
23	BECAUSE THERE ARE DIFFERENT RATES, SO THERE'S AN
24	EQUITY CONCERN, RIGHT?
25	AND YOU ALSO SAID THERE'S A CONCERN THAT
	134

1	SOME INSTITUTIONS MAY HAVE STRETCHED THEMSELVES TOO
2	FAR.
3	CHAIRMAN KLEIN: WELL, SOME OF THESE
4	INSTITUTIONS AS A PERCENTAGE HAVE PROVIDED A 15- TO
5	20-PERCENT DI SCOUNT. OTHERS WERE AT 5.7 AND 6.19
6	PERCENT, SO OTHERS DIDN'T STRETCH VERY MUCH AT ALL.
7	BUT WE'RE TRYING TO COOPERATE IN A TEAM SPIRIT.
8	IT'S JUST THAT THE QUESTION HERE IS THAT, A, IS IT
9	EQUITABLE UNDER THE SAME PROGRAM WHERE IT'S A
10	VOLUNTARY PROGRAM WHERE PEOPLE ARE BEING TO ASKED TO
11	COLLABORATE TO HELP US FUND A PORTFOLIO OF SCIENCE
12	FOR THE WHOLE STATE; AND, B, IF YOU LOOK AT THE
13	PERCENTAGES, IT PUTS A LOT OF STRESS ON SOME OF THE
14	I NSTI TUTI ONS.
15	IF YOU LOOK, SOME OF THOSE INSTITUTIONS
16	ALSO SUFFERED VERY LARGE CUTS, SO THERE ARE
17	INSTITUTIONS THAT HAD 7 OR \$8 MILLION CUTS AND HAVE
18	LARGE DISCOUNTS. RIGHT? AND SO THE ISSUE IS THE
19	COMPOUNDING EFFECT.
20	DR. LOVE: DID YOU SAY THIS IS THE
21	BINDING THIS IS WHAT THE
22	CHAIRMAN KLEIN: THEY'RE BOTH BINDING.
23	DR. LOVE: THEY' RE BOTH BINDING.
24	CHAIRMAN KLEIN: WE HAVE AN IRREVOCABLE
25	BINDING CHOICE IN TAKING GROUP ONE OR GROUP TWO
	135

135

1	BECAUSE ONLY THE BOARD CAN MAKE THIS DECISION.
2	DR. LOVE: CAN WE MIX PART OF GROUPS?
3	MR. HARRISON: BOB, CAN I MAKE ONE
4	ADDITIONAL POINT, WHICH I THINK YOU ALREADY MADE,
5	WHICH IS THAT IN MAKING ITS ORIGINAL PROPOSAL AND
6	RESPONSE TO OUR OFFER, ONE OF THE APPLICANTS DID
7	MAKE ITS PROPOSAL CONDITIONAL UPON THE OTHER
8	APPLICANTS ALL ACCEPTING THE SAME RATE. SO THAT IS
9	STILL A CONDITION EVEN UNDER THE ORIGINAL PROPOSAL.
10	CHAIRMAN KLEIN: THAT'S RIGHT. AND IF YOU
11	KNOCK THAT APPLICANT OUT, YOU KNOCK OUT \$5 MILLION,
12	WHICH, INTERESTINGLY, BRINGS YOU TO 17 MILLION. SO
13	THAT IS THE POSITION THAT WE'RE GOING TO REVISIT THE
14	FIRST THING IN THE MORNING BECAUSE WE HAVE
15	ADDITIONAL NONCONFLICTED PATIENT ADVOCATES WHO ARE
16	COMING IN THE MORNING. WE WILL REVIEW A PORTION OF
17	THIS, BUT WE WANT A THOUGHTFUL CONSIDERATION FROM
18	THE BOARD OF THIS, AND WE WANTED TO MAKE SURE THAT
19	IF THE BOARD MEMBERS HAD QUESTIONS OF THE
20	APPLICANTS, THAT THEY ASK THEM TONIGHT. SO AGAIN
21	MR. ROTH: MR. CHAIRMAN, WILL THERE BE
22	TIME TOMORROW WE'RE WAY DOWN INTO TRYING TO CLOSE
23	THE GAP. WILL THERE BE TIME TOMORROW JUST TO
24	DISCUSS HOW WE GOT HERE AND GO BACK UP INTO THIS
25	IS THE FIRST TIME WE'VE HAD A CHANCE TO TALK TO THE
	124

1	FACILITIES WORKING GROUP. AND I WANT TO AT LEAST
2	HAVE SOME CLARITY ON THE DECISION-MAKING PROCESS
3	THAT GOT US THERE. I DON'T WANT TO LOSE THE FOREST
4	FOR THE TREES HERE.
5	CHAIRMAN KLEIN: THERE WILL ABSOLUTELY BE
6	THAT TIME, BUT I WOULD SUGGEST IF YOU WANT TO ASK
7	THESE QUESTIONS TONIGHT, BECAUSE IN CASE THERE'S ANY
8	BACKGROUND RESEARCH OR TRANSCRIPT WE NEED TO PULL
9	UP, I WANT TO BE ABLE TO MAKE SURE THERE'S NO DELAY
10	TOMORROW MORNING. IF YOU'VE GOT SOME QUESTIONS
11	TONI GHT, LET'S
12	MR. ROTH: MY QUESTIONS ARE MORE ON HOW WE
13	RECTIFIED THE SCORES FOR THE SCIENTIFIC PART WITH
14	THE FACILITIES WORKING GROUP PART AND HOW YOU MADE
15	THE CUTS ON THE BASIS OF THAT. SO I WILL GO INTO
16	THAT TOMORROW, BUT IT'S JUST IT SEEMS TO ME THAT
17	WE'RE MAYBE TRYING TO BE ALL THINGS TO ALL PEOPLE
18	HERE AND MAKE THE NUMBERS WORK REGARDLESS OF HOW
19	THEY DID ON THE SCIENTIFIC PART OF THAT. AND I
20	BELIEVE THAT SOME OF THE CENTERS ASKED FOR
21	REASONABLE AMOUNTS AND ARE BEING PENALIZED FOR
22	TRYING TO BE REASONABLE AND VICE VERSA. SO I JUST
23	WANT TO UNDERSTAND HOW YOU DEALT WITH THAT AND
24	WHETHER WE CAN SUPPORT THAT.
25	CHAIRMAN KLEIN: TWO THINGS. ONE, DAVID,
	137

1	WHY
2	MR. SERRANO-SEWELL: I'M GLAD DUANE,
3	I'M GLAD YOU'RE BRINGING THIS UP BECAUSE SOMEONE
4	NEEDS TO ASK HOW DID THE FACILITIES WORK ARRIVE AT
5	OUR INITIAL SET OF RECOMMENDATIONS? AND IS NOW THE
6	TIME TO DO THAT? ARE WE DOING THAT TOMORROW?
7	CHAIRMAN KLEIN: IN REALITY, WE HAVE THREE
8	OR FOUR CRITICAL MEMBERS WHO WE'RE GOING TO HAVE TO
9	REPEAT PART OF THIS.
10	MR. SERRANO-SEWELL: PART OF WHAT?
11	CHAIRMAN KLEIN: HOWEVER, THOSE MEMBERS
12	HAVE BEEN ON THE MAJOR FACILITIES COMMITTEE. SO
13	IT'S IMPORTANT FOR THOSE MEMBERS WHO HAVE NOT BEEN
14	ON THE MAJOR FACILITIES COMMITTEE THAT WE ADDRESS
15	DUANE'S QUESTION NOW IF WE CAN.
16	MR. ROTH: I REALLY DON'T HAVE ANY
17	SPECIFIC INDIVIDUAL ONES, BUT I WOULD LIKE THE
18	MEMBERS OF THE BOARD THAT CAN HAVE THIS DISCUSSION
19	TO HAVE IT TOMORROW WHEN WE'RE ALL HERE SO THAT WE
20	DON'T HAVE TO GO THROUGH IT AGAIN.
21	CHAIRMAN KLEIN: OKAY.
22	DR. LOVE: AND TO THE EXTENT THAT YOU WERE
23	RAISING AN ISSUE ABOUT INSTITUTIONS, I WOULD BE
24	INTERESTED GENERICALLY, I THINK THE WHOLE BOARD
25	WOULD BE INTERESTED GENERICALLY, IF THERE ARE
	138

1	INSTITUTIONS THAT ARE IN THE AUDIENCE TONIGHT WHO
2	HAVE SOME PREVAILING VIEWS ON THIS AND THEY MAY NOT
3	BE HERE TOMORROW, THAT I THINK WE SHOULD TRY TO HEAR
4	WHAT THEY HAVE TO SAY BECAUSE I'M SURE THEY'VE BEEN
5	THINKING ABOUT THIS, AND I THINK IT WOULD BE
6	INSTRUCTIVE FOR US TO HEAR THEIR COMMENTS.
7	CHAIRMAN KLEIN: SO ARE THERE INSTITUTIONS
8	THAT ARE HERE TONIGHT THAT WILL NOT HAVE A
9	REPRESENTATIVE HERE TOMORROW? HOWEVER, WE'RE GOING
10	TO TRY AND MOVE THROUGH THIS EXPEDITIOUSLY TOMORROW
11	BECAUSE THE MEMBERS COMING TOMORROW HAVE BEEN
12	THROUGH THE MAJOR FACILITIES MEETING. SO IF THERE'S
13	SPECIFIC INSTITUTIONS YOU'D LIKE TO ASK QUESTIONS
14	OF, GETTING THAT OUT ON THE RECORD TONIGHT WOULD BE
15	HELPFUL.
16	I WOULD LIKE DAVID AND ALAN, JUST TO
17	CREATE A FOUNDATION, MAYBE WE SHOULD ADDRESS DUANE'S
18	QUESTI ON.
19	MR. LICHTENGER: CERTAINLY. I'D BE HAPPY
20	TO. SO I THINK ALAN ACTUALLY WAS THE ONE THAT CAME
21	UP WITH THE ELOQUENT SOLUTION THAT WORKED OUT SO
22	NICELY WHERE WE ACTUALLY DIDN'T HAVE TO REALLY
23	CONSIDER THE SCIENCE SCORES DURING THE PROGRAMMATIC
24	REVIEW PROCESS BECAUSE IT SEEMED TO HAVE AN
25	EQUITABLE, FAIR COMPONENT WHEN WE APPLIED ALAN'S

1	PROPOSED SOLUTION TO ALL THE APPLICANTS WHERE WE
2	GOT, WE FELT, CLOSE ENOUGH TO THE \$262 MILLION. I
3	KNOW WE WERE SHORT BY \$26.6 MILLION, BUT IT SEEMED
4	TO BE THE FAIR AND EQUITABLE AND RIGHT SOLUTION
5	GIVEN THAT ALL THE APPLICANTS DID ACTUALLY MAKE THE
6	GRANTS WORKING GROUP CUT TO BE THERE TO BE IN THE
7	PART 2 APPLICATION.
8	SO, YOU KNOW, THAT WAS KIND OF THE
9	CONSENSUS OF THE FACILITIES WORKING GROUP. MY
10	PERSONAL RECOMMENDATION WOULD BE TO THE ICOC TO TRY
11	TO FIND A WAY TO FUND THE GAP. AND, YOU KNOW, I'M
12	SOMEWHAT AGNOSTIC ABOUT HOW IT'S DONE, BUT AS LONG
13	AS THERE'S A WAY TO FIND THAT ADDITIONAL FUNDS, THAT
14	WOULD BE MY PERSONAL RECOMMENDATION.
15	I THINK SOME OF THE INSTITUTIONS HAVE BEEN
16	CUT SUBSTANTIALLY. WE DID CONSIDER POTENTIALLY
17	DURING THE PROGRAMMATIC REVIEW HAVING AN ADDITIONAL
18	PROCESS WHERE, AS THE VICE CHAIR POINTED OUT, OF
19	HAVING ADDITIONAL CUTS INVOLVING THE SCIENCE SCORE,
20	BUT WE ELECTED NOT TO GO THERE AT THE PRESIDENT'S
21	SUGGESTI ON.
22	MR. SERRANO-SEWELL: ALAN, BEFORE YOU
23	START AND IN PART IN LAYING THE FOUNDATION, MAYBE,
24	RICK, AFTERWARDS YOU CAN GIVE A VERY BRIEF SUMMATION
25	OF OUR PROCESS, THE FACILITIES WORKING GROUP. WE

1	MET, WE SCORED, WE HAD A DISCUSSION, THOSE SCORES
2	WERE TALLIED I'M DOING IT. THOSE SCORES WERE
3	TALLIED BY STAFF. WE FOLLOWED THE SAME PROCESS THAT
4	THE GRANTS WORKING GROUP FOLLOWS EXCEPT IT WAS IN
5	PUBLIC. AND I WANT YOU TO ELABORATE MORE ON IT
6	BECAUSE YOU WERE INTIMATELY INVOLVED. AND THEN WE
7	HAD THAT DISCUSSION. THAT WAS SORT OF THE FIRST
8	PIECE OF IT, WHICH WAS LONG, AND THEN DR. TROUNSON
9	CAME IN WITH SOMETHING THAT MADE A LOT OF SENSE.
10	AND PART OF OUR PROGRAMMATIC REVIEW THAT
11	WAS BROUGHT UP BY DEBBIE HYSEN WAS THAT WE HAD TO
12	TAKE INTO CONSIDERATION THE SCIENTIFIC Y SCORE U
13	SCORE, WHICH I THINK TIED IT ALTOGETHER REALLY
14	NEATLY BECAUSE THERE WAS SOME CORRELATION. I'LL
15	STOP THERE. IF YOU COULD ADDRESS THAT AS PART OF
16	RESPONDING TO DUANE AND LAYING THE FOUNDATION, IT
17	WOULD BE HELPFUL.
18	MR. ROTH: SO MY CRITICISM IS NOT OF THE
19	WORK THAT YOU DID IN THE FACILITIES WORKING GROUP AT
20	ALL. THE ONE CRITICISM I DO HAVE IS I THINK YOU
21	DOUBLE PENALIZE WHEN YOU HAVE A SCORE THAT DEALS
22	WITH URGENCY AND A PENALTY ON THE BACK END THAT
23	DEALS WITH IT TOO. SO YOU HAVE A DOUBLE COUNTING.
24	SET THAT ASIDE.
25	MR. SERRANO-SEWELL: THAT'S FINE. NOT SO
	1/1

MUCH I THINK FOR EVERYONE'S EDIFICATION, IT WOULD
BE HELPFUL JUST TO REPEAT BRIEFLY WHAT WE DID THAT
DAY, HOW IT ENDED UP WITH THE U SCORE. EVERYONE IS
SAYING ALAN'S RECOMMENDATION WAS SO EQUITABLE.
GREAT. JUST ELABORATE ON IT JUST A LITTLE BIT. YOU
MAY DI SAGREE.
CHAIRMAN KLEIN: DAVID, I THINK YOU'RE
THINKING TOO, WE HAVE A CHART THAT SHOWS HOW THESE
NUMBERS ALIGN WITH THE U SCORE, WHICH WAS THE
SCIENTIFIC GROUP'S ANALYSIS OF THE POTENTIAL
CONTRIBUTION OF THESE FACILITIES TO THE FUTURE
CAPACITY OF THESE INSTITUTIONS TO DELIVER ON THE
MISSION. NOW, THEY'RE NOT GOING TO BE EXACT, BUT
THEY PROVIDE YOU WITH A RELATIVE CONTRIBUTION VALUE
FROM A SCIENTIFIC PERSPECTIVE. AND REMEMBER, WE
WENT INTO THIS SESSION WITH FIVE DIFFERENT
APPLICANTS BEING TOTALLY ELIMINATED BASED ON SCIENCE
SCORES. SO THERE WAS AN INTENT TO DEAL WITH THE
REMAINING 12 INSTITUTIONS AS ALL PART OF A QUALITY
PORTFOLIO OF RESEARCH CAPACITY.
BUT DO WE HAVE THAT CHART, RICK, WITH THE
U SCORE?
MR. KELLER: IT'S THE FIRST PAGE IN YOUR
BINDER IS THE CHART THAT I THINK YOU'RE REFERRING
TO.
142

1	CHAIRMAN KLEIN: THAT'S NOT THE CHART
2	DOES IT SHOW IT
3	MR. KELLER: IT SHOWS THE X, Y, Z, AND THE
4	U SCORE IN THE BLUE. USE AND CONTRIBUTION SCORE.
5	CHAIRMAN KLEIN: USE AND CONTRIBUTION
6	SCORE, BUT WE HAD A CHART THAT HAD THE DOLLAR AMOUNT
7	RIGHT NEXT TO THE U SCORE. WHAT DAVID
8	SERRANO-SEWELL WAS COMMENTING ON, IF YOU LOOK AT THE
9	U SCORE AND THE DOLLARS AMOUNTS, THEY FOLLOWED
10	RELATIVELY WELL IN DESCENDING ORDER THE U SCORES.
11	THE USE AND CONTRIBUTION SCORES, SO YOU
12	GOT AN X SCORE FOR BASIC SCIENCE, A Y SCORE FOR
13	APPLIED, A Z FOR CLINICAL, AND THEN A U SCORE WAS
14	THE OVERALL SCORE FROM THE SCIENTIFIC PEER REVIEW
15	SESSION. AND ONLY THE QUALIFIED APPLICANTS CAN
16	DISCUSS THIS. ONLY THE QUALIFIED BOARD MEMBERS CAN
17	DI SCUSS THI S.
18	MR. ROTH: ANYWAY, THAT U SCORE WAS ADDED.
19	IT WAS X, Y, Z, THEN WE ADDED A U SCORE. THAT
20	WASN'T ORIGINALLY PART OF THAT SCORING, AND SOMEBODY
21	DECIDED WE SHOULD DO THAT.
22	CHAIRMAN KLEIN: NO. NO. THE PEER REVIEW
23	GROUP
24	MR. ROTH: THEY DECIDED TO DO THAT. IF I
25	REMEMBER RIGHT, THAT WASN'T PART OF THE
	142

1	CHAIRMAN KLEIN: THE SCIENTIFIC PEER
2	REVIEW PROVIDED THE U SCORE BECAUSE WE ASKED THEM IN
3	THEIR MANDATE TO PULL TOGETHER THE OVERALL ANALYSIS
4	OF WHAT THIS FACILITY WOULD CONTRIBUTE TO THEIR
5	MI SSI ON.
6	MR. LICHTENGER: MR. CHAIRMAN, I WANT TO
7	POINT OUT ONE FACT ABOUT THIS U SCORE AND HOW WE
8	ARRIVED AT THIS. THE TECHNICAL ANALYSIS AND THE
9	SCORING, ACCORDING TO THE PRESIDENT'S SUGGESTION,
10	ACTUALLY CORRELATED VERY HIGHLY TO THE U SCORES
11	WITHOUT US ACTUALLY APPLYING A DIFFERENT SCIENTIFIC
12	CUT TO THE PROCESS. SO IT WAS INTERESTING THAT BY
13	JUST EVALUATING THE FACILITIES ON THE TECHNICAL
14	CRITERIA DEFINITIONS THAT WE HAD, THAT WE FOUND NOT
15	A PERFECT CORRELATION, BUT A VERY CLOSE CORRELATION
16	TO THE U SCORE. THEREFORE, WE DIDN'T HAVE TO GO, WE
17	FELT, INTO A FURTHER ANALYSIS DURING THE
18	PROGRAMMATIC REVIEW LED BY THE VICE CHAIR BECAUSE IT
19	ALREADY ACTUALLY WE ALREADY ARRIVED AT WHERE WE
20	WANTED TO BE WHERE IT CLOSELY CORRELATED TO IT.
21	SO IT'S IMPORTANT THAT YOU UNDERSTAND THAT
22	THE FACILITIES WORKING GROUP MEMBERS DIDN'T WE
23	DIDN'T ACTUALLY HAVE TO GO THAT NEXT STEP DURING THE
24	PROGRAMMATIC REVIEW BECAUSE THE TECHNICAL ANALYSIS
25	ACTUALLY LED US TO THE PLACE WE WANTED TO BE WITHOUT
	144
	1 <i>1 /1 /1</i>

1	HAVING TO GO THROUGH THAT ADDITIONAL STEP.
2	MR. ROTH: ANYWAY, THIS IS GETTING A
3	LITTLE BIT AT WHAT I'M TALKING ABOUT. JUST STEPPING
4	WAY BACK FROM IT, WHERE WE STARTED, WE WERE GOING TO
5	HAVE TWO CENTERS OF EXCELLENCE ONCE UPON A TIME.
6	THAT WAS THE SORT OF PLACE WE STARTED. AND THEN WE
7	GOT THE STRATEGIC PLAN, AND WE SAID WE WOULD FUND
8	FIVE OR MORE AT TENS OF MILLIONS, AND WE'D FUND MUCH
9	LOWER LEVELS AT 5 TO 10 MILLION, AND THAT WAS IN THE
10	STRATEGIC PLAN. THEN WE GOT TO WE SORT OF TOOK
11	EVERYBODY AND WE PUT THEM TOGETHER, AND WE'RE TRYING
12	NOW TO RATIONALIZE HOW WE CAN GET THERE.
13	HERE ARE MY SIMPLE QUESTIONS. HOW CAN
14	STANFORD NOT GET A PERFECT SCORE AND FULLY FUND?
15	HOW CAN STANFORD NOT GET \$50 MILLION? THAT TO ME
16	SEEMS STRANGE. I GO DOWN, IF YOU LOOK AT THE TOP
17	SCORING ONES ON THE SCIENTIFIC REVIEW, AND TED YOU
18	BROUGHT THIS UP, THE PERCENTAGES OF THE ASK VERSUS
19	THE GRANT JUST DON'T MAKE MUCH SENSE, INCLUDING THIS
20	LAST CONVERSATION WE HAD. YOU KNOW, I CAN LOOK DOWN
21	HERE AT THE BOTTOM AND SAY THAT SANTA BARBARA, WHICH
22	GOT A 70 ON THAT U SCORE, GOT 74 PERCENT, AND A 71
23	AT MERCED GOT AN 84 PERCENT OF THE ASK. SO THOSE
24	ARE JUST THINGS THAT I THINK WE NEED TO UNDERSTAND.
25	I THINK OTHER INSTITUTIONS, DAVIS, UCLA,
	4.45

1	IRVINE, ALL DID REMARKABLE ON THE SCORES, AND SAN
2	FRANCISCO AND OTHERS. MANY THAT DID VERY WELL, IF
3	YOU LOOK AT THESE SCORES JUST IN ISOLATION, AND YOU
4	GO OVER TO THE RIGHT, AND I UNDERSTAND YOU WENT
5	THROUGH A PROCESS AND WERE THERE
6	MR. SERRANO-SEWELL: APPROVED BY THE ICOC.
7	APPROVED BY THE ICOC, JUST FOR THE RECORD.
8	MR. ROTH: ON SCIENTIFIC SCORES, THAT'S
9	ALL I'M TALKING ABOUT, AND SAYING THAT THERE SEEMS
10	TO ME TO BE A DISCONNECT, AND THE DISCONNECT IS THAT
11	WE REALLY ARE TRYING TO ACCOMMODATE EVERYONE. AND
12	THAT, I THINK, MOST OF US KNOW ALWAYS ENDS UP IN A
13	SITUATION LIKE THIS.
14	THE FINAL ONE, AND I DON'T SAY THIS
15	BECAUSE I'M FROM SAN DIEGO, BUT THEY MUST BE
16	FEELING, IF I WERE THEM, LIKE, GEE, IF WE HAD EACH
17	COME ON OUR OWN, WE'D PROBABLY HAVE A HUNDRED
18	MILLION UP ON THE BOARD, NOT 50 OR 40. SO THAT'S
19	THE POINT THAT I THINK THERE'S A LOT OF THINGS THAT
20	SCORED WELL SCIENTIFICALLY THAT IN THE END PROBABLY
21	GET US TO WHAT WE REALLY SET OUT TO DO, WHICH IS
22	EXCELLENCE, SCIENTIFIC EXCELLENCE, REWARD THE BEST
23	OF THE BEST.
24	MR. SERRANO-SEWELL: I'M GLAD WE'RE HAVING
25	THIS CONVERSATION, DUANE. WE COULD HAVE IT TODAY,

1	WE COULD HAVE IT TOMORROW, WE COULD HAVE IT ANY
2	TIME. BECAUSE THAT WAS SOMETHING THAT I THINK EVERY
3	ICOC MEMBER, ESPECIALLY I'LL SPEAK FOR MYSELF
4	WAS REALLY TRYING TO STRUGGLE WITH, A BASIC
5	FUNDAMENTAL QUESTION. I DO RECALL AT OUR LAST ICOC
6	MEETING, YOU DID RAISE THE ISSUE, AND YOU MADE IT
7	VERY CLEAR. AS WE GO THROUGH THIS PROCESS AND THE
8	END GAME, WHICH IS TODAY AND TOMORROW, WOULD THERE
9	BE AN INSTANCE IN WHICH AN APPLICANT GOT ZERO? WE
10	TOLD YOU YES. WE SAID ABSOLUTELY THERE CAN BE AN
11	INSTANCE WHEN SOMEBODY WHO ASKS FOR 50 MILLION GOT
12	ZERO DOLLARS OR 20 MILLION OR SOME FRACTION OR SOME
13	DI SCOUNT.
14	BUT I HAVE TO SAY, YOU KNOW, AGAIN I'LL
15	SPEAK FOR MYSELF, I THINK THE SENTIMENT'S REFLECTED
16	IN THE RECOMMENDATION, THE GOAL WAS TO FUND AS MUCH
17	AS POSSIBLE THAT MET THE SCIENTIFIC THRESHOLD OF
18	QUALITY. NOW, THERE'S VARYING SCORES. THEY'RE NOT
19	ONLY THE TOP TIER. THEY ARE SPREAD OUT, AND WE
20	THINK THE FUNDING REFLECTS THAT AS WELL. YOU KNOW,
21	THERE WERE SOME ISSUES WITH SOME APPLICANTS IN THEIR
22	FACILITIES APPLICATIONS. NOT EVERYBODY GOT GREAT
23	SCORES. SOME PEOPLE DID. MY POINT IS, I GUESS, MY
24	BROADER POINT TO YOUR POINT IS WE TRIED TO FUND AS
25	MUCH AS POSSIBLE. THAT WAS OUR THAT WAS MY

1	BASIS.
2	NOW, IF THAT'S WRONG, IF COLLECTIVELY WE
3	THINK THAT'S NOT A GOOD IDEA, OKAY. WE CAN GET THE
4	SCALPEL OUT TOMORROW. WE CAN START SAYING, YOU KNOW
5	WHAT, UC MERCED, ALL THINGS BEING EQUAL, THE
6	SCIENTIFIC SCORE, NO, WE DON'T THINK YOU SHOULD GET
7	AS MUCH. YOU THINK STANFORD SHOULD HAVE GOT A
8	PERFECT SCORE. OKAY, FINE. WE'LL GIVE THEM MORE
9	MONEY. THEN WE'LL JUST GO ON DOWN THE LINE, ON DOWN
10	THE LINE, ON DOWN THE LINE, AND THAT, I THINK, WOULD
11	NOT BE FAIR. IT DOESN'T TAKE INTO ACCOUNT THE
12	COMPLEXITIES OF THIS PROCESS, AND THIS PROCESS WAS
13	VERY COMPLEX BECAUSE WE ASKED OURSELVES TO FUND ALL
14	THESE CENTERS IN ONE SHOT INSTEAD OF DIVIDING IT UP
15	INTO THREE RFA'S. WE COULD HAVE DONE THAT. AS
16	GROUP A YEAR AGO, WE SAID NO. WE WANT TO GET THIS
17	ALL DONE IN ONE SHOT.
18	SO I THINK IT'S NOT A PERFECT WORK
19	PRODUCT, BUT IT'S CLOSE BECAUSE IT DOES ADDRESS THE
20	BROADER ISSUES THAT WE ATTEMPTED TO DO. THAT WAS
21	OUR GOAL. THAT WAS OUR CHARGE.
22	CHAIRMAN KLEIN: OKAY.
23	DR. TROUNSON: MR. CHAIRMAN, I JUST WANT
24	TO CLARIFY WHAT THE PROCESS WAS BECAUSE I THINK IT
25	DOES SOUND A BIT CONFUSING TO ME AS WELL. I KNOW

148

1	CLEARLY WHAT THE SITUATION HAS BEEN. FIRST OF ALL,
2	THE SCIENCE CATEGORIES, AS YOU SAID, WENT THROUGH
3	AND GAVE A RANKING ON SCIENCE. THOSE THAT DIDN'T
4	MAKE THAT CUTOFF WERE NOT INVITED TO THE SECOND
5	ROUND. SO THAT WAS THE SCIENCE SCORES. THE SCIENCE
6	SCORES ARE GENERALLY PRETTY HIGH. I THINK MOST OF
7	THE ESTABLISHMENTS ARE UP IN THE 90S, 80S, AND THERE
8	WERE SOME THAT CAME DOWN IN THE 70S. SO ESSENTIALLY
9	THEY REALLY DID SCORE VERY WELL.
10	YOU KNOW, WHEN WE REVIEWED THAT IN THE
11	SCIENCE SENSE, WE SAID THESE INSTITUTIONS, YOU KNOW,
12	HAVE GOT VERY GOOD PERFORMING PROGRAMS. WE DIDN'T
13	HAVE THE KIND OF DETAIL ON EACH PROJECT THAT YOU
14	WOULD HAVE IN A GRANTS WORKING GROUP BECAUSE IT WAS
15	DONE REALLY AS AN OVERALL SUMMARY OF WHAT THOSE
16	FACILITIES WERE REALLY CONCENTRATING ON AND THEIR
17	CAPACITY AND SO ON. SO THERE WAS A GOOD BROAD LOOK,
18	A THOUSAND-FOOT LOOK, IF YOU LIKE, AT THESE
19	INSTITUTIONS. AND I THINK THEY CAME OUT VERY MUCH
20	AS I WOULD HAVE EXPECTED THOSE INSTITUTIONS IN THEIR
21	SUBMISSIONS. THEY'RE FANTASTIC, ALL OF THEM. I
22	JUST SAY THE REST THAT DIDN'T MAKE IT ARE PRETTY
23	GOOD TOO, BUT THEY JUST DIDN'T MAKE IT. WE WENT
24	THROUGH THAT.
25	NOW, THE SECOND PART OF IT WAS DIVORCED
	149

1	FROM THE SCIENCE SIDE. NOTE SCIENCE MARKS COMING
2	INTO THE NEXT PART OF IT, BUT YOU AGREED THAT THERE
3	WAS A SCORE TO BE SET UP BY THE FACILITIES WORKING
4	GROUP THAT CONSISTED OF VALUE, LEVERAGE, URGENCY,
5	SHARED RESEARCH, FUNCTIONALITY TO GIVE YOU A TOTAL
6	POINTAGE OUT OF A HUNDRED. AND THE ALLOCATION TO
7	WHAT THOSE PARTICULAR POINTS WERE GIVEN A SCORE OF
8	FROM 15 TO 25 PERCENT. SO LEVERAGE WAS PRETTY HIGH.
9	IT WAS UP AT 25. VALUE WAS AT 25. FUNCTIONALITY
10	WAS AT 15. SHARED FACILITIES WERE AT 15.
11	NOW, THAT CAME THROUGH WITH A MARK OUT OF
12	A HUNDRED, RIGHT, YOU ADDED THOSE THROUGH. ALL WE
13	SAID WAS THAT GAVE A PERCENTAGE, IF YOU LIKE,
14	BECAUSE IT'S OUT OF ONE HUNDRED. WE SAID WHY DON'T
15	WE APPLY THAT TO THE GRANTS THAT WERE REQUESTED. SO
16	IN THE CASE OF STANFORD, THEY DID PRETTY WELL
17	BECAUSE THEY REQUESTED 50 MILLION, AND THEY GOT 90
18	PERCENT OF 50 MILLION. WHATEVER THAT SCORE WAS,
19	THEY GOT IT. SO THERE WAS A REDUCTION OF WHATEVER
20	IT WAS, 8 PERCENT OF THE 50 MILLION, BECAUSE THEY
21	GOT THAT 90-PERCENT SCORE. THERE ARE OTHER
22	INSTITUTES THAT GOT ON THAT COMPOSITE SCORE 73, AND
23	THAT MIGHT HAVE BEEN A BIT DIFFERENT IN SOME CASES
24	BECAUSE OF THE ADVANTAGE APPLIED FOR LEVERAGE OR
25	URGENCY. THOSE FIGURES WHERE THERE WAS SOME

1	VARIANCES THERE, THAT THOSE ONES CONTRIBUTED TO SOME
2	DIFFERENCES. SO, AGAIN, THEY'RE A PERCENTAGE OF
3	WHAT THOSE INSTITUTIONS REQUESTED.
4	NOW, WHEN I LOOKED AT ALL THE OTHER WAYS
5	OF INDEXING, IN KIND OF INDEXING, THOSE ARE VERY
6	MINOR CHANGES REALLY FROM ONE THING TO ANOTHER. BUT
7	IF YOU APPLIED THOSE SCORES, YOU COULD REDUCE THE
8	REQUESTED AMOUNT BY 47 MILLION, AND THAT WOULD BRING
9	IT THROUGH TO THE ICOC WITH A DEFICIT OF 26.6
10	MILLION. SO THE ICOC HAS STILL GOT TO DEAL WITH THE
11	26.6 MILLION.
12	NOW, I KNOW THOSE INSTITUTES THAT HAVE HAD
13	THAT CUT, WHATEVER IT IS, THE PERCENTAGE ON
14	STANFORD, THE PERCENTAGE ON THE BUCK INSTITUTE, AND
15	THE VARIOUS, ALL HURT, THEY ALL HURT, BUT SOMETHING
16	HAD TO BRING IT DOWN FROM THE 72 MILLION BECAUSE WE
17	WEREN'T GOING TO ADD 72 MILLION FROM TO THE INITIAL
18	REQUESTED. SO NOW YOU'VE GOT 26.6 MILLION TO DEAL
19	WITH. I THINK THE UP-FRONT THE OFFER FOR THE
20	UP-FRONT FUNDING DEALS WITH 17 PERCENT, 17 MILLION
21	OF THAT, AND THERE'S STILL ANOTHER NINE MILLION TO
22	DEAL WITH.
23	NOW, THAT WOULD ALLOW YOU TO MAKE NO
24	CHANGE. ESSENTIALLY I ARGUE TO YOU THAT YOU
25	SHOULDN'T PENALIZE THESE EMERGING INSTITUTES ANY
	151

1	MORE THAN THEY'VE CURRENTLY BEEN PENALIZED BECAUSE
2	THEY'RE THE ONES WHICH WILL TAKE THE PENALTY IF
3	THERE IS A CUT BECAUSE THEY TEND TO BE DOWN ON BOTH
4	SCORES. SO THE EMERGING INSTITUTES ARE THE ONES
5	THAT ARE GOING TO RECEIVE THE CUTS DEEPEST BECAUSE
6	THEY ARE LOW ON BOTH THOSE SCORES. I SAY TO YOU
7	DON'T DO IT BECAUSE THOSE GUYS JUST IT'S FAIR
8	GAME IN AUSTRALIA TO SAY GIVE THEM A FAIR GAME.
9	MR. ROTH: SO IT'S FAIR GAME FOR ME TO
10	PUSH BACK A LITTLE BIT TOO. SO I'LL PUSH BACK.
11	TELL ME, UC IRVINE, 29 MILLION; USC, 29 MILLION,
12	SCORES DRAMATICALLY DIFFERENT IN ALL CASES. SO
13	HOW
14	CHAIRMAN KLEIN: LET'S TALK ABOUT THIS
15	ISSUE BECAUSE ONE OF THE BASIC PARAMETERS IS
16	LEVERAGE BECAUSE IF NO ONE PUT UP LEVERAGE, WE'D BE
17	FUNDING TWO OR THREE INSTITUTIONS. AND IF WE DON'T
17 18	FUNDING TWO OR THREE INSTITUTIONS. AND IF WE DON'T HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY
18	HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY
18 19	HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY REDUCE OUR SCIENTIFIC POTENTIAL.
18 19 20	HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY REDUCE OUR SCIENTIFIC POTENTIAL. MR. ROTH: BOB, JUST ANSWER TELL ME THE
18 19 20 21	HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY REDUCE OUR SCIENTIFIC POTENTIAL. MR. ROTH: BOB, JUST ANSWER TELL ME THE 29 MILLION, HOW YOU GOT THERE. ONE'S 80 PERCENT AND
18 19 20 21 22	HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY REDUCE OUR SCIENTIFIC POTENTIAL. MR. ROTH: BOB, JUST ANSWER TELL ME THE 29 MILLION, HOW YOU GOT THERE. ONE'S 80 PERCENT AND ONE'S 84 PERCENT.
18 19 20 21 22 23	HAVE A BROAD-BASED PROGRAM, IT'S GOING TO RADICALLY REDUCE OUR SCIENTIFIC POTENTIAL. MR. ROTH: BOB, JUST ANSWER TELL ME THE 29 MILLION, HOW YOU GOT THERE. ONE'S 80 PERCENT AND ONE'S 84 PERCENT. CHAIRMAN KLEIN: WE'LL PUT OUT THE

1	REQUESTED, AND IT SHOWS THE RESULTING SCORE. AND IN
2	TERMS OF YOUR POINT, DUANE, ON SAN DIEGO CONSORTIUM
3	MEMBERS, IF THEY'D APPLIED INDIVIDUALLY GETTING A
4	HUNDRED MILLION, THAT'S FANTASY. IF YOU LOOK AT THE
5	CRITERIA ADOPTED BY THIS BOARD AND ADOPTED BY THE
6	FACILITIES GROUP, THEY DIDN'T HAVE THE LEVERAGE TO
7	ACCOMPLISH THAT BECAUSE THEY WOULD HAVE HAD TO HAVE
8	\$200 MILLION OF LEVERAGE TO GET \$100 MILLION.
9	MR. ROTH: THEY'D HAVE HAD 40 MILLION TO
10	GET IT'S A 20-PERCENT MATCH.
11	CHAIRMAN KLEIN: NO. NO. MATCH DIDN'T
12	GET YOU ANYWHERE. IF YOU CAME IN WITH MATCH, THAT
13	WAS A STATUTORY REQUIREMENT.
14	MR. ROTH: I'M NOT GOING TO ARGUE WITH YOU
15	ABOUT SAN DIEGO BECAUSE THAT'S NOT MY POINT. I'M
16	TRYING TO UNDERSTAND HOW SOME OF THESE OTHER
17	INSTITUTIONS THE SAN DIEGO CONSORTIUM, THEY WILL
18	TELL YOU, I WOULD IMAGINE, THEY SHOULDN'T HAVE DONE
19	IT. THEY SHOULD NOT HAVE DONE IT. THEY SHOULD NOT
20	HAVE PUT THE CONSORTIUM TOGETHER. THEY SHOULD HAVE
21	GONE DIFFERENT, BUT THAT'S A SIDE ISSUE. WE CAN
22	DEBATE THAT. IT'S WATER OVER THE DAM.
23	GO BACK NOW AND TELL ME HOW, WHEN YOU HAVE
24	THESE DRAMATICALLY DIFFERENT SCORES UP HERE FOR UC
25	
23	IRVINE, 94, 94, AND 90, 92 ON USE, AND 80 ON THE

1	FACILITIES WORKING GROUP. 29 MILLION, WHICH IS 80
2	PERCENT OF THEIR ASK.
3	DR. TROUNSON: SORRY. IT'S NOT GOT
4	ANYTHING TO DO WITH THE SCIENCE SCORES THE WAY IT
5	CAME OUT. AS I SAID, THE FACILITIES WORKING GROUP
6	WORKED OFF THIS OTHER SET OF PARAMETERS THAT I READ
7	TO YOU. IT'S NOT GOT TO DO WITH THE SCIENCE. THE
8	SCIENCE WAS NOT CONFIGURED INTO THOSE CALCULATIONS
9	AT ALL. THERE WAS NO
10	MR. ROTH: IT'S THE DIFFERENCE BETWEEN A
11	SCORE OF 80 AND SCORE OF 84.
12	DR. TROUNSON: IT'S NOT THE SCIENCE SIDE
13	OF IT.
14	MR. ROTH: I'M TALKING ABOUT THE
15	FACILITIES WORKING GROUP. IRVINE GOT AN 80; USC GOT
16	AN 84.
17	CHAIRMAN KLEIN: YOU THINK THOSE ARE
18	STATISTICALLY DIFFERENT?
19	MR. ROTH: NO, I DON'T.
20	MR. SERRANO-SEWELL: YOU WANT TO KNOW WHY
21	IRVINE GOT AN 80?
22	MR. ROTH: SO WHY DID ONE GET 84 PERCENT
23	OF THEIR ASK AND THE OTHER
24	CHAIRMAN KLEIN: COULD WE PLEASE HAVE THE
25	CHART UP THAT SHOWS THE RELATIONSHIP OF THE AMOUNT
	15/

154

1	REQUESTED WITH THE SCORE? THERE'S A SIMPLER
2	MR. LICHTENGER: MR. CHAIRMAN, I THINK WE
3	WANT TO SEE THE BREAKDOWN OF THE FACILITIES WORKING
4	GROUP SCORE, HOW WE ARRIVED AT THOSE NUMBERS, THE
5	VARIOUS COMPONENTS.
6	CHAIRMAN KLEIN: I WANT TO SHOW WE HAD
7	A VERY SIMPLE CHART. IF WE CAN'T BRING THAT CHART
8	UP QUICKLY, WHAT I'M GOING TO DO IS I THINK WE'VE
9	EXPLORED THESE TOPICS TONIGHT. WHAT I'M GOING TO DO
10	IS ASK FOR AN ADJOURNMENT UNTIL TOMORROW. BUT, YOU
11	KNOW, DUANE, IT IS A GOOD, HEALTHY DISCUSSION.
12	MR. ROTH: WE NEED TO HAVE IT.
13	CHAIRMAN KLEIN: WE NEED TO HAVE IT. AND
14	WHAT'S IMPORTANT, AS WE DRILL DOWN IN THIS, I THINK
15	YOU'RE GOING TO FIND THAT THERE ARE REAL SUBSTANTIVE
16	REASONS THESE NUMBERS CAME OUT THE WAY THEY DID.
17	MR. ROTH: WE NEED TO GET THOSE IN THE
18	RECORD.
19	MR. SERRANO-SEWELL: WAIT. WAIT. LET ME
20	SUGGEST SOMETHING, AND LET'S FOLLOW WHAT WE'VE DONE
21	BEFORE WITH STAFF. AND, DUANE, LET'S SEE IF YOU'RE
22	OKAY WITH THIS, THE FULL COMMITTEE IS OKAY WITH
23	THIS, AND MAYBE IT'S A BAD IDEA. BUT WHEN WE'VE HAD
24	DISCUSSIONS ON SCIENTIFIC GRANTS, WE'VE HAD A STAFF
25	MEMBER COME UP AND ANSWER WELL, THEY'VE GIVEN A
	155
	100

1	BRIEF SORT OF SUMMARY OF THE DISCUSSION AND HOW THE
2	WORKING GROUP CAME TO THE SCORE. AND IF ANY OF THE
3	ICOC MEMBERS HAD QUESTIONS, THEY'D ASK QUESTIONS.
4	THIS PROCESS SHOULD SOUND FAMILIAR. WE'VE DONE IT
5	MANY TIMES.
6	SO MAYBE IF, ALAN, YOU THINK, AND BOB
7	THINK IT'S A GOOD IDEA, IF DUANE OR ANY OTHER MEMBER
8	SAYS, HEY, FACILITIES WORKING GROUP, HOW THE HECK
9	DID YOU GET AN 80 OR 84 OR WHATEVER THE NUMBER WAS,
10	HAVE RICK SPEAK TO THOSE ISSUES AND SAY, YOU KNOW,
11	THIS IS WHAT HAPPENED. THEY CAME UP WITH THIS
12	SCORE. HERE'S WHERE THE DEFICIENCIES WERE. THERE
13	WERE DEFICIENCIES WITH THE UC IRVINE APPLICATION.
14	I'M HAPPY TO TALK ABOUT IT. THERE WERE ISSUES WITH
15	IT. THERE WAS A REASON WHY THEY GOT THAT SCORE.
16	LET'S HAVE RICK TALK ABOUT IT.
17	CHAIRMAN KLEIN: AND I WOULD SAY TOO, WITH
18	WHAT DAVID IS SAYING, THERE ARE EXTRAORDINARILY GOOD
19	ARGUMENTS FOR EVERY ONE OF THESE INSTITUTIONS,
20	TREMENDOUS CONTRIBUTIONS. LOOK AT THE SYSTEMS
21	BIOLOGY CONTRIBUTIONS OF SANTA CRUZ. THEY'RE NOT A
22	CENTER OF EXCELLENCE, THEY'RE NOT AN INSTITUTE, BUT
23	THEY MAKE A VERY SPECIFIC, VERY STRONG, AND
24	WELL-DOCUMENTED CONTRIBUTION TO SYSTEMS BIOLOGY. SO
25	WHAT WE NEED TO DO THOUGH IS WE SCHEDULED THIS TILL

1	NINE. IT'S 9:30. I THINK WE'VE GOT THE ISSUES ON
2	THE TABLE. DUANE AND TED AND OTHERS HAVE RAISED
3	GOOD QUESTIONS. WE'RE GOING TO BRING THE WE'LL
4	FIND THE BEST CHARTS THAT ARE THE LEAST CONFUSING
5	AND GO THROUGH THEM TOMORROW MORNING. BUT A HEALTHY
6	DISCUSSION IS IN THE GREAT TRADITION OF THIS WHOLE
7	PROCESS.
8	MR. LICHTENGER: MR. CHAIRMAN, I WOULD
9	SUGGEST THAT THERE'S A PARTICULAR CHART THAT I THINK
10	WOULD ADDRESS DUANE'S QUESTIONS VERY DIRECTLY, AND
11	POTENTIALLY WE CAN PRINT IT OUT AND HAND IT OUT TO
12	THE ICOC MEMBERS. I THINK THIS WILL SHOW HOW WE
13	ARRIVED AT THE FACILITIES SCORE FOR EACH OF THE
14	APPLI CANTS.
15	CHAIRMAN KLEIN: THAT WOULD BE GREAT. SO
16	WE'LL DO THAT IN THE MORNING; IS THAT RIGHT, DAVID?
17	IN ORDER TO GET DISTRIBUTION, WE'LL DO THAT IN THE
18	MORNING. AND ANY ICOC MEMBER THAT WANTS A COPY OF
19	THAT CHART TONIGHT, LET'S PROVIDE IT, AND LET'S
20	BRING SOME FOR THE PUBLIC SO THEY CAN HAVE IT AS
21	WELL.
22	DR. PIZZO: NOT ANY MEMBER, JUST THE ONES
23	WHO CAN.
24	CHAIRMAN KLEIN: ONLY THE BOARD MEMBERS
25	WHO HAVE NO CONFLICTS HAVE ACCESS TO THIS DOCUMENT,

1	ZERO CONFLICTS.
2	DR. PIZZO: JUST WANTED TO BE SURE THAT
3	THAT WAS CLEAR TO EVERYBODY.
4	CHAIRMAN KLEIN: THANK YOU, DR. PIZZO. WE
5	START AT 8:15. WE HAVE A SPOTLIGHT TOMORROW
6	MORNING, MELISSA KING, AT 8:15?
7	MS. KING: YES. THE SPOTLIGHT IS AT 8:15
8	IN THIS ROOM. THE ICOC MEETING STARTS AT NINE. AND
9	ICOC MEMBERS, YOU MAY LEAVE YOUR MATERIALS HERE. I
10	DON'T RECOMMEND LEAVING YOUR ELECTRONIC EQUIPMENT,
11	BUT YOU CAN LEAVE YOUR BINDERS.
12	CHAIRMAN KLEIN: AND THE SPOTLIGHT IS ON
13	PARKINSON'S DISEASE. THERE ARE SOME GREAT
14	PRESENTATIONS. WE STAND ADJOURNED. THANK YOU.
15	(THE MEETING WAS THEN ADJOURNED AT
16	9:36 P.M. TO RECONVENE AT 8:15 A.M. MAY 7TH, 2008.)
17	
18	
19	
20	
21	
22	
23	
24	
25	
	150

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 PROCEEDINGS BEFORE THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD AT THE LOCATION INDICATED BELOW

> LUXE HOTEL SUNSET BALLROOM 11461 SUNSET BOULEVARD LOS ANGELES, CALIFORNIA ON MAY 5 AND 6, 2008

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. ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CSR 7152

BARRI STER' S REPORTING SERVI CE 1072 BRI STOL STREET

SULTE 100

COSTA MESA, CALIFORNIA

(714) 444-4100