

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

LOCATION: SHERATON GATEWAY HOTEL
SAN FRANCISCO, CALIFORNIA

DATE: FEBRUARY 15, 2007
2 P.M.

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

BRS FILE NO.: 77054

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1 SAN FRANCISCO, CALIFORNIA; THURSDAY, FEBRUARY 15, 2007

2 02:44 P.M.

3

4 CHAIRMAN KLEIN: I'D LIKE TO CALL THE MEETING
5 TO ORDER. WELCOME EVERYONE TO SAN FRANCISCO. IT'S A
6 TREMENDOUS PRIVILEGE TO HAVE YOU HERE TODAY. IT IS
7 EXTRAORDINARY TO HAVE THIS BOARD WITH THEIR INCREDIBLE
8 PRESSURES SHOW UP FOR A TWO-DAY SESSION. WE HAVE THREE
9 MEMBERS STILL ON THEIR WAY.

10 THIS IS A HISTORIC OCCASION FOR US BECAUSE IT
11 IS THE FIRST MAJOR SCIENTIFIC GRANT ROUND. WE SET AN
12 IMPORTANT BENCHMARK BY HAVING THE FELLOWSHIPS FOR
13 POST-DOCTORAL AND FELLOWS AND GRADUATE STUDENTS, THE
14 169 RESEARCH TRAINING GRANTS FROM LAST YEAR. THIS IS A
15 LOGICAL NEXT STRATEGIC STEP ALONG A LONG PATH.

16 IN DISCUSSING THE GRANTS MADE TODAY, WE HAVE
17 TO REMEMBER THAT THEY WERE MADE POSSIBLE BY A GROUP OF
18 CIVIC PHILANTHROPISTS FROM SAN DIEGO TO SAN FRANCISCO
19 WHO COMMITTED \$45 MILLION TO BOND ANTICIPATION NOTES,
20 WHO EACH HAD TO HAVE A LEGAL OPINION THAT WE WOULD WIN
21 THE LAWSUIT, WHICH IS GREAT VALIDATION, AND WE THEN HAD
22 THE GREAT FORTUNE OF A BOLD MOVE BY CALIFORNIA'S
23 GOVERNOR, BRINGING US \$150 MILLION, COUPLED THAT WITH
24 THE FIVE MILLION FROM THE DOLBY FAMILY, GAVE US \$200
25 MILLION THAT WE'RE WORKING THROUGH AT THIS TIME. SO

1 THIS IS A HISTORIC DAY DUE TO AN EFFORT OF A GREAT
2 NUMBER OF PEOPLE, INCLUDING THE VISION OF SEVEN MILLION
3 CALIFORNIANS THAT VOTED FOR THIS INITIATIVE.

4 WE WILL START THE FORMAL MEETING HERE BY
5 MELISSA LEADING US IN THE PLEDGE OF ALLEGIANCE AND THEN
6 THE ROLL CALL.

7 (THE PLEDGE OF ALLEGIANCE.)

8 CHAIRMAN KLEIN: LET NO ONE SAY THAT WE'RE
9 NOT EXERCISING OUR TRUE PARTICIPATION IN THE VIRTUAL
10 REALITY OF SILICON VALLEY. BUT THE STAFF, WHILE YOU
11 ARE COMMITTED TO A VERY TIGHT BUDGET, WE CAN AFFORD THE
12 FLAG. MELISSA, THE ROLL CALL, PLEASE.

13 MS. KING: RICARDO AZZIZ.

14 DR. AZZIZ: PRESENT.

15 MS. KING: PAUL JENNINGS FOR DAVID BALTIMORE.
16 ROBERT PRICE FOR ROBERT BIRGENEAU.

17 DR. PRICE: HERE.

18 MS. KING: SUSAN BRYANT.

19 DR. BRYANT: PRESENT.

20 MS. KING: MARCY FEIT.

21 MS. FEIT: PRESENT.

22 MS. KING: MICHAEL FRIEDMAN. MICHAEL
23 GOLDBERG.

24 MR. GOLDBERG: PRESENT.

25 MS. KING: FRANCIS MARKLAND FOR BRIAN

1 HENDERSON.
2 DR. MARKLAND: PRESENT.
3 MS. KING: DAVID KESSLER.
4 DR. KESSLER: PRESENT.
5 MS. KING: BOB KLEIN.
6 CHAIRMAN KLEIN: PRESENT.
7 MS. KING: SHERRY LANSING. GERALD LEVEY.
8 DR. LEVEY: PRESENT.
9 MS. KING: TED LOVE. RICHARD MURPHY. TINA
10 NOVA. ED PENHOET.
11 DR. PENHOET: PRESENT.
12 MS. KING: PHIL PIZZO. CLAIRE POMEROY.
13 DR. POMEROY: HERE.
14 MS. KING: FRANCISCO PRIETO. JOHN REED.
15 DUANE ROTH.
16 MR. ROTH: HERE.
17 MS. KING: JOAN SAMUELSON. DAVID
18 SERRANO-SEWELL. JEFF SHEEHY.
19 MR. SHEEHY: HERE.
20 MS. KING: JONATHAN SHESTACK. OSWALD
21 STEWARD.
22 DR. STEWARD: HERE.
23 MS. KING: JANET WRIGHT.
24 DR. WRIGHT: HERE.
25 CHAIRMAN KLEIN: THANK YOU VERY MUCH. THE

1 FIRST ITEM ON THE AGENDA IS APPROVAL OF OUR LAST ICOC
2 MEETING'S MINUTES. WOULD ANYONE LIKE TO MAINTAIN A
3 MOTION FOR APPROVAL OF THOSE MINUTES? WE DO NOT HAVE A
4 QUORUM YET, AND WE WILL ASK IF THERE ARE ANY
5 CORRECTIONS TO THE MINUTES. ANY PUBLIC COMMENT ON THE
6 MINUTES? SEEING NO PUBLIC COMMENT ON THE MINUTES.

7 WHAT I'VE DONE IS WHILE WE'RE WAITING FOR A
8 QUORUM IS ACTUALLY SLIGHTLY REORGANIZED THE AGENDA TO
9 COVER AN ITEM WE CAN COVER WHILE WE'RE WAITING FOR THAT
10 QUORUM. AND THAT IS A SPECIAL RECOGNITION FOR DR. LEON
11 THAL. IT'S UNDER ITEM NO. 5. I HAVE PUT ON THE AGENDA
12 CONSIDERATION, WHICH WILL TAKE THE QUORUM, TO NAME THE
13 SEED GRANTS IN HONOR OF DR. LEON THAL.

14 AS BACKGROUND FOR THAT AND FOR THE RECORD AND
15 BENEFIT OF HIS FAMILY AND COLLEAGUES, I'D LIKE TO READ
16 A FEW PIECES OF INFORMATION INTO THE RECORD.

17 FIRST, WE ALL KNEW AND LOVED DR. LEON THAL
18 WHO GAVE TREMENDOUSLY TO THE CREATION OF THIS AGENCY.
19 HE PARTICIPATED IN THE SEARCH COMMITTEE THAT LOOKED AT
20 800 NAMES FOR THE GRANT REVIEW WORKING GROUP. HE WAS
21 ALWAYS THERE MAKING OUR QUORUM WORK FOR US. HE WAS
22 COMMITTED VERY DEEPLY TO THIS AGENCY ALONG WITH THE
23 TREMENDOUS LOAD THAT HE CARRIED PROFESSIONALLY.

24 DR. THAL LED A NATIONAL CONSORTIUM OF MORE
25 THAN 80 CENTERS CALLED ALZHEIMER'S DISEASE COOPERATIVE

1 STUDY, WHICH WERE FUNDED BY A GRANT FROM THE NATIONAL
2 INSTITUTE OF HEALTH ON AGING TO TEST PROMISING DRUGS
3 FOR ALZHEIMER'S DISEASE.

4 HIS RESEARCH INTERESTS FOCUSED ON THREE
5 AREAS: THE EFFECT OF BASAL FOREBRAIN LESION INDUCED
6 MEMORY LOSS, CLINICAL PATHOLOGICAL CORRELATIONS IN
7 ALZHEIMER'S DISEASE, AND THE CONDUCT OF CLINICAL DRUG
8 TRIALS IN ALZHEIMER'S DISEASE.

9 HE WAS AT THE TIME OF HIS DEATH THE CHAIR AND
10 A PROFESSOR OF THE DEPARTMENT OF NEUROSCIENCES AT THE
11 UNIVERSITY OF CALIFORNIA SAN DIEGO AND THE DIRECTOR OF
12 THE ALZHEIMER'S DISEASE RESEARCH CENTER AT UC SAN
13 DIEGO. HE WAS ALSO AN ADVISOR ON THE FEDERAL DRUG
14 ADMINISTRATION'S ALZHEIMER'S ASSESSMENT TEAM AND A
15 MEMBER OF MANY MEDICAL ASSOCIATIONS AND BOARDS. HE
16 SERVED AS CHAIRMAN OF THE FDA PERIPHERAL AND CENTRAL
17 NERVOUS SYSTEM DRUGS ADVISORY COMMITTEE, AND THE
18 CLINICAL TRIAL SUBCOMMITTEE OF ALZHEIMER'S DISEASE
19 RESEARCH CENTERS.

20 HE EARNED HIS MEDICAL DEGREE FROM DOWN STATE
21 MEDICAL CENTER, STATE UNIVERSITY OF NEW, AND A
22 BACHELOR'S DEGREE FROM TUFTS.

23 CERTAINLY HE WAS A TREMENDOUS ASSET TO THE
24 ALZHEIMER'S COMMUNITY IN CALIFORNIA, AND I WOULD CALL
25 TO YOUR ATTENTION THAT, IN COLLABORATION WITH THE

1 GOVERNOR OF CALIFORNIA AND HIS WIFE MARIA, HE WAS
2 WORKING IN THE STATE OF NEVADA FOR A MAJOR ALZHEIMER'S
3 RESEARCH CENTER IN LAS VEGAS THAT IS FAR DOWN THE TRACK
4 TO REALIZATION BECAUSE OF HIS COMMITTED EFFORTS.

5 RECENTLY HE WAS APPROVED FOR A GROUP OF
6 CLINICAL TRIALS ON FIVE DIFFERENT AREAS OF ALZHEIMER'S
7 DISEASE THAT WAS A \$50-MILLION NIH GRANT, ONE OF THE
8 LARGEST IN THE ALZHEIMER'S AREA THAT HAS EVER BEEN MADE
9 FOR CONCURRENT CLINICAL TRIALS.

10 SO WE CAN, WHILE WE ARE WAITING FOR A QUORUM,
11 HAVE SOME GENERAL DISCUSSION. AND I WOULD OPEN THE
12 FLOOR TO ANY DISCUSSION BY MEMBERS OF THIS BOARD OF THE
13 PROPOSAL TO NAME THE SEED GRANTS IN THE HONOR OF A VERY
14 DEDICATED SCIENTIST, CLINICIAN WHO WE HAD THE PRIVILEGE
15 OF SERVING WITH. ARE THERE ANY COMMENTS FROM MEMBERS
16 OF THE BOARD?

17 DR. POMEROY: I'D LIKE TO ECHO YOUR COMMENTS,
18 BOB, THAT WE'RE ALL GOING TO DEEPLY MISS LEON FOR ALL
19 OF HIS CONTRIBUTIONS TO THIS BOARD. BUT I THINK, MORE
20 IMPORTANTLY, WE'RE GOING TO MISS HIM BECAUSE OF THE
21 IMPACT THAT HE HAD ON THE FIELD OF ALZHEIMER'S AND THE
22 HOPE THAT HE BROUGHT TO PATIENTS EVERYWHERE. AND AS
23 SOMEONE, LIKE MANY OF THE PEOPLE AROUND THIS TABLE, WHO
24 HAS A FAMILY MEMBER WHO SUFFERS FROM ALZHEIMER'S, THAT
25 HOPE IS VERY IMPORTANT TO ALL OF US.

1 I THINK THAT IT IS ABSOLUTELY THE RIGHT THING
2 TO DO TO HONOR DR. THAL, TO THANK HIM FOR ALL THAT HE
3 HAS DONE. AND I THINK THAT THIS WOULD BE A VERY
4 APPROPRIATE WAY TO DO IT.

5 CHAIRMAN KLEIN: THANK YOU. ANY ADDITIONAL
6 COMMENTS FROM THE BOARD?

7 MR. ROTH: I'D JUST ECHO WHAT YOU HAVE SAID.
8 I THINK EVERYBODY FEELS VERY STRONGLY ABOUT WHAT
9 DR. THAL MEANT. BUT JUST A PERSONAL ANECDOTE ABOUT IT.
10 HIS CLINIC IS IN THE BUILDING I WORK IN MOST DAYS. AND
11 ON WEDNESDAY, WHEN THE ALZHEIMER'S CLINIC CONVENES,
12 WE'RE NOT ALLOWED TO HAVE MEETINGS IN THE BUILDING
13 BECAUSE THERE ARE SO MANY PATIENTS THAT COME. I KNOW
14 WHEN ED PENHOET AND SOME OF OTHER STAFF WERE IN SAN
15 DIEGO, THEY HAPPENED TO RUN INTO HIM IN THE BREEZEWAY,
16 AND HE TOOK THEM TO SHOW THEM AROUND HIS PATIENT AREA.

17 AND I CAN TELL YOU THAT'S BEEN GOING ON FOR
18 SO MANY YEARS AND WHAT A DEVASTATING EFFECT THAT'S
19 GOING TO HAVE ON THE COMMUNITY OF ALZHEIMER'S PATIENTS.
20 SO I THINK NAMING THESE GRANTS IN HIS HONOR WOULD BE A
21 TERRIFIC MORAL BOOST TO THE STAFF AND THE PEOPLE THAT
22 WORK THERE. SO I'D ENCOURAGE US TO DO IT.

23 CHAIRMAN KLEIN: ANY ADDITIONAL BOARD
24 COMMENT? ANY PUBLIC COMMENT? I THINK WE MAY HAVE A
25 MEMBER FROM THE ALZHEIMER'S ASSOCIATION TOMORROW. AND

1 EVEN THOUGH THE AGENDA ITEM IS BEING HEARD TODAY, WE
2 WILL REOPEN TOMORROW FOR THEIR COMMENTS. NEVERTHELESS,
3 IT IS OUR INTENTION, AS SOON AS WE HAVE A QUORUM, TO
4 TRY AND ADDRESS THIS ISSUE.

5 WITHOUT A QUORUM HERE, I'D LIKE TO MOVE TO
6 ANOTHER POINT OF RECOGNITION THAT IS NOT ON YOUR
7 AGENDA. WE'LL CALL THIS THE FEBRUARY SURPRISE. WE
8 HAVE THE BENEFIT OF A STAR BEING AMONG US BECAUSE
9 SHERRY LANSING IS GOING TO RECEIVE AN OSCAR, A
10 HUMANITARIAN OSCAR, FOR HER SERVICE TO MEDICAL
11 RESEARCH, CANCER RESEARCH, HER SERVICE ON THIS BOARD,
12 AND MANY OTHER BOARDS DEALING WITH MEDICAL ISSUES,
13 ENVIRONMENTAL ISSUES, OR HUNGER ISSUES.

14 SO I THINK IT WOULD BE APPROPRIATE THAT WHEN
15 SHERRY MAKES HER APPEARANCE HERE TODAY, SINCE WE CAN
16 CELEBRATE GOOD NEWS ENTHUSIASTICALLY, IF WE STOOD AND
17 GAVE HER A HAND OF APPLAUSE. IT IS VERY INFREQUENTLY
18 THAT A BOARD DEALING WITH MEDICAL RESEARCH GETS TO
19 RECOGNIZE AN OSCAR, AND WE SHOULD TAKE FULL ADVANTAGE
20 OF THE OPPORTUNITY.

21 ADDITIONALLY, IN TERMS OF RECOGNITION AND
22 GENERAL INFORMATION, I WOULD POINT OUT THAT TOMORROW
23 MORNING AT APPROXIMATELY 10 A.M. GOVERNOR
24 SCHWARZENEGGER IS GOING TO BE HERE TO ADDRESS US. AT
25 APPROXIMATELY 10:20 HE WILL HOLD A PRESS CONFERENCE.

1 AT THAT POINT IN THE MORNING WE'LL HAVE A SHORT BREAK.
2 THE BOARD IS INVITED TO THIS PRESS CONFERENCE, AND IT
3 IS CERTAINLY BENEFICIAL TO MEDICAL RESEARCH WHEN THE
4 GOVERNOR MAKES A PRIORITY TO EMPHASIZE THE IMPORTANCE
5 OF HISTORIC GRANTS THAT ARE BEING MADE IN CALIFORNIA AS
6 A MODEL FOR THE REST OF THE NATION.

7 ADDITIONALLY, AS AN INFORMATIONAL ITEM, I
8 WOULD TELL YOU THAT AS TO THE CONFLICTS OF INTEREST
9 THAT THE CIRM STAFF AND BOARD MEMBERS HAVE GONE THROUGH
10 AN EXTENSIVE PROCESS TO CHECK FOR CONFLICTS OF INTEREST
11 AND TO ENSURE THAT BOARD MEMBERS WHO HAVE A CONFLICT OF
12 INTEREST IN ANY PARTICULAR APPLICATION WILL NOT
13 PARTICIPATE IN THE VOTE OR THE DISCUSSION.

14 THE STAFF HAS PROVIDED EACH BOARD MEMBER WITH
15 A LIST OF INSTITUTIONS THAT HAVE SUBMITTED APPLICATIONS
16 OR THAT EMPLOY A COLLABORATOR ON AN APPLICATION. EACH
17 BOARD MEMBER HAS REVIEWED THE LIST AND CERTIFIED THOSE
18 INSTITUTIONS IN WHICH THE MEMBER HAS A CONFLICT OF
19 INTEREST. IN ADDITION, STAFF HAS REVIEWED THE
20 STATEMENT OF ECONOMIC INTEREST, FORM 700, OF EACH BOARD
21 MEMBER TO IDENTIFY ANY ADDITIONAL CONFLICTS OF
22 INTEREST.

23 BASED ON THIS INFORMATION, STAFF HAS PROVIDED
24 EACH BOARD MEMBER WITH A LIST OF THE APPLICATIONS BY
25 APPLICATION NUMBER IN WHICH THE BOARD MEMBER HAS A

1 DISQUALIFYING CONFLICT OF INTEREST. BOARD MEMBERS HAVE
2 BEEN DIRECTED NOT TO PARTICIPATE IN THE DISCUSSION OR
3 VOTE ON APPLICATIONS IN WHICH THEY HAVE AN INTEREST.

4 WE'RE GOING TO, BEFORE WE START THE ACTUAL
5 VOTING, JUST GO THROUGH AND CONFIRM WITH EACH BOARD
6 MEMBER IN A BRIEF FEW-MINUTE RECESS THAT EVERYONE HAS
7 THIS DOCUMENT AND THEY KNOW WHERE THAT DOCUMENT IS. SO
8 STAFF WILL COME UP IN THAT RECESS TO JUST CHECK WITH
9 EACH STAFF MEMBER TO MAKE SURE THEY ARE FOCUSED ON THAT
10 DOCUMENT IN THEIR POSSESSION.

11 THE BOARD MEMBERS, AS I SAID, HAVE BEEN
12 DIRECTED NOT TO PARTICIPATE IN THE DISCUSSION OR VOTE
13 ON APPLICATIONS IN WHICH THEY HAVE AN INTEREST. ONCE A
14 SPECIFIC APPLICATION OR APPLICATIONS ARE IDENTIFIED FOR
15 DISCUSSION, STAFF WILL ANNOUNCE THE CONFLICTS. AND,
16 COUNSEL, IS THAT OUR FINAL PROCEDURAL?

17 MR. HARRISON: YES. I UNDERSTAND THAT'S OUR
18 PRESENT INTENT.

19 CHAIRMAN KLEIN: THAT'S FINE. SO THEY WILL
20 ACTUALLY BE ANNOUNCED WHICH BOARD MEMBERS HAVE A
21 CONFLICT SO THAT THERE'S A DOUBLE-CHECK IN A PUBLIC
22 HEARING TO MAKE CERTAIN THAT THEY DO NOT PARTICIPATE IN
23 THE DISCUSSION OR THE VOTE. STAFF WILL THEN MONITOR
24 THE DISCUSSION AND THE VOTE TO ENSURE THE DISQUALIFIED
25 BOARD MEMBERS DO NOT PARTICIPATE. WHEN A ROLL CALL

1 VOTE IS TAKEN ON A SPECIFIC APPLICATION, BOARD MEMBERS
2 WHO HAVE AN INTEREST IN THAT APPLICATION WILL NOT BE
3 CALLED.

4 FINALLY, AT THE END OF THE BOARD'S
5 CONSIDERATION OF THE APPLICATION, BOARD MEMBERS WILL BE
6 ASKED TO CERTIFY THAT THEY HAVE NOT PARTICIPATED IN THE
7 VOTE OR DISCUSSION OF APPLICATIONS IN WHICH THEY HAVE A
8 CONFLICT OF INTEREST. TO ENSURE THE TRANSPARENCY OF
9 THIS PROCESS, STAFF HAS PREPARED A MASTER LIST OF THE
10 APPLICATIONS BY APPLICATION NUMBER ALONG WITH THE BOARD
11 MEMBERS WHO HAVE A CONFLICT IN EACH APPLICATION.

12 AND, COUNSEL, WHEN WILL IT BE POSSIBLE TO
13 HAVE THIS LIST?

14 MR. HARRISON: WE INTEND TO PROVIDE A COPY OF
15 THIS LIST TO THE PUBLIC AT THE CLOSE OF THE VOTING ON
16 THE APPLICATIONS.

17 CHAIRMAN KLEIN: RIGHT. SO THE PUBLIC WILL
18 HAVE IN REAL TIME THE ABILITY TO CONFIRM CONFLICTS
19 BECAUSE THEY'LL BE ANNOUNCED. IN ADDITION, THEY'LL
20 HAVE THE ABILITY AFTER THE SESSION TO CONFIRM WITH
21 THEIR RECORDS WHETHER THAT CONFLICT WAS OBSERVED, AND
22 STAFF WILL MONITOR COMPLIANCE.

23 I THINK THAT THAT COMPLETES OUR INFORMATIONAL
24 ITEMS. AGAIN, I WOULD SAY, BEFORE LAUNCHING INTO THE
25 PRESIDENT'S REPORT AND THIS VERY HISTORIC AGENDA, THAT

1 I WOULD LIKE TO EMPHASIZE THAT THE FRAMEWORK THAT HAS
2 BEEN CREATED TO PERMIT TODAY'S SESSION TO OCCUR HAS
3 INVOLVED THE SUPPORT OF THE NATIONAL ACADEMY OF
4 SCIENCE, NATIONAL ACADEMIES OF SCIENCE, WHO CREATED A
5 NATIONAL TASK FORCE TO HELP CREATE THE GUIDELINES FOR
6 MEDICAL AND ETHICAL STANDARDS, WHICH THE PUBLIC MAY
7 REMEMBER WAS ANNOUNCED ON APRIL 26TH OF 2006, AND ON
8 MAY 23D WE ADOPTED THOSE GUIDELINES AS A STARTING
9 POINT, AND THEN FURTHER STRENGTHENED THOSE GUIDELINES
10 TO COME TO THE REGULATIONS WE HAVE TODAY.

11 RECENTLY THE STATE OF ILLINOIS ANNOUNCED THAT
12 THEY WERE FOLLOWING CALIFORNIA'S MEDICAL AND ETHICAL
13 STANDARDS BECAUSE THEY FELT THAT THE MEDICAL AND
14 ETHICAL STANDARDS THAT HAD BEEN PUT IN PLACES WERE, IN
15 FACT, THE GOLD STANDARD FOR THE COUNTRY.

16 WE HAVE FULLY DEVELOPED OUR CONFLICTS
17 PROVISIONS, INCLUDING THE PROVISIONS THAT I'VE JUST
18 STATED. WE HAVE FULLY DEVELOPED THE WORKING GROUP
19 CONFLICTS PROVISIONS AND THE STAFF CONFLICT PROVISIONS.
20 AND I WILL REPORT TO YOU THAT JUDGE POLLAK ON THE FIRST
21 DISTRICT COURT OF APPEALS, WHO WAS PART OF THE HEARING
22 YESTERDAY, COMMENTED TO OUR OPPOSITION THAT HE THOUGHT
23 THAT OUR CONFLICTS PROVISIONS WERE VERY POINTEDLY AND
24 APPROPRIATELY EFFECTIVE IN ELIMINATING THE CONFLICTS
25 WHICH OUR OPPOSITION HAD RAISED AS AN ISSUE IN THE

1 CONSTITUTIONAL LITIGATION. SO AT LEAST WITH ONE MEMBER
2 OF THE COURT OF APPEALS OF THE STATE OF CALIFORNIA AND,
3 OF COURSE, WITH THE BENEFIT OF JUDGE SABRAW, WE KNOW
4 THAT OUR SYSTEM OF CONFLICTS AND CONTROLS BY THE STATE
5 HAVE BEEN TESTED IN THE COURT SYSTEM OF THE STATE AND
6 ARE BEARING EXTREMELY WELL.

7 ZACH, AT THIS POINT WOULD YOU LEAD US THROUGH
8 THE PRESIDENT'S REPORT, AND WE'LL HAVE THE OPPORTUNITY
9 TO BEGIN, THEN, THE REVIEW OF GRANTS. AND I REMIND
10 EVERYONE IN THIS ROOM THAT THE NIH LAST YEAR APPROVED
11 APPROXIMATELY \$38 MILLION OF EMBRYONIC STEM CELL GRANTS
12 FOR THE WHOLE COUNTRY FOR A WHOLE YEAR. TODAY AND
13 TOMORROW WE WILL BE REVIEWING A MUCH GREATER DOLLAR
14 AMOUNT OF GRANTS THAN THE NIH APPROVED FOR THE WHOLE
15 COUNTRY FOR ALL OF LAST YEAR. IT'S A HISTORIC
16 OPPORTUNITY TO MAKE A DIFFERENCE. AND WITH THANKS TO
17 THE CALIFORNIA VOTERS, WE HAVE THAT PRIVILEGE.

18 DR. HALL: LET ME BEGIN BY JUST ADDING CIRM'S
19 VOICE TO WHAT HAS BEEN SAID ABOUT LEON THAL AND THE
20 REAL SENSE OF LOSS THAT WE FEEL AT HIS TRAGIC DEATH.
21 HE BROUGHT TO US AND TO THIS BODY NOT ONLY CLINICAL
22 RESEARCH EXPERTISE OF THE HIGHEST QUALITY, BUT HE ALSO
23 BROUGHT TO OUR DISCUSSIONS, AS WE ALL KNOW, A WONDERFUL
24 PERSONAL STYLE, A SENSE OF CALM AND GOOD JUDGMENT, WITH
25 A SLIGHT AND SOMETIMES SLY SENSE OF HUMOR THAT LEAVENED

1 IT ALL. AND THERE'S NO DOUBT THAT HIS LOSS LEAVES A
2 LARGE GAP BOTH ON THE BOARD AND ALL OF OUR HEARTS.

3 NOW LET ME TURN FROM THAT TO SAY WHAT AN
4 EXCITING DAY THIS IS FOR CIRM AND THE SCIENCE TEAM.
5 THIS IS WHAT WE'VE BEEN WORKING FOR AND WAITING FOR FOR
6 THE LAST TWO YEARS. AND SO WE ARE EXTRAORDINARILY
7 EXCITED ABOUT THIS AND REALLY LOOK FORWARD TO THE
8 DISCUSSIONS OVER THE NEXT TWO DAYS ABOUT THE APPROVAL
9 OF THE APPLICATIONS THAT WE HAVE RECEIVED.

10 I WON'T KEEP YOU FROM THAT DISCUSSION FOR
11 LONG, BUT WOULD LIKE TO AT LEAST REMIND YOU AND BRING
12 TO YOUR ATTENTION SOME OF THE MATTERS THAT WE HAVE BEEN
13 CONCERNED WITH OF A MORE ROUTINE NATURE.

14 THE FIRST IS TO INTRODUCE TO YOU OUR NEWEST
15 MEMBER, RICK KELLER, WHO IS THE SENIOR OFFICER FOR
16 FACILITIES WHO IS HERE AND I WILL ASK TO STAND. HE HAS
17 JOINED US, I THINK, JUST JANUARY 3D, IF I'M NOT
18 MISTAKEN. HE WAS ASSISTANT VICE CHANCELLOR FOR CAPITAL
19 PLANNING AT UC DAVIS WHERE HE OVERSAW THE CONSTRUCTION
20 OF MANY, MANY BUILDINGS OVER SEVERAL YEARS, MANY YEARS,
21 AND WE ARE INDEED FORTUNATE TO HAVE HIM. HE HAS
22 ALREADY HAD A MAJOR IMPACT ON OUR WORK AS HE HAS
23 ESSENTIALLY TAKEN OVER THE SHARED FACILITIES RFA,
24 WORKING WITH LORI HOFFMAN, AND IS DOING A WONDERFUL JOB
25 ON THAT. THANK YOU, RICK.

1 I ALSO REGRET TO SAY THAT WE ARE LOSING TWO
2 PEOPLE. THE FIRST IS ERIN ROBBINS, WHO HAS LEFT US,
3 WHO WAS WITH US FROM THE BEGINNING, WHO WORKED IN MANY
4 CAPACITIES. MOST RECENTLY SHE WAS OUR FACILITIES
5 PERSON LOOKING AFTER THE SPACE THAT WE OCCUPY AND ITS
6 NEEDS. SHE HAS LEFT FOR A POSITION WITH JDRF WORKING
7 WITH PATIENTS, AND WE WISH HER WELL. SHE HAS A
8 CHALLENGING AND INTERESTING NEW JOB.

9 THE SECOND PERSON THAT WE ARE LOSING IS AMY
10 DUROSS, WHO HAS BEEN WITH US FROM THE BEGINNING AND, IN
11 FACT, PREDATES MY ARRIVAL BY QUITE A BIT. SHE WAS A
12 KEY PERSON IN THE PROPOSITION 71 CAMPAIGN, AS YOU ALL
13 KNOW. SHE PLAYED AN ENORMOUS ROLE IN SETTING UP THE
14 INSTITUTE IN ITS BEGINNING DAYS AND IN PROVIDING THE
15 TRANSITION. AS I TOLD HER, SHE'S PART OF OUR DNA. SHE
16 REALLY HAS BEEN HERE FROM THE BEGINNING, HAS MADE AN
17 ENORMOUS CONTRIBUTION BOTH TO THE CHAIR AND HIS STAFF
18 AND TO THE INSTITUTE AS A WHOLE. I REALLY WANT TO
19 EXPRESS MY THANKS TO AMY AND DEEP APPRECIATION FOR ALL
20 THAT SHE'S DONE FOR THE INSTITUTE.

21 SHE IS TIRELESS IN HER WORK AND HAS BEEN
22 EXTRAORDINARILY SKILLED. ALSO I WOULD SAY SHE SETS THE
23 EXAMPLE FOR MANY OF US AT CIRM IN HER COMMITMENT AND
24 DEVOTION TO THIS TREMENDOUS CAUSE.

25 SO SHE IS LEAVING TO WORK FOR A START-UP

1 BIOTECH FIRM IN GENOMICS CALLED NOVAGEN. SO WE WISH
2 HER WELL IN HER NEW JOB. IT SOUNDS EXCITING. AND I
3 WOULD TO ASK FOR A ROUND OF APPLAUSE FOR AMY.

4 (APPLAUSE.)

5 DR. HALL: SHE HAS BEEN TRULY PHENOMENAL.

6 I'D LIKE ALSO TO INTRODUCE AT THIS TIME
7 SEVERAL PEOPLE WHOM I'VE DESCRIBED TO YOU BEFORE, BUT
8 WHOM YOU HAVE NOT MET. FIRST OF ALL, TWO SCIENCE
9 OFFICERS, KUMAR HARI -- STAND UP, KUMAR, SO EVERYBODY
10 CAN SEE YOU -- RUTH GLOBUS AND ALSO MAYBEL CORTEZ, WHO
11 HAS JOINED US AS A GRANTS TECHNICAL ASSISTANT. SO YOU
12 WILL BE SEEING ALL OF THIS PEOPLE REGULARLY, AND YOU
13 WILL BE HEARING FROM TWO OF THEM, PERHAPS, TODAY AS WE
14 GO ALONG. AT ANY RATE, RUTH, KUMAR, AND MAYBEL HAVE
15 BEEN TERRIFIC ADDITIONS TO OUR SCIENCE TEAM AND HAVE
16 INDEED STRENGTHENED IT.

17 LET ME THEN MOVE TO TWO PUBLICATIONS THAT
18 HAVE RECENTLY COME OUT. YOU SHOULD ALL HAVE AT YOUR
19 PLACE THE FINAL COPY OF THE "CIRM SCIENTIFIC STRATEGIC
20 PLAN," WHICH WE FINALLY HAVE HARD COPY OF. WE HAVE A
21 FEW AT THE BACK. IT IS AVAILABLE ON THE WEBSITE, SO
22 CAN BE EASILY ACCESSED BY ALL, SO WE'RE PROUD TO HAVE
23 THAT OUT.

24 WE ALSO HAVE THE FINAL REPORT OF THE
25 IOM-SPONSORED MEETING, *ASSESSING THE MEDICAL RISKS OF*

1 *HUMAN OOCYTE DONATION FOR STEM CELL RESEARCH.* AS YOU
2 RECALL, THIS WAS A MEETING THAT WAS HELD IN SEPTEMBER
3 2006. THE IOM ASSEMBLED A DISTINGUISHED PANEL CHAIRED
4 BY LINDA GIUDICE, DR. LINDA GIUDICE, CHAIR OF OB-GYN
5 AND REPRODUCTIVE MEDICINE AT UCSF. SHE AND HER PANEL
6 THEN BROUGHT AN OUTSTANDING GROUP OF RESEARCHERS
7 TOGETHER FOR THIS ALL-DAY MEETING AND REALLY MADE A
8 COMPREHENSIVE EXAMINATION OF WHAT THOSE RISKS MIGHT BE.

9 THAT MEETING WAS THEN WRITTEN UP BY THE IOM
10 STAFF, AND THEN THE WRITE-UP OF THE MEETING WAS
11 CIRCULATED TO A NUMBER OF READERS FOR THEIR COMMENTS,
12 AND THEN FINALLY APPROVED BY THE IOM. SO THIS HAS GONE
13 THROUGH QUITE A PROCESS. THE PROCEEDINGS ARE AVAILABLE
14 ON THE WEBSITE. WE HAVE ONE OR TWO DRAFT COPIES OF THE
15 REPORT, BUT HARD COPIES WILL SOON BE AVAILABLE. WE'D
16 HOPED THEY WOULD BE AVAILABLE FOR THIS MEETING, BUT WE
17 WILL GET THEM TO YOU WHEN THEY COME.

18 IT WAS QUITE IMPORTANT BECAUSE, AS I SAID,
19 THIS, AS FAR AS WE KNOW, WAS THE FIRST COMPREHENSIVE
20 LOOK AT THIS IMPORTANT PROBLEM, LOOKING ALL THE WAY
21 FROM SHORT-TERM RISKS INVOLVING SURGICAL RISK, RISKS OF
22 ANESTHESIOLOGY, PSYCHOLOGICAL RISKS, WHICH IS OFTEN NOT
23 PAID MUCH ATTENTION TO, THE HYPEROVULATION SYNDROME AND
24 WHAT SERIOUS RISKS MIGHT COME FROM THAT, AND ALSO A
25 LOOK AT LONG-TERM RISKS ABOUT WHICH THERE IS SOME

1 INFORMATION, BUT NOT AS MUCH AS WE WOULD LIKE.

2 AND I WANT TO SIMPLY SAY, WITHOUT GOING INTO
3 THE MAIN POINTS OF THE REPORT, WHICH YOU WILL BE ABLE
4 TO SEE FOR YOURSELF, THAT THESE WILL CERTAINLY HAVE AN
5 IMPACT ON CIRM POLICIES. AND I THINK THE TWO PRINCIPAL
6 FEATURES THAT WE WILL LOOK AT AND FURTHER DISCUSS ARE,
7 NO. 1, THE NEED FOR MORE STUDIES IN THIS AREA,
8 PARTICULARLY THE NEED FOR LONG-TERM FOLLOW-UP. THAT IS
9 CLEAR, AND IT'S SOMETHING THAT WE CAN DO SOMETHING
10 ABOUT. AND NO. 2 IS THAT IT SEEMED VERY LIKELY, FROM
11 WHAT HAS BEEN SAID AND FROM OTHERS' EXPERIENCE, THAT
12 MUCH OF THE RISK, PARTICULARLY THE MODERATE SHORT-TERM
13 RISK, CAN BE MITIGATED BY CHOOSING APPROPRIATE
14 PROCEDURES. AND SO WE WILL LOOK AT THE RESULTS OF THE
15 MEETING, AND IT WILL INFORM OUR POLICIES GOING FORWARD.

16 AT ANY RATE, WE'RE DELIGHTED TO HAVE THIS.
17 WE THINK IT'S VERY IMPORTANT AND WILL BE IMPORTANT, NOT
18 ONLY FOR OUR OWN WORK, BUT WILL BE IMPORTANT WORLDWIDE.
19 WE WERE RECENTLY AT THE INTERNATIONAL STEM CELL FORUM,
20 AS I WILL TELL YOU IN JUST A MOMENT, AND THE REPORT
21 ATTRACTED A GOOD DEAL OF INTEREST THERE, AND ALL OF OUR
22 SAMPLES WERE QUICKLY GONE. THAT'S WHY I DON'T HAVE
23 MORE FOR YOU.

24 ARLENE CHIU AND I WERE AT THE INTERNATIONAL
25 STEM CELL FORUM WHICH MET IN SINGAPORE ON FEBRUARY 3D.

1 THE FORUM REPRESENTS 19 ORGANIZATIONS WHO ARE PART OF
2 IT. SEVENTEEN REPRESENT NATIONAL ENTITIES. JDRF AND
3 OURSELVES ARE THE ONLY TWO THAT DON'T REPRESENT
4 NATIONAL ENTITIES. AND AT THIS MEETING TWO MORE GROUPS
5 WERE INVITED TO JOIN, SPAIN AND SOUTH KOREA. AND IN
6 ADDITION, THERE WILL BE EXPLORATORY TALKS WITH INDIA
7 ABOUT WHETHER THEY MAY WISH TO JOIN AS WELL.

8 I MIGHT SAY JUST A WORD ABOUT THE
9 INTERNATIONAL STEM CELL FORUM. ITS PURPOSE IS TO
10 COORDINATE ACTIVITIES IN DIFFERENT COUNTRIES WITH THE
11 PURPOSE OF ASSURING AS MUCH TRANSPARENCY AS POSSIBLE
12 WITH ASSURING UNIFORMLY HIGH STANDARDS OF BOTH RESEARCH
13 AND OF ETHICAL PROCEDURES. AND SO THERE ARE A VARIETY
14 OF WORKING GROUPS, INCLUDING WORKING GROUPS THAT DEAL
15 WITH ETHICS. THERE IS ALSO A STEM CELL INITIATIVE THAT
16 PHASE I IS VIRTUALLY COMPLETE NOW, AND THE RESULTS OF
17 THAT, WE HOPE, WILL SOON BE PUBLISHED IN *NATURE*
18 *BIOTECHNOLOGY* WHICH COMPARE SOME 59 STEM CELL LINES
19 THAT HAVE BEEN ISOLATED AROUND THE WORLD TO LOOK AT
20 THEIR PROPERTIES AND TO SEE WHAT THEY HAD IN COMMON AND
21 TO CHARACTERIZE THEM. AND THERE WILL BE FURTHER
22 STUDIES EXAMINING GROWTH AND DIFFERENTIATION OF THESE
23 CELLS IN THE FUTURE.

24 WE ALSO HAD THE PRIVILEGE OF ATTENDING A
25 TWO-DAY SCIENTIFIC MEETING THAT WAS HELD, INTERNATIONAL

1 MEETING, IN CONJUNCTION WITH THE INTERNATIONAL STEM
2 CELL FORUM. ALSO, SINGAPORE ITSELF IS MAKING QUITE A
3 CONTRIBUTION IN THIS AREA. AND ARLENE AND I TOURED
4 WHAT THEY CALL BIOPOLIS. I'M NOT QUITE SURE WHERE THE
5 GREEK INFLUENCE COMES, BUT IT CONSISTS OF SEVEN
6 BUILDINGS WITH NAMES LIKE CRONOS AND PROTEOS AND SO
7 FORTH, WITH TWO MORE TO COME AND CONSTRUCTION NEARLY
8 COMPLETE. SO THIS IS A COMPLEX OF NINE BUILDINGS THAT
9 FORM A VERY IMPRESSIVE CAMPUS AT THE EDGE OF SINGAPORE.
10 THEY HAVE WONDERFUL FACILITIES THERE.

11 WE TALKED TO THE STEM CELL SCIENTISTS THERE
12 AND WERE PARTICULARLY IMPRESSED WITH THEIR EFFORTS IN
13 LOOKING AT LARGE-SCALE GROWTH OF STEM CELLS; THAT IS,
14 THE ABILITY TO GROW LARGE AMOUNTS THAT COULD BE USED
15 FOR THERAPIES.

16 NOW, AT THE FORUM MEETING THERE WAS
17 DISCUSSION ABOUT WHERE THE NEXT MEETING MIGHT BE, AND
18 BIDS WERE MADE BY ISRAEL AND CHINA. AND WE SUGGESTED
19 THAT THE MOST APPROPRIATE PLACE, HOWEVER, MIGHT BE TO
20 HAVE THE NEXT MEETING IN CALIFORNIA. AND, INDEED, THE
21 FORUM MEMBERS VOTED, AND WE WERE SELECTED AS THE SITE
22 FOR THE NEXT FORUM. SO APPROXIMATELY THIS TIME NEXT
23 YEAR WE WILL HAVE IN CALIFORNIA, IN SAN FRANCISCO, WE
24 WILL HAVE THE INTERNATIONAL STEM CELL FORUM MEETING,
25 AND I THINK THAT IS VERY APPROPRIATE AND SIGNIFICANT

1 RECOGNITION OF THE INTERNATIONAL ROLE THAT CALIFORNIA
2 STEM CELL RESEARCH IS PLAYING. SO THIS WILL BE
3 INTERESTING INDEED. AND I THINK WE WILL ALL LOOK
4 FORWARD TO THAT.

5 LET ME MENTION TWO OTHER MEETINGS THAT CIRM
6 HAS COSPONSORED. JUST THIS WEEK EARLIER WE HAD A
7 MEETING AT THE CIRM OFFICE ON THE UK STEM CELL BANK.
8 THIS WAS COSPONSORED BY THE BRITISH CONSULATE, AND THE
9 TWO SPEAKERS WERE LORD PATELL, WHO IS CHAIR OF THE MRC
10 STEERING COMMITTEE FOR THE BANK. HE IS A DISTINGUISHED
11 OB-GYN RESEARCHER AND REPRODUCTIVE ENDOCRINOLOGIST.
12 HE'S CHANCELLOR OF THE UNIVERSITY OF DUNDEE, AND HE IS
13 ALSO A MEMBER OF THE HOUSE OF LORDS. AND ACTUALLY IN
14 TERMS OF POLICY AND GOVERNMENTAL GUIDANCE, HE IS ONE OF
15 THE KEY FIGURES IN THE BRITISH GOVERNMENT. SO WE WERE
16 FORTUNATE TO HEAR HIM TALK ABOUT THEIR POLICIES.

17 AND DR. GLYN STACEY IS THE DIRECTOR OF THE UK
18 STEM CELL BANK. AND WE HEARD SOMETHING ABOUT THEIR
19 POLICIES, PROCEDURES, AND CHALLENGES. IT'S TAKEN THEM
20 SEVERAL YEARS TO GET THIS BANK ESTABLISHED. THEY HAVE
21 APPROVED, ARLENE, CORRECT ME IF I'M WRONG, I THINK IT'S
22 40 LINES OF WHICH THEY HAVE ABOUT 30 SOME ODD IN HAND,
23 AND THEY HAVE FOUR THAT ARE RIGHT NOW READY FOR
24 DISTRIBUTION. AND WE WERE IMPRESSED, I THINK, BY THE
25 MAGNITUDE OF THE JOB AND CHALLENGE IN REALLY PUTTING

1 TOGETHER A FIRST-RATE BANK, BUT WE'RE VERY, VERY
2 INTERESTED TO HAVE THEIR EXPERTISE AND TO HEAR OF THEIR
3 EXPERIENCE WITH THIS.

4 WE WILL ALSO BE COSPONSORING WITH THE HARVARD
5 CLUB OF SAN FRANCISCO A LECTURE BY DR. DOUGLAS MELTON
6 OF HARVARD UNIVERSITY ON "STEM CELLS -- SCIENCE,
7 POLITICS, AND THE ROAD AHEAD." THIS WILL BE ON
8 FEBRUARY 27TH AT GLADSTONE INSTITUTE. AND ATTENDANCE
9 WILL BE LIMITED, SO IF YOU WOULD LIKE TO COME, PLEASE
10 LET US KNOW AND WE WILL TRY TO RESERVE A SEAT FOR YOU.
11 FOR THOSE OF YOU WHO MAY NOT KNOW HIM, DOUG MELTON IS
12 ONE OF THE MOST DISTINGUISHED DEVELOPMENTAL BIOLOGISTS
13 IN THE WORLD, REALLY ENJOYS UNIFORM RESPECT, AND HAS
14 BEEN A LEADER IN STEM CELL BIOLOGY IN CREATING NEW
15 LINES. AND HIS LABORATORY HAS SPAWNED MANY, MANY YOUNG
16 INVESTIGATORS OF PROMINENCE, SOME OF WHOM HAVE COME TO
17 CALIFORNIA. KEVIN EGGAN, ANOTHER, HAS SERVED ON OUR
18 ETHICS COMMITTEE.

19 AND DOUG HIMSELF DOES NOT OFTEN TRAVEL. ONE
20 WEST COAST TRIP A YEAR IS ENOUGH FOR HIM, HE ONCE TOLD
21 ME. SO THIS IS A RARE OPPORTUNITY TO HEAR HIM, AND WE
22 LOOK FORWARD TO HIS TALK AND HIS PRESENCE.

23 NOW, LET ME QUICKLY BRING YOU UP TO DATE ON
24 OUR RFA'S. THE COMPREHENSIVE GRANT RFA, AS YOU KNOW,
25 HAD RECEIVED 70 APPLICATIONS. THOSE WERE REVIEWED BY

1 THE GRANTS WORKING GROUP JANUARY 8TH TO 10TH. AGAIN,
2 THIS WAS A STRENUOUS SESSION, AS IT WAS WITH THE SEED
3 GRANTS, WHICH WE'LL HEAR, OF COURSE, MORE ABOUT LATER.
4 WE ARE BUSY WRITING UP THE RESULTS OF THAT GRANTS
5 WORKING GROUP MEETING, AND THEY WILL BE PRESENTED TO
6 YOU IN MARCH FOR YOUR CONSIDERATION AND APPROVAL.

7 THE SHARED FACILITIES WORKING GROUP, ONCE
8 RICK CAME ON BOARD, WAS NO PROBLEM GETTING THIS OUT.
9 HE IMMEDIATELY SET TO WORK AND WAS A MAJOR HELP IN
10 THAT. IT WAS ISSUED ON JANUARY 12TH. I THINK IT WAS
11 THE 10TH ACTUALLY. DOESN'T MATTER. ANYHOW, WE HAVE
12 RECEIVED 25 LETTERS OF INTENT FOR THESE APPLICATIONS.

13 AND LET ME REMIND YOU THAT THERE ARE TWO
14 PARTS TO THE APPLICATION, ONE PART DEALING WITH THE
15 SCIENTIFIC NEED AND PROGRAM AND THE SECOND DEALING WITH
16 THE ACTUAL FACILITIES PART, HOW THE FACILITY WILL BE
17 DESIGNED. AND BECAUSE EACH OF THESE WILL BE REVIEWED
18 BY DIFFERENT WORKING GROUPS AND BECAUSE THEY TAKE
19 DIFFERENT TIMES AND PREPARATION, THEY'VE BEEN
20 SEPARATED. PART 1 APPLICATIONS ARE DUE FEBRUARY 23D
21 AND WILL BE REVIEWED IN EARLY APRIL BY THE GRANTS
22 WORKING GROUP. PART 2 APPLICATIONS ARE DUE MARCH 16TH
23 AND WILL BE REVIEWED BY THE FACILITIES WORKING GROUP ON
24 MAY 2D. AND WE HOPE TO BRING THE INFORMATION FROM BOTH
25 OF THOSE WORKING GROUPS TO YOU AT THE JUNE ICOC

1 MEETING.

2 SO THESE THREE INITIATIVES, THE SEED GRANTS,
3 COMPREHENSIVE GRANTS, AND THE SHARED FACILITIES GRANT
4 COMPRISE THE THREE PARTS OF OUR INITIATIVE TO
5 JUMP-START HUMAN EMBRYONIC STEM CELL RESEARCH IN
6 CALIFORNIA.

7 NOW, LET ME TURN TO A VERY MUCH MORE MUNDANE
8 TOPIC, AND THAT IS OUR AUDIT STATUS. WE HAVE TWO
9 AUDITS THAT I NEED TO TELL YOU ABOUT. I'M SORRY HERE.
10 OKAY. THE FIRST CARRIED OUT BY THE BOARD OF STATE
11 AUDITS, THIS IS A PERFORMANCE AUDIT, WHICH WAS MANDATED
12 BY JLAC, THE JOINT LEGISLATIVE AUDIT COMMITTEE, WHICH
13 WAS THEN UNDER THE CHAIRMANSHIP OF SENATOR ORTIZ. THIS
14 AUDIT WAS STARTED LAST SUMMER, AND I MADE SOME COMMENTS
15 ABOUT IT BEFORE. IT WAS QUITE A RIGOROUS AUDIT. WE
16 HAD FOUR PEOPLE COME IN AND WERE WITH US ABOUT FOUR
17 MONTHS. THEY THEN SPENT ANOTHER TWO MONTHS WORKING ON
18 THE AUDIT.

19 WE RECEIVED THE DRAFT REPORT ON FEBRUARY 5TH.
20 WE HAD BASICALLY WORKED TO RESPOND BY FEBRUARY 9TH WITH
21 ANY RESPONSES THAT WE MIGHT MAKE TO THAT REPORT. AND
22 WE HAVE RESPONDED, AND THERE WILL BE A PUBLIC RELEASE
23 IN LATE FEBRUARY. AND WE ARE NOT ALLOWED TO TALK ABOUT
24 THAT AUDIT UNTIL THAT TIME, BUT THAT'S WHEN WE CAN
25 EXPECT A PUBLIC RELEASE OF THE AUDIT AND THE RESPONSE.

1 ALSO, WE HAVE AN ANNUAL FINANCIAL AUDIT, AND
2 I'M SORRY I DIDN'T HAVE THIS. I APPARENTLY PUT THE
3 WRONG VERSION ON THIS MACHINE. BUT WE HAVE A CONTRACT
4 WITH A FIRM CALLED MACIAS, GINI & O'CONNELL, LLP. THIS
5 IS AN RFP THAT WAS AWARDED IN NOVEMBER IN RESPONSE --
6 THIS WAS A CONTRACT AWARDED IN RESPONSE TO AN RFP IN
7 NOVEMBER. THIS AUDIT IS COMPLETE. THIS IS OUR ANNUAL
8 FINANCIAL AUDIT WE HAVE EVERY YEAR, AND THE FINAL
9 DOCUMENT WILL BE IN THE STATE CONTROLLER'S OFFICE NEXT
10 WEEK. SO THAT IS ALL IN ORDER, AND I THINK WE WILL
11 HEAR MORE ABOUT THAT LATER, BUT JUST TO KEEP YOU
12 APPRISED OF ITS PROGRESS.

13 AND THEN, FINALLY, IN THE AREA OF MEDICAL AND
14 ETHICAL STANDARDS, GEOFF LOMAX, WHO IS OUR SENIOR
15 OFFICER FOR MEDICAL AND ETHICAL STANDARDS, HAS SET UP
16 TWO WORKSHOPS, ONE OF WHICH HAS ALREADY OCCURRED, AND
17 THE OTHER WHICH WILL OCCUR, ONE IN NORTHERN CALIFORNIA
18 AND ONE IN SOUTHERN CALIFORNIA. AND THEIR PURPOSE IS
19 TO MEET WITH REPRESENTATIVES OF EACH OF THE
20 INSTITUTIONS THAT WE ARE FUNDING TO DISCUSS AND CLARIFY
21 THE REGULATIONS, PARTICULARLY HOW THE ESCRO COMMITTEE
22 OR THE SCRO COMMITTEE MIGHT OPERATE, AND ALSO TO
23 DISCUSS WITH THEM WHAT THEIR PROBLEMS MIGHT BE AND TO
24 ALSO, WE HOPE, EXCHANGE BEST PRACTICES.

25 I ATTENDED THE MEETING THAT WAS HELD AT

1 STANFORD ON FEBRUARY 9TH, AND I WAS VERY IMPRESSED.
2 ACTUALLY WE HAD -- I DON'T KNOW IF GEOFF IS HERE. I
3 DON'T REMEMBER HOW MANY INSTITUTIONS WERE REPRESENTED.
4 TWELVE INSTITUTIONS. AND WHAT WAS OF INTEREST WAS THAT
5 IT WAS A FORUM IN WHICH THEY WERE ABLE TO DISCUSS NOT
6 ONLY PROBLEMS ABOUT HUMAN EMBRYONIC STEM CELL RESEARCH
7 THAT WAS CIRM-FUNDED, BUT THERE ARE ALSO ISSUES ARISING
8 FROM SB 1260 THAT THEY HAD. AND IT WAS A TERRIFIC
9 OPPORTUNITY FOR EACH OF THEM TO TALK ABOUT WHAT
10 EXPERIENCES THEY WERE HAVING AND WHAT STANCE THEIR
11 INSTITUTIONS HAVE TAKEN, AND ALSO FOR THOSE WHO WERE
12 JUST BEGINNING, TO LEARN FROM OTHERS ABOUT WHAT THEY
13 WERE DOING.

14 SO THIS IS VERY MUCH -- WE SEE OUR ROLE GOING
15 FORWARD IS TO MAINTAIN COMMUNICATION WITH INSTITUTIONS
16 TO HELP THEM NOT ONLY COMMUNICATE WITH US ABOUT WHAT'S
17 WORKING AND WHAT ISN'T, BUT ALSO TO COMMUNICATE AMONG
18 THEMSELVES. AND GEOFF LOMAX HAS ALREADY MADE A
19 TERRIFIC START IN GETTING THIS GOING, AND WE'RE VERY
20 PLEASED WITH IT. THERE WILL BE A CORRESPONDING MEETING
21 IN SAN DIEGO APRIL 6TH. AND A REPRESENTATIVE FROM UC
22 SAN DIEGO CAME UP ALREADY TO ATTEND THE FIRST MEETING
23 IN NORTHERN CALIFORNIA JUST TO SEE WHAT IT WOULD BE
24 LIKE IN THE SOUTH. WE THINK THIS IS GOING TO BE A VERY
25 VALUABLE SERIES OF MEETINGS.

1 SO THIS CONCLUDES REALLY THE FORMAL PART OF
2 MY PRESIDENT'S REPORT. I WILL SIMPLY SAY THAT WE ARE
3 EXPECTING ANOTHER BUSY MONTH BETWEEN NOW AND THE MARCH
4 MEETING, AND WE WILL HAVE A REPORT AT THAT TIME THAT
5 WILL BE FULL AND AS EXCITING AS THIS ONE. SO I WILL
6 TAKE ANY QUESTIONS THAT ANYBODY MIGHT HAVE ABOUT ANY OF
7 THESE TOPICS.

8 DR. WRIGHT: I DON'T HAVE A QUESTION SO MUCH
9 AS A SENTIMENT TO EXPRESS. AND I KNOW I DO THIS ON
10 BEHALF OF ALL THE BOARD MEMBERS. THOSE OF US WHO WERE
11 THERE FOR THE GRANT REVIEW GOT TO SEE AN ASTONISHING
12 PROCESS WORK IN A WAY THAT WAS BEYOND EXPECTATIONS.
13 AND I THINK THE SCIENCE TEAM HAS ALWAYS GIVEN US GREAT
14 EXPECTATIONS. I THINK ON BEHALF OF THE BOARD, EVEN
15 THOUGH SOME OF OUR MEMBERS ARE NOT HERE YET, WE
16 UNIFORMLY ARE GRATEFUL.

17 WHEN YOU AND I CHATTED ON A PRESIDENTIAL
18 SEARCH COMMITTEE CALL, I REMEMBER ONE OF THE THINGS YOU
19 SAID TO ME IS THAT YOU HAD CERTAIN LIMITATIONS, BUT ONE
20 OF YOUR STRENGTHS WAS SELECTING A FINE TEAM. AND,
21 ZACH, YOU'RE THE MASTER OF UNDERSTATEMENT THERE.

22 DR. HALL: THIS WAS A CALL ABOUT A YEAR AND A
23 HALF AGO AS I RECALL.

24 DR. WRIGHT: IT WAS. I REMEMBER WHERE I WAS
25 STANDING IN THE HOTEL IN D.C. WHEN WE HAD THIS

1 CONVERSATION. IF I HAD HAD ANY CONCEPT OF WHAT YOU
2 ACTUALLY MEANT BY THAT, THAT THAT WOULD TAKE
3 PERSONIFICATION IN SOMEONE LIKE ARLENE, I DON'T KNOW.
4 IT'S JUST AMAZING WHAT HAS OCCURRED. SO I THINK OF
5 YOU, ARLENE, AS THE HARDEST WORKING WOMAN IN STEM CELL
6 SCIENCE IN HONOR OF JAMES BROWN.

7 AND THINKING ABOUT THE EXPERTISE AROUND THIS
8 BOARD TABLE, I THINK WHAT YOU AND YOUR TEAM
9 ACCOMPLISHED WAS THE COMBINATION OF PRODUCING A MOVIE
10 AND NOT YET STARRING IN IT -- WE CAN'T GET ANYTHING TO
11 STICK TO YOU -- RUNNING A MAJOR MEDICAL SCHOOL AND
12 PROBABLY TAKING CARE OF PATIENTS, AS SOME OF US DO,
13 ALSO, AND THEN CONDUCTING AN ORCHESTRA, WHICH YOU DO SO
14 BEAUTIFULLY. SO ON BEHALF OF ALL OF US, THANK YOU VERY
15 MUCH.

16 (APPLAUSE.)

17 DR. HALL: LET ME JUST TAKE THIS OPPORTUNITY
18 TO SAY ARLENE HAS ALSO RECRUITED A FABULOUS SCIENCE
19 TEAM. THAT WAS IMPLIED IN YOUR WORDS, BUT I WOULD ALSO
20 LIKE TO HAVE A SEPARATE ROUND OF APPLAUSE FOR MOST OF
21 THE PEOPLE WHO ARE HERE.

22 (APPLAUSE.)

23 MR. REED: I JUST WANTED TO SAY ON BEHALF OF
24 THE PATIENT COMMUNITY THAT AMY DUROSS HAS BEEN
25 GIGANTIC. SHE HAS BEEN THE QUIET PERSON BEHIND THE

1 SCENES WHO WAS THE GLUE FOR EVERYBODY ELSE'S EFFORT.
2 SHE HAS HELPED SO MANY MILLIONS OF PEOPLE. THANK YOU
3 SO MUCH. WE WILL MISS YOU TERRIBLY.

4 (APPLAUSE.)

5 DR. HALL: UNLESS THERE ARE NO FURTHER
6 QUESTIONS. BOB, DO YOU HAVE A QUESTION?

7 CHAIRMAN KLEIN: NO. I'M JUST TRYING TO SEE
8 IF THERE ARE ANY OTHER PUBLIC QUESTIONS. JOHN SIMPSON.

9 MR. SIMPSON: THANK YOU. JOHN SIMPSON FROM
10 THE FOUNDATION FOR TAXPAYER AND CONSUMERS RIGHTS. I
11 GUESS I CAN HELP FILL IN THE VOID UNTIL WE GET A
12 QUORUM.

13 I DID WANT TO GO BACK AND ASK A QUESTION
14 ABOUT THE PROCEDURES. I'M AT A LOSS AS TO WHY THE
15 MASTER LIST OF CONFLICTS OF INTEREST WOULD NOT BE MADE
16 AVAILABLE IN REAL TIME RIGHT NOW SINCE IT WOULD SEEM TO
17 ME TO BE FACILITATING THE PROCESS ALL THE WAY AROUND.

18 BEFORE THAT'S ANSWERED, MAYBE I CAN MAKE TWO
19 OTHER QUICK POINTS ABOUT THE PROCESS. I CONTINUE TO
20 REFER PEOPLE TO THE STATE OF CONNECTICUT WHERE THEY DO
21 MANAGE TO AWARD OR DID MANAGE TO AWARD \$19.7 MILLION TO
22 70 APPLICANTS 21 GRANTS, AND IT WAS A MUCH MORE OPEN,
23 TRANSPARENT PROCESS WHERE THE APPLICANTS WERE NAMED AND
24 THEIR AFFILIATIONS WERE MADE PUBLIC. WE THINK THAT'S
25 AN IMPORTANT THING TO CONTINUE.

1 FINALLY, I WOULD JUST SIMPLY REPORT THAT
2 SINCE THE LAST TIME I TALKED TO YOU, WARF, IN ITS
3 INFINITE WISDOM, HAS DECIDED TO SIGNIFICANTLY AND
4 SUBSTANTIALLY EASE LICENSING REQUIREMENTS FOR ITS
5 OVERREACHING, HIGHLY RESTRICTIVE PATENTS. WE THINK
6 THAT'S A GOOD THING. WE DON'T THINK THAT THEY WENT FAR
7 ENOUGH. OTHERS HAVE SUGGESTED THAT OUR CHALLENGE IS
8 ONE OF THE REASONS THAT THEY CAVED AND DID THE RIGHT
9 THING. I JUST WANT YOU ALL TO KNOW THAT WE CONTINUE TO
10 PRESS THE CHALLENGE AND THE PTO, AND WE'RE OPTIMISTIC
11 THAT THOSE PATENTS WILL ULTIMATELY BE RESCINDED.

12 WE WOULD BE DELIGHTED IF AT ANY TIME THE ICOC
13 DECIDED TO ENDORSE THAT CHALLENGE. THAT MIGHT BE
14 SOMETHING YOU WOULD LIKE TO CONSIDER. THANK YOU.

15 CHAIRMAN KLEIN: DR. HALL, COULD YOU RESPOND
16 TO THIS QUESTION ABOUT THE TIMING AND THE PREPARATION
17 OF THE CONFLICTS LIST?

18 DR. HALL: YES. RIGHT. SO THE QUESTION CAME
19 UP OF WHETHER WE WOULD RELEASE THE ENTIRE LIST OF
20 CONFLICTS OF INTEREST. AND I PRESUME THE PURPOSE OF
21 THAT WAS TO, AT LEAST ONE PURPOSE OF IT, WAS TO SORT OF
22 DECODE THE LIST AND FIGURE OUT WHAT THE SIGNATURES OF
23 RECUSALS WERE FOR THE VARIOUS INSTITUTIONS. CERTAINLY
24 IT'S POSSIBLE TO DO THAT WITH THE LIST.

25 AND, AS YOU KNOW, ONE OF THE -- WE HAVE HAD

1 INTEREST IN HAVING THIS PROCESS OCCUR WITHOUT
2 IDENTIFICATION OF INDIVIDUALS OR INSTITUTIONS IN THE
3 BELIEF THAT THE BEST JUDGMENTS WILL BE MADE IF THEY'RE
4 MADE ON THE BASIS OF THE SCIENCE AND THE
5 RECOMMENDATIONS. THAT IS, WITHOUT CONSIDERATION OF WHO
6 THE PERSON IS OR WHERE THE INSTITUTION IS. AT THE SAME
7 TIME WE DO HAVE A COMMITMENT TO TRANSPARENCY. AND AS
8 BOB KLEIN, THE CHAIR, SAID AT THE BEGINNING, WE ARE
9 ABSOLUTELY COMMITTED TO HONORING THE CONFLICTS OF
10 INTEREST AND ENSURING THAT THE JUDGMENTS ARE MADE
11 WITHOUT ANY VIOLATION OF CONFLICT OF INTEREST PROVISOS.

12 SO THE PRACTICAL MATTER OF HOW TO DO THIS HAS
13 BEEN SORT OF A CAREFUL ROAD THAT WE HAVE FOLLOWED. LET
14 ME MAKE THE POINT, FIRST, THAT THE CHAIRMAN MADE
15 EARLIER. AND THAT IS, THAT EACH MEMBER OF THE BOARD
16 HAS A LIST OF HIS OR HER OWN RECUSALS, BUT YOU DO NOT
17 HAVE A LIST OF ALL THE RECUSALS. DO YOU? NO. SORRY.
18 MY HEART WHEN YOU RAISED IT. EACH PERSON HAS A LIST OF
19 THEIR RECUSALS; HOWEVER, THEY DO NOT HAVE ANY OTHER
20 PERSON'S RECUSALS. SO THEY KNOW THE GRANTS FOR WHICH
21 THEY HAVE A CONFLICT OF INTEREST, BUT THEY DO NOT KNOW
22 THOSE FOR WHICH OTHERS HAVE A CONFLICT OF INTEREST.

23 WE ACTUALLY THINK THAT'S THE RIGHT WAY.
24 THAT'S AS IT SHOULD BE. AND IF A MASTER LIST IS MADE
25 PUBLIC, THEN BOARD MEMBERS AND ANYONE ELSE, I THINK

1 THIS ENCOURAGES PEOPLE, THEN, TO TRY TO FIGURE OUT
2 WHICH ONES THEY ARE. SO WE HAVE TAKEN A POSITION THAT
3 WE WILL ANNOUNCE AT THE TIME OF EACH, AS THE CHAIRMAN
4 DESCRIBED, AT THE TIME THAT EACH GRANT THAT'S
5 CONSIDERED SPECIFICALLY WHICH THE RECUSALS ARE. BY THE
6 WAY, TRACKING THIS WHEN WE HAVE 231 AND THE DISCUSSION
7 IS SHIFTING IS DAUNTING. BUT TO BE ABSOLUTELY SURE
8 THAT YOU DON'T FORGET, YOU WILL BE REMINDED, AS WE
9 DISCUSS A GRANT, WHO HAS A CONFLICT OF INTEREST FOR
10 THAT GRANT. AND WE THINK THAT IS IN THE INTEREST OF
11 BEING SURE THAT WE HONOR THOSE CONFLICTS OF INTEREST
12 WITHOUT VIOLATION.

13 AT THE END OF THE PROCESS, FOR THOSE WHO
14 WOULD LIKE, THE MASTER LIST WILL BE AVAILABLE. I DON'T
15 HAVE A MASTER LIST. THE ONLY MASTER LIST IS INVOLVED
16 WITH THOSE WHO ARE DETERMINING CONFLICT OF INTEREST.
17 SO THOSE ARE OUR REASONS. THERE IS A WRITTEN ACCOUNT
18 OF THAT ON THE CALIFORNIA STEM CELL REPORTS BLOG THIS
19 MORNING FOR THOSE WHO ARE INTERESTED IN WHICH I REPLIED
20 TO DAVID JENSON OUR REASONS FOR WITHHOLDING IT TILL
21 AFTER THE MEETING.

22 CHAIRMAN KLEIN: I THINK DR. KESSLER WOULD
23 LIKE TO MAKE A COMMENT. AND IF I MAY, WE ARE
24 ANNOUNCING THE CONFLICTS BEFORE EVERY VOTE. IT WOULD
25 SEEM APPROPRIATE TO PURSUE TRYING TO ENHANCE OUR

1 TRANSPARENCY BY HAVING A LIST AVAILABLE DURING THE
2 PROCESS. IF WE COULD JUST EXAMINE THAT QUESTION, I
3 THINK IT'S A LEGITIMATE POINT.

4 BUT DR. KESSLER.

5 DR. KESSLER: THANKS, BOB. I JUST WANT TO
6 SECOND WHAT EVERYONE HAS SAID ABOUT STAFF AND CERTAINLY
7 ABOUT AMY, A GREAT LOSS. AND I DO TRUST STAFF A
8 HUNDRED PERCENT.

9 SAYING THAT, FOR THE RECORD, I APPRECIATE
10 THIS LIST. IT'S A LIST OF NUMBERS. THERE'S NO WAY
11 THAT I CAN KNOW OTHER THAN THE NUMBERS ON THIS LIST
12 WHAT I HAVE A CONFLICT WITH OTHER THAN WHAT STAFF HAS
13 TOLD ME.

14 DR. HALL: YOU WILL BE TOLD -- WHEN A GRANT
15 IS UP FOR CONSIDERATION, WE WILL READ OUT THE NAMES OF
16 THOSE WHO HAVE A CONFLICT OF INTEREST, SO YOU WILL BE
17 REMINDDED.

18 DR. KESSLER: YOU'RE GOING TO TELL ME, BUT I
19 CAN'T CERTIFY ANYTHING BECAUSE I DON'T HAVE INDEPENDENT
20 KNOWLEDGE OTHER THAN WHAT YOU'RE TELLING ME.

21 DR. PENHOET: YOU GENERATED THE DOCUMENT FROM
22 WHICH THAT LIST WAS CREATED.

23 DR. KESSLER: DID I GENERATE THIS LIST?

24 DR. PENHOET: YOU SHOULD HAVE. WE ALL DID.

25 DR. KESSLER: I GENERATED FROM THE

1 INSTITUTION LIST. YOU KNOW MY INSTITUTION THAT I
2 RECUSE MYSELF FROM. I DIDN'T GO THROUGH THE NUMBERS.

3 MR. HARRISON: WHAT YOU ARE CERTIFYING TO
4 IS -- THE APPLICATIONS WILL BE DISCUSSED BY APPLICATION
5 NUMBER. SO AT THE END OF THE PROCESS, WHAT YOU'RE
6 CERTIFYING IS THAT YOU HAVE NOT PARTICIPATED IN THE
7 DISCUSSION OF THOSE APPLICATIONS THAT ARE ON THE LIST
8 IN FRONT OF YOU. YOU WILL KNOW THAT BECAUSE THE
9 APPLICATIONS WILL BE DISCUSSED AND VOTED UPON BY
10 NUMBER.

11 DR. KESSLER: I DIDN'T DO THE NUMBERS, RIGHT?

12 MR. HARRISON: CORRECT.

13 DR. KESSLER: I DID --

14 DR. HALL: THAT'S BECAUSE YOU DON'T KNOW --
15 THAT'S RIGHT. OTHERWISE, THE ALTERNATIVE IS TO GIVE
16 YOU THE LIST WITH INSTITUTIONS IDENTIFIED. AND IF THE
17 BOARD WANT US TO DO THAT, WE CAN. THEN THEY BECOME
18 PUBLIC INFORMATION. THAT'S THE ISSUE.

19 DR. KESSLER: MY ONLY ISSUE IS THERE'S ALWAYS
20 A RISK WHEN WE HAVE NUMBERS. IT'S POSSIBLE TO MAKE A
21 MISTAKE. SO I SAY UNIVERSITY OF CALIFORNIA SAN
22 FRANCISCO, AND YOU GO THROUGH AND YOU PULL THE
23 UNIVERSITY OF CALIFORNIA SAN FRANCISCO APPLICATIONS.
24 IT'S POSSIBLE THERE'S AN ERROR THERE. THERE'S NO WAY
25 I'M GOING TO KNOW WHETHER THERE'S AN ERROR OR NOT,

1 RIGHT?

2 DR. HALL: THAT'S CORRECT.

3 DR. KESSLER: I WANTED, FOR THE RECORD, WHAT
4 I KNOW AND WHAT I DON'T KNOW, I CAN TELL YOU WHAT
5 INSTITUTION I HAVE, I CAN TELL YOU WHAT NUMBERS YOU
6 GAVE ME. I CAN'T CERTIFY -- I CAN CERTIFY THAT I
7 DIDN'T PARTICIPATE IN THESE. I CAN'T TELL YOU THAT
8 THESE MATCH THE UNIVERSITY OF CALIFORNIA.

9 DR. HALL: THAT'S FINE.

10 DR. KESSLER: I TRUST THAT STAFF HAS DONE
11 THAT, BUT I'M DEPENDENT -- I THINK WE'RE ALL DEPENDENT
12 ON THAT STEP. SO IF THERE'S A MISTAKE ON THESE LISTS,
13 IT'S NOT INTENTIONAL.

14 DR. HALL: YES. THAT PROCESS ACTUALLY IS
15 AVAILABLE TO AUDIT, AND IT HAS BEEN AUDITED FOR OUR
16 PRIOR TRAINING GRANTS. THAT WAS PART OF THE
17 PERFORMANCE AUDIT IN WHICH THE AUDITORS WENT IN,
18 CHECKED THE TWO LISTS AGAINST EACH OTHER. AND THERE
19 ARE OCCASIONAL MISTAKES. THERE IS NO QUESTION ABOUT
20 THAT, BUT THEY ARE VERY RARE AND THEY --

21 DR. KESSLER: MISTAKES, ESPECIALLY WITH
22 NUMBERS, THERE'S ALWAYS GOING TO BE SOME MISTAKE
23 SOMEWHERE NO MATTER HOW GOOD THE PEOPLE ARE. AND I
24 JUST WANT FOR THE RECORD THAT IT'S NOT THE ICOC MEMBERS
25 THAT HAVE ACTUALLY GONE THROUGH ITEM BY ITEM AND PULLED

1 THIS SO THAT MY COLLEAGUES AND ME ON ICOC CAN'T BE
2 HELD -- I MEAN INTENTIONALLY THAT WE'VE DONE SOMETHING
3 WRONG IF, IN FACT, THERE'S A MISTAKE HERE.

4 CHAIRMAN KLEIN: THANK YOU, DR. KESSLER.
5 POINT WELL TAKEN. I THINK JEFF SHEEHY.

6 MR. SHEEHY: YES. I ACTUALLY WOULD LIKE TO
7 URGE US TO MAKE THE FULL LIST, THE MASTER LIST,
8 AVAILABLE TO THE PUBLIC. I KIND OF AGREE WITH JOHN.
9 AND ACTUALLY THAT ADDITIONAL STEP IN TRANSPARENCY, I
10 THINK, GOES TOWARDS ADDRESSING DR. KESSLER'S THING
11 BECAUSE IF, FOR INSTANCE, SOMEONE NOTICED THAT DR.
12 KESSLER AND MYSELF, IF OUR LIST DIDN'T MATCH, THAT'D BE
13 A QUICK FAIL SAFE. AND OUR WILLINGNESS TO BE OPEN
14 WOULD HAVE -- KIND OF GET US OUT OF THAT. AND IT
15 ALLOWS THE PUBLIC TO KIND OF PLAY A MONITORING ROLE
16 ALONG WITH THE SUPERLATIVE JOB THAT STAFF IS DOING, BY
17 THE WAY. I ECHO JANET TOTALLY.

18 I CAN SEE WHY YOU MIGHT NOT WANT TO MAKE IT
19 AVAILABLE IN ADVANCE SO EVERYBODY CAN FIGURE EVERYTHING
20 OUT, BUT I THINK WE HAVE THEM IN FRONT OF US. YOU
21 KNOW, PEOPLE ARE GOING TO KNOW A LOT OF INFORMATION
22 TOMORROW WHEN WE ANNOUNCE THE GRANTS. I THINK THIS
23 LITTLE WINDOW, THIS ADDITIONAL LEVEL OF TRANSPARENCY
24 WOULD BE ACTUALLY VERY HELPFUL.

25 DR. PRICE: I WANT TO SPEAK AGAINST THAT FOR

1 A PROCEDURAL AND PRACTICAL REASON. MUCH OF WHAT WE'VE
2 BEEN DOING FOR MONTHS, OVER A YEAR, IS TO PROTECT
3 OURSELVES FROM WHAT, IN MY MIND, ARE PRETTY FANTASTICAL
4 HYPOTHETICAL SITUATIONS. LET ME PROVIDE ONE FOR YOU.
5 IF WE ALL HAVE THE FULL LIST AND WE KNOW WHO'S
6 ASSOCIATED WITH WHAT --

7 CHAIRMAN KLEIN: I THINK, DR. PRICE, THE
8 POSITION WAS NOT TO PROVIDE THE FULL LIST FOR EACH
9 MEMBER. I THINK IT WAS THAT THE PUBLIC WOULD HAVE
10 AVAILABLE TO IT THE LIST. EACH MEMBER WOULD HAVE, AS I
11 UNDERSTOOD THE PROPOSAL, HAVE THE LIST THAT ADDRESSED
12 THEIR ITEMS.

13 DR. PRICE: YEAH, BUT IF THE PUBLIC HAS THE
14 LIST, WE HAVE THE LIST. WE HAVE RECESS AND SO ON.
15 AND, THEREFORE, THIS OPENS UP THE POSSIBILITY OF LOG
16 ROLLING. I KNOW WHAT DR. KESSLER'S LIST AT UCSF ARE,
17 HE KNOWS THE BERKELEY LIST. SO I SAY, KESSLER, YOU
18 VOTE FOR THE BERKELEY PEOPLE. I'LL VOTE FOR THE UC --
19 I'LL VOTE TO MOVE THE UCSF PEOPLE UP THE LIST, AND
20 WE'LL BOTH BENEFIT. OF COURSE, WE KNOW IT'S ONLY
21 HYPOTHETICAL BECAUSE THE UCSF, ALL OF THEIR PROPOSALS
22 ARE GOING TO BE IN THE TOP FUNDING CATEGORY, SO THAT'S
23 NOT A REAL HYPOTHETICAL.

24 CHAIRMAN KLEIN: OKAY. WELL, WE CERTAINLY
25 HAVE LOOKED AT BOTH SIDES OF THE ISSUE.

1 DR. HALL: DR. PRICE, IF I REMEMBER FROM MY
2 TIME AT UCSF, ACTUALLY THE VOTES MIGHT GO THE OTHER
3 WAY.

4 DR. PRICE: POINT TAKEN.

5 CHAIRMAN KLEIN: ALL RIGHT. THANK YOU. ANY
6 ADDITIONAL COMMENTS? JOHN SIMPSON.

7 MR. SIMPSON: JOHN SIMPSON FROM THE
8 FOUNDATION FOR TAXPAYER AND CONSUMER RIGHTS. AGAIN,
9 WITH NO QUORUM, I FEEL THAT WE'RE NOT DELAYING THINGS.
10 CERTAINLY WHEN WE HAVE A QUORUM, I DON'T WANT TO DELAY
11 THINGS. I THINK THAT DR. KESSLER'S POINT GOES
12 PRECISELY TO WHY, NOT ONLY THE IDENTIFICATION BY
13 INSTITUTION, BUT ALSO THE NAME OF THE INDIVIDUAL SHOULD
14 BE MADE PUBLIC WHEN THIS IS BEING DEBATED. AND THAT IS
15 BECAUSE THERE'S THE POTENTIAL FOR THE SORT OF
16 PROFESSIONAL CONFLICT OF INTEREST WITH SOMEONE WHO
17 MIGHT HAVE BEEN A STUDENT, SOMEONE WHO MIGHT HAVE BEEN
18 COPUBLISHING WITH YOU THAT WOULDN'T BE KNOWN FROM A
19 MERE NUMBER.

20 AND, AGAIN, I POINT EVERYONE'S ATTENTION TO
21 CONNECTICUT WHERE THEY MANAGED TO HAVE THESE ABSTRACTS
22 JUST AS WE HAVE, BUT WE HAVE AT THE PUBLIC MEETING, NOT
23 BEFORE THAT, I GUESS, BUT AT THE PUBLIC MEETING THE
24 NAME OF THE INSTITUTION AND THE NAME OF THE PERSON WHO
25 WAS APPLYING. AND I THINK THAT WOULD MAKE LIFE MUCH

1 SIMPLER FOR EVERYONE AND WOULD MAKE IT CRYSTAL CLEAR TO
2 THE MEMBERS OF THE BOARD WHETHER THEY MIGHT HAVE SOME
3 LONG FORGOTTEN CONFLICT BECAUSE THEY ONCE COPUBLISHED
4 WITH THIS PERSON. THANK YOU.

5 CHAIRMAN KLEIN: THANK YOU VERY MUCH. I'D
6 LIKE TO RECOGNIZE FOR THE RECORD THAT SHERRY LANSING IS
7 NOW PRESENT. I'D LIKE IF THE BOARD COULD STAND AND WE
8 PROVIDE RECOGNITION TO THE FIRST OSCAR IN THE HISTORY
9 OF STEM CELL RESEARCH.

10 (APPLAUSE.)

11 MS. LANSING: I'M TOTALLY SURPRISED AND TAKEN
12 ABACK. AND THANK YOU. THAT'S VERY, VERY, VERY, VERY
13 KIND. BUT MORE IMPORTANT THAN ANY OSCAR IS THE WORK
14 THAT WE'RE ALL DOING HERE. I REALLY DO MEAN THAT
15 SINCERELY. THANK YOU FOR YOUR KINDNESS.

16 CHAIRMAN KLEIN: CERTAINLY IN MY BOOK THE
17 VERY BEST OSCAR THAT YOU COULD EVER RECEIVE IS A
18 HUMANITARIAN OSCAR FOR A LIFETIME CONTRIBUTION TO
19 REDUCE HUMAN SUFFERING. SHERRY, WE'RE VERY PRIVILEGED
20 TO HAVE YOU WITH US.

21 WE CAN GO FORWARD INTO AGENDA ITEM 8 AND
22 PROVIDE THE BACKGROUND, ALTHOUGH, SHERRY, YOU SHOULD
23 KNOW WE'RE STILL WAITING FOR TWO MEMBERS TO HAVE A
24 QUORUM, BUT WE CAN PROVIDE THE BACKGROUND FOR US,
25 LAYING OUT THE RECOMMENDATIONS OF THE GRANT WORKING

1 GROUP, WHICH IS ESSENTIAL TO OUR PROCESS, AND PROCEED
2 ALONG THIS TRACK.

3 TO LEAD OFF THIS ITEM, I'M GOING TO ASK JEFF
4 SHEEHY, STANDING IN FOR JOAN SAMUELSON, THE VICE
5 CHAIRPERSON OF THE SCIENTIFIC AND MEDICAL GRANTS REVIEW
6 WORKING GROUP, TO GIVE US AN OVERVIEW OF THE KEY
7 RECOMMENDATIONS CONCEPTUALLY FROM THAT GROUP.

8 MR. SHEEHY: AND I AM FILLING IN FOR JOAN.
9 SHE COULDN'T BE HERE TODAY. WHILE ZACH IS QUEUING UP
10 THE SLIDE, I WOULD REALLY LIKE TO ECHO WHAT JANET SAID
11 ABOUT THE WORK OF DR. CHIU AND STAFF. THAT WASN'T JUST
12 AN OPINION OF THE ICOC MEMBERS THAT WERE THERE, BUT THE
13 ADULATION FOR THE WORK THAT THEY DID WAS OVERWHELMINGLY
14 SHARED BY THE SCIENTIST MEMBERS. AND JUST THINK FOR A
15 MINUTE. WE HAD REVIEWED OVER 300 GRANTS IN A
16 RELATIVELY SHORT PERIOD OF TIME WITH INNUMERABLE
17 SPECIALISTS BROUGHT IN WITH CLOCKWORK PRECISION,
18 NONVOTING, BUT TO GIVE THEIR OPINIONS TO GUIDE THE
19 VOTING MEMBERS OF THE WORKING GROUP. AND IT WAS REALLY
20 A SPECTACULAR DISPLAY OF PROFESSIONALISM, OF TIMING,
21 AND OF GRACE. AND I PERSONALLY HAVE A SHRINE TO DR.
22 CHIU AT MY HOUSE, AND I HOPE SHE NEVER LEAVES US.

23 NOW, I'M GOING TO TALK ABOUT -- THE LAST PART
24 OF IT WAS THE PROGRAMMATIC REVIEW OF THE WORKING GROUP
25 WHERE WE ACTUALLY SHAPED THE PORTFOLIO. AND THIS GIVES

1 YOU KIND OF THE BREAKOUT ON HOW THE GRANTS WORKING
2 GROUP MADE THEIR FINAL RECOMMENDATIONS.

3 THEY SET OUT THREE TIERS ORIGINALLY. THE
4 FIRST TIER WERE THOSE THAT SHOULD BE FUNDED. THE
5 SECOND TIER WERE THOSE THAT SHOULD BE FUNDED IF THERE
6 WAS ENOUGH MONEY. AND THE THIRD TIER WERE THOSE THAT
7 WE DID NOT FEEL LIKE WARRANTED FUNDING. AND I DO
8 THINK, AS WE START INTO OUR DISCUSSION, THAT IN LOOKING
9 AT THAT THIRD TIER, WE CAPTURE SOME OF THE FLAVOR OF
10 WHAT THE SCIENTISTS AT THE WORKING GROUP WERE FEELING.
11 AND IF PEOPLE DO WISH TO MOVE PEOPLE'S APPLICATIONS OUT
12 OF THAT GROUP, I WOULD LIKE TO STATE THAT THE
13 SCIENTISTS FELT VERY STRONGLY IN SETTING THAT FLOOR,
14 THAT THEY WERE SETTING A STANDARD FOR US AS A FUNDING
15 AGENCY, A QUALITY STANDARD, A FLOOR BENEATH WHICH WE
16 SHOULD NOT FUND, THAT WE SHOULD REQUIRE PEOPLE WHO ASK
17 MONEY FROM US TO HIT A CERTAIN LEVEL, BOTH IN TERMS OF
18 QUALITY OF APPLICATION AND JUST THEIR GENERAL SKILL IN
19 BRINGING IT FORWARD.

20 NOW, IN THE SECOND PART OF IT, WE LOOKED AT
21 SEVERAL DIFFERENT THINGS IN ORDER TO KIND OF BALANCE
22 OUT OUR PORTFOLIO. WE LOOKED AT DISEASES. WE LOOKED
23 AT -- WE CONSIDERED SOME ASPECTS OF THE RESEARCHERS,
24 WHETHER THEY WERE NEW TO THE FIELD, BOTH WHETHER THEY
25 WERE JUST BEGINNING THEIR CAREER, OR THEY WERE FOLKS

1 WHO HAD -- SCIENTISTS WHO HAD NEVER DONE STEM CELL
2 RESEARCH BEFORE AND HAD MANAGED TO PUT TOGETHER AN
3 OUTSTANDING APPLICATION. WE LOOKED AT SCIENTIFIC
4 MERIT.

5 AND THE UPSHOT OF THAT IS WE ENDED UP LOOKING
6 BEYOND WHAT WE ACTUALLY HAD ALLOCATED MONEY FOR AT THE
7 ICOC. WE PULLED NINE APPLICATIONS UP AND ASTERISKED
8 THEM SPECIFICALLY FOR THESE CRITERIA THAT I MENTIONED,
9 AND GETTING A GOOD DISEASE SPAN IN OUR PORTFOLIO WAS A
10 MAJOR CRITERIA FOR THAT. ALSO CHAIRMAN KLEIN
11 IDENTIFIED POTENTIALLY ANOTHER \$20 MILLION IN FUNDING,
12 SO THEY ACTUALLY BROUGHT US DOWN -- WHEN YOU LOOK AT
13 THE LARGER SCALE WOULD BE ABOUT THE 34TH PERCENTILE,
14 AND ABOUT 76 IN TERMS OF THE SCORES. AND I FELT THAT
15 THE WORKING GROUP AND, I THINK, THE FOLKS THAT WERE
16 THERE FELT THAT THE WORKING GROUP VERY STRONGLY
17 ENCOURAGED US TO TRY TO FIND THE MONEY TO FUND DOWN TO
18 THAT LEVEL AT LEAST.

19 THEY WERE IMPRESSED BY THE QUALITY OF THE
20 SCIENCE THAT WAS PRESENTED. AND, FRANKLY, TO MAKE A
21 SLIGHT REFERENCE TO THE COMPREHENSIVE GRANT WORKING
22 GROUP RECOMMENDATIONS IN THE SECOND PART, THEY ACTUALLY
23 SAID, AS PART OF THEIR RECOMMENDATIONS FOR THAT ROUND,
24 THAT IF WE FIND ANY ADDITIONAL MONEY ANYWHERE, TO GO
25 BACK TO THE SEED GRANTS AND FUND FURTHER DOWN INTO THE

1 SECOND TIER. THEY WERE SO IMPRESSED WITH THOSE
2 APPLICATIONS.

3 AS YOU LOOK AT THE SCORES, WHEN WE BRING OUT
4 THE SCORES, THERE'S A VERY STRONG INSTRUCTION FROM STU
5 ORKIN, THE CHAIR OF THE WORKING GROUP, THAT THE PEOPLE
6 USE THE ENTIRE SCORE, THE ENTIRE SCALE IN SCORING. SO
7 I WAS TALKING WITH MR. SIMPSON, AND HE SAID, "WELL,
8 SOMEBODY GOT A 76. THAT'S A GENTLEMAN'S C." ACTUALLY,
9 NO, THAT WAS NOT A GENTLEMAN'S C. THAT WAS A VERY GOOD
10 SCORE IN THIS GROUP. THEY WERE A TOUGH GROUP. THEY
11 DIDN'T GIVE ANYTHING AWAY. AND AS ZACH TAKES US
12 THROUGH IT, I THINK YOU ARE GOING TO SEE THAT WE'VE GOT
13 SOME INCREDIBLE SCIENCE. THANK YOU.

14 CHAIRMAN KLEIN: DR. LEVEY, I BELIEVE, HAS A
15 POINT.

16 DR. LEVEY: I APPRECIATE JEFF'S COMMENTS
17 BECAUSE, AS I REVIEWED THE GRANTS, IT SEEMED TO ME
18 THERE WERE A NUMBER OF GRANTS IN THE SHADED AREA, I
19 GUESS WOULD BE TIER 2, THAT WERE CLEARLY CAPABLE OF
20 BEING FUNDED. I THOUGHT IT WAS AN IMPRESSIVE LIST.
21 THERE WAS A FALL-OFF THAT I NOTICED ACTUALLY STARTING
22 AT THE 74 LEVEL AND WHERE THE COMMENTS ABOUT WEAKNESSES
23 AND THINGS BECAME QUITE STARK. AND I'M DELIGHTED.

24 THE QUESTION I WANTED TO ASK BECAUSE I
25 CERTAINLY, IF NECESSARY, WILL EVEN MAKE A MOTION AT THE

1 APPROPRIATE TIME TO FUND ADDITIONAL GRANTS. DO WE HAVE
2 THE MONEY OR YOU TELL US WHETHER IT'S POSSIBLE?

3 CHAIRMAN KLEIN: CERTAINLY. FIRST OF ALL,
4 LET ME ADDRESS THAT ON A COUPLE OF LEVELS. AND IN
5 TERMS OF THE DECISIONS, I WOULD ADD, JEFF, I THINK
6 APPROPRIATELY, THAT THE WORKING GROUP SUGGESTED THAT IF
7 ANY TIME THERE'S A POINT FOR A STRATEGIC DECISION TO
8 CREATE A BROAD BASE OF WORK THAT IS UNDERWAY IN
9 CALIFORNIA TO CREATE A PIPELINE FOR OUR LATER
10 COMPREHENSIVE GRANTS, THIS IS A TREMENDOUS OPPORTUNITY
11 AT THE FRONT END OF THE SYSTEM TO BROADEN THAT BASE AND
12 DIVERSIFY THE FIELD BROADLY UNDER WHICH WORK IS BEING
13 UNDERTAKEN.

14 SO THEIR RECOMMENDATION WAS NOT ONLY THAT
15 SCIENCE WAS GREAT, BUT AS A STRATEGIC ISSUE, THEY WERE
16 RECOMMENDING THAT WE PAY ATTENTION TO THIS AS A
17 STRATEGIC OPPORTUNITY.

18 THE MONEY ISSUE, AS A QUESTION AROSE, AND IF
19 YOU LOOK AT OUR CASH FLOWS, WE CERTAINLY HAVE THE
20 FLEXIBILITY WITHIN THE MONEY WE HAVE AVAILABLE TO
21 INCREASE THIS ALLOCATION BY 20 MILLION OR ANY OTHER
22 FIGURE THAT THIS BOARD WOULD INDEPENDENTLY ARRIVE AT AS
23 APPROPRIATE BASED ON THE MERITS, WITHIN CERTAIN LIMITS.
24 BUT CERTAINLY THE ISSUE HERE IS THAT IF YOU LOOKED AT
25 ONE OF MANY OPTIONAL CASH FLOW PLANS WE HAD THAT CAME

1 BEFORE THE BOARD GOING BACK TWO BOARD MEETINGS AGO, WE
2 HAD 20 MILLION SITTING OUT IN AUGUST AND SEPTEMBER.
3 AND EVEN FOR ANOTHER ROUND OF GRANTS IF, IN FACT, THE
4 DECISION BY THE SUPREME COURT WERE DELAYED UNTIL
5 OCTOBER, FOR EXAMPLE, WE COULD STILL CONDUCT A ROUND IN
6 JULY, AUGUST, SEPTEMBER, AND BY OCTOBER THEN HAVE A
7 DECISION BY THE SUPREME COURT WITH THE BONDS SET UP TO
8 BE SOLD.

9 WE TOOK THE PRECAUTION, AS A LEAD-TIME ISSUE,
10 OF HAVING THE FINANCE COMMITTEE OF THE STATE AUTHORIZE
11 AN ADDITIONAL \$55 MILLION OF BONDS THAT ARE ALREADY
12 APPROVED TO BE ISSUED. SO WE HAVE THAT 55 MILLION
13 SITTING THERE POISED TO BE ISSUED SUBJECT TO OUR COURT
14 DECISIONS.

15 THE MARKET MIGHT ALLOW US, AFTER A COURT OF
16 APPEALS DECISION, DEPENDING UPON THAT DECISION, WITH
17 BOND INSURANCE OR OTHER CREDIT ENHANCEMENT TO, IN FACT,
18 ISSUE BEFORE THE SUPREME COURT DECISION. BUT UNDER THE
19 MOST PROBABLE CASE, EVEN IF WE HAD AN OCTOBER DECISION
20 OF THE SUPREME COURT, WE WOULD BE ABLE TO ISSUE BONDS
21 TO FUND THAT 20 MILLION THAT'S SITTING IN THAT TIME
22 PERIOD.

23 ADDITIONALLY, IN TERMS OF THE TOTAL AMOUNT OF
24 FUNDS THAT ARE IN OUR BUDGETS, WE'VE TALKED PREVIOUSLY
25 ABOUT A GOAL THROUGH INTEREST RATE MANAGEMENT ON THE

1 DEBT SIDE AND INVESTMENT INCOME MANAGEMENT ON THE
2 INCOME SIDE OF TRYING TO REDUCE THE 52 MILLION IN
3 CAPITALIZED INTEREST IN THE FIRST THREE YEARS BY
4 APPROXIMATELY 20 MILLION. IF WE WERE CAPABLE OF DOING
5 THAT, IF WE WERE SUCCESSFUL, WE WOULD, IN FACT, CREATE
6 THE OPPORTUNITY FOR 20 MILLION MORE.

7 FINALLY, THERE IS AN OPPORTUNITY FUND THAT
8 RUNS THE WHOLE LENGTH OF THE PROGRAM WITH SOME ABILITY
9 TO REALLOCATE WITHOUT TAKING MONEY FROM OTHER
10 CATEGORIES. BUT THIS BOARD HAS THE ABILITY AS A
11 STRATEGIC DECISION AND IT HAS THE CASH AVAILABLE TO
12 ALLOCATE 20 MILLION MORE, APPROXIMATE RANGE, MAYBE IT'S
13 15, MAYBE IT'S 25 MILLION IN THIS TIME PERIOD, IF THEY
14 FEEL THAT STRATEGIC GRANTS ARE MERITORIOUS. THAT'S A
15 LONG ANSWER, BUT IT'S A COMPLICATED FACT PATTERN.

16 MS. LANSING: I UNDERSTAND WHAT WE'RE SAYING,
17 AND PARTICIPATING IN THE PROCESS, I THOUGHT, WAS REALLY
18 INTERESTING BECAUSE WHAT WE SAID TO EVERYBODY, WHEN
19 THEY WERE REVIEWING THE GRANTS, WAS JUST REVIEW THEM ON
20 THEIR MERIT. DON'T REVIEW THEM ON WHETHER OR NOT WE
21 HAVE THE MONEY OR NOT. AND I WOULD, IN A WAY, THINK
22 THAT'S THE PUREST WAY THAT WE SHOULD DO IT. LET'S
23 JUST, THE BOARD, LOOK AT THESE AND SEE WHAT WE THINK IS
24 WORTHY OF SPENDING THE MONEY ON.

25 IF WE DON'T SPEND ALL THE MONEY THAT WE

1 COULD, NOT EVEN WITH THE FUTURE, I THINK THAT'S OKAY.
2 THAT JUST SHOWS THAT WE'RE APPLYING FISCAL
3 RESPONSIBILITY AND VERY, VERY TOUGH STANDARDS TO GET A
4 GRANT. IF WE WERE TO RECOMMEND CERTAIN THINGS THAT WE
5 DIDN'T HAVE MONEY FOR, WE COULD SAY, I ASSUME, WHEN WE
6 HAVE THE FUNDING, WE WOULD LIKE TO DO THAT. BUT I
7 WOULD LIKE TO ENCOURAGE US TO JUST REVIEW THE GRANT ON
8 THE BASIS OF IT ALONE AND NOT WHETHER WE COULD SPEND
9 MORE MONEY OR NOT.

10 CHAIRMAN KLEIN: PROCEDURALLY, IN ORDER TO
11 FOLLOW OUR PROCEDURAL RULES AND AVOID CONFLICTS, THE
12 PROCESS WILL BE THAT WE WILL REVIEW GRANTS AND GRANT
13 CATEGORIES. WE WILL NOT VOTE ON FUNDING UNTIL
14 TOMORROW. SO WE'RE GOING TO GO THROUGH PROVISIONAL
15 VOTES BASED PURELY ON SCIENTIFIC MERIT, AS YOU SUGGEST,
16 SHERRY, AND THEN TOMORROW GET TO THE HARD VOTES.

17 WE ACTUALLY FORTUITOUSLY HAVE DESIGNED A
18 PROCESS WHEREBY WE HAVE PROVISIONAL VOTES TONIGHT. AND
19 WHILE THERE'S A COUPLE OF ITEMS ON THE AGENDA THAT
20 REQUIRE A QUORUM, WE, ACCORDING TO COUNSEL, CAN HAVE
21 PROVISIONAL VOTES WITHOUT A QUORUM AND MOVE THE AGENDA.
22 SO BY TOMORROW MORNING WE'RE IN A POSITION TO THEN
23 DETERMINE FUNDING AND THE PRIORITIES OF FUNDING.

24 DR. STEWARD: WHAT WE DO TODAY IMPACTS ON
25 WHAT WE CAN DO IN OTHER AREAS. AND THE SORT OF OBVIOUS

1 ISSUE IS HOW FUNDING SEED GRANTS AFFECTS OUR ABILITY TO
2 BE FLEXIBLE LATER ON AND LOOK FOR THE FIRST TIME AT THE
3 COMPREHENSIVE GRANTS. JEFF ALLUDED TO THIS A LITTLE
4 BIT, AND I JUST WOULD LIKE TO HEAR DISCUSSION OF THAT.
5 I GATHER, FROM WHAT JEFF SAID, THAT IT WAS SOMETHING
6 THAT WAS PERHAPS DISCUSSED BY THE GRANTS WORKING GROUP.
7 AND SO IF SOMEONE COULD EXPAND ON THAT, I WOULD
8 APPRECIATE HEARING THAT.

9 MR. SHEEHY: I DON'T WANT TO GET OUT OF
10 SCHOOL, AND I THINK JANET WAS THERE AND SHERRY WAS
11 THERE TOO. BUT THERE DEFINITELY WAS A FEELING AMONGST
12 THE REVIEWERS WHO WERE AT BOTH REVIEWS THAT THE QUALITY
13 OF THE SEED GRANTS REALLY TOOK THEM BY SURPRISE, THAT
14 JUST FOR A WHOLE HOST OF REASONS, THE SCIENCE, THE
15 PEOPLE DOING THE WORK, THAT IF THERE WAS ANY WAY TO
16 REALLY BEEF UP WHAT WE WERE DOING IN THAT AREA, THAT WE
17 SHOULD REALLY TRY TO DO SO. I DON'T THINK IT'S
18 SPEAKING OUT OF SCHOOL TO SAY THAT THERE WAS NOT THE
19 SAME ENTHUSIASM FOR THE COMPREHENSIVE GRANTS.

20 THERE WAS A MARKED DIFFERENCE. IS THAT YOUR
21 RECOLLECTION, JANET AND SHERRY?

22 MS. LANSING: AS YOU SAID, YES, A HUNDRED
23 PERCENT AGREE, JEFF. THAT'S A VERY ACCURATE
24 DESCRIPTION; BUT AS YOU SAID, THEY WERE VERY
25 COMFORTABLE WITH WHERE THE LINE FELL. DO YOU KNOW? I

1 GOT THE FEELING. MAYBE --

2 MR. SHEEHY: THEY WERE LOOKING AT THIS IN THE
3 CONTEXT OF ASSUMING THAT WE WOULD ALREADY FUND AN
4 ADDITIONAL 20 MILLION. I THINK THAT IF THEY KNEW THAT
5 THERE WAS SOME CERTAINTY ABOUT MOVING ANOTHER 20
6 MILLION, THEY MIGHT HAVE EVEN FELT MORE STRONGLY.

7 DR. HALL: LET ME MAKE A POINT, IF I MIGHT.
8 THAT IS, THERE'S A TECHNICAL COMPONENT TO THIS, WHICH I
9 WAS GOING TO DISCUSS IN A MOMENT, BUT I THINK IT'S VERY
10 APT NOW. THAT IS, WE BROUGHT TO YOU A REQUEST TO
11 APPROVE A CERTAIN NUMBER OF GRANTS AT THE AUGUST
12 MEETING FOR THE SEED GRANTS AND FOR THE COMPREHENSIVE
13 GRANTS. WE HAVE NO IDEA WHO WAS OUT THERE, WHAT THE
14 LEVEL OF INTEREST WAS, WE DID NOT KNOW. AND SO WE
15 SUGGESTED THAT YOU APPROVE 30 SEED GRANTS AND 25
16 COMPREHENSIVE GRANTS. OKAY.

17 THEN WHEN THE APPLICATIONS CAME IN, WE WERE
18 ASTONISHED AND DELIGHTED TO RECEIVE 231 APPLICATIONS
19 FOR THE SEED GRANTS. AND IF WE FUNDED THE 25, AS YOU
20 WILL SEE, THAT WILL BRING IT TO SOMEWHERE IN THE 17TH
21 PERCENTILE OR SO.

22 WE RECEIVED FOR THE COMPREHENSIVE GRANTS, ON
23 THE OTHER HAND, ABOUT 70 APPLICATIONS. AND IF WE WERE
24 TO FUND ALL OF THE 30, I DON'T HAVE THE CALCULATION IN
25 MY HEAD RIGHT NOW, BUT THAT WOULD BRING YOU UP TO WELL

1 OVER A THIRD. SO THAT WOULD BRING YOU TO ALMOST DOUBLE
2 THE PERCENTILE. SO THERE WAS THIS SENSE THAT GIVEN --
3 AND THE TIER 1, AS YOU WILL SEE IN A MOMENT, IS DEFINED
4 BY THE AMOUNT OF MONEY THAT YOU APPROVE. AND SO I
5 THINK PART OF THE RESPONSE WAS THE SCIENCE WAS VERY
6 GOOD, AND THE OTHER ISSUE WAS THAT THE NUMBER OF
7 APPLICATIONS, WITH RESPECT TO THE NUMBER OF
8 APPLICATIONS, THE AMOUNT APPROVED FOR FUNDING WAS MUCH
9 HIGHER FOR THE COMPREHENSIVES THAN FOR THE SEED GRANTS
10 JUST BECAUSE WE HAD NO WAY OF KNOWING WHEN WE STARTED
11 OUT.

12 MS. LANSING: I TOTALLY AGREE WITH YOU. I
13 THINK THAT'S A REALLY HELPFUL STATISTIC. JEFF, I DON'T
14 THINK WE'RE DISAGREEING. I THINK WE WERE TALKING ABOUT
15 THE SAME ADDITIONAL MONEY, AND THAT'S WHERE THEY WERE
16 COMFORTABLE. BUT, AGAIN, I THINK IT'S UP TO THE BOARD
17 TO LOOK AT EACH THING, SEE HOW THEY FEEL, AND MOVE
18 CERTAIN THINGS OR NOT MOVE CERTAIN THINGS.

19 DR. HALL: LET ME JUST SAY I DIDN'T MEAN TO
20 SAY THAT'S ALL IT WAS BECAUSE I JUST ECHO JEFF. I
21 THINK THAT'S ONE ISSUE JUST BECAUSE THE DISCREPANCY WAS
22 QUITE NOTICEABLE THERE. THE OTHER WAS THAT THERE WAS
23 REAL ENTHUSIASM FOR THE LEVEL OF SCIENCE IN THE SEED
24 GRANTS. THERE'S NO QUESTION ABOUT THAT.

25 MS. LANSING: I AGREE. I SECOND THAT, ECHO

1 IT. I HONESTLY WASN'T DISAGREEING. I WAS SORT OF
2 RECLARIFYING.

3 DR. PENHOET: BOB, IN YOUR CONVERSATION YOU
4 IMPLIED THAT WE'D BE LIMITING OUR FUTURE FLEXIBILITY,
5 BUT MY UNDERSTANDING IS, EVEN IF WE VOTED TO INCREASE
6 THIS BY THE FULL 25.3 MILLION, OR WHATEVER THE NUMBER
7 IS, TO TAKE ALL OF THESE GRANTS INTO CONSIDERATION,
8 THAT WOULDN'T CANNIBALIZE THE NEXT ROUND OF GRANTS THAT
9 ARE RIGHT IN FRONT OF US, NOT NECESSARILY. IT WOULD
10 LIMIT OUR FUTURE FLEXIBILITY, BUT IT DOESN'T HAVE TO
11 COME OUT OF THE HIDE OF THE GRANTS WHICH WE'RE GOING TO
12 NOW LOOK AT IN THE MARCH MEETING.

13 CHAIRMAN KLEIN: IN FACT, IT SPECIFICALLY
14 WOULDN'T COME OUT OF THAT UNLESS THE BOARD SO DESIRED,
15 NOR THE FOLLOWING ROUND.

16 DR. PENHOET: SO WE'D BE FACED WITH A HIATUS
17 IN FUNDING IN THE WORST CASE.

18 CHAIRMAN KLEIN: IF WE INCREASE IT NOW, WE
19 WOULD BE TALKING ABOUT PROBABLY ADJUSTING SOMETHING IN
20 THE SIGNIFICANT FUTURE ACROSS MANY PROGRAMS OR TAKING
21 MONEY FROM AN OPPORTUNITY FUND THAT IS UNALLOCATED.

22 DR. HALL, WOULD YOU LIKE TO TAKE US THROUGH
23 THIS NEXT STEP. AND FOR EVERYONE'S UNDERSTANDING, I'D
24 LIKE TO MAKE IT VERY CLEAR HERE THAT THE PROCESS HERE
25 IS WE'RE GOING THROUGH AND CONCEPTUALLY UNDERSTAND THIS

1 PROCESS. THEN WE'RE GOING TO GO INTO AN EXECUTIVE
2 SESSION TO SEE IF THERE'S ANY PROPRIETARY INFORMATION,
3 SCIENTIFIC PROPRIETARY INFORMATION WHERE WE NEED TO
4 PROTECT THE SCIENTIFIC IDEAS OR CLINICAL IDEAS OF THE
5 APPLICANTS. THEN WE WILL COME BACK INTO A PUBLIC
6 SESSION AND GO THROUGH PROVISIONAL VOTES.

7 DR. HALL, WOULD YOU LIKE TO LEAD US THROUGH
8 THIS NEXT INCREMENT?

9 DR. HALL: YES. SO MY JOB AND THAT OF
10 ARLENE'S IS, BEFORE YOU BEGIN YOUR DELIBERATIONS ON THE
11 GRANTS ONE BY ONE, IS TO TAKE YOU THROUGH BACKGROUND
12 INFORMATION FROM THE WORKING GROUP THAT WILL FILL OUT
13 AND, I HOPE, ADD A LITTLE FLESH TO THE BONES OF THE
14 REMARKS THAT JEFF MADE.

15 AND THE FIRST THING IS JUST TO REMIND YOU
16 THAT WE DID HAVE 231 SEED APPLICATIONS. WE HAD A
17 THREE-DAY REVIEW IN NOVEMBER. WE HAD NOT ONLY 15
18 SCIENTISTS AND 6 PATIENT ADVOCATES PLUS THE CHAIR
19 THERE, BUT WE ALSO HAD AT VARIOUS TIMES DURING THAT
20 THREE DAYS 32 EXPERT SPECIALISTS WHO WERE BROUGHT IN
21 BECAUSE THEY HAD KNOWLEDGE ABOUT PARTICULAR SUBJECTS
22 THAT WERE NOT WELL REPRESENTED ON THE COMMITTEE. AND
23 THESE WERE ALWAYS SECONDARY REVIEWERS.

24 LET ME REMIND YOU THEY HAD TO FOLLOW THE SAME
25 CONFLICT OF INTEREST RULES AS THE MEMBERS OF THE

1 WORKING GROUP, BUT AS SPECIALISTS, THEY DID NOT VOTE.
2 SO THEY OPINED AND GAVE THEIR EXPERT OPINION ABOUT THE
3 QUALITY OF A GRANT AFTER A PRIMARY REVIEWER ON THE
4 WORKING GROUP HAD DELIVERED AN ANALYSIS OF THE GRANT.
5 THEN WE WOULD HAVE SOMEBODY COME IN, AND I THINK ALL OF
6 THESE WERE ONLINE. THEY CAME IN VIA TELEPHONE. AND
7 YOU'VE HEARD REFERENCE ALREADY TO THE MARVELOUS JOB
8 THAT GIL AND ARLENE AND OTHERS DID IN ORCHESTRATING
9 THIS AMAZING THING SO THAT IT WAS -- ACTUALLY I THINK
10 THE SECOND TIME AROUND, WE EVEN HAD TWO ON THE LINE AT
11 THE SAME TIME, SO IT WAS QUITE SOMETHING.

12 NOW, AS JEFF SAID, THERE WERE WORKING GROUP
13 RESOLUTIONS TO COME OUT OF THIS. AND I WILL GO THROUGH
14 THEM ONE BY ONE. LET ME BEGIN JUST BY SHOWING YOU THE
15 DISTRIBUTION OF SCORES. THIS IS ON THE VERTICAL AXIS
16 ON THE LEFT HAND IS THE NUMBER OF APPLICATIONS, RANGING
17 FROM TWO UP TO 12 IN THIS SCALE. AND ON THE HORIZONTAL
18 AXIS ARE THE SCORES. THE SCORES RANGE FROM ZERO AT THE
19 LEFT TO A HUNDRED AT THE RIGHT. WE DID ACTUALLY HAVE
20 SEVERAL ZEROS, AND THEY WERE APPLICATIONS THAT TURNED
21 OUT NOT TO BE RESPONSIVE TO THE RFA. IN OTHER WORDS,
22 NOT WORKING ON HUMAN EMBRYONIC STEM CELLS, FOR EXAMPLE.
23 PEOPLE WHO HAD MISREAD IT OR THOUGHT MAYBE WE WOULD
24 CHANGE OUR MINDS.

25 AT ANY RATE, THOSE AREN'T LISTED HERE, BUT

1 ALL THE REST ARE LISTED. AS YOU CAN SEE, AS JEFF SAID,
2 THE WORKING GROUP FOLLOWED THE ADMONITION OF STUART
3 ORKIN, WHO WAS THE CHAIR AND PRESIDED OVER THE
4 SCIENTIFIC EVALUATIONS, TO USE THE ENTIRE RANGE.

5 SO THE FIRST RECOMMENDATION, AS WAS
6 INDICATED, WAS TO THEN IDENTIFY IF WE WERE TO FUND ON
7 THE BASIS OF THE SCIENTIFIC SCORES ON THE BASIS OF
8 SCIENTIFIC MERIT, REMEMBERING THAT WE'RE APPROVED FOR
9 \$24 MILLION, WHICH WAS THE ORIGINAL APPROVAL, WHICH
10 GRANTS WOULD BE FUNDED AND HOW FAR DOWN WOULD IT TAKE
11 US. AND SO ONE SIMPLY COUNTS UP, AND OUR STAFF DID
12 THIS THROUGH SPREADSHEETS, FROM RIGHT TO LEFT THE
13 AMOUNT OF EACH GRANT ON THE SCALE, AND YOU JUST KEEP
14 GOING WITH A CUMULATIVE TOTAL UNTIL YOU REACH \$24.2
15 MILLION. IT TURNED OUT THAT IS THE TOP 38
16 APPLICATIONS.

17 AND LET ME REMIND YOU YOU APPROVED 24
18 MILLION, AND WE ESTIMATED THAT THAT WOULD FUND 30
19 APPLICATIONS. WE DID NOT KNOW THE EXTRA COSTS THAT
20 WOULD BE ADDED ON ABOVE THE DIRECT PROJECT COST. AND
21 SO WE MADE A GENEROUS ESTIMATE ABOUT WHAT THAT WOULD
22 BE. AS IT TURNS OUT, OUR ESTIMATE WAS GENEROUS, AND WE
23 WERE ABLE TO FIT IN UNDER THE 24 MILLION APPROVAL 38
24 APPLICATIONS ON THIS SCALE.

25 THAT TAKES US DOWN TO SCORES THAT ARE ABOVE

1 OR EQUAL TO 84, SO THIS IS A VERY HIGH LEVEL. THIS IS
2 THE 16.5 PERCENTILE; THAT IS, 17 PERCENT OF THE GRANTS
3 ARE IN THIS TOP TIER OF TIER 1 THAT WOULD BE APPROVED
4 FOR FUNDING UNDER THIS PARTICULAR -- UNDER THE APPROVAL
5 AMOUNT. SO THIS THEN DEFINES TIER 1.

6 THE GROUP THEN LOOKED TO DEFINE TIER 3, THOSE
7 THAT WOULD BE NOT RECOMMENDED FOR FUNDING, AND THEY DID
8 THIS IN TWO WAYS. NO. 1, ONE LOOKS FOR AN ABSOLUTE
9 STANDARD AND SAYS, LOOK, WE DON'T THINK WE OUGHT TO BE
10 FUNDING GRANTS BELOW THIS LEVEL. AND THEN NO. 2, ONE
11 LOOKS FOR A NATURAL BIMODAL DISTRIBUTION; THAT IS,
12 SOMEPLACE WHERE THERE'S A DIP IN THE DISTRIBUTION. WE
13 ALL RECOGNIZE THAT THESE SCORES HAVE A CERTAIN
14 ARBITRARY QUALITY TO THEM, AND SO IF YOU'VE GOT A
15 CLUSTER OF GRANTS, LET'S SAY, AT 74, THEN YOU DON'T
16 WANT TO DRAW THE LINE RIGHT IN THE MIDDLE OF THAT
17 CLUSTER BECAUSE IT'S ARBITRARY WHO'S ON WHICH SIDE.

18 LET'S SEE HOW THAT HAPPENED. AND SO THIS WAS
19 THE FIRST RECOMMENDATION. THEN TO DEFINE TIER 3, THEY
20 SAID THAT AT THIS REGION RIGHT IN HERE JUST A LITTLE
21 BIT ABOVE 70 SEEMED THE APPROPRIATE PLACE, AND THAT
22 THERE WAS A NATURAL DIP HERE IN THE DISTRIBUTION. AND
23 SO THIS THEN DEFINED TIER 3. THESE ARE SCORES THAT ARE
24 LESS THAN OR EQUAL TO 70. THERE WERE 143 APPLICATIONS
25 IN THIS PILE, AND WHAT THAT MEANS IS THAT EVERYTHING

1 THAT IS BELOW THE 38TH PERCENTILE WOULD THEN BE NOT
2 RECOMMENDED FOR FUNDING AT THIS TIME.

3 NOW, THOSE OF YOU WHO ARE ASTUTE WILL REALIZE
4 THAT HAVING DRAWN THESE TWO LINES FOR TIER 1 AND TIER
5 3, WE HAVE NOW DEFINED TIER 2. SO THAT IS BETWEEN THE
6 TWO, AND ITS CHARACTERISTICS ARE THERE WERE 50
7 APPLICATIONS IN THIS GROUP, THE SCORES RANGE FROM 71 TO
8 83, THE PERCENTILE SCORES FOR THIS GROUP RANGE FROM THE
9 17TH, WHICH IS THE LINE WE HAVE ALREADY DISCUSSED HERE
10 DOWN TO THE 38TH, AND SO THAT IS THE RANGE OF THOSE.
11 AND THIS GROUP WAS RECOMMENDED FOR FUNDING IF FUNDS ARE
12 AVAILABLE.

13 NOW, LATER ON IN THIS DISCUSSION YOU WILL
14 CONSIDER MANY OF THESE GRANTS INDIVIDUALLY AND TALK
15 ABOUT THEM INDIVIDUALLY. AND I DON'T WISH TO DO THAT
16 AT THIS POINT; HOWEVER, I DO WANT TO SHOW YOU THAT
17 WITHIN THIS TIER DURING THE SECOND PART, THE
18 PROGRAMMATIC REVIEW, WHICH IS IN PART A PORTFOLIO
19 REVIEW, THAT IS, YOU LOOK AT THE ONES THAT HAVE BEEN
20 APPROVED FOR FUNDING, YOU LOOK AT THE ONES THAT ARE
21 JUST BELOW, AND YOU SAY ARE THERE IMPORTANT
22 CONSIDERATIONS THAT WOULD LEAD US TO HAVE AN OVERALL
23 PORTFOLIO THAT WOULD INCLUDE OTHER GRANTS.

24 ON THIS BASIS, FOR THE REASONS THAT JEFF
25 CITED, SOMETIMES RELATED TO DISEASE, SOMETIMES RELATED

1 TO PROMISING YOUNG INVESTIGATOR OR TECHNOLOGICAL
2 INTEREST THAT WAS NOT REPRESENTED, VARIOUS MEMBERS
3 PROPOSED THAT PARTICULAR APPLICATIONS IN TIER 2 BE
4 GIVEN SPECIAL CONSIDERATION BASED ON THEIR PROGRAMMATIC
5 RELEVANCE. IN EACH CASE, THOSE PEOPLE WHO HAD A
6 CONFLICT OF INTEREST HAD TO LEAVE THE ROOM WHEN THESE
7 GRANTS WERE DISCUSSED, A VOTE WAS TAKEN, AND EACH OF
8 THESE WAS DONE INDIVIDUALLY FOR THAT.

9 AND AS I SAID, IT'S NOT THE TIME NOW TO GO
10 THROUGH THEM, BUT I WILL SHOW YOU THEM IN JUST A MOMENT
11 FOR A PURPOSE. THIS WOULD REQUIRE AN ADDITIONAL 5.3
12 MILLION FUNDS AND WOULD ADD, OF COURSE, NINE ADDITIONAL
13 APPLICATIONS TO THE ORIGINAL 38 TO GIVE A TOTAL OF 47.

14 NOW, HERE THEY ARE. AND MY PURPOSE IS NOT
15 FOR YOU TO LOOK AT THEM INDIVIDUALLY, BUT SIMPLY TO SEE
16 THAT THE SCORES OF THESE GRANTS REALLY SPAN THE RANGE
17 IN TIER 2. THAT IS, THEY GO ALL THE WAY FROM 83 AT THE
18 TOP DOWN TO 71 AT THE BOTTOM. AND IF ONE WERE TO TAKE
19 THESE AND ADD THEM TO THE TIER 1 GRANTS, THAT WOULD
20 BRING YOU TO ABOUT A 20TH PERCENTILE IN TERMS OF
21 FUNDING.

22 OKAY. LET'S CARRY ON THEN. AND THERE IS A
23 THIRD RECOMMENDATION SORT OF WHICH WAS TO GO EVEN
24 FURTHER AND TO INCREASE FUNDING TO A TOTAL OF \$45
25 MILLION. ACTUALLY THERE WAS SOME AMBIGUITY IN THE

1 DISCUSSION. AT TIMES IT WAS A \$20 MILLION ADD-ON AND
2 AT OTHER TIMES IT WAS REFERRED TO AS 45. SO FOR THE
3 PURPOSES OF THIS DISCUSSION, WE HAVE CHOSEN THE 45, AND
4 SO THAT IS WHAT YOU SEE HERE. THAT WOULD FUND 25
5 APPLICATIONS BESIDES THOSE THAT ARE ASTERISKED. IN
6 ADDITION TO THOSE NINE, THERE WOULD BE 25 MORE
7 APPLICATIONS FOR A TOTAL OF 34 ADDITIONAL APPLICATIONS.

8 AND SO MY LAST GRAPH HERE THEN SHOWS YOU, YOU
9 CAN'T REPRESENT ON THE GRAPH THE ASTERISKED ONES
10 BECAUSE THEY ARE SPREAD ALL THROUGHOUT TIER 2, BUT THIS
11 WOULD SHOW YOU, THEN, WHERE IT WOULD COME DOWN IF YOU
12 WERE TO FOLLOW THIS RECOMMENDATION. THIS WOULD THEN
13 GIVE YOU AN ADDITIONAL 34 APPLICATIONS WITH SCORES FROM
14 76 TO 83. THIS WOULD TAKE YOU, THEN, TO THE 31ST
15 PERCENTILE, AND WOULD GIVE A TOTAL FOR ALL SEED GRANTS,
16 INCLUDING TIER 1, THE ASTERISKED ONES, AND EXTRA
17 GRANTS, TO BRING IT UP TO 45 -- WOULD BRING IT TO \$44.9
18 MILLION, WHICH WE THOUGHT WAS A PRETTY GOOD JOB BY THE
19 WORKING GROUP ACTUALLY TO GET SO CLOSE.

20 SO, AT ANY RATE, HERE ARE THE SUMMARY JUST AS
21 YOU'VE SEEN BEFORE FROM JEFF. AND I'M HAPPY TO
22 ENTERTAIN ANY QUESTIONS THAT YOU MAY HAVE ABOUT THE
23 PROCESS BEFORE WE GO INTO THE CONSIDERATION OF GRANTS
24 WHICH WILL BE DONE BY THE CHAIR, AND EITHER DR. CHIU,
25 ARLENE, OR I WILL BE AVAILABLE FOR ANY QUESTIONS THAT

1 YOU MIGHT HAVE ABOUT THE PROCESS, AND JEFF AS WELL.

2 DR. WRIGHT: ZACH, I HAVE A QUESTION. ON THE
3 LAST SLIDE, IF WE FUNDED DOWN TO THE 45 MILLION AND THE
4 34 APPLICATIONS IN TIER 2, THAT TAKES US TO WHAT
5 PERCENTAGE? WAS THAT 30?

6 DR. HALL: LET ME GO BACK ONE. I THINK IT'S
7 33 OR SOMETHING LIKE THAT.

8 DR. WRIGHT: BACK ONE MORE, I THINK.

9 DR. HALL: IT TAKES YOU TO 31. I'M SORRY.
10 SO THAT WOULD GIVE YOU, THEN, A TOTAL OF 38 PLUS 34 IS
11 72 IS MY CALCULATION, 72 TOTAL GRANTS OUT OF THE --
12 IT'S ABOUT A THIRD, SO THAT WORKS OUT RIGHT.

13 AND WE CAN GO OVER THESE NUMBERS LATER. I
14 WANTED TO JUST GIVE YOU AN OVERVIEW HOW THE LAYOUT, THE
15 SORT OF TERRAIN OVER WHICH YOU'LL BE WORKING OVER THE
16 NEXT DAY AND A HALF.

17 CHAIRMAN KLEIN: ALL RIGHT. THANK YOU VERY
18 MUCH, DR. HALL. IT'S IMPORTANT NOW TO REALIZE,
19 STEPPING BACK TO 50,000 FEET HERE, THAT WHAT WE'RE
20 INTENDING TO DO IS GO INTO A CLOSED SESSION WHERE WE
21 CAN SEE IF THERE'S ANY PROPRIETARY SCIENTIFIC MATERIAL
22 THAT MEMBERS WOULD LIKE TO ASK QUESTIONS OF OR SEE THE
23 APPLICATIONS SO THEY CAN MAKE INDEPENDENT DECISIONS
24 BECAUSE THIS BOARD, UNDER THE CONSTITUTIONAL PROVISIONS
25 UNDER WHICH WE ARE CONFERRED THE AUTHORITY OF THE

1 STATE, ARE CHARGED WITH MANAGEMENT AND CONTROL OF THE
2 PROCESS, SO WE HAVE THE ABILITY TO MAKE ALL DECISIONS
3 INDEPENDENT OF ANY ADVISORY GROUP DECISIONS AND/OR
4 RECOMMENDATIONS THAT HAVE BEEN PRESENTED TO YOU.

5 IT'S VERY IMPORTANT TO UNDERSTAND AS PROCESS,
6 WHEN WE COME BACK INTO OPEN SESSION, WE WILL BE MAKING,
7 AS I REFERRED BEFORE, TO PROVISIONAL VOTES TO MOVE IN
8 AND OUT OF ANY OF THESE LEVELS OF RECOMMENDATION ANY
9 INDIVIDUAL APPLICATION. ON EACH INDIVIDUAL VOTE, WE'LL
10 ANNOUNCE WHETHER THERE'S CONFLICTS, SO WE'LL HAVE THE
11 ABILITY FOR EVERY BOARD MEMBER TO KNOW NOT TO VOTE AND
12 NOT TO PARTICIPATE IN THE DISCUSSION SO WE HAVE A
13 DOUBLE-CHECK SYSTEM AGAINST YOUR LIST. AND AFTER WE'VE
14 GONE THROUGH EACH OF THE TIERS, WE WILL HOPEFULLY END
15 UP AT A POINT WHERE TOMORROW MORNING WE CAN START OFF
16 AND ACTUALLY DO THE FUNDING VOTES WHICH WILL BECOME THE
17 FINAL VOTES. WE WILL NEED A QUORUM FOR THAT, AND MY
18 UNDERSTANDING IS, GOD WILLING, WE WILL HAVE A QUORUM
19 TOMORROW MORNING. WE HAVE DEVINE HELP WHEN WE REALLY
20 NEED THE FINAL VOTES TO BE TAKEN.

21 SO IT'S IMPORTANT TO REALIZE THAT WE HAVE THE
22 OPTION BY STATUTE TO ENTER INTO A CLOSED SESSION FOR
23 CERTAIN CONFIDENTIAL MATTERS AS MANDATED BY SECTION
24 125290.30(D)(3)(B) AND (C) OF PROPOSITION 71, FOR THE
25 RECORD. WE WILL HOPE TO HAVE THIS FAIRLY SHORT.

1 ON THE OPTIMISTIC SIDE, WE WOULD HOPE TO BE
2 BACK IN HALF AN HOUR. ON THE MORE CONSERVATIVE SIDE,
3 WE WOULD HOPE TO BE BACK IN AN HOUR TO AN HOUR AND 15
4 MINUTES FROM THIS SESSION. IT DEPENDS ON THE
5 INDIVIDUAL QUESTIONS OF THE MEMBERS TO DISCUSS THIS
6 INFORMATION.

7 JAMES HARRISON, IS THERE ANY SUPPLEMENT YOU
8 WOULD LIKE TO MAKE TO THOSE STATEMENTS?

9 MR. HARRISON: NOT AT THIS TIME.

10 CHAIRMAN KLEIN: OKAY. DR. CHIU OR DR. HALL,
11 ANY SUPPLEMENTS? ANY BOARD MEMBERS COMMENTS BEFORE WE
12 GO INTO CLOSED SESSION? JOHN SIMPSON, PUBLIC.

13 MR. SIMPSON: I'M AFRAID I MAY BE VERY
14 IGNORANT. I DON'T UNDERSTAND WHAT YOUR PROVISIONAL
15 VOTES ACCOMPLISH. I THOUGHT YOU NEEDED TO HAVE A
16 QUORUM VOTE ON EVERY SINGLE APPLICATION, DO YOU NOT?

17 CHAIRMAN KLEIN: WELL, WHAT WE WILL HAVE IS A
18 QUORUM VOTE ON EVERY APPLICATION WHEN WE MAKE THE FINAL
19 FUNDING DECISION. THESE ARE TENTATIVE REALLOCATIONS OF
20 THE PRIORITY FOR FUNDING OF THE INDIVIDUAL
21 APPLICATIONS. WE WON'T, UNTIL WE SEE THE ARRANGEMENT
22 IN RELATIONSHIP TO ALL OF THE APPLICATIONS, MAKE A
23 DECISION ON THE FINAL FUNDING.

24 MR. SIMPSON: BUT THE MEMBERS WHO AREN'T HERE
25 WON'T HAVE THE ABILITY TO RECUSE THEMSELVES. I'M

1 PUZZLED HOW THIS WORKS. I'M NOT TRYING TO DELAY
2 THINGS, AND I HAVE THE HIGHEST REGARD FOR THE BOARD
3 THAT'S HERE. AND I WON'T SAY ANYTHING ABOUT THE
4 MEMBERS THAT AREN'T.

5 CHAIRMAN KLEIN: IT'S A VERY LEGITIMATE
6 STATEMENT. I WOULD TELL YOU THE MEMBERS THAT ARE HERE
7 HAVE A LOT OF PERSONAL EMERGENCIES AND PROFESSIONAL
8 RESPONSIBILITIES. THEY'RE VERY COMMITTED.

9 JAMES HARRISON, WOULD UP PLEASE ADDRESS THIS
10 ISSUE SINCE WE'VE SPENT A LOT OF TIME MAKING SURE WE
11 PROPERLY ANSWERED THIS QUESTION.

12 MR. HARRISON: SURE. AS BOB HAS MENTIONED,
13 WHAT YOU WILL BE DOING TODAY IS CONSIDERING THE ARRAY
14 OF APPLICATIONS IN THE THREE TIERS AND DISCUSSING
15 WHETHER INDIVIDUAL APPLICATIONS SHOULD BE PULLED, FOR
16 EXAMPLE, FROM TIER 3 TO TIER 2 FOR FURTHER
17 CONSIDERATION OR, FOR EXAMPLE, IF THERE'S AN
18 APPLICATION IN TIER 1 WHICH A BOARD MEMBER THINKS DOES
19 NOT MERIT FUNDING OR MERITS FURTHER CONSIDERATION AND
20 SHOULD BE MOVED TO TIER 2.

21 YOUR CONSIDERATION OF THESE APPLICATIONS THIS
22 EVENING WILL BE PROVISIONAL IN THE SENSE THAT YOU WILL
23 NOT BE MAKING ANY FINAL DECISION ON WHETHER TO FUND OR
24 NOT TO FUND A PARTICULAR APPLICATION. THAT WILL OCCUR
25 TOMORROW ONCE YOU HAVE A QUORUM. AT THAT POINT IN

1 TIME, AFTER YOU'VE HAD AN OPPORTUNITY TO MOVE
2 APPLICATIONS FROM ONE TIER TO ANOTHER, STAFF WILL
3 PROVIDE YOU WITH INFORMATION GRAPHICALLY ILLUSTRATING
4 THE BUDGET FOR THE APPLICATIONS THAT YOU BELIEVE SHOULD
5 BE FUNDED, THOSE THAT REMAIN IN TIER 2, AND THOSE THAT
6 ARE IN TIER 3.

7 BOARD MEMBERS WILL THEN, AGAIN, HAVE AN
8 OPPORTUNITY AT THAT POINT IN TIME TO MAKE MOTIONS TO
9 MOVE INDIVIDUAL APPLICATIONS. ONCE THOSE MOTIONS HAVE
10 BEEN EXHAUSTED, THE BOARD WILL BE ASKED TO MAKE A FINAL
11 DECISION WITH RESPECT TO THE THREE TIERS.

12 CHAIRMAN KLEIN: JAMES, I'D LIKE TO FOCUS FOR
13 A MOMENT ON THE LAST PART OF YOUR STATEMENT SO JOHN
14 UNDERSTANDS IT'S RESPONSIVE TO HIS QUESTION. THAT FOR
15 MEMBERS -- FOR ALL THE MEMBERS OF THE BOARD, INCLUDING
16 THOSE THAT ARE NOT HERE TODAY, BUT WILL BE HERE AS PART
17 OF THE QUORUM, PRIOR TO ANY FINAL VOTE, THERE WILL BE A
18 REQUEST AS TO WHETHER ANY MEMBER WISHES TO MOVE
19 ANYTHING OUT OF ANY GROUP OR INTO ANY GROUP. SO THERE
20 WILL BE AN OPTION OR OPPORTUNITY FOR INDIVIDUAL MEMBERS
21 TOMORROW, BEFORE THERE'S A FINAL VOTE, OR ANY MEMBER OF
22 THIS BOARD, TO MAKE FINAL ADJUSTMENTS BEFORE WE MAKE
23 OUR FINAL VOTES. ALL RIGHT.

24 MR. SIMPSON: WE WOULD ALL BE BETTER SERVED
25 IF THE MEMBERS OF THE BOARD COULD MANAGE TO FULFILL

1 THEIR RESPONSIBILITIES AND SHOW UP FOR MEETINGS THAT
2 ARE APPROPRIATELY AGENDAD. THAT IS NOT ANYTHING
3 CASTING ANY SORT OF NEGATIVE COMMENT ON ANY OF YOU
4 BECAUSE YOU'RE ALWAYS ALL HERE, BUT THERE DOES SEEM TO
5 BE A CONSISTENT PATTERN OF CERTAIN MEMBERS NEVER
6 SHOWING UP AND, INDEED, AN INABILITY TO GET QUORUMS.
7 AND I WOULD STRONGLY URGE, FOR THE RECORD AND FOR
8 FURTHER DISSEMINATION, THAT THOSE MEMBERS SHOULD DO THE
9 RIGHT THING AND SIMPLY RESIGN SO THAT PEOPLE WHO DO
10 TAKE THIS SERIOUSLY ENOUGH TO TAKE CONSIDERABLE TIME
11 OUT OF THEIR BUSY PROFESSIONAL LIVES CAN REPLACE THEM.
12 THIS IS NOT AN APPROPRIATE WAY FOR THESE FOLKS TO BE
13 BEHAVING THAT AREN'T HERE.

14 CHAIRMAN KLEIN: JOHN, I WOULD RESPECTFULLY
15 STATE THAT ONE OF THE BENEFITS OF HAVING A LARGE BOARD
16 IS THAT WE HAVE THE ABILITY TO HAVE A CROSS-SECTION OF
17 TREMENDOUS EXPERIENCE AND EXPERTISE. AND ON ANY GIVEN
18 DAY, THERE WILL BE CONFLICTS FOR THE MEMBERS THAT ARE
19 QUITE LEGITIMATE IN DEDICATION TO MEDICAL RESEARCH AND
20 MEDICAL ADVOCACY OR PERSONAL EMERGENCIES. OF COURSE,
21 WE HAVE TWO BOARD MEMBERS RIGHT NOW, ONE AS A RESULT OF
22 A DEATH, ONE AS A RESULT OF A VACANCY THAT IS JUST NOW
23 BEING FILLED AT THE UC SAN DIEGO MEDICAL SCHOOL WHERE
24 WE DON'T HAVE SOMEONE IN THE POSITION. SO THE BOARD
25 TOTAL MANPOWER AND WOMANPOWER IS DOWN AT THE MOMENT;

1 BUT ON A RANDOMIZED BASIS, WE ALWAYS HAVE HAD
2 TREMENDOUS EXPERTISE DISTRIBUTED ACROSS A NUMBER OF
3 SPECIALIZED AREAS THAT HAS BEEN AN INVALUABLE
4 CONTRIBUTION.

5 DR. BRYANT: I JUST WANTED TO SAY A LITTLE
6 BIT MORE ABOUT THE EXPANSION OF THE BUDGET, AND I DON'T
7 KNOW IF THIS IS THE RIGHT TIME OR WHETHER IT SHOULD
8 WAIT UNTIL AFTER THE CLOSED SESSION, BUT I'D BE GUIDED
9 BY YOU. I JUST HAD SOME COMMENTS ABOUT HOW I THINK
10 IT'S A VERY COMPLICATED DECISION. SHALL I GO AHEAD?

11 CHAIRMAN KLEIN: WELL, LET ME SAY THAT IT IS
12 A VERY COMPLICATED DECISION, AND YOU CAN EITHER SPEAK
13 TO IT NOW. YOU MAY WANT TO SPEAK IT TO AFTER THE
14 PROVISIONAL VOTES ARE TAKEN SO THAT YOU CAN SEE IN
15 CONTEXT THE DECISIONS AND BE ABLE TO MAKE THE COMMENT
16 ON BUDGET RELATED TO DECISIONS THAT HAVE BEEN MADE.
17 BUT YOU CAN SPEAK AT BOTH TIMES IF YOU WISH.

18 DR. BRYANT: I ACTUALLY WOULD PREFER TO SPEAK
19 BEFORE WE START THINKING ABOUT WHICH ONES BECAUSE I
20 THINK -- I WAS VERY STRUCK BY THE REPORT FROM THE
21 SCIENTIFIC WORKING GROUP ABOUT THEIR DIFFERENT
22 EXPERIENCE WITH THE TWO GRANT GROUPS. SO THAT'S NO. 1.
23 AND IT'S NOT VERY OFTEN THAT YOU FIND A REVIEW GROUP
24 THAT'S WILLING TO GO BEYOND. USUALLY THEY'RE A LITTLE
25 STINGY AND CRITICAL.

1 SO I THINK THAT'S ONE THING TO TAKE INTO
2 CONSIDERATION. I THINK THE OVERWHELMING NUMBER OF
3 APPLICATIONS FOR THESE SEED GRANTS INDICATES A HUGE
4 INTEREST IN GETTING INTO STEM CELL RESEARCH. AND I WAS
5 CONCERNED BEFORE THIS DISCUSSION THAT WE WOULD BE
6 DISCOURAGING A LOT OF PEOPLE, AND THAT THE FUNDING RATE
7 WOULD BE NO BETTER THAN IT IS AT NIH FOR OTHER KINDS OF
8 RESEARCH. IT'S JUST APPALLINGLY LOW.

9 SO I THINK WE HAVE TO BALANCE THE POSSIBLE
10 DAMAGE TO FUTURE FUNDING OPPORTUNITIES IN CASE THE
11 TRIAL LASTS LONGER THAN WE NOW ANTICIPATE AGAINST THE
12 DEFLATING EFFECT IT WILL HAVE ON THE MOMENTUM THAT STEM
13 CELL RESEARCH HAS IN CALIFORNIA. SO BASICALLY WHAT I'M
14 SAYING IS I DIDN'T THINK THAT I WOULD BE THINKING THIS
15 WAY, BUT I'M IN FAVOR OF EXPANDING THE FUNDING BECAUSE
16 OF THE HIGH QUALITY AND THE COMMENTS THAT CAME BACK
17 FROM THE SCIENTIFIC WORKING GROUP AND WHAT ELSE I SAID.

18 CHAIRMAN KLEIN: THANK YOU. AND I WOULD SAY
19 THAT THIS IS AN INNOVATIVE BOARD, AND THE FINANCE
20 COMMITTEE OF THE STATE HAS FACED THE CHALLENGES IN
21 INNOVATION WITH RECEPTIVITY. AND IF THE SUPREME COURT
22 DECISION IS DEFERRED, YOU CAN BELIEVE THAT WE WILL BE
23 DEDICATED TO CREATING THE ROOM TO KEEP OUR PROGRAM
24 MOVING FORWARD.

25 MS. FEIT: I JUST WANT TO ECHO MY COLLEAGUES

1 WHO WERE ON THE GRANT WORKING GROUP AND WITNESSED THE
2 INTENSE PARTICIPATION BY ALL OF THE SCIENTISTS AND
3 THEIR COMMENTS, PARTICULARLY TO THAT IN THOSE GRANTS
4 THAT THEY FELT THEY COULD NOT GIVE A SIGNIFICANT ENOUGH
5 SCORE TO WARRANT FUNDING. THEY WERE CONSIDERATE ABOUT
6 THE KIND OF FEEDBACK THAT WOULD GO BACK TO THE
7 APPLICANTS TO ENCOURAGE THEM TO REAPPLY, TO CONTINUE
8 BEING INTERESTED. SO THERE WAS GREAT DISCUSSION AND
9 CONSIDERATION AND SENSITIVITY ABOUT THAT, JUST FOR THAT
10 POINT ALONE, AND NOT WANTING TO DISCOURAGE THE FUTURE
11 GROWTH OF THE SCIENCE.

12 CHAIRMAN KLEIN: THANK YOU VERY MUCH. SEEING
13 NO ADDITIONAL POINTS, I WOULD ASK THAT WE ADJOURN TO
14 CLOSED SESSION UNLESS A BOARD MEMBER HAS ANOTHER POINT.
15 THANK YOU.

16 STAFF, WILL YOU TELL US WHERE WE SHOULD GO
17 FOR CLOSED SESSION?

18 MS. KING: WE'RE GOING TO THE PORTOLA B ROOM,
19 WHICH IS RIGHT ACROSS THE HALL.

20 (THE BOARD THEN WENT INTO CLOSED
21 SESSION, NOT REPORTED NOR HEREIN TRANSCRIBED. THE
22 MEETING WAS THEN RECONVENED AND HEARD AS FOLLOWS:)

23 CHAIRMAN KLEIN: ALL RIGHT. IF WE CAN
24 RECONVENE, PLEASE. I'D LIKE TO REPORT THERE WAS NO
25 ACTION TAKEN IN THE EXECUTIVE SESSION. ADDITIONALLY,

1 THERE WERE MONITORS SO THAT IT WAS CAREFULLY FOLLOWED
2 THAT NO ONE WITH ANY CONFLICTS EITHER REVIEWED MATERIAL
3 WITH WHICH THEY HAD A CONFLICT, NOR PARTICIPATED IN ANY
4 DISCUSSION OF PROPRIETARY OR SCIENTIFIC INFORMATION.
5 SO WE ARE PREPARED TO GO FORWARD.

6 FOR THE RECORD, DR. PIZZO HAS JOINED THE
7 MEETING. THANK YOU, DR. PIZZO. WE WILL NOW GO INTO
8 THE NEXT SESSION OF THIS PROCESS.

9 DR. HALL, WE WILL BEGIN WITH TIER NO. 3 TO
10 ASK WHETHER ANY MEMBER WISHES TO MAKE A MOTION TO MOVE
11 AN APPLICATION FROM TIER 3 INTO TIER 2. AFTER ALL THE
12 MOTIONS WITH RESPECT TO APPLICATIONS IN TIER 3 HAVE
13 BEEN EXHAUSTED, THE ICOC WILL MOVE ON TO THE
14 APPLICATIONS IN TIER 1.

15 NOW, THESE ARE PROVISIONAL VOTES, BUT REALIZE
16 THAT THE TIER 2 CATEGORY HAS BEEN IDENTIFIED FOR
17 POTENTIAL FUNDING. WE CAN MOVE ANY ITEM FROM TIER 3
18 THAT WE WISH TO FUND INTO TIER 2 OR INTO TIER 1, BUT
19 THIS IS A SPECIFIC CONSIDERATION OF WHETHER THERE'S ANY
20 APPLICATION IN TIER 3 THAT WE WANT TO MOVE TO TIER 2.

21 DR. HALL: LET ME JUST SAY, MR. CHAIR,
22 MELISSA KING AND SCOTT TOCHER AND JAMES HARRISON WILL
23 BE CONCERNED ABOUT CONFLICT OF INTEREST ISSUES. WE
24 WILL BE HAPPY TO PROVIDE WHAT INFORMATION WE CAN UPON
25 REQUEST ABOUT ANY OF THE GRANTS THAT ANYBODY WISHES TO

1 CONSIDER OR WISHES FURTHER INFORMATION ABOUT, ANY OF
2 THE APPLICATIONS THEMSELVES.

3 CHAIRMAN KLEIN: THAT'S RIGHT. OKAY. AND
4 VERY SPECIFICALLY, SO THE AUDIENCE UNDERSTANDS THAT
5 COMMENT DR. HALL HAS JUST MADE, WHEN ANY ITEM COMES UP
6 FOR CONSIDERATION, ANY APPLICATION, THE STAFF WILL
7 ANNOUNCE THE CONFLICTS OF ANY BOARD MEMBERS WITH THAT
8 APPLICATION SO THE PUBLIC UNDERSTANDS AND THE BOARD
9 MEMBERS UNDERSTAND AS A SAFETY MECHANISM NOT TO
10 PARTICIPATE IN THAT DISCUSSION, NOT TO PARTICIPATE IN
11 THAT VOTE.

12 ALL RIGHT. IS THERE ANY MOTION TO CONSIDER
13 AN APPLICATION TO MOVE FROM TIER 3 TO TIER 2? SEEING
14 NO MOTION, I WOULD LIKE TO GO ON TO THE NEXT CATEGORY.

15 THE NEXT CATEGORY IS TIER 1. REMEMBER THAT
16 TIER 1 IS THE CATEGORY THAT COMES TO US WITH THE
17 HIGHEST RECOMMENDATION. AND THE QUESTION BEFORE THE
18 MEMBERS IS WHETHER ANY MEMBER WISHES TO MAKE A MOTION
19 TO MOVE AN APPLICATION FROM TIER 1 DOWN TO TIER 2 OR TO
20 TIER 3; THAT IS, THEY THINK THERE IS AN APPLICATION IN
21 TIER 1 AT THIS POINT WHICH IS NOT APPROPRIATE FOR
22 FUNDING.

23 ALL RIGHT. SEEING NO MOTION IN THIS
24 CATEGORY, WE WILL MOVE TO TIER 2. TIER 2 IS DIVIDED
25 INTO THREE SEPARATE CATEGORIES, AND THE FIRST CATEGORY,

1 AS DR. HALL HAS PREVIOUSLY INDICATED, DEALS WITH THE
2 NINE APPLICATIONS THAT FOR PROGRAMMATIC OR OTHER
3 CONSIDERATIONS WERE IDENTIFIED IN THE PEER REVIEW
4 SESSION AND MOVED UP INTO A SPECIAL CATEGORY RIGHT
5 BELOW THE BOTTOM OF TIER 1. THOSE APPLICATIONS, OF
6 COURSE, COULD BE MOVED INTO TIER 1 FOR FUNDING, OR THEY
7 COULD BE LEFT IN THEIR CURRENT LOCATION.

8 THE CONSIDERATIONS OF THESE APPLICATIONS
9 WE'LL GO THROUGH ON A ONE-BY-ONE BASIS TO SEE IF
10 THERE'S ANYONE THAT WANTS TO MOVE ANY ONE OF THESE
11 APPLICATIONS. DR. HALL, COULD YOU INTRODUCE EACH OF
12 THOSE WITH THE ASTERISK IN THE PROGRAMMATIC BOX?

13 DR. HALL: I THINK IN OUR DIVISION OF LABOR,
14 I'M GOING TO ASK DR. CHIU TO DO THAT. AND LET'S PUT UP
15 THE RIGHT SLIDES.

16 CHAIRMAN KLEIN: AFTER CONSIDERING THESE
17 APPLICATIONS INDIVIDUALLY, THERE WILL BE A
18 CONSIDERATION, WHETHER INDIVIDUALLY OR AS A GROUP, WE
19 WANT TO MOVE ANY OF THESE APPLICATIONS IN THIS
20 PORTFOLIO GROUP UP INTO THE HIGHEST PRIORITY FUNDING
21 CATEGORY.

22 DR. PENHOET: IS THAT A SEPARATE DISCUSSION
23 FROM EXPANDING THE HIGHEST CATEGORY? DOES THAT MEAN WE
24 BUMP ONE FROM THE HIGHER CATEGORY IN ORDER TO DO THAT?

25 CHAIRMAN KLEIN: YOU HAVE THE OPTION OF JUST

1 ADDING TO THE HIGHER CATEGORY, OR YOU HAVE THE OPTION
2 TO ADD ONE AND, THEN AS A SEPARATE MOTION, TAKE ONE
3 FROM THAT CATEGORY, BUT WE HAVE JUST CONSIDERED
4 CATEGORY ONE. NO ONE PUT FORTH A MOTION AT THIS POINT
5 PROVISIONALLY TO MOVE ONE DOWN. WE STILL HAVE THE
6 OPPORTUNITY TO DO THAT WHEN WE GET TO FUNDING.

7 AT THIS POINT WHAT WE'RE CONSIDERING IS THE
8 NINE APPLICATIONS IN THIS CATEGORY AND IF WE WANT TO
9 MOVE THEM INTO THE PREFERRED FUNDING CATEGORY
10 PROVISIONALLY.

11 DR. PENHOET: IRRESPECTIVE OF MONEY?

12 CHAIRMAN KLEIN: IRRESPECTIVE OF MONEY AT
13 THIS POINT.

14 DR. HALL: BOB, ARE YOU GOING TO DO EACH ONE,
15 JUST A PROCEDURAL QUESTION, ARE YOU GOING TO DO EACH
16 ONE WITH A HEAD-COUNT VOTE?

17 CHAIRMAN KLEIN: SCOTT, WOULD YOU INFORM US
18 LEGALLY OF THE PROCEDURE?

19 MR. TOCHER: WE'LL BE TAKING A ROLL CALL
20 SENSE OF THE MEMBERS OF THE COMMITTEE WITH RESPECT TO
21 EACH APPLICATION.

22 CHAIRMAN KLEIN: AND BEFORE EACH VOTE, WE
23 HAVE TO, DR. HALL, ANNOUNCE THE CONFLICTS. DOES
24 ANYONE -- DR. HALL, THE FIRST OF THESE APPLICATIONS AT
25 THE TOP OF THE SCREEN IS 170-1. DR. CHIU, IT'S 170-1.

1 IS THERE ANY MEMBER OF THE BOARD THAT WOULD LIKE TO
2 MOVE THIS GRANT INTO THE PREFERRED FUNDING CATEGORY?

3 DR. CHIU: INTO TIER 1, IS THAT THE QUESTION?

4 DR. HALL: BOB, JUST AS A WAY OF PROCEEDING,
5 MAYBE YOU COULD ASK FIRST IF FURTHER INFORMATION IS
6 REQUIRED THAN WHAT IS IN THE NOTEBOOK, IF ANYBODY WANTS
7 TO ASK ANY QUESTIONS ABOUT IT.

8 CHAIRMAN KLEIN: THE THOUGHT IS THAT IF ANY
9 ONE IS PUT INTO DISCUSSION, THEN WE IMMEDIATELY GO INTO
10 THE COMMENT.

11 MS. KING: BEFORE WE DO THAT, I'D JUST LIKE
12 TO STATE FOR THE RECORD THAT SHERRY LANSING HAS A
13 CONFLICT WITH THIS PARTICULAR APPLICATION.

14 CHAIRMAN KLEIN: THANK YOU. IS ANYONE
15 INTERESTED IN MOVING THIS APPLICATION? DR. BRYANT.

16 DR. BRYANT: I'M CONFUSED BECAUSE, WITHOUT --
17 WE HAVEN'T HAD THE DISCUSSION ABOUT HOW FAR THE FUNDING
18 IS GOING TO GO, SO I MEAN MAYBE A DIFFERENT DISCUSSION
19 COULD BE DO WE WANT THESE PROPOSALS TO STAY IN THIS
20 PREFERRED TIER 2 GROUP. I'M NOT SURE BECAUSE IF WE
21 MOVE THEM INTO GROUP ONE, THEN WE'RE SUGGESTING
22 CHANGING THE FUNDING.

23 CHAIRMAN KLEIN: THE IMPLICATION OF MOVING
24 INTO TIER 1 IS THAT WE WILL WANT TO INCREASE THE
25 FUNDING.

1 DR. BRYANT: OKAY.

2 DR. HALL: ONE SUGGESTION WAS, AND I THINK
3 SHERRY LANSING MADE THIS BEFORE, WOULD BE JUST TO GO
4 THROUGH AND SAY WHETHER YOU THOUGHT IT SHOULD BE FUNDED
5 OR NOT. THEN WHAT WE WILL DO OVERNIGHT IS REORDER,
6 ACCORDING TO WHAT YOU'VE DONE, AND PROVIDE YOU WITH A
7 NEW SHEET HERE. AND WE WILL GIVE YOU CUMULATIVE
8 AMOUNTS. SO YOU WILL SEE THE FINANCIAL CONSEQUENCES OF
9 WHERE YOU WANT TO CUT OFF. BUT RIGHT NOW THE IDEA
10 WOULD BE JUST TO, ON A SCIENTIFIC BASIS, IS THIS ONE
11 YOU WANT TO FUND OR NOT FUND, AND THEN YOU CAN MAKE
12 THAT -- IN A FINANCIAL CONTEXT YOU CAN CONSIDER IT
13 TOMORROW. SO IN THAT WAY YOU DON'T BUMP ANYBODY ELSE
14 WHEN YOU'RE CONSIDERING THAT.

15 CHAIRMAN KLEIN: PROCEDURALLY COUNSEL HAS
16 ADVISED US ON THIS PROCESS AS BEING THE BEST TO
17 MINIMIZE CONFLICTS.

18 DR. PENHOET: THEN WOULDN'T THE BEST VOTE BE
19 WHETHER YOU WANT TO JUST LEAVE IT IN THIS CATEGORY OR
20 MOVE IT?

21 DR. HALL: JUST TO FUND OR NOT FUND WILL DO
22 IT, AND JUST CONSIDER TIER 1 AS BEING DEFINED BY THE
23 ORIGINAL AMOUNT, AND THEN YOU ADD A NEW ONE TO FUND.
24 EACH ONE YOU CAN SAY, YES, WE WOULD ALSO LIKE TO FUND
25 THIS ONE; YES, WE WOULD ALSO LIKE TO FUND THIS ONE; NO,

1 WE DON'T WANT TO FUND THIS ONE; YES, WE WOULD. AND
2 THEN, AS I SAID, WE WILL PRODUCE OVERNIGHT AND BRING
3 YOU THE FINANCIAL TABLET. SO YOU DON'T HAVE TO PUT IT
4 IN TIER 1. ALL YOU HAVE TO DO IS SAY YOU WANT TO FUND
5 IT. IS THAT OKAY? IS THAT YOUR UNDERSTANDING, MR.
6 CHAIR?

7 CHAIRMAN KLEIN: WELL, WE'RE ACTUALLY, FROM A
8 LEGAL PROCEDURE, IT WOULD FACILITATE THE VOTES AND
9 MINIMIZE THE COMPLICATIONS, DR. HALL, IF WE MOVE THE
10 ONES WE WANTED TO FUND INTO TIER 1. DR. CHIU.

11 DR. CHIU: MAY I RAISE A PROCEDURAL QUESTION?
12 AND THAT IS THAT TIER 1, HAVING NOW BEEN NO ACTION, ARE
13 WE TO ASSUME THAT ALL TIER 1 APPLICATIONS ARE NOW
14 EQUIVALENT IN TERMS OF A BUCKET OF APPLICATIONS AND NOT
15 ANY ONE IS PARTICULARLY RANKED IN ANY ORDER?
16 SIMILARLY, ALL THOSE IN TIER 2 A ARE EQUIVALENT,
17 REGARDLESS OF SCORE NOW. AND SO RIGHT NOW WHAT IS
18 UNDER DISCUSSION IS TO MOVE INTO TIER 1, WHICH WOULD
19 EXPANDED THE 24 MILLION, OR TO KEEP IN TIER 2 A AS NO
20 CHANGE IN STATUS, OR WITH LESS FAVORABLE COMMENTS, MOVE
21 OUT OF TIER 2 A INTO 2 B? THIS WAY THERE IS NO
22 DISCUSSION OF FUNDS, BUT IT GIVES YOU EQUIVALENT
23 BUCKETS, YOU MIGHT SAY.

24 AND THEN TONIGHT WE CAN PUT THEM IN TERMS OF
25 DOLLARS REQUIRED, BUT AT LEAST THAT SIMPLIFIES, IN MY

1 MIND, A LITTLE BIT EASIER IN LOOKING AT BUCKETS OF
2 APPLICATIONS WITHOUT RELATIVE RANKING. BECAUSE ONCE WE
3 DO RELATIVE RANKING AND WE DO BUMPING, THEN EACH TIME
4 YOU BRING SOMETHING UP, SOMETHING IS IN JEOPARDY, AND
5 TWO SETS OF PEOPLE ARE NOW IN CONFLICT.

6 CHAIRMAN KLEIN: IF I CAN PROCEED HERE, I
7 THINK DR. SHEEHY AND DR. POMEROY AND THEN DR. LEVEY.
8 DR. SHEEHY.

9 MR. SHEEHY: THANK YOU. SO I THINK I
10 UNDERSTAND THE PROCEDURE. SO IN A WAY WE'RE SOMEWHAT
11 DOING THIS BACKWARDS, BUT I THINK, TO GO TO SHERRY'S
12 POINT, WHERE WE'RE REALLY FOCUSING ON THE SCIENCE, AND
13 THEN WE'LL FIGHT AMONGST OURSELVES TO FIGURE OUT WHERE
14 THE MONEY IS.

15 IN THAT CONTEXT, I WOULD LIKE TO MOVE THIS
16 APPLICATION INTO TIER -- MOVE TO MOVE THIS APPLICATION
17 INTO TIER 1.

18 CHAIRMAN KLEIN: IS THERE A SECOND? THIS IS
19 JUST TO PUT IT INTO DISCUSSION.

20 DR. STEWARD: I SECOND.

21 CHAIRMAN KLEIN: SECOND FROM DR. STEWARD.

22 DR. PENHOET: IMPLICIT IN YOUR MOTION IS
23 EXPAND TIER 1 BY ONE GRANT.

24 MR. SHEEHY: YES, ABSOLUTELY.

25 DR. PRICE: I THINK THERE'S CONTRADICTION

1 WITH THE DEFINITION OF TIER 1. IT SAYS RECOMMENDED FOR
2 FUNDING, PERIOD. YOU'RE NOW SAYING RECOMMENDED FOR
3 FUNDING OR FIND OUT TOMORROW WHETHER THE FUNDING IS
4 AVAILABLE.

5 CHAIRMAN KLEIN: DR. PRICE, THAT'S A
6 RECOMMENDATION OF THE WORKING GROUP. THAT'S AN
7 ADVISORY GROUP. THIS IS THE BOARD THAT DECIDES WHAT'S
8 FUNDED.

9 DR. PRICE: WHAT IS OUR NEW DEFINITION OF
10 TIER 1?

11 CHAIRMAN KLEIN: OUR NEW DEFINITION OF TIER 1
12 IS WHAT WAS IN TIER 1 AND WHATEVER APPLICATIONS FROM
13 TIER 2 WE ADD TO TIER 1. WE ARE MAKING OUR OWN
14 RECOMMENDATIONS AS AN INDEPENDENT DECISION.

15 DR. PRICE: BUT YOU'RE NOT MAKING A
16 RECOMMENDATION FOR FUNDING. YOU'RE MAKING A
17 RECOMMENDATION WE WANT TO FUND THESE IF FUNDS ARE
18 AVAILABLE.

19 CHAIRMAN KLEIN: WE WILL MAKE A DECISION
20 TOMORROW.

21 DR. PRICE: I UNDERSTAND. WHAT WE'RE
22 SAYING -- NEVER MIND.

23 MR. SHEEHY: I GET YOUR POINT. WE'RE DOING
24 THIS BACKWARDS, BUT EVEN THOUGH WE'RE DOING THIS
25 BACKWARDS, IT'S STILL A PROCESS THAT WILL GET US -- AND

1 IF WE GET TO A POINT AND WE HAVE A SIGNIFICANT
2 DIFFERENCE ON WHAT OUR FUNDING LEVEL IS, WE'LL PROBABLY
3 HAVE TO COME BACK TO THIS LIST AND REORDER IT. IN THIS
4 CONTEXT, I THINK WE CAN GO THROUGH, AT LEAST TO SOME
5 POINT, AND SAY THAT WE THINK THAT THESE OUGHT TO BE
6 FUNDED.

7 CHAIRMAN KLEIN: OKAY. AND THIS HAS BEEN
8 THOUGHTFULLY DISCUSSED WITH COUNSEL. THIS IS A
9 PROCEDURE TO, AGAIN, MINIMIZE CONFLICTS. OKAY. WE
10 HAVE, I BELIEVE, CLAIRE. DR. LEVEY.

11 DR. LEVEY: I'M SORRY FOR BEING A LITTLE
12 DENSE HERE, BUT I'M A LITTLE BIT CONFUSED ABOUT WHAT
13 WE'RE DOING. WE'RE ACTUALLY RECOMMENDING AS A GROUP A
14 LIST THAT CONTAINS TWO ABERRANTLY SCORED GRANTS TO JUMP
15 OTHER GRANTS THAT WERE STRONGLY VOTED ON BY THE REVIEW
16 GROUP?

17 DR. PENHOET: WE'RE VOTING TO EXPAND THE
18 DEFINITION OF TIER 1 TO INCLUDE THESE GRANTS.

19 CHAIRMAN KLEIN: WE'RE NOT REMOVING ANY FROM
20 THE TOP PRIORITY. WE'RE JUST EXPANDING THE TOP
21 PRIORITY.

22 DR. LEVEY: OKAY.

23 CHAIRMAN KLEIN: OKAY. IS THERE ANY FURTHER
24 DISCUSSION ON MOVING THIS GRANT UP TO SUPPLEMENT TIER
25 1? ALL RIGHT.

1 COUNSEL, ON THIS VOTE, AS IN OTHER VOTES, WE
2 HAVE PUBLIC COMMENT. AND I'D LIKE TO INDICATE THAT
3 PUBLIC COMMENT SHOULD BE LIMITED TO THREE MINUTES, IF
4 THERE IS PUBLIC COMMENT, AS A PROCEDURAL MATTER BECAUSE
5 WE HAVE A LOT OF ITEMS TO GO THROUGH. IS THERE ANY
6 PUBLIC COMMENT ON THIS ITEM? SEEING NO PUBLIC COMMENT
7 ON THIS ITEM, COULD YOU REPEAT THE CONFLICTS AND THEN
8 DO A ROLL CALL VOTE.

9 MS. KING: SHERRY LANSING HAS A CONFLICT WITH
10 THIS APPLICATION.

11 CHAIRMAN KLEIN: OKAY.

12 MS. KING: RICARDO AZZIZ.

13 DR. AZZIZ: YES.

14 MS. KING: PAUL JENNINGS FOR DAVID BALTIMORE.
15 ROBERT PRICE.

16 DR. PRICE: YES.

17 MS. KING: SUSAN BRYANT.

18 DR. BRYANT: YES.

19 MS. KING: MARCY FEIT.

20 MS. FEIT: YES.

21 MS. KING: MICHAEL FRIEDMAN. MICHAEL
22 GOLDBERG.

23 MR. GOLDBERG: YES.

24 MS. KING: FRANCIS MARKLAND FOR BRIAN
25 HENDERSON.

1 DR. MARKLAND: YES.

2 MS. KING: DAVID KESSLER. BOB KLEIN.

3 CHAIRMAN KLEIN: YES.

4 MS. KING: SHERRY LANSING. SORRY. THANK

5 YOU. GERALD LEVEY.

6 DR. LEVEY: YES.

7 MS. KING: TED LOVE. RICHARD MURPHY. TINA

8 NOVA. ED PENHOET.

9 DR. PENHOET: YES.

10 MS. KING: PHIL PIZZO. CLAIRE POMEROY.

11 DR. POMEROY: YES.

12 MS. KING: FRANCISCO PRIETO. JOHN REED.

13 DUANE ROTH.

14 MR. ROTH: YES.

15 MS. KING: JOAN SAMUELSON. DAVID

16 SERRANO-SEWELL. JEFF SHEEHY.

17 MR. SHEEHY: YES.

18 MS. KING: JONATHAN SHESTACK. OSWALD

19 STEWARD.

20 DR. STEWARD: YES.

21 MS. KING: JANET WRIGHT.

22 DR. WRIGHT: YES.

23 CHAIRMAN KLEIN: ALL RIGHT. NOW, TO THE

24 EXTENT -- LET'S GO NEXT TO THE NEXT APPLICATION 249-1.

25 IS THERE ANY MOTION THAT WOULD MOVE THIS GRANT TO

1 EXPAND TIER 1?
2 DR. LEVEY: SO MOVED.
3 CHAIRMAN KLEIN: SO MOVED FROM DR. LEVEY. IS
4 THERE A SECOND?
5 MR. ROTH: SECOND.
6 CHAIRMAN KLEIN: WHAT ARE THE CONFLICTS
7 BEFORE WE HAVE DISCUSSION AND A VOTE?
8 MS. KING: DR. JENNINGS AND DR. PENHOET.
9 CHAIRMAN KLEIN: CONFLICTS ARE DR. JENNINGS
10 AND DR. PENHOET. ANY DISCUSSION ON THIS ITEM? ANY
11 PUBLIC DISCUSSION ON THIS ITEM? COULD YOU PLEASE CALL
12 THE ROLL.
13 MS. KING: RICARDO AZZIZ.
14 DR. AZZIZ: YES.
15 MS. KING: ROBERT PRICE.
16 DR. PRICE: YES.
17 MS. KING: SUSAN BRYANT.
18 DR. BRYANT: YES.
19 MS. KING: MARCY FEIT.
20 MS. FEIT: YES.
21 MS. KING: MICHAEL FRIEDMAN. MICHAEL
22 GOLDBERG.
23 MR. GOLDBERG: YES.
24 MS. KING: FRANCIS MARKLAND.
25 DR. MARKLAND: YES.

1 MS. KING: DAVID KESSLER. BOB KLEIN.
2 CHAIRMAN KLEIN: YES.
3 MS. KING: SHERRY LANSING.
4 MS. LANSING: YES.
5 MS. KING: GERALD LEVEY.
6 DR. LEVEY: YES.
7 MS. KING: TED LOVE. RICHARD MURPHY. TINA
8 NOVA. ED PENHOET HAS A CONFLICT. PHIL PIZZO.
9 DR. PIZZO: YES.
10 MS. KING: CLAIRE POMEROY.
11 DR. POMEROY: YES.
12 MS. KING: FRANCISCO PRIETO. JOHN REED.
13 DUANE ROTH.
14 MR. ROTH: YES.
15 MS. KING: JOAN SAMUELSON. DAVID
16 SERRANO-SEWELL. JEFF SHEEHY.
17 MR. SHEEHY: YES.
18 MS. KING: JONATHAN SHESTACK. OSWALD
19 STEWARD.
20 DR. STEWARD: YES.
21 MS. KING: JANET WRIGHT.
22 DR. WRIGHT: YES.
23 CHAIRMAN KLEIN: ALL RIGHT. LET ME ASK, IN
24 THE INTEREST OF TIME EFFICIENCY, THE NEXT FIVE GRANTS
25 RUN 82, 81, 81, 81, AND 78, REASONABLY CLOSE TO THE

1 SCIENTIFIC SCORES WITH THE ONES WE'VE JUST VOTED ON.
2 COUNSEL, MY UNDERSTANDING IS THAT WE CAN VOTE ON THOSE
3 AS A GROUP IF WE WISH. IS THAT A CORRECT STATEMENT?

4 MR. HARRISON: YES. YOU CAN VOTE TO MOVE
5 THEM AS A BLOCK TO TIER 1.

6 CHAIRMAN KLEIN: IF WE DID, WE WOULD CITE THE
7 CONFLICTS FOR EACH OF THOSE, AND THE VOTES WOULD ONLY
8 BE COUNTED IF SOMEONE DID NOT HAVE A CONFLICT.

9 MR. HARRISON: CORRECT. AND, IN FACT, IN THE
10 ROLL CALL VOTE, WHAT WE WOULD ASK IS THAT MEMBERS WHO
11 HAVE A CONFLICT IN A SPECIFIC APPLICATION AMONG THE
12 FIVE STATE THAT THEY'RE NOT PARTICIPATING IN THE VOTE
13 WITH RESPECT TO THAT APPLICATION.

14 CHAIRMAN KLEIN: SO I WOULD LIKE TO INDICATE
15 THAT IT WOULD BE IN ORDER TO EITHER MOVE INDIVIDUALLY,
16 AS WE HAVE, OR TO MOVE AS THIS GROUP IF THERE WERE A
17 MOTION TO MOVE THESE TO EXPAND TIER 1.

18 MR. ROTH: SO I'D LIKE TO MAKE A MOTION THAT
19 WE MOVE THE NEXT FOUR.

20 CHAIRMAN KLEIN: NEXT FOUR. HIS MOTION IS
21 FOUR.

22 DR. WRIGHT: SO MOVED.

23 MR. HARRISON: COULD YOU IDENTIFY THEM BY
24 APPLICATION NUMBER JUST FOR CLARITY ON THE RECORD?

25 MR. ROTH: 331, 222, 333, 409.

1 CHAIRMAN KLEIN: OKAY.

2 MR. SHEEHY: SECOND.

3 CHAIRMAN KLEIN: SECOND BY JEFF SHEEHY.

4 MS. KING: THOSE IN CONFLICT WITH THIS
5 APPLICATION ARE RICARDO AZZIZ, SUSAN BRYANT, FRANCIS
6 MARKLAND, SHERRY LANSING, GERALD LEVEY, AND OSWALD
7 STEWARD.

8 CHAIRMAN KLEIN: COULD YOU INDICATE BY GRANT
9 NUMBER WHICH CONFLICTS THEY ARE BECAUSE THEY WILL BE
10 VOTING ON THE ONES THAT THEY ARE NOT IN CONFLICT WITH.
11 AND SCOTT TOCHER WILL EXPLAIN.

12 MR. TOCHER: FOR APPLICATION 331, THE MEMBERS
13 WITH CONFLICTS ARE AZZIZ, LANSING, LEVEY, AND MEYER;
14 FOR 222 IT'S MARKLAND; FOR 333 IT'S BRYANT, LANSING,
15 AND STEWARD; AND FOR 409 IT IS BRYANT, LANSING, AND
16 STEWARD.

17 CHAIRMAN KLEIN: OKAY. AND WHEN EACH ONE IS
18 CALLED AS A ROLL CALL, YOU WILL ANNOUNCE THAT YOU ARE
19 NOT VOTING ON THE ONES IN WHICH YOU HAVE CONFLICT OF
20 WITH. IS THAT CORRECT, SCOTT?

21 MR. TOCHER: THAT'S CORRECT.

22 CHAIRMAN KLEIN: SO YOU CAN CAST AN AYE VOTE
23 FOR THOSE THAT YOU'RE NOT IN CONFLICT WITH WITH THE
24 STATEMENT THAT YOU ARE NOT VOTING FOR THOSE IN WHICH
25 YOU ARE IN CONFLICT, AND THE STAFF ARE WILL NOT RECORD

1 A VOTE FOR THOSE IN WHICH YOU ARE IN CONFLICT. RIGHT?
2 PROCEDURE IS UNDERSTOOD? OKAY.

3 THERE'S A MOTION AND A SECOND. ANY
4 ADDITIONAL COMMENT? NO ADDITIONAL COMMENT. PUBLIC
5 COMMENT? NO PUBLIC COMMENT. COULD WE HAVE A ROLL
6 CALL, AND COULD EACH BOARD MEMBER STATE, WHEN THEY
7 RESPOND, IF THEY HAVE A CONFLICT WITH ANY OF THESE,
8 THEY WILL SPECIFICALLY STATE THEY ARE SPECIFICALLY NOT
9 VOTING FOR THE ONE IN WHICH THEY HAVE A CONFLICT.

10 MS. KING: RICARDO AZZIZ.

11 DR. AZZIZ: YES, AND I AM NOT VOTING FOR
12 THOSE GRANTS THAT I'M SPECIFICALLY EXCLUDED.

13 MS. KING: PAUL JENNINGS. ROBERT PRICE.

14 DR. PRICE: YES FOR ALL FOUR.

15 MS. KING: SUSAN BRYANT.

16 DR. BRYANT: YES, EXCEPT I'M NOT VOTING FOR
17 THOSE FOR WHICH I HAVE A CONFLICT.

18 MS. KING: MARCY FEIT.

19 MS. FEIT: YES ON ALL FOUR.

20 MS. KING: MICHAEL FRIEDMAN. MICHAEL
21 GOLDBERG.

22 MR. GOLDBERG: YES, EXCEPT FOR THOSE FOR
23 WHICH I MAY HAVE A CONFLICT.

24 MS. KING: FRANCIS MARKLAND.

25 DR. MARKLAND: YES, EXCEPT FOR THAT ONE I

1 HAVE A CONFLICT.

2 MS. KING: DAVID KESSLER. BOB KLEIN.

3 CHAIRMAN KLEIN: YES ON ALL FOUR.

4 MS. KING: SHERRY LANSING.

5 MS. LANSING: YES, EXCEPT FOR THOSE THAT I
6 HAVE A CONFLICT.

7 MS. KING: GERALD LEVEY.

8 DR. LEVEY: YES, EXCEPT FOR 331.

9 MS. KING: TED LOVE. RICHARD MURPHY. TINA
10 NOVA. ED PENHOET.

11 DR. PENHOET: YES ON ALL FOUR.

12 MS. KING: PHIL PIZZO.

13 DR. PIZZO: YES ON ALL FOUR.

14 MS. KING: CLAIRE POMEROY.

15 DR. POMEROY: YES.

16 MS. KING: FRANCISCO PRIETO. JOHN REED.
17 DUANE ROTH.

18 MR. ROTH: YES ON ALL FOUR.

19 MS. KING: JOAN SAMUELSON. DAVID
20 SERRANO-SEWELL. JEFF SHEEHY.

21 MR. SHEEHY: YES ON ALL FOUR.

22 MS. KING: JONATHAN SHESTACK. OSWALD
23 STEWARD.

24 DR. STEWARD: YES ON 331 AND 222, AND
25 CONFLICTS ON 333 AND 409.

1 MS. KING: JANET WRIGHT.

2 DR. WRIGHT: YES ON ALL FOUR.

3 CHAIRMAN KLEIN: THANK YOU. WE NOW COME TO
4 THE LAST THREE IN THIS CATEGORY. DOES ANYONE WANT TO
5 MAKE A MOTION RELATED TO 453?

6 DR. STEWARD: YES, I WOULD LIKE TO.

7 CHAIRMAN KLEIN: DR. STEWARD MAKING A MOTION
8 TO MOVE IT TO TIER 1. IS THERE A SECOND?

9 DR. BRYANT: SECOND.

10 CHAIRMAN KLEIN: SECOND FROM DR. BRYANT. AND
11 WHO IS IN CONFLICT?

12 MS. KING: LANSING AND POMEROY.

13 CHAIRMAN KLEIN: THANK YOU. IS THERE
14 DISCUSSION ON THIS MOTION?

15 MR. ROTH: YES. I WOULD LIKE TO JUST GET
16 SOME ADDITIONAL COMMENTS FROM SOME OF THE COMMITTEE
17 MEMBERS, IF POSSIBLE, ON THE SCIENTIFIC MERIT.

18 CHAIRMAN KLEIN: OKAY.

19 DR. STEWARD: THIS IS A PROJECT THAT SEEKS TO
20 USE HUMAN EMBRYONIC STEM CELLS TO REGENERATE THE HAIR
21 CELLS OF THE EAR AND THE COMMUNICATING CELLS OF A
22 SPIRAL GANGLION. MOST OF THE PEOPLE ON THIS BOARD
23 SUFFER FROM HEARING LOSS, MANY -- AND I SAY THAT
24 BECAUSE ONE OF THE MOST COMMON CAUSES OF OR COMMON
25 CONSEQUENCES OF AGING IS HEARING LOSS. HEARING LOSS,

1 ACTUALLY HEARING LOSS AFFECTS ALL OF OUR COMMUNICATION
2 SKILLS. YOU CAN JUST ASK YOUR SPOUSE ABOUT THAT. YOU
3 COULD ASK YOUR SPOUSE TOO WHETHER YOU HAVE A HEARING
4 LOSS.

5 THIS IS AN EXTRAORDINARILY INTERESTING GRANT
6 THAT IS ALMOST THE IMAGE OF WHAT I THINK THE PUBLIC
7 IMAGINED WITH PROP 71, CREATING TISSUE TO REPLACE
8 SOMETHING THAT'S DIED. I THINK IT'S A WONDERFUL
9 EXAMPLE OF A PROJECT THAT SHOULD BE FUNDED.

10 CHAIRMAN KLEIN: OKAY. THANK YOU.

11 MR. ROTH: IF I COULD JUST ASK AGAIN THE
12 SPECIAL CONSIDERATION HERE WAS?

13 CHAIRMAN KLEIN: DR. CHIU, THE QUESTION FROM
14 DUANE ROTH IS FROM A PROGRAMMATIC VIEWPOINT, WHY WAS
15 THAT GRANT RAISED INTO THIS GROUP?

16 DR. CHIU: IF YOU DON'T MIND, IT THINK IT'S
17 WRITTEN IN THE PUBLIC. DR. HALL HAS THE COMPLETE
18 DISCUSSION.

19 DR. HALL: ACTUALLY I HAPPENED TO WRITE UP
20 THIS GRANT, SO I REMEMBER IT. THERE WERE THREE ISSUES.
21 ONE, THAT IT WAS A VERY INTERESTING BIOLOGICAL SYSTEM;
22 NO. 2, IT ADDRESSED A HEALTH PROBLEM THAT HAS THE
23 POTENTIAL FOR CELL REPLACEMENT THERAPY THAT IS NOT
24 ADDRESSED ANYWHERE ELSE IN OUR PORTFOLIO; AND NO. 3,
25 THIS WAS RECOGNIZED AS A VERY PROMISING YOUNG

1 INVESTIGATOR.

2 DR. BRYANT: SO I DID ASK QUESTIONS ABOUT
3 THIS PROPOSAL BECAUSE IT SOUNDED EXTREMELY EXCITING,
4 BUT I COULDN'T TELL WHETHER THERE WERE ANY PRELIMINARY
5 RESULTS. SO I WAS ABLE TO BE SATISFIED ON THAT ON
6 THOSE GROUNDS, AND THE PRELIMINARY RESULTS ARE VERY
7 EXCITING. AND I AM VERY HAPPY TO SEE THIS GRANT PUT
8 INTO THE FUNDING CATEGORY.

9 CHAIRMAN KLEIN: OKAY. THANK YOU VERY MUCH.

10 MR. ROTH: I APPRECIATE THOSE ANSWERS BECAUSE
11 I THINK, GIVEN THE SCORE, ESPECIALLY WITH THIS ONE AND
12 THE NEXT TWO, THAT WE SHOULD LOOK AT THESE AND REALLY
13 UNDERSTAND WHY THE DECISION WAS RECOMMENDED THAT THEY
14 BE GIVEN SPECIAL CONSIDERATION. SO THAT IT'S ON THE
15 RECORD AND EVERYBODY UNDERSTANDS. THIS HELPS ME A
16 GREAT DEAL JUST TO HEAR A LITTLE MORE CANDID COMMENT
17 ABOUT THE PROCESS.

18 CHAIRMAN KLEIN: OKAY. THANK YOU, DUANE.
19 ANY ADDITIONAL POINTS OR QUESTIONS FROM THE BOARD? ANY
20 ADDITIONAL -- YES, JOHN SIMPSON.

21 MR. SIMPSON: I'M GLAD TO SEE MR. ROTH
22 RAISING THE POINT HERE AT THIS PARTICULAR ONE ABOUT
23 ADDITIONAL SCIENTIFIC MERIT. I WAS GOING TO RAISE THE
24 SAME ISSUE. I WAS GOING TO DO IT A LITTLE FARTHER DOWN
25 THE LIST, BUT I THINK IT'S IMPORTANT THAT WE'VE REACHED

1 THE POINT WHERE WE DO NEED TO HAVE A LITTLE MORE
2 EXPLANATION WHEN WE'RE DOWN IN THE 70S OF WHY THIS DOES
3 MERIT SPECIAL TREATMENT. THANK YOU VERY MUCH FOR
4 RAISING THAT POINT, MR. ROTH.

5 CHAIRMAN KLEIN: OKAY. ANY ADDITIONAL PUBLIC
6 COMMENT? ALL RIGHT. WITH THAT, I'D CALL THE ROLL, AND
7 PLEASE REPEAT WHO IS IN CONFLICT.

8 MS. KING: SHERRY LANSING AND CLAIRE POMEROY.
9 RICARDO AZZIZ.

10 DR. AZZIZ: YES.

11 MS. KING: PAUL JENNINGS. ROBERT PRICE.

12 DR. PRICE: YES.

13 MS. KING: SUSAN BRYANT.

14 DR. BRYANT: YES.

15 MS. KING: MARCY FEIT.

16 MS. FEIT: YES.

17 MS. KING: MICHAEL FRIEDMAN. MICHAEL
18 GOLDBERG.

19 MR. GOLDBERG: YES.

20 MS. KING: FRANCIS MARKLAND.

21 DR. MARKLAND: YES.

22 MS. KING: DAVID KESSLER. BOB KLEIN.

23 CHAIRMAN KLEIN: YES.

24 MS. KING: GERALD LEVEY.

25 DR. LEVEY: YES.

1 MS. KING: TED LOVE. RICHARD MURPHY. TINA
2 NOVA. ED PENHOET.
3 DR. PENHOET: YES.
4 MS. KING: PHIL PIZZO.
5 DR. PIZZO: YES.
6 MS. KING: FRANCISCO PRIETO. JOHN REED.
7 DUANE ROTH.
8 MR. ROTH: YES.
9 MS. KING: JOAN SAMUELSON. DAVID
10 SERRANO-SEWELL. JEFF SHEEHY.
11 MR. SHEEHY: YES.
12 MS. KING: JONATHAN SHESTACK. OSWALD
13 STEWARD.
14 DR. STEWARD: YES.
15 MS. KING: JANET WRIGHT.
16 DR. WRIGHT: YES.
17 CHAIRMAN KLEIN: ALL RIGHT. AS WE GO TO THE
18 NEXT GRANT, IT IS 308, IS THERE A MOTION TO PUT THIS ON
19 THE TABLE FOR CONSIDERATION OF MOVING IT INTO TIER 1?
20 DR. PIZZO: SO MOVED.
21 CHAIRMAN KLEIN: IS THERE A SECOND?
22 DR. BRYANT: SECOND.
23 CHAIRMAN KLEIN: SECOND FROM DR. BRYANT.
24 MOTION IS OPEN FOR CONSIDERATION.
25 MS. KING: CONFLICTS FOR THIS, MARCY FEIT,

1 DAVID KESSLER, SHERRY LANSING, AND JEFF SHEEHY.

2 CHAIRMAN KLEIN: ALL RIGHT. DISTINGUISHED
3 GROUP.

4 DR. LEVEY: I WILL BE VOTING AGAINST THIS
5 APPLICATION BECAUSE IT'S SUCH A RADICAL DEPARTURE FROM
6 THE RANKING, AND THE CRITICISMS OF THIS GO TO THE VERY
7 FIBER OF THIS GRANT PROPOSAL. IT SAYS THE UNDERLYING
8 HYPOTHESIS IS NOT CLEAR. THERE'S GENERAL LACK OF
9 DETAIL IN THE EXPERIMENTAL DESIGN. AND ONE REVIEWER
10 FELT THAT THE ABSENCE OF AN EXPLICIT EXPERIMENTAL PLAN
11 FOR THE SECTION ON THE DISCOVERY OF GROWTH FACTORS THAT
12 COULD BE USED TO EXPAND A DERIVED ENDODERM CELL
13 POPULATION IS A MAJOR WEAKNESS.

14 I THINK TO JUMP THIS GRANT BEYOND SOME
15 EXTRAORDINARILY GOOD GRANTS IS NOT APPROPRIATE.

16 CHAIRMAN KLEIN: ALL RIGHT. STAFF, WOULD YOU
17 LIKE TO ADDRESS WHY THIS GRANT WAS PUT INTO THIS
18 PORTFOLIO POSITION?

19 DR. CHIU: I THINK THE MAIN CONSIDERATION IS
20 THAT, LOOKING AT ALL THE APPLICATIONS THAT HAVE BEEN
21 PUT IN TIER 1, THIS IS THE ONLY ONE THAT WORKS TO
22 DEVELOP CELLS FOR TREATMENT OF DIABETES, SO IT'S BASED
23 ON A PROGRAMMATIC EVALUATION OF DISEASE NEED.

24 CHAIRMAN KLEIN: OKAY.

25 DR. LEVEY: I WOULD JUST MAKE THIS POINT TO

1 THE BOARD AND TO OUR BOARD MEMBERS, THAT THE FACT THAT
2 SOMETHING IS THE ONLY PIECE OF RESEARCH IN AN AREA AND
3 YET THE RESEARCH IS FLAWED IS NO CRITERIA FOR PUTTING
4 THAT INTO A FUNDABLE POSITION.

5 DR. PIZZO: THAT'S A VERY GOOD POINT.

6 CHAIRMAN KLEIN: AND, STAFF, WHAT WAS YOUR
7 VIEW OF THE INTEGRITY OR THE FEASIBILITY OF THIS
8 RESEARCH IN TERMS OF THE COMMENTS THAT DR. LEVEY IS
9 COMMENTING ON?

10 DR. CHIU: ONE COMMENT I SEE HERE IS THAT THE
11 REVIEWERS THOUGHT THERE WOULD BE A SIGNIFICANT LEARNING
12 CURVE FOR HUMAN EMBRYONIC STEM CELL CULTURE.

13 CHAIRMAN KLEIN: OKAY. DR. PENHOET.

14 DR. PENHOET: I AGREE WITH DR. LEVEY'S
15 ASSESSMENT. I THINK, FIRST OF ALL, IT'S A FIELD IN
16 WHICH THERE ARE PEOPLE WORKING ELSEWHERE IN TERMS OF
17 DEVELOPING LINES FOR DIABETES. AND THIS PROPOSAL
18 DIDN'T HAVE, IN MY VIEW, A LOT OF SUBSTANCE, AND WE DO
19 GO QUITE FAR DOWN THE LIST TO PROPOSE THIS, SO I WILL
20 JOIN HIM IN VOTING NO ON THIS PROPOSAL.

21 CHAIRMAN KLEIN: AND ANY ADDITIONAL COMMENTS
22 FROM THE BOARD?

23 DR. BRYANT: I HAD SOME SIMILAR COMMENTS WHEN
24 I WAS REVIEWING THIS ONE ALSO. I THINK THERE ARE
25 QUESTIONS ABOUT COMMITMENT, AND, YOU KNOW, THE

1 HYPOTHESIS, THE LEADING COMPONENT OF THIS, IS
2 TROUBLING.

3 CHAIRMAN KLEIN: OKAY. JOHN SIMPSON. IS
4 THERE ANY OTHER BOARD COMMENTS? I DON'T SEE ANY.

5 MR. SIMPSON: MANY OF US HAD EXPRESSED
6 CONCERN THAT THE BOARD WOULD ACT AS A RUBBER STAMP AND
7 NOT DELVE INTO THESE THINGS IN A SERIOUS WAY. I'M
8 DELIGHTED TO SEE THAT THE BOARD IS TAKING THIS VERY
9 SERIOUSLY AND LOOKING VERY CLOSELY AND EXAMINING THESE
10 PROPOSALS, AND THAT THAT'S A WONDERFUL THING TO BE
11 OBSERVING. THIS IS A VERY GOOD PROCESS THAT'S GOING
12 FORWARD.

13 CHAIRMAN KLEIN: THANK YOU. WE ALWAYS LOVE
14 PUBLIC VALIDATION.

15 IF WE COULD -- IF THERE'S NO OTHER BOARD
16 COMMENTS, IF WE CAN DO A ROLL CALL AFTER STATING THE
17 CONFLICTS.

18 MS. KING: CONFLICTS ARE MARCY FEIT, DAVID
19 KESSLER, SHERRY LANSING, AND JEFF SHEEHY.

20 CHAIRMAN KLEIN: AND, STAFF, AS A MATTER OF
21 COURSE, WHEN WE HAVE SEVERAL COMMENTS INTERVENE, IF YOU
22 COULD RESTATE THE CONFLICTS JUST AS YOU'VE DONE SO THAT
23 IF THE BOARD ARE NOT FOCUSED, THAT WE'RE ON THE SAME
24 ITEM. CALL THE ROLL, PLEASE.

25 MS. KING: RICARDO AZZIZ.

1 DR. AZZIZ: OPPOSE.
2 MS. KING: PAUL JENNINGS. ROBERT PRICE.
3 DR. PRICE: NO.
4 MS. KING: SUSAN BRYANT.
5 DR. BRYANT: NO.
6 MS. KING: MICHAEL FRIEDMAN. MICHAEL
7 GOLDBERG.
8 MR. GOLDBERG: NO.
9 MS. KING: FRANCIS MARKLAND.
10 DR. MARKLAND: OPPOSED.
11 MS. KING: BOB KLEIN.
12 CHAIRMAN KLEIN: NO.
13 MS. KING: GERALD LEVEY.
14 DR. LEVEY: NO.
15 MS. KING: TED LOVE. RICHARD MURPHY. TINA
16 NOVA. ED PENHOET.
17 DR. PENHOET: NO.
18 MS. KING: PHIL PIZZO.
19 DR. PIZZO: NO.
20 MS. KING: CLAIRE POMEROY.
21 DR. POMEROY: NO.
22 MS. KING: FRANCISCO PRIETO. JOHN REED.
23 DUANE ROTH.
24 MR. ROTH: NO.
25 MS. KING: JOAN SAMUELSON. DAVID

1 SERRANO-SEWELL. JONATHAN SHESTACK. OSWALD STEWARD.

2 DR. STEWARD: NO.

3 MS. KING: JANET WRIGHT.

4 DR. WRIGHT: NO.

5 CHAIRMAN KLEIN: OKAY. THANK YOU. WE ARE
6 GOING ON TO 247. WOULD ANYONE LIKE TO MAKE A MOTION TO
7 PUT THAT UNDER CONSIDERATION? WE HAVE THE OPTION OF
8 NOT MAKING A MOTION TO RAISE IT AS WELL.

9 MS. KING: FOR THE RECORD, CONFLICTS WITH
10 THIS APPLICATION ARE SUSAN BRYANT, SHERRY LANSING, AND
11 OSWALD STEWARD.

12 MR. SHEEHY: I'D LIKE TO MOVE TO -- I
13 ACTUALLY LIKE THIS ONE. SO I'D LIKE TO MOVE TO FUND
14 THIS. I THINK IT'S IMPORTANT. I THINK IT'S IMPORTANT
15 BECAUSE IT'S ALZHEIMER'S. I KNOW THAT IS
16 CONTRADICTING, AND I ACTUALLY TENDED TO AGREE WITH THE
17 COMMENTS MADE, THAT WE SHOULD BE A LITTLE CAREFUL ON
18 THIS, BUT THIS IS ONE THAT I MIGHT MAKE AN EXCEPTION.
19 THERE SEEMED TO BE SOME STRENGTHS IN THIS PROPOSAL, AND
20 ALZHEIMER'S DISEASE IS NOT WELL UNDERSTOOD IN GENERAL.

21 CHAIRMAN KLEIN: OKAY. THERE'S A MOTION. IS
22 THERE A SECOND FOR CONSIDERATION? THE BOARD SEEMS TO
23 BE HIGHLY FOCUSED, SO I'M GOING TO WAIT A MOMENT.
24 OKAY. IF THERE'S NO SECOND, WE WILL MOVE FORWARD TO
25 THE NEXT STAGE OF OUR CONSIDERATION.

1 DR. CHIU: AMY LEWIS WILL NOW SHOW THE REST
2 OF TIER 2.

3 CHAIRMAN KLEIN: JUST SO STAFF UNDERSTANDS,
4 THERE IS GOING TO BE NO VOTE ON THIS ITEM BECAUSE THERE
5 WAS NO MOTION. THE MOTION FAILED FOR LACK OF A SECOND.
6 THERE'S A QUESTION.

7 DR. AZZIZ: I DON'T HAVE A QUESTION. I HAVE
8 A MOTION WHEN YOU'RE READY.

9 CHAIRMAN KLEIN: OKAY. WE ARE PREPARED TO
10 LOOK AT TIER 2, BUT CAN WE JUST PUT IT ON THE SCREEN
11 FIRST. JUST ONE SECOND.

12 DR. CHIU: THE NEXT ONE ON TIER 2 IS 416, MR.
13 CHAIRMAN.

14 MS. KING: WITH APPLICATION 416, THE
15 CONFLICTS ARE BRYANT, LANSING, AND STEWARD.

16 CHAIRMAN KLEIN: OKAY. BEFORE WE GO TO THIS
17 APPLICATION, DR. AZZIZ, DO YOU HAVE A GENERAL MOTION?

18 DR. AZZIZ: I HAVE ACTUALLY A SPECIFIC MOTION
19 ABOUT THIS APPLICATION.

20 CHAIRMAN KLEIN: HE HAS A SPECIFIC MOTION
21 ABOUT THIS APPLICATION. DR. AZZIZ.

22 DR. AZZIZ: THIS APPLICATION IS SCORED HIGHER
23 THAN ALMOST EVERY OTHER APPLICATION THAT WE HAVE JUST
24 MOVED UP INTO TIER 1. WHILE IT DOES NOT ADDRESS A
25 SPECIFIC DISORDER, IT ADDRESSES A VERY IMPORTANT

1 PROBLEM, WHICH IS THE GENERATION OF OOCYTES FOR FURTHER
2 EMBRYONIC STEM CELL DEVELOPMENT. IT'S VERY UNIQUE.
3 THE REVIEWERS REALLY LIKED THIS. THE IDEA IS A
4 SIGNIFICANT -- REVIEWING THE SPECIFIC AIMS. THEY'RE
5 INNOVATIVE. THERE'S A LACK OF PRELIMINARY DATA, BUT
6 THERE'S A LACK OF PRELIMINARY DATA PRETTY MUCH WITH A
7 LARGE NUMBER OF THE SEED GRANTS. THAT'S THE NATURE OF
8 THE SEED GRANT.

9 SO I ACTUALLY AM VERY EXCITED ABOUT THIS
10 GRANT. AND, AGAIN, EVEN THE REVIEWERS THEMSELVES
11 SCORED THIS HIGHER THAN ANY OF THE ONES WE JUST MOVED
12 UP INTO TIER 1 WITH ONE EXCEPTION. SO I WOULD MOVE
13 THAT WE MOVE THIS INTO TIER 1 IN THE FUNDABLE RANGE.

14 DR. WRIGHT: SECOND.

15 DR. LEVEY: I'LL SECOND THAT.

16 CHAIRMAN KLEIN: THERE'S A SECOND FROM JANET
17 WRIGHT. IT IS NOW AVAILABLE FOR CONSIDERATION.

18 ADDITIONAL COMMENTS FROM THE BOARD?

19 DR. PIZZO: CAN I ASK A QUESTION IN FOLLOW-UP
20 BECAUSE I AGREE WITH THE COMMENTS THAT WERE MADE BY
21 RICARDO. AND SO THE QUESTION IS REALLY A PRACTICAL
22 ONE. THAT IS, IF IT GOES INTO THE FUNDABLE RANGE, DOES
23 IT HAVE TO BE STRATIFIED IN THAT RANGE BECAUSE WE
24 HAVEN'T YET FINALIZED WHERE WE ARE WITH REGARD TO
25 FUNDING? AND BECAUSE I AGREE THAT SCIENTIFIC MERIT IS

1 HIGH, ONE MIGHT ACTUALLY NOT ONLY MOVE IT INTO THE NEXT
2 TIER, BUT ACTUALLY MOVE IT UP OR ABOVE THE GROUPS WE'VE
3 JUST TALKED ABOUT.

4 CHAIRMAN KLEIN: IT IS AN OPTION TO MOVE IT
5 INTO THE NEXT TIER. COUNSELOR HARRISON, WOULD YOU LIKE
6 TO COMMENT HERE?

7 DR. PIZZO: DO YOU UNDERSTAND WHAT I MEAN BY
8 TIER?

9 CHAIRMAN KLEIN: YES. YOU WANT TO MOVE IT
10 INTO SCORE ORDER.

11 DR. PIZZO: YES, EXACTLY.

12 MR. HARRISON: WELL, AT THIS POINT IN TIME,
13 ALL WE'RE DOING IS PRELIMINARILY MOVING APPLICATIONS
14 FROM ONE TIER TO ANOTHER TIER. WE'RE NOT NECESSARILY
15 PRIORITIZING THEM WITHIN TIERS. YOU WILL HAVE AN
16 OPPORTUNITY TO DO THAT TOMORROW WHEN YOU LOOK AT THE
17 FINAL ARRAY OF APPLICATIONS WITHIN TIER 1 AND THE
18 BUDGET FOR THOSE APPLICATIONS. YOU WILL HAVE AN
19 OPPORTUNITY TO, FOR EXAMPLE, MAKE MOTIONS TO MOVE
20 APPLICATIONS OUT OF TIER 1 THAT ARE LESS MERITORIOUS IF
21 YOU THINK THEY SHOULD NOT BE FUNDED OR THAT YOU'RE
22 FUNDING TOO MUCH.

23 CHAIRMAN KLEIN: BUT HE COULD ALSO MOVE IT
24 INTO THE ORDER OF SCORED BY THIS MOTION.

25 DR. PIZZO: IT'S JUST A SIMPLER WAY OF

1 KEEPING TABS ON THINGS NOW AS WE MOVE FORWARD.

2 DR. HALL: ONE PROBLEM, PHIL, IS IF YOU DO
3 THAT, YOU AFFECT A NUMBER OF GRANTS THROUGH --

4 DR. PIZZO: A CASCADING EFFECT.

5 DR. HALL: THAT'S EXACTLY RIGHT. AND THE
6 CONFLICT OF INTEREST PROBLEMS BECOME RATHER MORE
7 COMPLICATED. SO IT SEEMS SIMPLER -- I'M NOT -- I'M
8 JUST TRYING TO EXPLAIN THE REASONING BEHIND IT. IT
9 SEEMS SIMPLER TO CONSIDER ONE BY ONE DO YOU WANT TO
10 FUND THIS GRANT. THEN IT'S CLEAR WHO'S GOT CONFLICT OF
11 INTEREST, AND YOU DON'T AFFECT ANY OTHER GRANT. AND
12 THEN YOU COME LATER AND SEE THE FINANCIAL CONSEQUENCES
13 OF ALL THE DECISIONS.

14 DR. PIZZO: I ACCEPT THAT. I AGREE.

15 CHAIRMAN KLEIN: THAT'S BEEN ARGUED FROM BOTH
16 SIDES.

17 DR. POMEROY: QUESTION OF CLARIFICATION.
18 JUST BECAUSE WE LEAVE SOMETHING IN TIER 2 DOESN'T MEAN
19 THAT WE CAN'T DECIDE TO FUND IT TOMORROW BECAUSE IT
20 WOULD STILL BE IN THE CATEGORY IF FUNDS ARE AVAILABLE.

21 CHAIRMAN KLEIN: THAT'S RIGHT. YOU CAN MAKE
22 A SUPPLEMENTAL FUNDING DECISION TO FUND A GROUP IN THIS
23 SECOND TIER.

24 DR. AZZIZ: THIS IS A QUESTION OF PROCEDURE
25 AND MAY NOT BE ANSWERABLE TODAY. DOES THE ICOC HAVE

1 THE PREROGATIVE OF ACTUALLY, SAY, CUTTING 10 OR 12
2 PERCENT ACROSS THE BOARD ON GRANTS AND, HENCE, ALLOWING
3 A GREATER NUMBER OF GRANTS TO BE FUNDED AT PERHAPS
4 SLIGHTLY LESS PERCENTAGE?

5 CHAIRMAN KLEIN: YOU HAVE THAT ABILITY,
6 ALTHOUGH IT DOESN'T ALWAYS HIT EACH GRANT EQUALLY.
7 THERE'S SOME GRANTS THAT MAY, IN FACT, BE STRETCHING
8 BECAUSE THEY'RE AMBITIOUS GRANTS THAT MAY NEED -- HAVE
9 A GREATER NEED, BUT YOU DO HAVE THAT ABILITY.

10 DR. CHIU, I THINK YOU WANTED TO COMMENT ON
11 THAT.

12 DR. CHIU: WELL, THE THING IS THAT THIS IS
13 THE FIRST ROUND. AND SOME OF THE APPLICANTS MAY NOT
14 HAVE COMPLETELY UNDERSTOOD HOW TO DO THE CALCULATIONS
15 FOR BOTH DIRECT PROJECT COST, FACILITIES, AND INDIRECT
16 COSTS. AND WE'RE HOLDING THEM AT WHAT THEY SIGNED OFF
17 ON. SO SOME OF THEM HAVE ASKED FOR THE FULL AMOUNT
18 THAT THEY'RE ENTITLED TO, PERHAPS MORE, IN WHICH CASE
19 WE WILL REDUCE THEM WHEN GRANTS MANAGEMENT LOOKS AT
20 INDIVIDUAL CASES THAT THE BOARD HAS CHOSEN TO APPROVE
21 FOR FUNDING. OTHER ONES ARE STRETCHED SO THIN ALREADY,
22 THAT TO CUT ANOTHER 10 PERCENT -- IN OTHER WORDS, IT
23 HITS DIFFERENT ONES DIFFERENTLY. SO IF YOU DO
24 ACROSS-THE-BOARD CUT, THERE WOULD BE SOME INJUSTICES.

25 DR. HALL: I WOULD ALSO MAKE THE COMMENT THAT

1 THIS IS OUR FIRST ROUND OF RESEARCH GRANTS. I THINK TO
2 START BY CUTTING BUDGETS ACROSS THE BOARD SENDS A
3 TERRIBLE MESSAGE TO SCIENTISTS IN THE STATE. THIS IS
4 NOT WHAT --

5 DR. PIZZO: RIGHT. YOU'RE GOING TO WITHDRAW
6 THAT.

7 DR. AZZIZ: I ACTUALLY AM NOT GOING TO
8 WITHDRAW IT. I STAND BY THAT. 95 PERCENT OR 90
9 PERCENT OF SOMETHING YOU DIDN'T HAVE TO BEGIN WITH IS A
10 HECK OF A LOT BETTER THAN NOT. HAVING SAID THAT, I'M
11 NOT TRYING TO BE DRACONIAN. IF THERE'S NOT SUPPORT FOR
12 THIS, THEN IT WAS JUST A QUESTION.

13 CHAIRMAN KLEIN: A VERY GOOD QUESTION.

14 DR. HALL: QUICK POINT, MR. CHAIR, IF I MAY.
15 I CAN PREDICT THAT IF WE DO THAT, THEN WE WILL GET
16 BUDGETS THE NEXT TIME INFLATED BY AN EQUIVALENT AMOUNT
17 IF IT'S POSSIBLE TO DO SO.

18 DR. PIZZO: I THINK AT THIS -- I MEAN THE
19 SPIRIT THAT RICARDO IS ADDRESSING, BUT I THINK THE
20 MESSAGE IS GOING TO BE VERY CLEAR TO A SCIENTIFIC
21 COMMUNITY THAT'S ALREADY WRESTLING WITH THE PROSPECT OF
22 ADMINISTRATIVE AND OTHER CUTS THAT ARE COMING FROM
23 OUTSIDE OF CALIFORNIA. THIS IS A TIME FOR CALIFORNIA
24 TO STAND HIGH AND LOOK AS IF IT'S REALLY VALUING WHAT
25 WE'RE DOING IN OUR RESEARCH FUNDING.

1 CHAIRMAN KLEIN: OKAY. GOOD DISCUSSION.

2 DR. PRICE: SO FAR I FIND PERSUASIVE THE
3 MOTION MAKER'S ARGUMENTS HERE. I WOULD JUST WONDER IF
4 IT'S APPROPRIATE FOR ME TO ASK THE STAFF TO INDICATE
5 WHY, DESPITE THE HIGH SCORE, THIS PROPOSAL DIDN'T MAKE
6 IT UP INTO THE ASTERISK CATEGORY.

7 DR. HALL: WELL, THE --

8 DR. PRICE: DESPITE THE STRENGTH OF THE
9 APPRAISAL.

10 DR. HALL: SO THE PROCEDURE WAS THAT DURING
11 THE PROGRAMMATIC REVIEW PHASE, THE WORKING GROUP, UNDER
12 THE LEADERSHIP OF JOAN SAMUELSON, CARRIED OUT AN
13 EXERCISE NOT -- WELL, IT'S NOT EXACTLY WHAT YOU'RE
14 DOING HERE BUT BECAUSE IN THE FOLLOWING WAY, THAT IS,
15 THEY DID NOT GO THROUGH GRANT BY GRANT BY GRANT.
16 DIVIDED THEM INTO 1S, 2S, AND 3S BY THE PROCESS I
17 DESCRIBED, AND THEN SAID WITHIN TIER 2, ARE THERE ANY
18 YOU WANT TO MOVE UP? SO ANY ONE THAT SOMEBODY WANTED
19 TO BE CONSIDERED WAS CONSIDERED. NO ONE SAID LET'S
20 TAKE A VOTE NOT TO MOVE THIS. YOU SEE WHAT I'M SAYING?

21 THERE WAS ONE GRANT THAT SCORED QUITE LOW, AS
22 I RECALL IN THE LOW 70S, THAT WAS PROPOSED TO BE MOVED
23 UP AND WAS DEFEATED. OTHER THAN THAT, NOBODY --

24 CHAIRMAN KLEIN: THERE WERE A COUPLE OF OTHER
25 APPLICATIONS THAT WERE RAISED AND WERE NOT MOVED UP.

1 THERE WERE DEFINITELY A COUPLE. AND I'D LIKE TO SAY
2 JEFF SHEEHY DID A GREAT JOB ON MANAGING THIS PORTION OF
3 THE REVIEW.

4 MR. SHEEHY: IF I COULD SPEAK TO DR. PRICE'S
5 COMMENT. ITS HIGH SCORE ACTUALLY MEANT IT WOULDN'T GET
6 AN ASTERISK. ACTUALLY PROBABLY MEANT IT WOULDN'T GET
7 AN ASTERISK BECAUSE WHAT WE WERE LOOKING FOR WERE
8 ONES -- THERE REALLY WAS A STRONG SENSE, AS I SAID AT
9 THE OUTSET, THAT WE PROBABLY HAD NOT ALLOCATED ENOUGH
10 MONEY FOR THE QUALITY OF SCIENCE THAT WE HAD
11 DISCOVERED. SO THIS WAS THE NEXT ONE RIGHT BELOW. SO
12 WE BROUGHT UP STUFF THAT WE THOUGHT WAS UNLIKELY. IN
13 OTHER WORDS, THE NEXT FOUR OR FIVE, MAYBE EVEN -- THE
14 NEXT BIG CLUMP WERE REALLY PEOPLE ASSUMED IF MONEY WERE
15 FOUND. THEIR HIGH SCORES MEANT THAT THEY WEREN'T
16 LIKELY TO GET ASTERISKED, SO WHY ENGAGE IN THAT
17 EXERCISE BECAUSE THEY WERE THE NEXT IMMEDIATE ONES.
18 DOES THAT MAKE SENSE?

19 DR. PRICE: IT MAKES A LOT OF SENSE EXCEPT IF
20 WE MAKE A DIFFERENT KIND OF DECISION, THEY MAY ACTUALLY
21 NOT GET IT.

22 CHAIRMAN KLEIN: IT'S AN INDEPENDENT DECISION
23 WE WILL MAKE.

24 DR. HALL: IT'S A STATEMENT OF FACT. THE TOP
25 TWO OR THREE THAT WERE ASTERISKED WERE 83, 82, 82. AND

1 THE TOP ONES THAT WEREN'T ASTERISKS WERE THE SAME.

2 MR. SHEEHY: IT WAS, BUT NOT TO TRY TO
3 RECAPITULATE THE ENTIRE PROGRAMMATIC REVIEW, I THINK
4 THAT THOSE -- I THINK IT'S MORE COMPLEX THAN THAT, BUT
5 I DO THINK THAT SOME OF THE ONES RIGHT ON THE CUSP IN
6 THE 80S, THE LOW 80S, BECAUSE WE'VE BEEN THERE ALREADY
7 FOR ABOUT 30 HOURS, IT WASN'T -- WE WEREN'T GOING TO
8 ASTERISK EVERYTHING. AND REMEMBER WE HAD THE NOTION
9 THAT THERE WAS AN ADDITIONAL 20 MILLION THAT WOULD BE
10 AVAILABLE, SO WHY NIT-PICK WHEN YOU WRITE UP, ASSUMING
11 THAT WE'D BE ABLE TO GO SOMEWHERE DOWN INTO THE LIST.
12 BUT THERE WAS THE SENSE THAT SOME OF THEM REALLY NEEDED
13 TO BE HIGHLIGHTED.

14 PROBABLY IN RETROSPECT, I THINK THAT IF THE
15 GROUP REALLY KNEW THAT THE DISCUSSION WAS GOING TO TAKE
16 PLACE IN THIS LEVEL WITH THIS TYPE OF TREATMENT OF THE
17 ASTERISK, THIS ONE WOULD HAVE BEEN MOVED UP.

18 CHAIRMAN KLEIN: DR. LEVEY.

19 DR. LEVEY: I ACTUALLY WANT TO MAKE ONE
20 COMMENT. FIRST OF ALL, IF WE HAVE THE ADDITIONAL
21 MONEY, THEN A LOT OF THIS DISCUSSION AND AGONY THAT
22 WE'RE GOING THROUGH IS MOOT. SO IT WOULD BE HELPFUL TO
23 KNOW WHETHER WE HAVE THAT.

24 SECOND THING IS I THINK THIS KIND OF
25 CONSIDERATION OF HOW WE MOVE GRANTS AROUND MAKES ME

1 FEEL A LITTLE BIT UNCOMFORTABLE BECAUSE WE RUN THE RISK
2 OF -- HOW SHOULD I PUT IT? -- OF EITHER ANNOYING OR
3 AGGRAVATING THE PEOPLE WHO SUBMITTED GRANTS OR
4 OFFENDING TO A CERTAIN DEGREE SOME OF THE REVIEWERS ON
5 THE STUDY SECTION. AND I FEEL A LITTLE BIT
6 UNCOMFORTABLE WITH THIS KIND OF JUGGLING MOSTLY BECAUSE
7 IT'S SOMEWHAT SUBJECTIVE, AND WE'RE MIXING SCIENTIFIC
8 EVALUATIONS WITH SUBJECTIVE EVALUATIONS.

9 CHAIRMAN KLEIN: DR. LEVEY, A COUPLE OF
10 POINTS ARE IMPORTANT HERE IS THAT THE REVIEWERS HAD A
11 VERY GOOD DISCUSSION ABOUT THE FACT THAT IN CALIFORNIA
12 THE BOARD HAS TO BE CHARGED WITH THE AUTHORITY OF
13 MAKING THESE DECISIONS AND, IN FACT, MIGHT WELL MODIFY
14 THESE DECISIONS. AND THEY WERE QUITE COMFORTABLE WITH
15 THAT, UNDERSTANDING THAT WE HAVE THE RESPONSIBILITY TO
16 EVALUATE OUR OWN PRIORITIES AND THAT THE PROGRAM
17 PRIORITIES OF THIS BOARD MIGHT BE DIFFERENT OR THE
18 SCIENTIFIC EVALUATION MIGHT BE DIFFERENT.

19 THEY BASICALLY UNDERSTAND THAT THIS BOARD HAS
20 TO EXERCISE THAT LEVEL OF CONTROL AND WILL MAKE FUNDING
21 DECISIONS THAT MAY BE VERY DIFFERENT THAN THE
22 RECOMMENDATIONS.

23 DR. HALL: GERRY, LET ME ALSO MAKE A POINT,
24 AND THAT IS THAT REMEMBER THE RECOMMENDATIONS, THE 15
25 SCIENTIFIC MEMBERS GIVE THE SCIENTIFIC SCORE. THEN THE

1 ENTIRE 22-, 23-MEMBER GROUP VOTES ON THESE. OKAY.

2 SO WHAT YOU'RE SEEING IS THE RECOMMENDATION
3 OF THE ENTIRE GROUP, TAKING INTO CONSIDERATION THE
4 SCIENTIFIC SCORE. AND THE GENERAL IDEA IS THAT YOU
5 SCORE EACH ONE, AND THEN YOU LOOK AT THE PORTFOLIO OF
6 GRANTS THAT YOU HAVE AND YOU SAY ARE THERE REASONS TO
7 ADJUST THE RECOMMENDATIONS THAT YOU WOULD GIVE BASED ON
8 SCIENTIFIC SCORE. AND, IN FACT, MANY OF THE ASTERISK
9 SUGGESTIONS, IF MY MEMORY SERVES ME CORRECTLY, MOST OF
10 THEM WERE MADE BY SCIENTIFIC MEMBERS OF THE GROUP, NOT
11 BY PATIENT ADVOCATES OR OTHERS.

12 SO IT WAS THE SCIENTISTS THEMSELVES WHO SAID,
13 LOOKING AT THIS PORTFOLIO, WE WOULD SUGGEST IT COULD BE
14 IMPROVED BY SOME ADJUSTMENTS, TAKING INTO ACCOUNT
15 CONSIDERATIONS THAT AREN'T REFLECTED SIMPLY IN THE
16 SCIENTIFIC SCORE. SO IT'S NOT THAT -- THE SCIENTIFIC
17 SCORE ISN'T THE FINAL WORD OF THE WORKING GROUP. THE
18 RECOMMENDATION IS, AND IT'S THE ENTIRE WORKING GROUP.
19 YOU MAY CHOOSE TO OVERRIDE IT. THAT'S ABSOLUTELY THE
20 CASE. I THINK EVERYBODY UNDERSTANDS THAT, AS BOB SAID.
21 THERE'S NO QUESTION ABOUT THAT. I JUST DIDN'T WANT --
22 YOU SAID OUT OF RESPECT FOR THE GROUP OR THEY MIGHT
23 GET -- THESE ARE THEIR RECOMMENDATIONS IN THE END TAKEN
24 BY VOTE, BY HEAD COUNT VOTE.

25 CHAIRMAN KLEIN: OKAY. AND I THINK THE

1 GENERAL TENOR WAS THAT THEY WERE SUPPORTIVE IN THIS
2 ENTIRE CATEGORY OF RAISING ANY THAT WE FELT APPROPRIATE
3 INTO FUNDING CATEGORY.

4 DR. HALL: VOTED TO DO SO.

5 DR. PENHOET: MAYBE, THEN, WHAT WE'RE VOTING
6 FOR TONIGHT IS TO FUND THIS GRANT IF FUNDING IS
7 AVAILABLE.

8 CHAIRMAN KLEIN: IF WE MAKE THE DECISION.

9 DR. PENHOET: TOMORROW WE MAKE THE DECISION
10 ABOUT FUNDING BEING AVAILABLE YES OR NO.

11 CHAIRMAN KLEIN: WE'RE MOVING THIS INTO TIER
12 1. WE'LL MAKE A DECISION TOMORROW ABOUT HOW FAR DOWN
13 TO FUND TIER 1. OKAY.

14 DR. AZZIZ: THE MOTION SHOULDN'T CHANGE.
15 THERE IS A MOTION ON THE TABLE, RIGHT.

16 CHAIRMAN KLEIN: THERE IS A MOTION ON THE
17 TABLE TO MOVE IT UP TO TIER 1.

18 DR. AZZIZ: THERE'S A MOTION ON THE TABLE
19 WHICH HAS BEEN SECONDED. WE DON'T WANT TO HAVE TO --
20 THE MOTION IS TO MOVE APPLICATION 416 INTO THE TIER 1.

21 CHAIRMAN KLEIN: THAT'S RIGHT.

22 DR. AZZIZ: WITHOUT -- I DON'T ACTUALLY
23 ACCEPT AMENDMENTS TO THAT WITH ANY PROVISIO. TOMORROW
24 WE'LL LOOK AT PROVISOS.

25 CHAIRMAN KLEIN: THERE'S GOING TO BE AN

1 INDEPENDENT EVALUATION TOMORROW WHETHER YOU WANT TO
2 REORDER TIER 1. ALL RIGHT.

3 ANY ADDITIONAL BOARD COMMENTS? IS THERE ANY
4 PUBLIC COMMENTS? SEEING NONE, COULD YOU REPEAT THE
5 CONFLICTS AND CALL THE ROLL.

6 MS. KING: THOSE WITH A CONFLICT IN THIS
7 APPLICATION ARE SUSAN BRYANT, SHERRY LANSING, AND
8 OSWALD STEWARD.

9 RICARDO AZZIZ.

10 DR. AZZIZ: YES.

11 MS. KING: PAUL JENNINGS. ROBERT PRICE.

12 DR. PRICE: YES. MARCY FEIT.

13 MS. FEIT: YES.

14 MS. KING: MICHAEL FRIEDMAN. MICHAEL
15 GOLDBERG.

16 MR. GOLDBERG: YES.

17 MS. KING: FRANCIS MARKLAND.

18 DR. MARKLAND: YES.

19 MS. KING: DAVID KESSLER. BOB KLEIN.

20 CHAIRMAN KLEIN: YES.

21 MS. KING: GERALD LEVEY.

22 DR. LEVEY: YES.

23 MS. KING: TED LOVE. RICHARD MURPHY. TINA
24 NOVA. ED PENHOET.

25 DR. PENHOET: YES.

1 MS. KING: PHIL PIZZO.
2 DR. PIZZO: YES.
3 MS. KING: CLAIRE POMEROY.
4 DR. POMEROY: YES.
5 MS. KING: FRANCISCO PRIETO. JOHN REED.
6 DUANE ROTH.
7 MR. ROTH: YES.
8 MS. KING: JOAN SAMUELSON. DAVID
9 SERRANO-SEWELL. JEFF SHEEHY.
10 MR. SHEEHY: YES.
11 MS. KING: JONATHAN SHESTACK. JANET WRIGHT.
12 DR. WRIGHT: YES.
13 CHAIRMAN KLEIN: ALL RIGHT. THANK YOU.
14 A NUMBER OF THESE GRANTS ON THIS PARTICULAR
15 LIST EXTEND DOWN THROUGH NO. 452, WHICH IS STILL AN 80S
16 SCORE. IS THERE ANYONE THAT HAS A DESIRE TO MOVE THE
17 GRANTS THROUGH THE SCORE OF 80?
18 MR. SHEEHY: I'D LIKE TO MAKE THAT MOTION.
19 DR. LEVEY: I SECOND THAT.
20 CHAIRMAN KLEIN: THERE'S A MOTION AND A
21 SECOND.
22 MS. KING: WE'RE JUST GOING TO ASK FOR A
23 MOMENT TO DETERMINE THE CONFLICTS.
24 CHAIRMAN KLEIN: WE WILL TAKE A BRIEF MOMENT
25 TO DETERMINE THE CONFLICTS. AND PROBABLY THE BEST WAY

1 TO DO IT IS JUST WALK THEM DOWN SEQUENTIALLY.
2 REMEMBER, WHEN INDIVIDUAL MEMBERS VOTE, THEY'LL BE
3 STATING THAT THEY'RE VOTING FOR ALL OF THOSE ON WHICH
4 THEY DO NOT HAVE A CONFLICT.

5 MR. HARRISON: IS THE MOTION INCLUSIVE OF
6 THOSE THAT ARE SCORED 80?

7 CHAIRMAN KLEIN: INCLUSIVE OF THOSE THAT ARE
8 SCORED 80; IS THAT CORRECT?

9 MR. SHEEHY: YES. 80 AND ABOVE.

10 MR. TOCHER: SO THE CONFLICTS BEGINNING WITH
11 APPLICATION 449 AND MOVING DOWN FROM THERE.

12 APPLICATION 449: FEIT, KESSLER, LANSING, SHEEHY.

13 APPLICATION 302, THERE ARE NONE. 225, THERE ARE NO

14 CONFLICTS. 173: LANSING. 169, THERE ARE NONE. 292

15 IS LANSING. 200, THERE ARE NONE. 428 THERE ARE NONE.

16 172: AZZIZ, LANSING, LEVEY, AND MEYER. AND THE LAST,

17 452 IS FEIT, KESSLER, LANSING, AND SHEEHY.

18 CHAIRMAN KLEIN: OKAY. DR. CHIU, DO YOU HAVE
19 A COMMENT?

20 DR. CHIU: DID WE COVER 225 AND 302? I MIGHT
21 HAVE MISSED THEM.

22 CHAIRMAN KLEIN: WHAT WE ARE DOING IS THEY'RE
23 PART OF A MOTION.

24 DR. CHIU: RIGHT. I UNDERSTAND. WERE THE
25 CONFLICTS READ?

1 CHAIRMAN KLEIN: THERE WERE NO CONFLICTS FOR
2 THOSE.

3 DR. CHIU: I JUST WANTED TO MAKE SURE THAT
4 THAT'S UNDERSTOOD, THERE WERE NO CONFLICTS.

5 CHAIRMAN KLEIN: THANK YOU VERY MUCH. ALL
6 RIGHT. ANY ADDITIONAL COMMENTS BY THE BOARD ON THOSE
7 APPLICATIONS SPECIFICALLY?

8 DR. AZZIZ: I HAVE A QUESTION --

9 CHAIRMAN KLEIN: YES.

10 DR. AZZIZ: -- TO THE MOTION PROPOSED BY DR.
11 LEVEY. WHAT IS THE RATIONALE, I'M SORRY, FOR YOUR
12 GOING FROM A SCORE OF 82 TO 80, JUST TO MATCH THE STARS
13 IN THE OTHER APPLICATIONS, OR WAS THERE SOME OTHER
14 RATIONALE?

15 CHAIRMAN KLEIN: I THINK THE MOTION WAS JEFF
16 SHEEHY AND DR. LEVEY.

17 MR. SHEEHY: I THINK THAT 80, WITHIN THE
18 CONTEXT, AND IT MIGHT NOT BE BAD IF I COULD GET --
19 MAYBE IF WE COULD GET SOME SORT OF IDEA OF WHAT
20 PERCENTILE THAT TAKES US TO. BUT BASED ON THE SCALE
21 THAT WE WERE USING, THE SCIENTIST MEMBERS, BECAUSE THE
22 ADVOCATE MEMBERS DID NOT SCORE AND DID NOT VOTE ON
23 SCORES. BUT IF YOU LOOK AT THE SCALE THAT WAS USED, 80
24 IS A QUITE HIGH SCALE -- QUITE HIGH SCORE, I BELIEVE,
25 BASED ON THE WAY THE SCIENTISTS WERE SCORING THE

1 APPLICATIONS.

2 SO I PERSONALLY FEEL THAT THAT IS A VERY
3 REASONABLE CUTTING POINT IF YOU WANT TO TAKE A -- IF
4 YOU'RE LOOKING AT THIS AND TRYING TO SLICE, IT'S ALMOST
5 CERTAINLY TO BE THE TOP QUARTER.

6 DR. CHIU: 24TH.

7 DR. AZZIZ: IT IS THE TOP QUARTER.

8 MR. SHEEHY: SO I THINK THAT THAT'S A
9 REASONABLE PLACE TO BE MYSELF.

10 CHAIRMAN KLEIN: AS I UNDERSTAND, JEFF, IT'S
11 ALSO BECAUSE YOU SAT THROUGH EACH OF THESE, AND
12 INDIVIDUALLY YOU FEEL THAT THEY ARE UNIQUELY -- YOU'RE
13 PREPARED TO MAKE A UNIQUE DECISION THAT THEY ARE
14 APPROPRIATELY SCORED. YOU DIDN'T HAVE ANY PROBLEM WITH
15 THE SCORE IN RECOMMENDING EACH OF THESE?

16 MR. SHEEHY: NO, ABSOLUTELY NOT. I THOUGHT
17 THEY WERE ALL APPROPRIATELY SCORED.

18 CHAIRMAN KLEIN: OKAY.

19 MR. SHEEHY: AND ACTUALLY INTERESTING
20 SCIENCE.

21 CHAIRMAN KLEIN: OKAY. DR. LEVEY, WOULD YOU
22 LIKE TO COMMENT AS WELL?

23 DR. LEVEY: I THINK ALL THE COMMENTS HAVE
24 BEEN MADE.

25 CHAIRMAN KLEIN: OKAY. ANY ADDITIONAL

1 COMMENTS FROM THE BOARD OR QUESTIONS? ANY ADDITIONAL
2 COMMENTS FROM THE PUBLIC? NO ADDITIONAL COMMENTS FROM
3 THE PUBLIC. COULD YOU REPEAT THE CONFLICTS LIST,
4 PLEASE? AND REALIZE THAT WHEN THE VOTING OCCURS,
5 PEOPLE WILL NOT BE VOTING FOR ANYTHING THAT THEY ARE IN
6 CONFLICT BECAUSE THEY WILL BE STATING THAT THEY ARE NOT
7 VOTING FOR ANY ITEM FOR WHICH THEY HAVE A CONFLICT.

8 MR. TOCHER: APPLICATION 449 IS FEIT,
9 KESSLER, LANSING, SHEEHY; NO CONFLICTS WITH 302 OR 225;
10 LANSING IS IN CONFLICT WITH 173; NO CONFLICTS ON 169;
11 LANSING IN CONFLICT WITH 292; NO CONFLICTS WITH 200 AND
12 428; WITH 172, IT IS AZZIZ, LANSING, LEVEY, AND MEYER;
13 AND WITH 452, FEIT, KESSLER, LANSING, AND SHEEHY.

14 CHAIRMAN KLEIN: WOULD YOU CALL THE ROLL.

15 MS. KING: RICARDO AZZIZ.

16 DR. AZZIZ: YES, WITH THE EXCEPTION OF THOSE
17 THAT I HAVE A CONFLICT.

18 MS. KING: PAUL JENNINGS. ROBERT PRICE.

19 DR. PRICE: YES.

20 MS. KING: SUSAN BRYANT.

21 DR. BRYANT: YES.

22 MS. KING: MARCY FEIT.

23 MS. FEIT: YES, WITH THE EXCEPTION OF 449 AND
24 452 OF WHICH I AM IN CONFLICT.

25 MS. KING: MICHAEL FRIEDMAN. MICHAEL

1 GOLDBERG.

2 MR. GOLDBERG: YES.

3 MS. KING: FRANCIS MARKLAND.

4 DR. MARKLAND: YES.

5 MS. KING: DAVID KESSLER. BOB KLEIN.

6 CHAIRMAN KLEIN: YES.

7 MS. KING: SHERRY LANSING.

8 MS. LANSING: YES, WITH THE EXCEPTION OF

9 THOSE I HAVE A CONFLICT ON.

10 MS. KING: GERALD LEVEY.

11 DR. LEVEY: YES, WITH THE EXCEPTION OF 172 IN

12 WHICH I HAVE A CONFLICT.

13 MS. KING: TED LOVE. RICHARD MURPHY. TINA

14 NOVA. ED PENHOET.

15 DR. PENHOET: YES.

16 MS. KING: PHIL PIZZO.

17 DR. PIZZO: YES.

18 MS. KING: CLAIRE POMEROY.

19 DR. POMEROY: YES.

20 MS. KING: FRANCISCO PRIETO. JOHN REED.

21 DUANE ROTH.

22 MR. ROTH: YES.

23 MS. KING: JOAN SAMUELSON. DAVID

24 SERRANO-SEWELL. JEFF SHEEHY.

25 MR. SHEEHY: YES, WITH THE EXCEPTION OF 449

1 AND 452 WITH WHICH I HAVE A CONFLICT.

2 MS. KING: JONATHAN SHESTACK. OSWALD
3 STEWARD.

4 DR. STEWARD: YES.

5 MS. KING: JANET WRIGHT.

6 DR. WRIGHT: YES.

7 CHAIRMAN KLEIN: THANK YOU. AND THE BOARD
8 MEMBERS MIGHT HAVE, WHILE THEY HAVE AN ABSOLUTE OPTION
9 OF THEIR APPROACH, KNOW THAT IF THEY JUST STATE THEY'RE
10 VOTING FOR THOSE ON WHICH THEY DO NOT HAVE A CONFLICT,
11 THAT MEANS THAT IF THEY WERE TO INADVERTENTLY NOT LIST
12 ONE WITH WHICH THEY HAVE A CONFLICT, IT WILL BE COVERED
13 BY STAFF, WHO WILL NOT REGISTER A VOTE; WHEREAS, BY
14 LISTING THE NUMBERS, IN CASE YOU DON'T LIST ALL THE
15 NUMBERS, THERE IS AN ISSUE.

16 MR. HARRISON: IF A MEMBER WANTS TO LIST THE
17 NUMBERS AND HE OR SHE FORGETS ONE, WE'LL ALSO PROMPT
18 THEM.

19 CHAIRMAN KLEIN: GREAT. WE HAVE LOTS OF
20 BACKUP SYSTEMS HERE.

21 OKAY. SO WE ARE AT 203. WHAT IS THE
22 PLEASURE OF THE BOARD? IS THERE ANYONE WHO WOULD LIKE
23 TO MAKE A MOTION TO MOVE NO. 203 INTO TIER 1?

24 MR. ROTH: MR. CHAIRMAN, BEFORE WE DO THAT, I
25 WONDER, ZACH, COULD YOU PUT THE SLIDE BACK UP WITH THE

1 BAR CHART OF THE DISTRIBUTION? WHILE THEY'RE DOING
2 THAT, I'D LIKE TO, ONCE AGAIN, HEAR THE COMMENTS THAT
3 THE EXPERT REVIEWERS MADE ABOUT THE STRENGTH OF THESE
4 APPLICATIONS OVERALL BECAUSE WE'RE GETTING INTO AN AREA
5 NOW THAT IS CRITICAL. AND MY BIAS IS GOING TO BE
6 TOWARDS JUMP-STARTING BECAUSE OF OUR LATE START IN
7 GETTING GRANTS FUNDED, AND THE FACT THAT I THINK WE
8 SHOULD FUND AS MANY THINGS AS WE CAN WITH MERIT THIS
9 ROUND. AND THAT WILL BE A DISCUSSION FOR TOMORROW, BUT
10 I WANT TO LOOK AT THIS IN -- I THOUGHT IT WAS VERY
11 TELLING.

12 DR. HALL: WE ARE NOW, AS YOU CAN SEE, NOW AT
13 25 PERCENT, RIGHT AT 80, WHICH IS ABOUT, WHAT, YOU CAN
14 SEE AS WELL AS I CAN, MAYBE A THIRD OR LESS OF THE WAY
15 INTO TIER 2. NOW, THAT IS PLUS THE SEVEN GRANTS THAT
16 YOU NOW HAVE RECOMMENDED FOR FUNDING WOULD BE ADDED TO
17 THAT. SO ROUGHLY ABOUT A THIRD OF THE WAY DOWN TIER 2
18 IS WHERE YOU ARE TALKING NOW.

19 CHAIRMAN KLEIN: I WOULD LIKE TO INDICATE
20 THAT THE MEMBERS OF THE SCIENTIFIC GROUP -- DO WE HAVE
21 A MOTION HERE FOR THE BOARD? THE MEMBERS OF THE
22 SCIENTIFIC GROUP WERE QUITE CLEAR THAT SOME BRILLIANT
23 GRANTS WERE SCORED SLIGHTLY LOWER BECAUSE THEY WERE, IN
24 FACT, BREAKING NEW AREAS WHERE THERE WASN'T -- THERE
25 WAS MORE RISK INVOLVED, BUT IT WAS A GREAT CONCEPT. SO

1 THAT IT WASN'T NECESSARILY THAT THERE WERE GREAT
2 PRESENTATIONS OF IDEAS WHERE THERE WAS A QUESTION ON
3 THE MARGIN OF WHETHER THIS WAS SO INNOVATIVE, THAT IT
4 MIGHT NOT BE ACHIEVABLE. IF IT GOT A SCORE STILL IN
5 THIS RANGE, THEY WERE THINKING IT WAS ACHIEVABLE, BUT
6 GRADED DOWN POTENTIALLY FOR SOME RISK.

7 SO THERE'S A LOT OF MIX OF ISSUES HERE THAT
8 WE NEED TO LOOK AT IN THIS SCORE, BUT I CERTAINLY WOULD
9 ALSO REFLECT THAT THE REVIEWERS THOUGHT THAT WHEN THE
10 NIH WAS IN 1985 FUNDING A THIRD OF APPLICATIONS, AS
11 LONG AS THE SCIENCE WAS SOLID, THEY THOUGHT THERE WAS
12 INTEGRITY IN THAT PROCESS. SO YOU SEE FROM THEIR
13 PROPOSAL, IF AVAILABLE FUNDS, THAT THEY THOUGHT THERE
14 WERE A LOT OF ADDITIONAL OPPORTUNITY HERE.

15 NOW, I WOULD POINT OUT, THOUGH, IF YOU ARE
16 GOING TO HAVE A TIER 1 AND A TIER 2, YOU CAN HAVE
17 FUNDING AS HAS BEEN STATED EARLIER IN TIER 2. SO THE
18 DECISION IS WHERE YOU WANT TO MAKE THE CUTOFF.

19 DR. POMEROY: BY LEAVING SOMETHING IN TIER 2,
20 WE'RE NOT DECIDING TO NOT FUND IT. IN FACT, THAT'S THE
21 DISCUSSION WE'RE GOING TO HAVE TOMORROW, WHETHER TO
22 FUND.

23 CHAIRMAN KLEIN: THAT'S CORRECT.

24 MR. ROTH: THIS IS EXACTLY THE POINT I WAS
25 STRUGGLING WITH, BUT IT SEEMS TO ME THAT THERE'S AN

1 AWFULLY NICE DISTRIBUTION DOWN BELOW 70 AND ABOVE 70.
2 IS THAT WHAT THOSE NUMBERS SAY?

3 DR. HALL: WELL, YES. I'M NOT SURE IF YOU'RE
4 TALKING ABOUT THE NATURAL PEAKS AND VALLEYS, BUT THERE
5 CERTAINLY IS ONE FOR THE RED LINE. THAT DEFINES TIER
6 3.

7 MR. ROTH: SO IT SEEMS TO ME, GIVEN WHAT'S
8 BEEN SAID ABOUT THE STRENGTH OF THESE, WHICH SURPRISED
9 ME ALSO, I THOUGHT THERE WOULD BE AN AWFUL LOT OF
10 THINGS THAT COME IN THAT WOULDN'T PASS MERIT WITH THE
11 REVIEWERS. BUT THE FACT THAT THEY DID AND THE FACT
12 THEY'RE RECOMMENDING THESE ALL BE FUNDED IF THERE'S
13 MONEY WOULD LEAD ME TO BELIEVE THAT, PENDING THE
14 DISCUSSION TOMORROW ABOUT FUNDING, THAT WE SHOULD
15 APPROVE THESE ALL THE WAY DOWN TO 70. I WOULD MAKE
16 THAT A MOTION.

17 DR. PRICE: SECOND.

18 DR. PENHOET: I'D LIKE TO SPEAK AGAINST IT.
19 I THINK AS WE GET DOWN IN THIS RANGE, FIRST OF ALL, I'M
20 ONE PERSON, I DIDN'T FIND ANY GRANTS WITH A SCORE BELOW
21 76 THAT I COULD VOTE FOR AFFIRMATIVELY. THAT'S MY
22 VOTE. BUT I ALSO THINK AS YOU GET IN THIS RANGE WHERE
23 THE DIFFERENCE IS BINARY FOR THE GRANTEES, THAT WE OWE
24 IT TO THEM TO GO THROUGH THESE ONE BY ONE BECAUSE IF WE
25 LUMP THEM ALTOGETHER, WELL, THAT'S BINARY TOO IN A WAY,

1 BUT I DO THINK THAT AS WE GET CLOSE TO THE RED LINE,
2 THAT WE SHOULD DISCUSS MAYBE STARTING FROM THE RED LINE
3 UP. BUT I'M UNCOMFORTABLE LUMPING THEM ALTOGETHER
4 MYSELF.

5 CHAIRMAN KLEIN: ALL RIGHT. ADDITIONAL
6 COMMENTS?

7 DR. STEWARD: YEAH. I HAVE TO REINFORCE THAT
8 COMMENT. I'M JUST LOOKING BACK THROUGH SOME OF THE
9 COMMENTS OF THE ONES LOWER DOWN, AND THEY ARE REALLY
10 QUITE DAMAGING COMMENTS. AND SO I THINK WE NEED TO
11 REALLY LOOK AT THESE QUITE CAREFULLY.

12 CHAIRMAN KLEIN: ALL RIGHT. SO THERE IS A
13 MOTION. DUANE, GIVEN THE COMMENTS OF THE OTHER BOARD
14 MEMBERS --

15 MR. ROTH: I'LL MODIFY THE MOTION FOR THIS
16 ROUND TO GO TO 76. IS THAT WHERE? 75 AND TAKE THOSE
17 AS A BLOCK. I'LL MOVE INCLUDING 75.

18 CHAIRMAN KLEIN: ALL RIGHT. THE MOTION HAS
19 BEEN REPROPOSED. SO MY UNDERSTANDING IS THE MOTION HAS
20 BEEN WITHDRAWN AND A NEW MOTION IS BEING PUT FORWARD;
21 IS THAT CORRECT? YES. AND THAT'S BEEN WITHDRAWN FROM
22 THE MAKER OF THE MOTION AND THE SECOND. THAT'S
23 CORRECT.

24 DR. PENHOET: DOES THAT MEAN WE'RE FORCED TO
25 VOTE FOR THE ENTIRE BLOCK? WE JUST HAVE TO SAY YES OR

1 NO? WE CAN'T SAY YES FOR ALL EXCEPT WHY?

2 CHAIRMAN KLEIN: CAN I MAKE A SUGGESTION,
3 THAT FOR EFFECTIVENESS IN DEALING WITH THE CONFLICTS,
4 IF WE TOOK IT IN SMALLER STEPS, IT MIGHT BE HELPFUL IF
5 WE COULD DO THAT BECAUSE WE -- JUST ADMINISTRATIVELY TO
6 GO THROUGH THE PROCESS. IS THAT A REASONABLE REQUEST?

7 DR. STEWARD: I THINK WE'RE GETTING TIRED.
8 AND I THINK THAT WE WERE ALL VERY COMFORTABLE AT VOTING
9 FOR THE GRANTS THAT WERE SCORED ABOVE 80 AS BEING
10 APPROPRIATE TO MOVE ABOVE TIER 1. WE'VE ALREADY SAID
11 THAT BEING IN TIER 2 DOESN'T MEAN THAT THEY WOULDN'T
12 GET FUNDED TOMORROW WHEN WE DISCUSSED THE FUNDING LINE.
13 I WONDER IF THE MORE APPROPRIATE THING MIGHT BE TO
14 ESSENTIALLY STOP HERE, LEAVE THE GRANTS IN TIER 1 THAT
15 ARE THERE NOW, 80 AND ABOVE, THAT'S THE 25TH
16 PERCENTILE, AND REVISIT WHAT TO DO WITH THE GRANTS IN
17 TIER 2 TOMORROW.

18 CHAIRMAN KLEIN: WELL, THERE HAD BEEN A
19 COMMENT FROM DR. PENHOET THAT, FOR EXAMPLE, THAT HE
20 WOULD INDIVIDUALLY REVIEW THESE, PARTICULARLY FROM 76
21 DOWN, BECAUSE HE'S CONCERNED THAT EACH GRANT GET AN
22 APPROPRIATE REVIEW. HE'S CONCERNED ABOUT THE STRENGTH
23 OF SOME OF THEM IN THAT AREA. IF WE'RE GOING TO HAVE
24 THE TIME TO DO THAT REVIEW WITH TIME AVAILABLE ON OUR
25 SCHEDULE NOW, THIS WOULD BE THE TIME TO DO THAT

1 INDIVIDUAL REVIEW.

2 MS. LANSING: I AGREE WITH ACTUALLY DR.
3 PENHOET AND WHAT YOU JUST SAID AS WELL. I THINK WE'RE
4 VERY TIRED. EITHER WE SHOULD BREAK FOR DINNER, WHICH
5 IS SOMETHING THAT WAS ON OUR SCHEDULE, AND COME BACK,
6 WHICH IS, I THINK, SOMETHING WE CAN DO, OR WE SHOULD GO
7 FROM 76 ON UP AND VOTE FOR THAT, AND THEN GO
8 INDIVIDUALLY FROM 76 ON DOWN ONE AT A TIME BECAUSE I
9 DON'T THINK WE SHOULD RUSH THIS. I THINK THIS IS
10 REALLY IMPORTANT THAT YOU REVIEW EACH OF THESE GRANTS
11 AS SERIOUSLY AS THE ONES THAT GOT 80. I PERSONALLY AM
12 NOT UPSET IF WE DON'T SPEND ALL THE MONEY THAT WE HAVE
13 THAT WE CAN BECAUSE THAT SHOWS THAT WE'RE TAKING IT
14 VERY SERIOUSLY AND WE'RE NOT WASTING MONEY.

15 ON THE OTHER HAND, IF THERE ISN'T MORE MONEY
16 AND WE THINK THE SCIENCE IS GOOD, THAT'S GREAT, BUT I
17 WANT TO REVIEW -- EVEN THOUGH I CAN'T PERSONALLY, I
18 WANT TO REVIEW THEM.

19 MS. FEIT: I AGREE WITH SHERRY AND DR.
20 PENHOET. MY RECOLLECTION OF THE REVIEW IN THIS AREA
21 WAS WHERE THERE WAS A GREAT DEAL OF CONTROVERSY IN
22 THESE. YOU'RE GETTING INTO THE LEVEL WHERE THERE WAS A
23 LOT OF CRITICISM AND OPINIONS VOICED IN EACH OF THESE
24 GRANTS. SO I THINK WE'RE AT THE STAGE WHERE THIS GROUP
25 NOW NEEDS MORE ATTENTION. I DON'T THINK THAT WE CAN

1 BLOCK IT AND SAY WE CAN VOTE FOR ALL THESE. I THINK WE
2 NEED TO INDIVIDUALLY GO THROUGH THEM IF WE'RE GOING TO
3 CONSIDER THEM.

4 CHAIRMAN KLEIN: OKAY. SO, DUANE, YOU'RE
5 FACING A VERY POPULAR PROPOSAL TO ADJOURN FOR DINNER.

6 DR. PRICE: SECOND.

7 CHAIRMAN KLEIN: WOULD IT BE -- WOULD YOU BE
8 WILLING TO CONTEMPLATE WITHDRAWING THIS UNTIL AFTER
9 DINNER?

10 MR. ROTH: I AM PERFECTLY WILLING TO DO THAT.

11 CHAIRMAN KLEIN: IS THE SECOND WILLING?

12 DR. PRICE: SURE.

13 CHAIRMAN KLEIN: OKAY. SO, STAFF, CAN WE
14 APPROPRIATELY ADJOURN TO DINNER AT THIS TIME?

15 MS. KING: YES, WE CAN.

16 DR. PIZZO: CAN I ASK JUST A PRACTICAL
17 QUESTION? I HATE TO BE THE SPOILER OF THIS ISSUE, BUT
18 DOES IT REQUIRE A QUORUM FOR THE NEXT PHASE?

19 CHAIRMAN KLEIN: NO.

20 DR. PIZZO: THEN YOU CAN GO TO DINNER.

21 CHAIRMAN KLEIN: OKAY. SO WHAT WOULD BE THE
22 DIRECTIONS FROM THE STAFF FOR DINNER?

23 MS. KING: TO FOLLOW ME.

24 CHAIRMAN KLEIN: AND THE TIME REQUIRED FOR
25 DINNER WOULD BE 45 MINUTES.

1 MS. KING: FORTY-FIVE MINUTES, SO WE'RE
2 TAKING A 45-MINUTE BREAK.

3 CHAIRMAN KLEIN: THANK YOU. AND WE WILL
4 FOLLOW MELISSA KING. WE'RE ADJOURNED FOR DINNER.

5 (A RECESS WAS TAKEN.)

6 CHAIRMAN KLEIN: IF THE STAFF COULD LOOK FOR
7 SOME BOARD MEMBERS THAT ARE STILL NOT PRESENT. AMY
8 LEWIS, COULD YOU ASSIST THE STAFF IN LOOKING FOR BOARD
9 MEMBERS? THANK YOU. ALL RIGHT. WE ARE RECONVENING.
10 DUANE, I THINK YOU HAD A MOTION ON THE FLOOR.

11 MR. ROTH: I THINK I WITHDREW THE MOTION, AND
12 SECOND WITHDREW, SO I'LL TRY FOR A THIRD TIME. IF I
13 DON'T MAKE IT THIS TIME, I'M GOING TO GIVE UP. BUT MY
14 POINT, BEFORE I MAKE THE MOTION, IS THAT, DESPITE THE
15 FACT THAT WE HAVE THIS CUTOFF, DO NOT FUND AREA, I JUST
16 WANT TO REMIND THE MEMBERS THAT THE REVIEWERS RANKED
17 EVERY SINGLE PROPOSAL, AND THEY MADE A CUTOFF DOING THE
18 SAME DELIBERATION WE'RE DOING NOW, AND THEY MADE THE
19 CUTOFF AT SOMETHING LIKE 70 OR 71 IN THAT RANGE.

20 SO I'M A LITTLE CONCERNED THAT WE VIEW AS WE
21 MOVE DOWN HERE THAT THESE PROPOSALS WEREN'T WORTHY OF
22 FUNDING WHEN, IN FACT, THE REVIEWERS SAID, INDEED, THEY
23 WERE WORTHY OF FUNDING DEPENDING ON THE FUNDS.
24 TOMORROW WHEN WE MAKE THE DECISION ABOUT WHERE THE
25 CUTOFF IS GOING TO BE, IT'S PROBABLY GOING TO BE A

1 FINANCIAL DECISION, NOT NECESSARILY A RANKING.

2 WITH THAT IN MIND, I THINK IF YOU LOOK AT
3 WHERE WE'RE AT RIGHT NOW, THERE'S A CLUSTER OF 77S.
4 AND WE PROBABLY SHOULD TALK THROUGH THOSE, BUT ANYTHING
5 78 AND UP, I WOULD LIKE TO MAKE A MOTION THAT WE
6 APPROVE THOSE FOR FUNDING.

7 CHAIRMAN KLEIN: ALL RIGHT. IS THERE A
8 SECOND?

9 DR. LEVEY: SECOND.

10 CHAIRMAN KLEIN: DR. LEVEY. IS THERE
11 DISCUSSION? THE MOTION IS TO APPROVE THOSE INCLUSIVE
12 THROUGH 78. THAT WOULD BE 203, 317, 262, 283, 381. SO
13 THERE'S FIVE GRANTS IN THIS MOTION.

14 DR. PENHOET: ONE WAS CUT OFF.

15 CHAIRMAN KLEIN: IS ONE CUT OFF AT THE TOP?

16 DR. CHIU: NO.

17 CHAIRMAN KLEIN: THE NEXT ONE UP IS 80; IS
18 THAT RIGHT?

19 MR. ROTH: THERE WAS A 78 THAT WE APPROVED
20 EARLIER IN THE ASTERISK GROUP. THAT ONE IS ALREADY
21 APPROVED, SO WE DON'T NEED TO INCLUDE THAT.

22 CHAIRMAN KLEIN: AND WE APPROVED THROUGH 80
23 PREVIOUSLY. OKAY. SO THERE'S A MOTION AND A SECOND TO
24 APPROVE THOSE THAT ARE IN 78 AND 79. IS THERE ANY
25 DISCUSSION? SEEING NO ADDITIONAL --

1 MR. TOCHER: CONFLICTS?

2 CHAIRMAN KLEIN: CONFLICTS.

3 MR. TOCHER: APPLICATION 203, AZZIZ, LANSING,
4 LEVEY, MEYER. APPLICATION 317, THERE ARE NO CONFLICTS.
5 APPLICATION 262, MARKLAND. NO CONFLICTS WITH 283. AND
6 381, FEIT, KESSLER, LANSING, AND SHEEHY.

7 CHAIRMAN KLEIN: THE ONE THAT JEFF SHEEHY HAS
8 A CONFLICT IS 381; IS THAT CORRECT?

9 MR. TOCHER: THAT'S RIGHT.

10 CHAIRMAN KLEIN: THAT'S THE ONLY ONE; IS THAT
11 CORRECT?

12 MR. TOCHER: THAT'S RIGHT.

13 CHAIRMAN KLEIN: ANY OTHER QUESTIONS FROM THE
14 BOARD ON CONFLICTS?

15 DR. AZZIZ: NOT ON CONFLICTS. I HAVE NO
16 QUESTION ON CONFLICTS, JUST A DISCUSSION ABOUT THE
17 MOTION.

18 CHAIRMAN KLEIN: DISCUSSION.

19 DR. AZZIZ: OKAY. I RESPECT MY COLLEAGUE TO
20 THE LEFT, BUT THE QUESTION REALLY IS WHY ARE WE
21 DISCUSSING THIS? I MEAN THEY ARE ALREADY IN ORDER OF
22 PRIORITY. TOMORROW WHEN WE ACTUALLY ASSIGN CUTOFF
23 FUNDING RANGES, THESE WILL BE INCLUDED. SO THERE IS NO
24 ADVANTAGE TO DOING ANY OF WHAT WE'RE DOING TODAY
25 BECAUSE THEY'RE ALREADY IN LINE, 79, 78, AND WE COULD

1 CUT OFF AT 77 OR 76 OR 75, OR WHATEVER WE CHOOSE TO
2 TOMORROW. SO I AM SIMPLY QUESTIONING THE VALUE OF THIS
3 CURRENT MOTION AS OPPOSED TO LEAVING THIS FOR TOMORROW.

4 CHAIRMAN KLEIN: THIS MOTION IS HELPFUL TO US
5 IN THAT WE MAY DECIDE NOT TO FUND BEYOND TIER 1, BUT IT
6 IS ALSO TRUE THAT WE'RE TRYING TO CREATE A DEMARCATION
7 LINE FOR OURSELVES BETWEEN TIER 1 AND TIER 2. AND I
8 THINK THIS MOTION IS TO TRY AND IDENTIFY WHERE THAT
9 LINE WOULD BE. AND THE MOTION, I THINK, IS GOING TO BE
10 FOLLOWED BY A MOTION TO INDIVIDUALLY REVIEW EITHER
11 STARTING WITH 77 OR 76. SO WE'RE TRYING TO LOOK AT
12 WHAT THERE'S A CONSENSUS ON IN TERMS OF THE GRANTS EACH
13 INDIVIDUAL BOARD MEMBER'S REVIEWED THEY DO NOT HAVE A
14 PROBLEM WITH.

15 OKAY. ADDITIONAL DISCUSSION? PUBLIC
16 DISCUSSION? SEEING NO PUBLIC DISCUSSION, CONFLICTS AND
17 ROLL CALL.

18 MR. TOCHER: APPLICATION 203, AZZIZ, LANSING,
19 LEVEY, MEYER. 317, THERE ARE NO CONFLICTS. 262,
20 MARKLAND. 283, NO CONFLICTS. AND 381, FEIT, KESSLER,
21 LANSING, SHEEHY.

22 CHAIRMAN KLEIN: ALL RIGHT. ROLL CALL.

23 MS. KING: RICARDO AZZIZ.

24 DR. AZZIZ: NO.

25 MS. KING: PAUL JENNINGS. ROBERT PRICE.

1 DR. PRICE: YES.

2 MS. KING: SUSAN BRYANT.

3 DR. BRYANT: YES.

4 MS. KING: MARCY FEIT.

5 MS. FEIT: YES, EXCEPT FOR 381 WITH WHICH I
6 AM IN CONFLICT.

7 MS. KING: MICHAEL FRIEDMAN. MICHAEL
8 GOLDBERG. FRANCIS MARKLAND.

9 DR. MARKLAND: YES, EXCEPT FOR 262 IN WHICH I
10 HAVE A CONFLICT.

11 MS. KING: DAVID KESSLER. BOB KLEIN.

12 CHAIRMAN KLEIN: YES ON ALL OF THEM.

13 MS. KING: SHERRY LANSING.

14 MS. LANSING: YES, BUT WHAT I HAVE A
15 CONFLICT.

16 MS. KING: GERALD LEVEY.

17 DR. LEVEY: YES, EXCEPT FOR 203 IN WHICH I
18 HAVE A CONFLICT.

19 MS. KING: TED LOVE. RICHARD MURPHY. TINA
20 NOVA. ED PENHOET.

21 DR. PENHOET: YES.

22 MS. KING: PHIL PIZZO. CLAIRE POMEROY.

23 DR. POMEROY: NO.

24 MS. KING: FRANCISCO PRIETO. JOHN REED.
25 DUANE ROTH.

1 MR. ROTH: YES.

2 MS. KING: JOAN SAMUELSON. DAVID
3 SERRANO-SEWELL. JEFF SHEEHY.

4 MR. SHEEHY: YES, EXCEPT FOR THE ONES FOR
5 WHICH I HAVE A CONFLICT.

6 MS. KING: JONATHAN SHESTACK. OSWALD
7 STEWARD. JANET WRIGHT.

8 DR. WRIGHT: YES.

9 MR. TOCHER: WITH ONE CLARIFICATION FOR DR.
10 AZZIZ.

11 DR. AZZIZ: THAT'S CORRECT. EXCEPT FOR THE
12 ONES I HAVE A CONFLICT. THANK YOU.

13 CHAIRMAN KLEIN: ALL RIGHT. WE ARE NOW AT
14 157. IS THERE A MOTION FOR DISCUSSION OF WHETHER NO.
15 157, THE FIRST OF THOSE WITH A 77 SCORE, SHOULD BE
16 MOVED UP? THE FIRST ONE IS 157 IN THAT LIST. ON THE
17 SCREEN -- ALL RIGHT. WHAT IS THE PLEASURE OF THE
18 BOARD?

19 DR. HALL: WOULD IT BE HELPFUL AT THIS STAGE
20 TO HAVE A BRIEF COUPLE-LINE DESCRIPTION OF EACH OF THE
21 GRANTS?

22 CHAIRMAN KLEIN: I THINK THAT WOULD BE VERY
23 HELPFUL, AND THE BOARD AT THIS POINT MAY WISH TO BREAK
24 THIS INTO A SECOND RECOMMENDED FUNDING GROUP AS VERSUS
25 THE FIRST FUNDING GROUP. IT WOULD BE HELPFUL WHEN WE

1 GET TO THE FUNDING DECISIONS TOMORROW TO KNOW WHERE THE
2 PRIORITY PERSPECTIVE IS OF THIS BOARD. OKAY.

3 SO IN ANY CASE, DR. CHIU, WOULD YOU LIKE TO
4 DISCUSS 157? AND I POINT OUT FOR THOSE WHO ARE COMING
5 IN THAT 157 ON THE SCREEN APPEARS TO BE IN A DIFFERENT
6 ORDER THAN 157 IN THE BOOK.

7 DR. CHIU: WE'RE TALKING ABOUT 157 NOW.

8 CHAIRMAN KLEIN: 157, YES.

9 DR. CHIU: SO THIS IS AN --

10 CHAIRMAN KLEIN: FOR THE BENEFIT OF THE
11 PUBLIC, DR. CHIU, IT WOULD BE BENEFICIAL TO FOLLOW THE
12 ORDER ON THE SCREEN.

13 DR. CHIU: WE'RE DISCUSSING APPLICATION NO.
14 157, TITLED "PHYSIOLOGICAL REACTIONS TO TUMORS IN A
15 MOUSE/HUMAN EMBRYONIC STEM CELL MODEL OF BRAIN CANCER."
16 PROPOSAL AIMS TO MODEL BRAIN TUMOROGENESIS IN THE MOUSE
17 USING HUMAN EMBRYONIC STEM CELLS ENGINEERED TO
18 OVEREXPRESS A GROWTH FACTOR. THE APPLICANT WILL
19 ENGINEER THE HUMAN EMBRYONIC STEM CELLS TO PRODUCE THE
20 GROWTH FACTOR DRIVEN BY A UNIQUE PROMOTER THAT'S UNIQUE
21 TO STEM CELLS IN A WAY TO MIMIC THE EFFECT OF THIS
22 GROWTH FACTOR PRODUCING CNS GLIOMAS.

23 SO IN ADDITION TO ESTABLISHING THE CELL
24 LINES, TRANSPLANT STUDIES WILL EXAMINE THEIR GROWTH AND
25 DIFFERENTIATION IN FOREBRAIN OF YOUNG MICE TO EVALUATE

1 THE EFFECTS OF PRODUCTION OF THIS PARTICULAR GROWTH
2 FACTOR ON DIFFERENTIATION AND TUMOROGENICITY OF THE
3 HUMAN ES CELLS.

4 IN ADDITION, MOLECULAR AND PHYSIOLOGICAL
5 STUDIES WILL BE PERFORMED TO DETERMINE HOW THESE CELLS
6 INTEGRATE AND INTERACT WITH THE HOST CELLS. SO THAT'S
7 A BRIEF SYNOPSIS OF WHAT THE APPLICATION PROPOSES TO
8 DO.

9 CHAIRMAN KLEIN: ALL RIGHT. DISCUSSION ON
10 THE MOTION?

11 MR. TOCHER: THERE ARE NO CONFLICTS.

12 CHAIRMAN KLEIN: WE DON'T HAVE A MOTION
13 ACTUALLY AT THIS POINT.

14 MR. TOCHER: THERE ARE NO CONFLICTS.

15 CHAIRMAN KLEIN: AND THERE ARE NO CONFLICTS.
16 DOES ANYONE WANT TO MAKE A MOTION RELATED TO THIS
17 GRANT?

18 MR. SHEEHY: COULD WE JUST GET MAYBE A QUICK
19 SYNOPSIS OF THE MAJOR STRENGTHS AND WEAKNESSES? THAT
20 MIGHT BE HELPFUL. MAYBE A LITTLE BIT SHORTER
21 DESCRIPTION ON THESE AND A LITTLE MORE ABOUT ESPECIALLY
22 THE WEAKNESSES, I HATE TO SAY, BUT THAT'S HELPFUL.

23 CHAIRMAN KLEIN: IF THEY PROVIDED AT LEAST
24 THE STRENGTHS AND WEAKNESSES SO THE PUBLIC HAS KIND OF
25 A BALANCED VIEW TOO.

1 MR. SHEEHY: BALANCE, YEAH.

2 DR. CHIU: I'LL VERY QUICKLY STATE THAT THE
3 PI HAS A STRONG TRACK RECORD IN APPLYING STATE-OF-ART
4 NEUROPHYSIOLOGICAL APPROACHES TOWARD UNDERSTANDING
5 NEURODEVELOPMENTAL ISSUES AND SUBSTANTIAL EXPERIENCE
6 WITH THE TECHNIQUES THAT WILL BE USED TO EVALUATE THE
7 PHYSIOLOGICAL EFFECTS OF CELL TRANSPLANTATION IN TUMOR
8 FORMATION.

9 THIS IS AN AREA THAT'S ALMOST COMPLETELY
10 UNEXPLORED. THIS IS A NOVEL AND POTENTIALLY
11 INTERESTING BRAIN TUMOR HOST CELL INTERACTION MODEL.
12 AND THE NOTION OF LOOKING AT, QUOTE, RECRUITMENT AND
13 POSSIBLE TRANSFORMATION OF CELL NEIGHBORS INTO THE
14 TUMOR, UNQUOTE, IS VERY INTERESTING AND OF INTEREST TO
15 THE FIELD BECAUSE THE EFFECTS OF TUMORS ON THE
16 PHYSIOLOGY OF SURROUNDING HOST TISSUE AND THE POSSIBLE
17 RECRUITMENT OF HOST TISSUE BY GROWTH FACTORS EMANATING
18 FROM A TUMOR. BOTH SUBJECTS OF GREAT IMPORTANCE ABOUT
19 WHICH LITTLE IS KNOWN.

20 SO THOSE ARE THE STRENGTHS.

21 THE WEAKNESS, THE MAIN WEAKNESS IS THAT THERE
22 WAS NO A PRIORI REASON TO ASSUME THAT THE PARTICULAR
23 GROWTH FACTOR EXPRESSING HUMAN EMBRYONIC STEM CELLS
24 WILL, INDEED, MAKE TUMORS IN THIS MODEL. SO THAT'S THE
25 NOVELTY, AND THE RISK OF IT IS THAT IT'S NOT CLEAR WHY

1 ONE WOULD PRESUPPOSE THIS WOULD HAPPEN, THE WORK. AND
2 THEN THE IDEA IS THAT THIS IS A PILOT STUDY THAT, IF
3 THERE WERE INTERESTING RESULTS, COULD LAUNCH THE PI TO
4 MAYBE ATTRACT NIH FUNDING, AND THERE'S NO PRELIMINARY
5 DATA, IN OTHER WORDS. AND THEY HOPE TO GET PRELIMINARY
6 DATA.

7 THERE'S A GLARING HINT OF USING ES CELLS ONLY
8 TO RESPOND TO THIS RFA SINCE CERTAIN MOUSE MODELS ARE
9 ALREADY AVAILABLE AND PERFECT FOR STUDYING MANY OF
10 THESE PHYSIOLOGICAL ISSUES.

11 SO IN THE DISCUSSION, I'LL JUST SUMMARIZE THE
12 DISCUSSION. PERHAPS THAT WOULD SHORTEN THAT. THE
13 INVESTIGATOR RECOGNIZES HAVING GOOD TRACK RECORD, THE
14 GOALS WERE DEEMED APPROPRIATE DURING DISCUSSION;
15 HOWEVER, THE OVEREXPRESSION OF THAT PARTICULAR GROWTH
16 FACTOR AS A CAUSE OF TUMOROGENICITY IN HUMAN ES CELLS
17 IS AN ASSUMPTION NOT SUPPORTED BY EVIDENCE. IT WAS
18 TAKEN ON FAITH THAT OVEREXPRESSION OF THIS FACTOR WOULD
19 CAUSE TUMORS. PERHAPS THE FAILURE MIGHT ALSO BE OF
20 INTEREST SINCE IT WOULD BE NEW INFORMATION.

21 ONE REVIEWER INDICATED THAT WHILE THIS FACTOR
22 MAY BE OVEREXPRESSED IN HUMAN BRAIN TUMORS, STUDIES ON
23 OTHER INFLUENCING FACTORS AND TRANSCRIPTION FACTORS IN
24 ADULT CELL MODELS HAVE ALSO BEEN PUBLISHED. SO
25 QUESTION IS WHY FOCUS ON THIS PARTICULAR GROWTH FACTOR?

1 CHAIRMAN KLEIN: ALL RIGHT. THANK YOU. ANY
2 BOARD MEMBER WANT ANY ADDITIONAL INFORMATION? SO IS
3 THERE A MOTION TO MOVE THIS UP? OR IN THE LACK OF A
4 MOTION, IT WILL STAY IN ITS EXISTING STATUS.

5 DR. PRICE: COULD MOVE DOWN.

6 CHAIRMAN KLEIN: YOU CAN MOVE IT DOWN. WOULD
7 YOU LIKE TO MAKE A MOTION TO THAT EFFECT?

8 DR. PRICE: YES.

9 CHAIRMAN KLEIN: DR. PRICE IS MOVING A MOTION
10 TO MOVE IT DOWN. IS THERE A SECOND TO THAT MOTION?

11 DR. HALL: THE PROBLEM IS THAT I THINK YOU
12 JUST WANT TO SAY NOT TO FUND, RIGHT, BECAUSE THE
13 PROBLEM IS YOU'RE GOING TO MOVE IT DOWN BELOW, HOW FAR
14 DOWN, AND WHERE WILL IT IMPACT OTHER GRANTS.

15 DR. PRICE: NOT TO FUND.

16 DR. CHIU: LEAVE IT AS IS, NOT MOVE IT TO
17 TIER 1.

18 CHAIRMAN KLEIN: NO. NO. HIS POSITION IS
19 NOT TO FUND.

20 DR. CHIU: NOT TO FUND TO TIER 3.

21 MR. SHEEHY: I'LL SECOND THAT.

22 CHAIRMAN KLEIN: THERE'S A MOTION AND A
23 SECOND. I WOULD JUST SAY THAT, DR. CHIU, COULD YOU
24 FURTHER COMMENT ON THE WORKING GROUP'S STATEMENT ABOUT
25 THE FACT THAT THERE ARE OPPORTUNITIES WITH MOUSE MODELS

1 THAT HAVE ACCESS TO NIH FUNDING TO DO THIS TYPE OF
2 RESEARCH? WAS THAT THE COMMENT ON THIS PARTICULAR
3 GRANT?

4 DR. CHIU: THERE WAS A COMMENT ABOUT NIH
5 FUNDING, THAT THIS COULD POSSIBLY BE FUNDED BY THE NIH.
6 AND THE FINAL COMMENT IS THAT THIS IS AN UNDERSTUDIED
7 AREA WORTHY OF MORE INVESTIGATION. AND THE
8 PHYSIOLOGICAL STUDIES HERE ARE USEFUL. THE QUESTION IS
9 WHETHER THIS NEUROPHYSIOLOGICAL MODEL IS USEFUL IN THE
10 FIELD. SO, IN GENERAL, THE APPROACH AND THE GENERAL
11 FEEL IS AN IMPORTANT ONE. THIS PARTICULAR APPROACH IS
12 IN QUESTION.

13 CHAIRMAN KLEIN: OKAY. I WOULD ACTUALLY
14 SUPPORT THE MOTION NOT TO FUND. ANY OTHER COMMENTS?
15 ANY COMMENTS FROM THE PUBLIC? THERE IS A MOTION. WHAT
16 ARE THE CONFLICTS?

17 MR. TOCHER: NONE.

18 DR. STEWARD: CAN I ASK FOR A CLARIFICATION
19 ON THE MOTION?

20 CHAIRMAN KLEIN: THE MOTION IS NOT TO FUND
21 THIS. MOVE IT TO TIER 3. ONE OF THE COMMENTS MADE IS
22 THAT THIS COULD POTENTIALLY BE FUNDED BY NIH BECAUSE IT
23 INVOLVES MOUSE MODELS THAT NIH FUNDS COULD BE USED ON.
24 OKAY.

25 CALL FOR THE VOTE. THERE ARE NO CONFLICTS;

1 IS THAT CORRECT?

2 MS. KING: CORRECT. JUST TO CLARIFY, A VOTE
3 OF YES WOULD BE NOT TO FUND THIS, TO MOVE IT TO TIER 3.

4 CHAIRMAN KLEIN: THAT'S RIGHT.

5 MS. KING: RICARDO AZZIZ.

6 DR. AZZIZ: YES.

7 MS. KING: PAUL JENNINGS. ROBERT PRICE.

8 DR. PRICE: YES.

9 MS. KING: SUSAN BRYANT.

10 DR. BRYANT: YES.

11 MS. KING: MARCY FEIT.

12 MS. FEIT: YES.

13 MS. KING: MICHAEL FRIEDMAN. MICHAEL
14 GOLDBERG.

15 MR. GOLDBERG: YES.

16 MS. KING: FRANCIS MARKLAND.

17 DR. MARKLAND: YES.

18 MS. KING: DAVID KESSLER. BOB KLEIN.

19 CHAIRMAN KLEIN: YES.

20 MS. KING: SHERRY LANSING.

21 MS. LANSING: NO.

22 MS. KING: GERALD LEVEY.

23 DR. LEVEY: YES.

24 MS. KING: TED LOVE. RICHARD MURPHY. TINA
25 NOVA. ED PENHOET.

1 DR. PENHOET: YES.

2 MS. KING: PHIL PIZZO. CLAIRE POMEROY.

3 DR. POMEROY: NO.

4 MS. KING: FRANCISCO PRIETO. JOHN REED.

5 DUANE ROTH.

6 MR. ROTH: NO.

7 MS. KING: JOAN SAMUELSON. DAVID

8 SERRANO-SEWELL. JEFF SHEEHY.

9 MR. SHEEHY: YES.

10 MS. KING: JONATHAN SHESTACK. OSWALD

11 STEWARD.

12 DR. STEWARD: YES.

13 MS. KING: JANET WRIGHT.

14 DR. WRIGHT: NO.

15 CHAIRMAN KLEIN: OKAY. THANK YOU. ALL

16 RIGHT. THE NEXT GRANT ON THE SCREEN IS NO. 183. ARE

17 THERE CONFLICTS?

18 MR. HARRISON: WE SHOULD JUST CLARIFY FOR THE

19 RECORD THERE WERE 11 VOTES IN FAVOR OF THAT MOTION AND

20 FOUR OPPOSED.

21 CHAIRMAN KLEIN: THANK YOU.

22 MR. TOCHER: GRANT 183, GOLDBERG AND PIZZO.

23 DR. HALL: OKAY. THIS IS A GRANT THAT

24 ADDRESSES A NOVEL THERAPEUTIC APPROACH TO STROKE. AND

25 THE PROPOSAL COMES FROM AN INVESTIGATOR WHO IS AN

1 EXPERT IN STUDYING THE AFTERMATH OF CEREBROVASCULAR
2 ISCHEMIA. AND ONE OF THE INTERESTING THINGS THAT HE IS
3 WORKING ON IS THE FACT THAT THE REGENERATION OF
4 ENDOTHELIAL CELLS IS INHIBITED BY WHAT IS APPARENTLY AN
5 ENDOGENOUS ARGININE DERIVATIVE, ASYMMETRIC
6 DIMETHYLARGININE, NOT A COMPOUND I WAS AWARE OF BEFORE,
7 BUT CLEARLY AN IMPORTANT ONE IN STROKE BECAUSE THIS
8 COMPOUND BLOCKS ARGININE SYNTHASE -- I'M SORRY --
9 NITRIC OXIDE SYNTHASE WHICH USES ARGININE AS A
10 SUBSTRATE. SINCE NITRIC OXIDE IS IMPORTANT FOR
11 ENDOTHELIAL CELL FUNCTION, THEN THE PRESENCE OF THIS
12 COMPOUND IMPAIRS THE ABILITY OF THE BRAIN TO HEAL
13 ITSELF, PARTICULARLY THE VASCULATURE TO HEAL ITSELF
14 AFTER A STROKE.

15 SO THE BASIC PROPOSAL, THEN, IS TO USE HUMAN
16 EMBRYONIC STEM CELLS IN THE FOLLOWING WAY. THAT IS, TO
17 ENGINEER THEM SO THAT THEY WILL BE BETTER ABLE TO
18 HANDLE THIS PARTICULAR COMPOUND. AND THEN FROM THESE,
19 THEN, HUMAN EMBRYONIC STEM CELLS WILL FORM ENDOTHELIAL
20 CELLS WHICH ARE DERIVED FROM THEM, WHICH WILL THEN BE
21 ADMINISTERED IN AN ATTEMPT TO IMPROVE THE VASCULATURE
22 AFTER A STROKE.

23 SO THE STRENGTHS OF THE PROPOSAL ARE THE PI'S
24 EXPERTISE IN ISCHEMIA, THE STRONG SUPPORT OF A
25 COLLABORATOR WHO HAS DONE SOME IMAGING AND HAS A

1 REPORTER GENE CONSTRUCT THAT WILL ALLOW TRANSDUCED
2 CELLS TO BE FOLLOWED, AND THEN THERE'S ALSO A RODENT
3 STROKE MODEL PROPOSED WHICH IS THOUGHT TO BE USEFUL.

4 THE KEY WEAKNESSES OF THE PROPOSAL IS THAT
5 ALTHOUGH THERE IS SOME IMAGING WILL BE DONE, THERE IS
6 NO HIGH RESOLUTION ANATOMICAL IMAGING SO THAT IT WILL
7 NOT BE ABLE TO FOLLOW THESE PARTICULAR CELLS THAT ARE
8 PUT IN. AND THE SECOND POINT, THEY SAY THAT THE USE OF
9 THESE HUMAN EMBRYONIC DERIVED ENDOTHELIAL CELLS MAY BE
10 LESS EFFECTIVE THAN ENDOTHELIAL PROGENITOR CELLS WHICH
11 ARE, IN ESSENCE, ADULT STEM CELLS.

12 SO THE QUESTION IS THEY SAY WHY USE THE HUMAN
13 EMBRYONIC STEM CELLS RATHER THAN THE ADULT STEM CELLS
14 WHICH MIGHT BE MORE EFFECTIVE?

15 SO THE DISCUSSION SAYS REVIEWERS WERE
16 ENTHUSIASTIC ABOUT THE EXPERIENCE OF THE PI, THE
17 STRENGTH OF THE COLLABORATORS, THE UTILITY OF THE
18 STROKE MODEL, AND THE CLARITY OF THE PROPOSAL. THE
19 STUDIES WOULD BE PERFORMED SMOOTHLY AND USEFUL RESULTS
20 WOULD EMERGE.

21 TWO ISSUES WERE HIGHLIGHTED BY THE REVIEWERS.
22 FIRST, THE LACK OF HIGH RESOLUTION MRI MAY RESULT IN
23 THE FALSE IMPRESSION THAT THESE CELLS CAN INTEGRATE
24 INTO A SITE BECAUSE OF THE REPORTERS USED, AND THEY
25 SUGGEST THAT THEY WILL -- THEY SHOULD ADD AN MRI

1 SCANNING PROTOCOL.

2 SECOND, SINCE ENDOTHELIAL PROGENITOR CELLS
3 CAN BE OBTAINED AS PERIPHERAL BLOOD PROGENITORS, IT
4 SEEMS THAT THESE WOULD WORK WELL IN THESE STUDIES, AND
5 THIS ALTERNATIVE WAS NOT ADDRESSED. AND I THINK THE
6 IMPLIED POINT HERE IS THAT THIS IS A PROPOSAL THAT'S
7 TAILORED TO FIT OUR INTEREST IN HUMAN EMBRYONIC STEM
8 CELLS, AND THEY MAY OR MAY NOT BE THE BEST. SO THAT'S
9 THE COMMENTS.

10 MR. SHEEHY: I WANTED TO ASK A COUPLE OF
11 QUESTIONS. FIRST, I THINK THAT READING THE STRENGTHS
12 OF THIS, THERE'S SOMETHING OF A CONTRADICTION HERE.
13 THIS SAYS THE PI HAS STRONG SUPPORT FOR ONE
14 COLLABORATOR WHO IS AN IMAGING EXPERT FROM MOLECULAR
15 IMAGING USING BIOLUMINESCENT NUCLEAR MEDICINE
16 TECHNIQUES AND WHO PROVIDES THE REPORTING GENE
17 CONSTRUCT, ALLOWING BOTH IN VIVO AND IN VITRO
18 MONITORING OF THE TRANSDUCED CELLS WITH HIGH
19 SENSITIVITY. SO IT SEEMS LIKE THE MAJOR WEAKNESS IS
20 ACTUALLY ADDRESSED. IT SEEMS LIKE ONE TECHNIQUE --

21 DR. HALL: I READ THAT IN THE FOLLOWING WAY.
22 IT'S BIOLUMINESCENT, SO IT'S LIGHT MICROSCOPIC IMAGING
23 IS WHAT'S GOING TO BE USED. AND WHAT THEY ASKED FOR IS
24 HIGH RESOLUTION ANATOMICAL IMAGING, AND THEY SAY
25 SPECIFICALLY THEY SHOULD HAVE MRI OR MRS, WHICH IS

1 SPECTROSCOPY, MAGNETIC RESONANCE SPECTROSCOPY, IMAGING
2 SPECTROSCOPY.

3 MR. SHEEHY: SO HE HAS THE WRONG
4 COLLABORATOR?

5 DR. HALL: NO. LIGHT MICROSCOPE STUDIES ARE
6 FINE, BUT THEY DON'T GIVE YOU ENOUGH RESOLUTION. SO IF
7 YOU REALLY WANT TO FIND OUT WHERE THOSE CELLS GO IS THE
8 ARGUMENT. AND I'M NOT SAYING ONE WAY OR THE OTHER, BUT
9 THE ARGUMENT WOULD BE THAT WHAT YOU NEED IS TO THEN GO
10 TO MRI WHERE YOU CAN SEE MUCH HIGHER RESOLUTION SO YOU
11 CAN SEE WHERE THE CELLS GO. I THINK THAT'S THE POINT
12 BEING MADE.

13 SO AS WITH THE PROPOSALS IN THIS RANGE, IT
14 HAS SOME STRENGTHS, IT HAS SOME WEAKNESSES, AND IT'S A
15 QUESTION OF BALANCING THEM ALL.

16 MR. SHEEHY: CAN I ASK A LITTLE BIT MORE. IS
17 THIS PERSON -- HE SEEMS TO BE A RECOGNIZED EXPERT ON
18 STROKE. IS THIS SOMEONE WHO IS NEW TO THE STEM CELL
19 FIELD, OR IS THIS SOMEONE WHO'S DONE STEM CELL --
20 EMBRYONIC STEM CELL RESEARCH?

21 DR. HALL: I WOULD HAVE TO GO TO THE CV TO
22 SEE THAT. I DON'T HAVE IT. DOES SOMEBODY HAVE OTHER
23 INFORMATION ON THE PANEL?

24 DR. CHIU: YES.

25 DR. HALL: NEW TO THE STEM CELL FIELD.

1 MR. SHEEHY: SO THIS IS A RECOGNIZED EXPERT
2 ON THE STROKE WHO'S NEW. IS THIS THE ONLY APPLICATION
3 THAT WE -- I SEEM TO REMEMBER -- MY MEMORY IS SO
4 FEEBLE, BUT I SEEM TO REMEMBER SOME COMMENT BEING MADE
5 ABOUT THIS BEING THE ONLY ONE THAT WAS A STROKE.

6 DR. HALL: IT'S NOT MADE IN THE INFORMATION I
7 HAVE ON THE WRITE-UP. AND IT WAS NOT -- IS IT CORRECT
8 THAT IT WAS NOT PROPOSED? WAS IT DISCUSSED IN
9 PROGRAMMATIC REVIEW?

10 MR. SHEEHY: I THINK THIS MAY BE THE ONLY
11 ONE.

12 DR. OLSON: IT'S NOT THE ONLY STROKE.

13 DR. HALL: IT WAS NOT DISCUSSED IN
14 PROGRAMMATIC, BUT IT IS APPARENTLY THE ONLY ONE ON
15 STROKE.

16 CHAIRMAN KLEIN: I THINK THAT THE COMMENT
17 ACTUALLY WAS MADE IN PROGRAMMATIC REVIEW -- EXCUSE
18 ME -- IN THE SCIENTIFIC REVIEW, IN THE SCIENTIFIC
19 REVIEW, THAT THIS WAS A RENOWN EXPERT IN STROKE, AND
20 THERE WAS A NECESSITY TO REALLY TRY AND GET SOME PEOPLE
21 WITH HIGH QUALITY WHO HAD TREMENDOUS KNOWLEDGE ON
22 STROKE INTO THE EMBRYONIC STEM CELL RESEARCH AREA, SO
23 THEY THOUGHT THAT WAS OF PARTICULAR VALUE IN REALLY
24 PROVIDING THIS INVESTIGATOR WITH SEED MONEY TO SEE IF
25 THEY COULD REALLY DEVELOP THEIR IDEAS FOR STROKE IN

1 THIS FIELD.

2 DR. PENHOET: I MOVE APPROVAL OF THIS GRANT.

3 CHAIRMAN KLEIN: DR. PENHOET HAS A MOTION TO

4 APPROVE TO FUND. IS THERE A SECOND?

5 MR. ROTH: YES.

6 CHAIRMAN KLEIN: THERE'S A SECOND FROM DUANE

7 ROTH.

8 DR. POMEROY: DOES THAT MEAN TO MOVE IT TO

9 TIER 1?

10 CHAIRMAN KLEIN: IT MOVES TO TIER 1 IS WHAT

11 WE'RE STILL CONSIDERING; IS THAT CORRECT?

12 MR. ROTH: YES.

13 DR. PENHOET: WE'RE GOING TO END UP WIPING

14 OUT TIER 2. WE'RE GOING TO EITHER SHOVE THEM DOWN INTO

15 TIER 3 OR UP INTO TIER 1.

16 CHAIRMAN KLEIN: WE'RE STILL IN THE HIGH END

17 OF --

18 DR. POMEROY: I'D LIKE TO COMMENT ON THAT

19 BECAUSE --

20 CHAIRMAN KLEIN: DR. POMEROY, YOU HAVE THE

21 FLOOR.

22 DR. POMEROY: IT SEEMS TO ME THAT STROKE IS A

23 VERY IMPORTANT AREA, THAT THERE'S SOME INTRIGUING

24 ASPECTS OF THIS, BUT SEEMS TO ME TO FALL CLEARLY INTO

25 THE TIER 2, THAT IT DEPENDS UPON HOW MUCH MONEY WE

1 HAVE. THIS IS DIFFERENT THAN ONES THAT WERE SORT OF
2 IMMEDIATE, YES, WE WANT THIS, BUT STRONGER THAN THE
3 ONES THAT WE MOVED DOWN. SO I DON'T SEE A PROBLEM WITH
4 LEAVING IT IN TIER 2.

5 DR. HALL: JUST LEAVE IT WHERE IT IS IS WHAT
6 YOU ARE SAYING.

7 DR. POMEROY: THAT'S MY FEELINGS.

8 CHAIRMAN KLEIN: IS THERE ADDITIONAL COMMENT?

9 MR. SHEEHY: I'M TORN BECAUSE I DO THINK I'M
10 KIND OF IN BETWEEN ON THIS BECAUSE I DO THINK ONE OF
11 THE GOALS OF THIS ROUND IS TO GET PEOPLE TO ACTUALLY
12 HAVE EXPERIENCE WORKING WITH STEM CELLS WHO DO NOT,
13 EMBRYONIC STEM CELLS. THIS IS REALLY HOW WE GROW THE
14 FIELD. SO MAYBE THAT'S MORE OF A POLICY ISSUE AND THE
15 SCIENCE DOESN'T SEEM ALL THAT SOFT, AND WE HAVE -- SO I
16 WON'T KNOW TILL THEY ACTUALLY CALL MY NAME HOW I'M
17 GOING TO VOTE.

18 CHAIRMAN KLEIN: THE SCIENTISTS IN THIS ROUND
19 REALLY DID SPEAK EXTREMELY HIGHLY OF THE STROKE
20 EXPERTISE AND THE DESIRE TO DEVELOP EXPERTISE AS BEING
21 A PRIORITY IN THIS AREA BECAUSE IT WAS NOT OTHERWISE
22 REPRESENTED. AND THEY DIDN'T KNOW OF A LOT OF OTHER
23 RESEARCH NATIONALLY THAT WAS BEING FUNDED IN THIS
24 SPECIFIC AREA.

25 DR. PENHOET: NOW I'M CONFUSED BECAUSE SO FAR

1 TO THIS POINT, WE'VE EITHER RECOMMENDED FOR FUNDING OR
2 WE HAVEN'T RECOMMENDED FOR FUNDING. NOW CLAIRE HAS
3 INTRODUCED A NEW CONCEPT WHICH WE RECOMMEND THAT IT
4 STAYS IN TIER 2, FUND IF SO. IF WE'RE GOING TO CREATE
5 THAT CATEGORY, I WOULD BE HAPPY TO CHANGE MY MOTION TO
6 LEAVE IT IN TIER 2 IF THAT'S WHAT WE'RE -- THEN IT'S
7 NOT A -- THEN IT'S A RECOMMENDATION FOR FUNDING IF
8 FUNDS ARE AVAILABLE.

9 CHAIRMAN KLEIN: IF YOU VOTE DOWN THIS
10 MOTION, IT DOESN'T TAKE IT OUT OF TIER 2.

11 DR. BRYANT: I WAS JUST GOING TO SAY THERE
12 WAS ONE OTHER THAT WE TOOK NO ACTION ON, I THINK. I
13 DON'T REMEMBER WHICH ONE IT WAS. THERE WAS ONE.

14 CHAIRMAN KLEIN: WE HAVE A MOTION HERE THAT'S
15 ON THE FLOOR.

16 MS. LANSING: I JUST FIND IT CONFUSING. I
17 GUESS, YOU KNOW, AS A LAYPERSON, I JUST LIKED IT. AND
18 I RESPECT WHAT YOU ARE SAYING, CLAIRE, BUT I JUST LIKED
19 IT SO MUCH WHEN WE RECOMMENDED IT FOR FUNDING OR WE
20 DIDN'T RECOMMEND IT FOR FUNDING. IT JUST SEEMED SO
21 CLEAN. THEN THE SCORES ARE GOING TO SPEAK BACK TO US.
22 WE'RE GOING TO SEE WHERE WE ARE, AND THERE'S GOING TO
23 BE A DEMARCATION LINE. WHAT WAS THE ONE THAT WE LEFT
24 WHERE IT WAS?

25 DR. HALL: LET ME JUST SAY THAT IT SEEMS TO

1 ME TECHNICALLY YOU CAN DO IT EITHER WAY. THERE IS NO
2 DIFFERENCE IN THE END. WHAT YOU WILL SEE TOMORROW,
3 THEY'LL BE LINED UP BY SCORE WITHIN THE CATEGORIES.
4 AND SO IT WILL EITHER BE AT THE TOP OF THE DON'T FUND
5 OR IT WILL BE IN AN INTERMEDIATE CATEGORY.

6 MS. LANSING: IT'S GOING TO LOOK WEIRD. I
7 GUESS IT WON'T. IT JUST SEEMS WEIRD YOU'RE GOING TO
8 HAVE A 76 THAT YOU RECOMMENDED FOR FUNDING AND A 76
9 THAT YOU DIDN'T.

10 CHAIRMAN KLEIN: THERE IS AN INTEGRITY,
11 THOUGH, TO THE INDIVIDUAL PERSPECTIVE ON THESE GRANTS
12 WHICH IS ACTUALLY VERY HELPFUL. WE'RE CAUGHT WITH A
13 COMPLICATED, THOUGH, SITUATION, SHERRY, CLEARLY IN
14 TRYING TO BE AS PRECISE AS WE CAN BE WITHIN THE
15 CONSTRAINTS OF OUR OPTIONS. SO THE VOTE ON THIS IS IF
16 YOU VOTE FOR IT, IT MOVES UP TO TIER 1. IF YOU DON'T
17 VOTE FOR IT, IT STAYS IN TIER 2.

18 MS. LANSING: IN A SENSE MY QUESTION IS IF
19 YOU VOTE FOR IT, YOU'RE RECOMMENDING THAT IT GETS
20 FUNDED. IF YOU DON'T VOTE FOR IT, BY LEAVING IT IN
21 TIER 2, TECHNICALLY YOU'RE SAYING YOU DON'T VOTE FOR IT
22 TO BE FUNDED.

23 CHAIRMAN KLEIN: NO. TECHNICALLY IF YOU VOTE
24 FOR IT AND IT GOES INTO TIER 1, IT HAS A VERY HIGH
25 PRIORITY OF FUNDING. IF YOU DON'T VOTE FOR IT, IT'S IN

1 TIER 2. IT HAS A LOWER PRIORITY OF FUNDING, BUT IT
2 STILL CAN BE FUNDED.

3 MS. LANSING: ARE YOU ALLOWED TO ABSTAIN FROM
4 A VOTE?

5 CHAIRMAN KLEIN: YES. YOU'RE ALLOWED TO
6 ABSTAIN.

7 MS. FEIT: I THINK WE'RE AT A POINT WHERE ALL
8 OF THESE GRANTS NOW, AND I'M SITTING HERE TRYING TO
9 REMEMBER ALL OF THE SCIENTIFIC DISCUSSION, AND WE'RE
10 GOING TO SEE THE SAME FLAVOR AS WE GO THROUGH EACH OF
11 THESE, THE SAME SORT OF YING AND YANG OF IT. AND I
12 THINK WE SHOULD LEAVE THE REST OF THEM ALONE NOW. AND
13 I THINK ONCE WE ESTABLISH WHAT THE FUNDING LEVEL, THE
14 SCIENTISTS HAVE ALREADY RECOMMENDED THAT IF WE HAVE
15 ENOUGH FUNDING, THAT WE CONSIDER THESE FOR FUNDING.
16 AND I THINK, IF ANYTHING, THEY'RE ALREADY IN A PRIORITY
17 LIST, AND I THINK WE SHOULD JUST LEAVE THE REST OF THIS
18 LIST ALONE, ESTABLISH OUR FUNDING LEVEL TOMORROW, AND
19 BASED ON THAT, CONTINUE THE FUNDING THROUGH THE LIST.
20 AS YOU GO DOWN, YOU'RE GOING TO FIND MORE AND MORE
21 CONTROVERSY LIKE THIS. I CAN TELL YOU THAT THAT IS MY
22 RECOLLECTION OF IT.

23 MR. SHEEHY: I JUST THINK THAT WE NEED -- WE
24 JUST HAD TWO THAT ARE SCORED THE SAME THAT WE FEEL
25 DIFFERENTLY ABOUT. AND I REALLY THINK THAT'S KIND OF

1 WHY WE'RE HERE IS TO MAKE SOME OF THESE DECISIONS. I
2 ACTUALLY HAVE COME TO MY DECISION. I ACTUALLY WOULD
3 LIKE TO PUT THIS INTO TIER 1. THE MORE I THINK ABOUT
4 IT, THE MORE THE DEBATE GOES ON. I THINK IT'S GOING TO
5 MAKE OUR JOB EASIER, FRANKLY, TOMORROW IF WE MAKE SOME
6 OF THESE DECISIONS WHEN WE START TALKING ABOUT MONEY IF
7 WE REALLY PUT TOGETHER A PRETTY NICE COMPARTMENT IN
8 TIER 1.

9 AND THEN WE REALLY WILL HAVE A SENSE OF WHAT
10 WE WANT TO DO WITH WHAT MONEY IS AVAILABLE IF WE KNOW
11 WHAT'S OUT THERE. I KNOW IT'S GOING TO BE GRUELING,
12 BUT IN SOME DEGREE, TO BE RESPECTFUL OF THE SCIENTISTS
13 WHO SAT THERE, MARCY, YOU WERE THERE WITH US, THIS
14 THING IS REALLY BRUTAL, BUT WE HAVE 230 APPLICATIONS,
15 AND SOME OF THEM WE HAVE TO TALK ABOUT IN SOME DETAIL
16 AND KIND OF STRUGGLE THROUGH IT. AND IT'S TOUGH.

17 DR. STEWARD: I'D LIKE TO REINFORCE WHAT
18 MARCY SAID BECAUSE WHEREVER WE STOP TONIGHT, WE'RE
19 GOING TO FACE THE SAME THING, WHICH IS TO LOOK TOMORROW
20 AT DECISIONS AROUND THE BORDER. AND IT REALLY DOESN'T
21 MATTER WHERE THAT BORDER IS UNTIL WE DEFINE WHAT THE
22 FUNDING LINE IS.

23 I WOULD PREFER TO SPEND THE TIME REALLY
24 CONSIDERING THE THINGS AROUND THAT BORDER. MAYBE
25 TOMORROW WE'LL DECIDE THAT EVERYTHING GETS PAID DOWN

1 THROUGH 74, IN WHICH CASE WE DON'T EVEN HAVE TO WORRY
2 ABOUT IT. SO MAKING THAT DECISION NOW BEFORE WE GO
3 INTO THESE REALLY, REALLY NITTY-GRITTY KINDS OF
4 CONSIDERATIONS, I THINK, IS THE STRATEGIC WAY TO GET
5 OUR TASK DONE EFFECTIVELY AND CAREFULLY.

6 CHAIRMAN KLEIN: DR. STEWARD, IN TERMS OF
7 AVOIDING CONFLICTS, IT'S BENEFICIAL, TO THE EXTENT THAT
8 WE GO THROUGH THESE INDIVIDUAL DECISIONS TONIGHT,
9 LOOKING AT VARIOUS DIFFERENT OPTIONS THAT WE'VE
10 CONSIDERED IN THE MODEL, IT DOES HELP US AVOID THOSE.

11 NOW, DOESN'T MEAN WE HAVE TO MOVE THESE UP OR
12 DOWN, BUT TO THE EXTENT WE CAN GO THROUGH SOME MORE
13 INDIVIDUAL CONSIDERATIONS TONIGHT, IT WILL BE HELPFUL
14 TO US IF WE DO THAT BEFORE WE CONSIDER OUR FUNDING
15 OPTIONS BECAUSE OF THE DISCUSSION PREVIOUSLY THAT
16 OCCURRED IN RELATIONSHIP TO THE ANSWER TO DR. PIZZO'S
17 QUESTION.

18 DR. STEWARD: MAYBE I SHOULD ASK. ARE WE
19 GOING TO GO THROUGH ALL OF TIER 2 IN THAT WAY?

20 CHAIRMAN KLEIN: WELL, THE COMMITTEE MAY
21 DECIDE AT A CERTAIN POINT IN TIER 2 THAT THEY DON'T
22 WANT TO GO ANY FURTHER.

23 DR. STEWARD: I THINK THAT WAS ACTUALLY WHAT
24 IS THE SUGGESTION NOW.

25 CHAIRMAN KLEIN: OKAY. THEY MAY DECIDE THAT

1 YOU DON'T WANT TO CONSIDER ANY AT A CERTAIN LEVEL FOR
2 FUNDING. HERE WE HAVE A MOTION ON THE FLOOR STILL, AND
3 LET'S SEE WHAT WE CAN DO IN TERMS OF JUST RESOLVING
4 THIS ITEM THAT IS STILL PENDING. IS THERE ANY
5 ADDITIONAL COMMENTS ON THIS ITEM?

6 DR. LEVEY: AGAIN, I JUST WANT TO MAKE A
7 GENERIC COMMENT BECAUSE I KNOW -- I THINK A NUMBER OF
8 PEOPLE HERE HAD GONE THROUGH THIS GRAY AREA. AND I
9 THINK IT'S CLEAR WHETHER YOU CUT IT OFF AT 76 OR 75 OR
10 77, FOR THOSE WHO HAVE GONE THROUGH IT, WHAT YOU WILL
11 SEE IS THAT AS YOU GO PROGRESSIVELY, IT'S SUBTLE, BUT
12 THE WEAKNESSES THAT WERE POINTED OUT ARE QUITE SHARPLY
13 DIFFERENT FROM ALL THE OTHER GRANTS THAT WE FIGURED.
14 AND WE'RE NOT GOING TO GET INTO VERY SOFT, SUBJECTIVE
15 DECISION-MAKING, WHICH I THINK WILL NOT REFLECT WELL ON
16 WHAT THIS BOARD IS DOING. AND I THINK WHAT WE OUGHT TO
17 DO, UP TO ME, I WOULD CUT IT OUT OF WHEREVER WE ARE
18 NOW, 77 OR WHATEVER IT IS, AND WE CAN GO THROUGH THAT.
19 AND THEN TOMORROW I THINK WE HAVE A FUNDAMENTAL
20 DECISION TO MAKE, AND THAT IS WHETHER TO FUND THIS GRAY
21 AREA. AND IF SO, HOW DEEP INTO THE GRAY AREA.

22 I WOULD CERTAINLY HOPE THAT WE FUND AT LEAST
23 PART OF THE GRAY AREA BECAUSE I THINK MOST OF THE
24 PEOPLE IN ACADEMIC MEDICINE HERE WILL REALIZE THAT ONE
25 OF THE MOST IMPORTANT THINGS THAT YOU CAN DO IN A

1 RESEARCH ENVIRONMENT IS TO GIVE SEED GRANTS. THIS IS
2 MORE IMPORTANT, I WOULD SAY, THAN THE COMPREHENSIVE
3 GRANTS AND THE NEXT FACILITIES GRANTS THAT WE'RE GOING
4 TO CONSIDER IN JUNE. THIS IS GOING TO BE THE LIFEblood
5 IN A FIELD THAT HAS FEW INVESTIGATORS, RELATIVELY
6 SPEAKING. SO THE MORE THAT WE CAN FUND WITH SEED
7 GRANTS, I THINK THE BETTER OFF WE'RE GOING TO BE.

8 BUT TO GO THROUGH THIS NOW LITTLE BIT OF THIS
9 AND LITTLE BIT OF THAT AND DECIDE WHO GOES UP AND WHO
10 STAYS, I DON'T THINK IT'S GETTING US ANYWHERE. WE HAD
11 A FIRST CLASS SCIENTIFIC REVIEW COMMITTEE WITH A GOOD
12 NUMBER OF PEOPLE FROM THIS BOARD REPRESENTED ON IT.
13 THEY MET THE CRUCIBLE OF BEING CONSIDERED THERE BECAUSE
14 THESE WERE, I DON'T KNOW HOW MANY ACTUALLY WERE, IF YOU
15 INCLUDE THE FUND AND TO FUND IF POSSIBLE, I THINK
16 THAT'S ABOUT A THIRD OF THE TOTAL POOL.

17 DR. CHIU: 88 OUT OF 231.

18 DR. LEVEY: ROUGHLY 34, 35 PERCENT. AND OUR
19 JOB IS TO TRY TO STIMULATE STEM CELL RESEARCH,
20 EMBRYONIC STEM CELL RESEARCH IN PARTICULAR, AND I WOULD
21 JUST HOPE THAT WE END UP WITH ENOUGH MONEY THAT WE CAN
22 FUND THIS GRAY AREA. AND I JUST WOULD -- I DON'T KNOW.
23 MAYBE YOU'D WANT TO GET, BOB, A SENSE OF THE BOARD AS
24 TO HOW WE FEEL ABOUT THIS BECAUSE I THINK IT MAY BE A
25 LITTLE BIT MORE PRODUCTIVE THAN WHAT WE'RE DOING.

1 CHAIRMAN KLEIN: ALL RIGHT. THERE'S TWO
2 THINGS WE HAVE. FIRST, WE HAVE A PENDING VOTE THAT WE
3 HAVE TO COMPLETE. DR. AZZIZ, AND THEN WE CAN TURN TO
4 YOUR ISSUE.

5 DR. AZZIZ: WELL, OKAY. MY COMMENT WAS,
6 AGAIN, GENERAL COMMENTS TO ECHO WHAT GERRY IS SAYING,
7 BUT IT IS ABOUT THIS PARTICULAR VOTE. AGAIN, I JUST
8 NEED CLARIFICATION. ARE WE VOTING FOR FUNDING TONIGHT,
9 OR ARE WE VOTING SIMPLY TO ORGANIZE THE APPLICATIONS IN
10 THE ORDER OF PRIORITY BECAUSE IF THAT'S THE CASE, THEN
11 I THINK WE'VE GOTTEN THAT DONE. IF IT IS ABOUT
12 FUNDING, THEN IT'S ABOUT FUNDING, AND WE NEED TO NOW
13 PUT ON A DIFFERENT CAP AND LOOK AT NUMBERS AND FIGURE
14 OUT HOW MUCH MONEY THERE IS AND SO ON.

15 WHILE I APPRECIATE THAT TOMORROW IT WILL BE
16 EASIER TO SAY TIER 1, TIER 2, AND SO ON, I MEAN THE
17 REALITY IS THAT WE WILL SIMPLY LOOK AT NUMBERS AND THEN
18 DEFINE A PERCENTILE CUTOFF AND CUT IT OFF. I'M SURE
19 THAT LOTS OF THE TIER 1S WILL GET FUNDED OR ALL OF
20 THEM, PLUS SOME IN TIER 2 AND SO ON. SO I'M A LITTLE
21 CONFUSED AS TO WHAT WE'RE DOING BECAUSE IT SEEMS TO ME
22 THAT WE'RE CREATING UNNECESSARY PERHAPS CONFUSION
23 RATHER THAN DECIDING TO ORGANIZE THEM IN ORDER OR NOT
24 AND THEN FUND TOMORROW.

25 MS. LANSING: WELL, WHAT I THOUGHT WE WERE

1 DOING WAS LOOKING, AND IT STARTED ACTUALLY WITH ED
2 SAYING HE WAS UNCOMFORTABLE, AND I HOPE I'M QUOTING YOU
3 RIGHT, ED, BELOW 76. AND SO WE COULD TAKE A MOTION
4 THAT SAID DO WE WANT TO FUND EVERYTHING ABOVE 76 AND
5 THEN FROM 76 DOWN TO 71, WHICH IS THE GRAY AREA, AND
6 REVIEW THOSE BECAUSE THOSE WERE THE ONES THAT YOU
7 WEREN'T COMFORTABLE WITH. BUT AS IT TURNS OUT, THERE
8 WAS ALSO ONE ABOVE 76 THAT WE DIDN'T WANT TO FUND.

9 SO I GUESS WHAT I THINK WE'RE TRYING TO DO,
10 AND MAYBE THE HOUR IS LATE, YOU KNOW, MAYBE WE'RE NOT
11 ABLE TO MAKE THE BEST DECISIONS, WHICH WOULD BE
12 TERRIBLE, WAS EVALUATING HOW MUCH OF THESE GRAY ONES WE
13 WISH TO FUND, PERIOD, YOU KNOW, ASSUMING THAT WE HAVE
14 THE MONEY. AND I THINK WE HAVE TO DO THAT.

15 NOW, I DON'T KNOW IF THIS IS THE BEST TIME TO
16 DO IT. I UNDERSTAND THAT.

17 DR. PENHOET: WELL, ONE WAY THROUGH THAT
18 WOULD BE TO DO WHAT YOU JUST PROPOSED, LOOK AT SOME
19 NUMBER LIKE 76, AND THEN BY EXCEPTION ASK THIS GROUP IS
20 THERE ANY SINGLE GRANT IN THE 76 AND BELOW CATEGORY IN
21 TIER 2 THAT SOMEONE HERE WANTS TO TAKE OUT AND DISCUSS
22 SEPARATELY. IF SO, WE'LL JUST TAKE IT OUT AND VOTE ON
23 THE REST OF THE PACKAGE. IF NOT, THEN WE VOTE ON THE
24 ENTIRETY. AND NOW THE OTHERS ARE ALL SCORED 77, SO
25 IT'S THE SAME QUESTION. WE HAVE A BUNCH OF 77S. IS

1 THERE ANY ONE OF THESE 77S THAT SOMEBODY WANTS TO TAKE
2 OUT AND DISCUSS SEPARATELY? SO WE COULD VOTE SO PEOPLE
3 WHO HAVE POINT OF VIEW ABOUT SOME OF THESE GRANTS COULD
4 HAVE AN OPPORTUNITY TO HAVE THAT GRANT DISCUSSED ON ITS
5 OWN, AND THE REST WOULD BE ESSENTIALLY DONE AS GROUPED.
6 THAT WOULD BE ONE WAY TO DO IT.

7 CHAIRMAN KLEIN: I WOULD SAY AS WELL THERE
8 HAVE BEEN COMMENTS ON THE BOARD THAT AT THIS POINT WE
9 DO NEED TO LOOK AT SOME INDIVIDUAL GRANTS, AND IT HELPS
10 US TO BENCHMARK. BUT TRUST ME, THERE IS A BENEFIT IN
11 PROVIDING THE RECORD THAT WE'RE BUILDING SO PEOPLE CAN
12 REALLY UNDERSTAND THE DISTINCTION AND THE
13 CHARACTERISTICS THAT WE'RE LOOKING AT. IT'S VERY
14 HELPFUL OVERALL IN THE BIG PICTURE OF WHAT WE'RE TRYING
15 TO ACCOMPLISH AS AN AGENCY.

16 ALL RIGHT. WE HAVE A VOTE, BUT WE HAVE TO
17 SEE IS THERE IS PUBLIC COMMENT. JOHN SIMPSON.

18 MR. SIMPSON: JOHN SIMPSON FROM THE
19 FOUNDATION FOR TAXPAYER AND CONSUMER RIGHTS. I AGREE
20 WITH A NUMBER OF THE MEMBERS OF THE BOARD THAT YOU ARE
21 REACHING A POINT WHERE THE WEAKNESSES ARE STARTING TO
22 GLARE OUT, BUT ONE OF THE THINGS, PARTICULARLY IN THIS
23 LAST GRANT, WAS THAT THERE WERE SPECIFIC WEAKNESSES
24 THAT WERE ADDRESSED THAT LED ME TO BELIEVE THAT IF
25 SOMETHING WERE ADDED, IT WOULD FIX THE EXPERIMENT, A

1 DIFFERENT KIND OF IMAGING, WHICH IS ALL BEYOND ME. BUT
2 IF YOU GIVE THE GRANT, CAN YOU GIVE IT WITH THE
3 EXPECTATION THAT THE GRANTEE WILL HEED THE ADVICE OF
4 THE PEER REVIEW AND SAY, OH, YES. I WILL ADD AN MRI.
5 IN OTHER WORDS, WHAT RESPONSE COMES FROM THE SCIENTISTS
6 TO THE PEER REVIEW IF YOU GIVE THE GRANT? THAT WOULD
7 SEEM TO ME TO BE A VERY KEY THING TO ADDRESS.

8 CHAIRMAN KLEIN: A VERY GOOD QUESTION.
9 ESSENTIALLY THERE ARE SOME OF THESE GRANTS WHERE THE
10 WEAKNESSES CAN BE CURED EFFECTIVELY BY FOLLOWING THE
11 ADVICE OF THE PEER REVIEW. DR. HALL, COULD YOU COMMENT
12 ON WHAT INFLUENCE THE RECOMMENDATIONS HAVE FOR PEOPLE
13 COMPETING WITH GRANTS WITH THIS AGENCY?

14 DR. HALL: YOU KNOW, THE ADVICE WILL GO BACK.
15 IT'S ON THE CONFIDENTIAL REVIEW. THE PERSON WILL SEE
16 THE OPINION OF THE WORKING GROUP ON THIS. YOU KNOW,
17 WHETHER THEY WILL -- THAT WILL CHANGE THEIR BEHAVIOR OR
18 NOT I DON'T KNOW. THESE ARE COMPLICATED ISSUES. IT
19 MAY MEAN, FOR EXAMPLE, REBUDGETING. I CAN'T IMAGINE
20 GETTING AN MRI COMPONENT ONTO SOMETHING LIKE THIS WOULD
21 BE AN INEXPENSIVE PROPOSITION. I THINK THERE IS THAT
22 EXPERTISE AVAILABLE FOR THIS PERSON IF THEY CHOSE TO DO
23 THAT. SO I DON'T KNOW.

24 I MEAN IT, AGAIN, IT IS THE GRAY AREA, AND I
25 THINK YOU CAN TAKE THE POSITION THAT JEFF ENUNCIATED

1 BEFORE. THIS IS A -- STROKE IS VERY IMPORTANT. I
2 DON'T KNOW WHAT THE FIGURES ARE NOW. IT WAS 500,000 A
3 YEAR, PROBABLY MORE THAN THAT NOW, WHEN I WAS AT NIH
4 TEN YEARS AGO. THIS IS A MAJOR HEALTH PROBLEM IN THE
5 COUNTRY. THERE IS A LACK OF TREATMENTS FOR IT, AS ED
6 PENHOET AND OTHERS KNOW. AND IT IS A -- THIS IS A
7 PERSON WHO IS VERY EXPERIENCED.

8 ON THE OTHER HAND, THE REVIEWERS IDENTIFIED
9 TWO NOT NONTRIVIAL PROBLEMS WITH THE DESIGN, AND
10 WHETHER THEY WILL FOLLOW IT OR NOT, IT'S VERY HARD TO
11 SAY. SO THEY CERTAINLY COULD DO SO, BUT THAT'S OFTEN A
12 MATTER OF PERSONALITY AND OTHER THINGS.

13 CHAIRMAN KLEIN: OKAY.

14 DR. BRYANT: SO IN LOOKING AT THESE COMMENTS,
15 IT SOUNDS MORE AS IF THIS PERSON DOESN'T HAVE THE
16 EXPERTISE IN THAT AREA. AND THE IMAGING PERSON THAT HE
17 OR SHE HAS IS IN THE WRONG -- IS NOT COVERING THIS
18 PARTICULAR WEAKNESS. AND SO ONE POSSIBILITY WOULD, OF
19 COURSE, BE TO GET SOMEBODY WHO CAN GUIDE THEM IN THIS
20 AREA BECAUSE IT SOUNDS TO ME LIKE THIS PERSON DOESN'T
21 UNDERSTAND THE INTRICACIES OF THIS IMAGING PROJECT,
22 PART OF THE PROJECT, LIKE, FOR INSTANCE, THAT YOU WILL
23 BE GETTING A FALSE RESULT BECAUSE THE TRACE THAT YOU'VE
24 USED MIGHT HAVE BEEN INGESTED BY OTHER CELLS AND MOVED
25 AROUND THE BODY, AND ALL THAT KIND OF THING IMAGING

1 EXPERTS WOULD BE AWARE OF THAT AND COULD WRITE IT IN.
2 SO I THINK IT'S NOT PUT TOGETHER RIGHT.

3 DR. HALL: YES. IT'S AN OLD SORT OF SAYING
4 OF STUDY SECTIONS AND REVIEWING GROUPS AND DISEASE
5 GROUPS THAT YOU CAN'T REWRITE PEOPLE'S GRANTS FOR THEM.
6 IN THE END YOU HAVE WHAT THEY WROTE, AND YOU HAVE TO
7 DEAL WITH IT AS IT IS. IN THIS CASE IT SEEMS TO ME IT
8 HAS STRENGTHS AND IT HAS WEAKNESSES, AND IT IS YOUR
9 WISDOM THAT WILL DECIDE.

10 DR. LEVEY: YOU KNOW, THIS QUESTION DOES
11 BRING UP A REALLY IMPORTANT ISSUE ACTUALLY. AND I'M
12 SURE WE'LL GET INTO IT WHEN WE TALK ABOUT FACILITIES.
13 I DON'T KNOW WHAT THE FACILITIES GRANTS WERE LIKE. BUT
14 THE SOONER WE GET MULTILOCATION FOCI FOR CORE
15 LABORATORIES IN THE STATE, IF THIS GROUP IS FROM
16 NORTHERN CALIFORNIA, FOR EXAMPLE, THERE'S POWERFUL
17 MICROPET AT STANFORD, I BELIEVE, WITH SAM GAMBHIR AND
18 AT DAVIS. AND I THINK IF WE HAD DEFINITELY
19 IDENTIFIABLE UNITS WHERE YOU COULD SAY TO SOMEBODY LIKE
20 THIS, IMAGING ISN'T YOUR BAG, BUT, YOU KNOW, DAVIS HAS
21 THE SETUP FOR YOU, OR UCSD OR UCLA. WE CAN OFFER
22 SOMETHING LIKE THAT. SO MAYBE AT SOME POINT IN THE
23 NEXT FEW MONTHS, WE'LL GET INTO ALL THIS. BUT IT WOULD
24 BE NICE TO HAVE CENTERS OF EXCELLENCE SCATTERED AROUND
25 THE STATE SYSTEM.

1 CHAIRMAN KLEIN: ABSOLUTELY.

2 DR. LEVEY: THIS IS EXPENSIVE STUFF TO GET
3 INTO.

4 CHAIRMAN KLEIN: ALL RIGHT. WE'VE HAD GREAT
5 DISCUSSION FROM THE BOARD. ANY OTHER COMMENTS FROM THE
6 BOARD? ANY COMMENTS FROM THE PUBLIC? CONFLICTS?

7 MS. KING: MICHAEL GOLDBERG AND PHIL PIZZO.

8 CHAIRMAN KLEIN: OKAY. CONFLICTS FOR MICHAEL
9 GOLDBERG AND PHIL PIZZO. THE MOTION WAS TO MOVE THIS
10 UP TO TIER 1. WE HAVE A ROLL CALL VOTE.

11 MS. KING: RICARDO AZZIZ.

12 DR. AZZIZ: I NEED A CLARIFICATION. COULD
13 YOU REREAD THE MOTION?

14 CHAIRMAN KLEIN: THE MOTION IS TO RECOMMEND
15 TO MOVE UP TO TIER 1 FOR FUNDING APPLICATION 183.

16 DR. AZZIZ: YES. I DON'T HAVE ANY CONFLICT.

17 MS. KING: PAUL JENNINGS. ROBERT PRICE.

18 DR. PRICE: YES.

19 MS. KING: SUSAN BRYANT.

20 DR. BRYANT: NO.

21 MS. KING: MARCY FEIT.

22 MS. FEIT: YES.

23 MS. KING: MICHAEL FRIEDMAN. FRANCIS
24 MARKLAND.

25 DR. MARKLAND: YES.

1 MS. KING: DAVID KESSLER. BOB KLEIN.
2 CHAIRMAN KLEIN: YES.
3 MS. KING: SHERRY LANSING.
4 MS. LANSING: YES.
5 MS. KING: GERALD LEVEY.
6 DR. LEVEY: YES.
7 MS. KING: TED LOVE. RICHARD MURPHY. TINA
8 NOVA. ED PENHOET.
9 DR. PENHOET: YES.
10 MS. KING: CLAIRE POMEROY.
11 DR. POMEROY: NO.
12 MS. KING: FRANCISCO PRIETO. JOHN REED.
13 DUANE ROTH.
14 MR. ROTH: YES.
15 MS. KING: JOAN SAMUELSON. DAVID
16 SERRANO-SEWELL. JEFF SHEEHY.
17 MR. SHEEHY: YES.
18 MS. KING: JONATHAN SHESTACK. OSWALD
19 STEWARD.
20 DR. STEWARD: YES.
21 MS. KING: JANET WRIGHT.
22 DR. WRIGHT: YES.
23 CHAIRMAN KLEIN: ALL RIGHT. THANK YOU. WHAT
24 IS THE VOTE?
25 MR. HARRISON: 12 IN FAVOR, TWO OPPOSED.

1 CHAIRMAN KLEIN: LET ME ASK THE BOARD ITS
2 PLEASURE AT THIS POINT. WOULD YOU LIKE TO GO THROUGH
3 THE 77S ONE AT A TIME?

4 MR. ROTH: I THINK WE'RE COMMITTED NOW.
5 WE'VE GOT TO FINISH IT. WE DON'T GO PART WAY THROUGH.

6 CHAIRMAN KLEIN: THAT'S FINE. OKAY. THE
7 NEXT ONE IS NO. 239. THE CONFLICTS WE CAN STATE AFTER
8 DR. CHIU.

9 MR. TOCHER: IT'S JUST MS. LANSING.

10 CHAIRMAN KLEIN: OKAY.

11 DR. CHIU: A QUICK SYNOPSIS IS THIS FROM A
12 NEWLY INDEPENDENT INVESTIGATOR WHO IS NEW TO THE FIELD,
13 WORKS ON HEART DISEASE. AND WHAT IS PROPOSED IS A NEW
14 PLATFORM TO TEST MULTIPLE STIMULI FOR DIFFERENTIATION
15 OF HUMAN EMBRYONIC STEM CELLS TO SPECIFIC
16 SUBPOPULATIONS OF CARDIOMYOCYTES IN ORDER TO TREAT
17 HEART DISEASE.

18 AND SO THE INTERESTING PART IS THAT THIS
19 PROPOSAL WANTS TO USE, AS A TISSUE ENGINEERING
20 APPLICATION, WANTS TO USE MICROSYSTEMS WHERE EMBRYONIC
21 STEM CELLS OR EMBRYOID BODIES ARE SEEDED ONTO POLYMERIC
22 SCAFFOLDS WITH A -- TO USE A HIGH-THROUGHPUT METHOD OF
23 CHECKING CHEMICAL STIMULI TESTED IN COMBINATION WITH
24 BOTH ELECTRICAL AND MECHANICAL STIMULI SO THAT THEY CAN
25 MONITOR THE RESPONSES OPTICALLY AND BY

1 ELECTROPHYSIOLOGICAL MEASUREMENT. SO THIS IS A RATHER
2 UNIQUE TECHNOLOGY TO LOOK AT DIFFERENT MECHANICAL AND
3 CHEMICAL STIMULI TO SEE IF YOU CAN TURN SEEDED
4 EMBRYONIC STEM CELLS OR EMBRYOID BODIES INTO DIFFERENT
5 TYPES OF CARDIOMYOCYTES, TARGETING EVENTUALLY ATRIAL
6 VENTRICULAR AND PACEMAKER CELLS.

7 THE STRENGTHS IS THAT THE TOPIC CLEARLY IS
8 IMPORTANT. THE INVESTIGATORS HAVE VERY STRONG
9 ENGINEERING AND ELECTROPHYSIOLOGICAL BACKGROUND. THE
10 APPROACH FOR ENRICHING CARDIOMYOCYTES THE REVIEWERS
11 FOUND CONVINCING AND FEASIBLE. THE PLATFORM LOOKS
12 READY FOR USE. IT'S A CLEVER IDEA TO USE A PATCH CLAMP
13 ON A CHIP PLATFORM FOR ELECTRICAL AND CHEMICAL
14 STIMULATION OF EMBRYOID BODIES. SO IT'S THE WHOLE
15 APPROACH THAT ATTRACTED THE ENTHUSIASM OF THE
16 REVIEWERS.

17 WEAKNESSES ARE THAT THERE'S LITTLE DISCUSSION
18 ACTUALLY GIVEN TO THE CHEMICAL STIMULI. THE EXACT
19 NATURE OF THE FACTORS TO BE USED PROBABLY REQUIRE QUITE
20 SPECIFIC COMBINATIONS OF CARDIAC SPECIFIC GROWTH
21 FACTORS AND CYTOKINES IN COMBINATION AND IN SEQUENCE.
22 THIS WOULD BE VERY IMPORTANT TO MAKE THIS SUCCESSFUL,
23 AND THE DETAILS WERE NOT PROVIDED.

24 ALSO METHODS FOR SINGLE CELL LEVEL STRIPPING
25 OF CELLS FROM EMBRYOID BODIES, RATHER A TRICKY

1 PROPOSITION, SEEMS CHALLENGING TO ACCOMPLISH. SO THOSE
2 ARE THE MAJOR WEAKNESSES IDENTIFIED.

3 THE PRINCIPAL INVESTIGATOR HAS PREVIOUSLY
4 DEVELOPED AN INTERESTING MICROFLUIDIC DEVICE FOR PATCH
5 CLAMP. SO METHODOLOGY SEEMS GOOD FOR THAT. CLEVER USE
6 OF PREVIOUSLY DEVELOPED TECHNOLOGY. DISCUSSION AS TO
7 WHETHER EMBRYOID BODIES WERE A FEASIBLE CELL TYPE OR
8 CELL TYPES FOR USE IN THIS APPROACH. QUESTION, THERE
9 WAS A QUESTION WHETHER THE FULLY DIFFERENTIATED
10 CARDIOMYOCYTES WOULD ALSO BE CLINICALLY USEFUL. AND IT
11 APPEARS THAT IN THE MOUSE SOME OF THIS HAS BEEN DONE
12 AND THE ANSWER IS YES. SO THAT'S ALL I HAVE ON THE
13 REVIEW OF THIS PARTICULAR APPLICATION.

14 CHAIRMAN KLEIN: IS THERE A MOTION FROM THE
15 BOARD?

16 DR. LEVEY: I'LL MOVE TO KEEP IT WHERE IT IS.

17 CHAIRMAN KLEIN: DR. LEVEY MOVES WE KEEP IT
18 WHERE IT IS.

19 DR. POMEROY: SECOND.

20 CHAIRMAN KLEIN: SECOND. ANY OTHER COMMENTS?
21 IF THERE'S NO MOTION TO MOVE IT.

22 DR. BRYANT: I HAVE A COMMENT. I DO THINK
23 THIS IS A BETTER PROPOSAL THAN IT SEEMS BECAUSE I THINK
24 THERE'S A LOT OF WORK GOING INDIRECTLY IN HUMANS, AND
25 IT WOULD BE NICE TO HAVE SOME WORK IN A MODEL USING

1 HUMAN STEM CELLS AND DEVELOPING -- ONE OF THE BIGGEST
2 PROBLEMS WITH THESE KINDS OF STEM CELL IMPLANTS INTO
3 THE HEART IS THAT THEY CAN DEVELOP A SEPARATE -- THE
4 CELLS HAVE TO LINK UP WITH EACH OTHER. OTHERWISE THEY
5 BEAT SEPARATELY, AND THEN THE GRAFT KILLS YOU. SO I
6 THINK THIS IS ACTUALLY A PRETTY INTERESTING MODEL.

7 CHAIRMAN KLEIN: OKAY. YOU'RE DIRECTLY
8 ADDRESSING THE ISSUE OF SYNCHRONIZATION.

9 DR. BRYANT: YEAH.

10 CHAIRMAN KLEIN: ADDITIONAL COMMENTS?

11 MR. SHEEHY: I JUST WONDER IF IT'S BETTER
12 PROCEDURALLY TO HAVE A VOTE TO FUND WITH THE NEGATIVE
13 BEING TO LEAVE IT WHERE IT IS AS OPPOSED BECAUSE IF YOU
14 DID LOSE THE VOTE NOT TO FUND, WE WOULD STILL -- THAT
15 WOULD NOT LEAVE US WITH AN OUTCOME. WE'D HAVE TO HAVE
16 ANOTHER MOTION TO FUND. I JUST MEAN PROCEDURALLY. I
17 DON'T KNOW IF THAT MIGHT MAKE SENSE TO THE MAKER OF THE
18 MOTION.

19 DR. POMEROY: THE MOTION IS TO PUT IT IN THE
20 CATEGORY OF FUND IF MONEY IS AVAILABLE.

21 MR. SHEEHY: THAT'S WHERE IT IS RIGHT NOW.

22 CHAIRMAN KLEIN: THE MOTION IS TO KEEP IT IN
23 THAT CATEGORY.

24 DR. PENHOET: I'M TRYING TO GET A
25 CLARIFICATION. NO VOTE ON ANY OF THESE DOESN'T MEAN IT

1 GOES TO TIER 3. IT JUST STAYS WHERE IT IS; IS THAT
2 RIGHT?

3 MR. SHEEHY: NO. NO.

4 DR. PENHOET: WE DID VOTE ONE DOWN.

5 MR. SHEEHY: BUT FOR DR. BRYANT, IF SHE VOTES
6 NO ON THIS, THE IMPLICATION OF -- WHAT SHE REALLY WANTS
7 TO SAY IS THIS SHOULD BE IN TIER 1.

8 DR. LEVEY: SHE WOULD VOTE NO ON THIS.

9 CHAIRMAN KLEIN: SHE WOULD VOTE NO ON THIS
10 MOTION.

11 MR. SHEEHY: THEN WE HAVE ANOTHER MOTION.

12 CHAIRMAN KLEIN: IS THERE ANY OTHER COMMENTS?

13 DR. LEVEY: IT MAKES IT SIMPLER. IF THE
14 BOARD FEELS IT MAKES IT SIMPLER, THAT'S FINE. WE
15 CHANGE THE MOTION. IT JUST MEANS THAT IF YOU WANT TO
16 KEEP IT AT TIER 2, YOU VOTE NO.

17 CHAIRMAN KLEIN: ALL RIGHT. SO ARE YOU
18 CHANGING YOUR MOTION, DR. LEVEY?

19 DR. LEVEY: YES.

20 CHAIRMAN KLEIN: IS THE SECOND CHANGING THEIR
21 MOTION? WHOEVER SECONDED THE MOTION --

22 MS. KING: YOU WERE THE SECOND ON DR. LEVEY'S
23 MOTION.

24 CHAIRMAN KLEIN: DR. POMEROY, ARE YOU
25 CHANGING YOUR MOTION?

1 DR. POMEROY: I WILL DO ANYTHING, DR. LEVEY,
2 AT THIS POINT.

3 CHAIRMAN KLEIN: I THINK THE MOTION IS NOW TO
4 MOVE IT TO TIER 1. SO IF YOU VOTE NO, IT STAYS WHERE
5 IT IS. ALL RIGHT.

6 ANY ADDITIONAL COMMENTS FROM THE BOARD?
7 COMMENTS FROM THE BOARD? FROM THE AUDIENCE? NO
8 COMMENTS FROM THE AUDIENCE. THE CONFLICTS.

9 MS. KING: CONFLICT IS SHERRY LANSING.

10 CHAIRMAN KLEIN: ROLL CALL.

11 MS. KING: RICARDO AZZIZ.

12 DR. AZZIZ: NO.

13 MS. KING: PAUL JENNINGS. ROBERT PRICE.

14 DR. PRICE: YES.

15 MS. KING: SUSAN BRYANT.

16 DR. BRYANT: YES.

17 MS. KING: MARCY FEIT.

18 MS. FEIT: YES.

19 MS. KING: MICHAEL FRIEDMAN. MICHAEL
20 GOLDBERG.

21 MR. GOLDBERG: YES.

22 MS. KING: FRANCIS MARKLAND.

23 DR. MARKLAND: YES.

24 MS. KING: DAVID KESSLER. BOB KLEIN.

25 CHAIRMAN KLEIN: ABSTAIN.

1 MS. KING: GERALD LEVEY.
2 DR. LEVEY: SORRY I CHANGED THE MOTION. NO.
3 MS. KING: TED LOVE. RICHARD MURPHY. TINA
4 NOVA. ED PENHOET.
5 DR. PENHOET: YES.
6 MS. KING: PHIL PIZZO. CLAIRE POMEROY.
7 DR. POMEROY: NO.
8 MS. KING: FRANCISCO PRIETO. JOHN REED.
9 DUANE ROTH.
10 MR. ROTH: YES.
11 MS. KING: JOAN SAMUELSON. DAVID
12 SERRANO-SEWELL. JEFF SHEEHY.
13 MR. SHEEHY: YES.
14 MS. KING: JONATHAN SHESTACK. OSWALD
15 STEWARD.
16 DR. STEWARD: NO.
17 MS. KING: JANET WRIGHT.
18 DR. WRIGHT: YES.
19 MR. HARRISON: NINE IN FAVOR, FOUR OPPOSED,
20 AND ONE ABSTENTION.
21 CHAIRMAN KLEIN: THANK YOU. WE'RE AT NO.
22 239, WHICH WE JUST PASSED. WE'RE AT 242.
23 DR. HALL: THIS IS A NOT DISSIMILAR
24 APPLICATION IN SOME WAYS. IT'S BY A PERSON WITH
25 EXPERTISE IN BIOENGINEERING WHO HAS A NOVEL APPROACH TO

1 LOOK AT THE DIFFERENTIATION OF EMBRYONIC STEM CELLS
2 ALONG THE CARDIOMYOCYTE LINEAGE WITH THE AIM OF
3 ADDRESSING THE PROBLEM THAT WAS MENTIONED BEFORE. AND
4 THAT IS HOW DO THESE CELLS INTEGRATE WITH EACH OTHER
5 AND WITH ENDOGENOUS TISSUE SO THAT YOU GET SYNCHRONOUS
6 ELECTRICAL ACTIVITY.

7 SO THE KEY TECHNOLOGICAL POINT OF THIS GRANT
8 IS A MICROELECTRODE ARRAY IN WHICH CELLS CAN BE PLATED
9 ON AND THEN ELECTRICAL RECORDING CAN BE DONE ON THE
10 ARRAY. AND THE EXPERIMENTAL PLAN IS TO TAKE EMBRYOID
11 BODIES FROM HUMAN EMBRYONIC STEM CELLS TO PUT THEM OUT
12 ON THE MICROELECTRODE ARRAY AND THEN BY
13 ELECTROPHYSIOLOGICAL MONITORING TO FOLLOW THE
14 ELECTRICAL BEHAVIOR OF THESE EMBRYOID BODIES AS A
15 FUNCTION OF TIME TO SEE WHEN THEY ATTAIN ELECTRICAL
16 ACTIVITY, AND THEN TO SEE HOW AND WHEN THAT ACTIVITY
17 BECOMES SYNCHRONOUS.

18 SO EVERYBODY AGREES THAT THE PROBLEM IS AN
19 IMPORTANT ONE. AND ITS STRENGTHS OF THIS PROPOSAL ARE
20 JUDGED THAT IT'S A BOLD AND INNOVATIVE EXPERIMENTAL
21 STRATEGY, AND THE PROBLEM OF ORGANIZING FUNCTIONAL
22 INTEGRATION OF CELLS IS IDENTIFIED AS A KEY ONE. THE
23 CULTURE SYSTEM IS INNOVATIVE. AND I FAILED TO MENTION
24 A VERY NICE EXPERIMENT THAT GOES ALONG WITH THIS, AND
25 THAT IS, ONCE THIS IS DONE, THE EXPERIMENTER PROPOSES

1 TO CO-CULTURE NEONATAL MONOCYTES ALONGSIDE THESE
2 EMBRYOID BODIES. AND THERE IS -- I CAN'T GIVE YOU A
3 BETTER TECHNICAL DESCRIPTION, BUT IT'S DESCRIBED AS AN
4 ELECTROPHYSIOLOGICAL BARRIER BETWEEN THEM SO THAT THEY
5 PRESUMABLY START OUT INDEPENDENTLY, AND THEN TO EXAMINE
6 HOW WELL THESE EMBRYOID BODY DERIVED MYOCYTES INTEGRATE
7 INTO THE NORMAL TISSUE THAT'S DERIVED FROM NEONATAL
8 ANIMALS.

9 SO THE STRENGTHS ALSO ARE THE EXPERIENCE IN
10 THE DESIGN OF MONITORING SYSTEMS WITH
11 ELECTROPHYSIOLOGY. AND THE COLLABORATOR WILL PROVIDE
12 THE NECESSARY BACKGROUND IN STEM CELL AND CARDIOMYOCYTE
13 TECHNOLOGIES AND EXPERIENCE WITH CELL ENGRAFTMENT AND
14 MONITORING. SO THEY HAVE ALREADY GROWN A HUMAN
15 EMBRYONIC STEM CELL LINE AND GOTTEN BEADED EMBRYOID
16 BODIES AFTER DIFFERENTIATION.

17 SO THE WEAKNESSES ARE THE SUGGESTION THAT
18 EMBRYOID BODIES ARE NOT THE BEST WAY TO STUDY THIS
19 BECAUSE ONLY A SMALL NUMBER OF THESE MAY, IN FACT, END
20 UP AS BEADING CARDIOMYOCYTES, AND THE SUGGESTION IS
21 THAT THEY WOULD BE SERVED TO USE HOMOGENEOUS CULTURES
22 OF HUMAN EMBRYONIC STEM CELLS WITHOUT EMBRYONIC BODY
23 FORMATION, AND THEN THROUGH THE USE OF FACTORS,
24 PRESUMABLY DISCOVERED BY APPROACHES SUCH AS WE HEARD
25 BEFORE AND OTHERS, THEN WOULD BE TO DIRECT THEM DOWN

1 THE CARDIOMYOCYTE DIFFERENTIATION PATHWAY AND STUDY
2 THEM IN THAT WAY.

3 A SECOND CRITICISM IS IT'S FOCUSED ALMOST
4 ENTIRELY ON ELECTRICAL SIGNALING. IT WOULD BE NICE TO
5 HAVE MOLECULAR MARKERS OF DIFFERENTIATION THAT COULD
6 CORRESPOND TO THE ELECTROPHYSIOLOGICAL MATURATION TO
7 PROVIDE A COMMON LANGUAGE WITH DEVELOPMENTAL
8 BIOLOGISTS. THE PROPOSAL LACKS A CLEAR DISCUSSION OF
9 METRICS THAT COULD BE USED TO COMPARE THE SUCCESS FROM
10 ONE DIFFERENTIATION INTEGRATION FROM ONE EXPERIMENT TO
11 THE NEXT. AND THEY DO NOT HAVE POSITIVE CONTROLLED
12 EXPERIMENTS IN WHICH THEY USE PRIMARY CARDIOMYOCYTES
13 AGAINST WHICH THESE CELLS COULD BE EVALUATED.

14 SO I THINK THERE WAS -- A POINT IN THE
15 DISCUSSION THAT'S RELEVANT PERHAPS IS THAT SOME
16 DISCUSSION IS THAT THE RATIONALE FOR CONDUCTING THESE
17 STUDIES WITH HUMAN RATHER THAN MOUSE EMBRYONIC STEM
18 CELLS GIVEN THAT IT'S NOT CLEAR THAT OUR KNOWLEDGE IS
19 YET AT THE STAGE FOR DOING THESE WITH HUMAN CELLS. ON
20 THE OTHER HAND, OTHERS OR ANOTHER PERSON, WHATEVER IT
21 IS, IT WAS ARGUED, IT SAYS, THAT HUMAN STUDIES MIGHT BE
22 MORE COMPELLING GIVEN THE ULTIMATE CLINICAL GOAL.

23 CHAIRMAN KLEIN: OKAY. DR. PENHOET.

24 DR. PENHOET: QUESTION FOR ZACH. THESE TWO
25 GRANTS THAT WE'VE JUST BEEN LOOKING AT, WERE OUTSIDE

1 EXPERTS CONSULTED ON THESE TWO GRANTS?

2 DR. HALL: YES. ACTUALLY WE HAD -- I THINK
3 IT'S FAIR TO SAY --

4 DR. PENHOET: AND DID THEIR OPINIONS ABOUT
5 THESE --

6 DR. HALL: -- WE HAD EXCELLENT OUTSIDE EXPERT
7 ON THIS, WHOSE PERFORMANCE WAS SO GOOD, WE'RE GOING TO
8 SUGGEST THAT HE BECOME A MEMBER OF THE COMMITTEE. AND
9 I THINK IT'S INTERESTING THAT -- WELL, YEAH.

10 DR. PENHOET: AND THE NEXT QUESTION IS WERE
11 THEIR VIEWS ON THIS ROUGHLY COINCIDENT WITH THE SCORES
12 THAT ENDED UP ON THESE? DID THEY HAVE A DIFFERENT VIEW
13 THAN OUR FORMAL REVIEWERS, OR WERE THEY SIMILAR VIEWS?

14 DR. HALL: I DON'T REMEMBER. I WOULD HAVE
15 TO -- WE DON'T HAVE THAT INFORMATION. I THINK THEY
16 DON'T VOTE, OF COURSE. AND I WOULD SAY, REMEMBERING
17 THE CARDIAC DISCUSSION IN GENERAL, NOT THESE GRANTS IN
18 PARTICULAR, THAT THE DISCUSSION WAS QUITE LIVELY. AND
19 THE OUTSIDE PERSON WAS, I THINK, CONSIDERED EQUIVALENT
20 TO THOSE -- I MEAN THESE WERE GOOD DISCUSSIONS. THIS
21 PERSON COULD HAVE BEEN A MEMBER OF THE COMMITTEE. THEY
22 DID NOT VOTE, IN FACT. THEY DID, HOWEVER, RECOMMEND A
23 SCORE. THAT IS THE WAY IT WORKS.

24 THE PRIMARY REVIEWER SAYS IN THE END I WOULD
25 GIVE THIS SUCH-AND-SUCH A SCORE. IN FACT, THEY START

1 THE DISCUSSION BY DOING THIS. THEN THERE'S A
2 DISCUSSION. THEN THEY'RE ASKED AGAIN WHAT THEIR SCORE
3 IS. ALMOST ALWAYS IF THEY'RE APART, THEY MOVE
4 TOGETHER. I CAN'T TELL YOU, BUT MY MEMORY IS, AND
5 ANYBODY ELSE MAY CONTRADICT ME IF I'M WRONG, BUT THESE
6 GOT -- THESE GRANTS IN GENERAL GOT A VERY GOOD
7 DISCUSSION ACROSS THE BOARD BY BOTH INTERNAL AND
8 EXTERNAL PEOPLE.

9 DR. CHIU: MY RECOLLECTION IS THAT BECAUSE WE
10 GOT THE SAME SPECIALISTS IN CARDIOMYOCYTES, THAT THESE
11 PROBABLY WERE REVIEWED VERY CLOSE TO EACH OTHER WITHOUT
12 LARGE INTERVENING TIMES. AND BECAUSE THIS PARTICULAR
13 EXPERT WAS HELD IN VERY HIGH REGARD, THAT HIS OR HER
14 RECOMMENDATIONS WERE TAKEN CLOSE TO HEART.

15 DR. HALL: THERE IS A KIND OF PARALLEL IN
16 THAT THESE ARE BOTH ESSENTIALLY PEOPLE WHO ARE VERY
17 STRONG IN ENGINEERING, WHO THEN WANT TO APPLY IT TO
18 CARDIOMYOCYTE. I THINK BOTH THEIR EXPERIENCE AND THEIR
19 INEXPERIENCE SHOWS IN THE GRANT PROPOSAL. THAT WOULD
20 BE MY COMMENT ON IT.

21 CHAIRMAN KLEIN: I THINK --

22 DR. PRICE: CAN WE DISCUSS THIS NOW, OR WE
23 HAVE TO HAVE A MOTION FIRST?

24 CHAIRMAN KLEIN: WE HAVE TO -- WE SHOULD HAVE
25 A MOTION TO HAVE A DISCUSSION OF THE GRANT. BUT YOU

1 CAN ALSO CHANGE YOUR MOTION OR WITHDRAW YOUR MOTION.

2 DR. PRICE: I'LL MAKE A MOTION TO PUT IT IN
3 THE NONFUNDING FUNDING CATEGORY.

4 CHAIRMAN KLEIN: WELL, YOU CAN MAKE A MOTION
5 AND SAY WHY.

6 DR. PRICE: IF I DON'T HAVE A SECOND, THEN WE
7 CAN'T HAVE THE DISCUSSION.

8 CHAIRMAN KLEIN: IN MAKING THE MOTION --

9 DR. PRICE: I MAKE A MOTION THAT WE PLACE
10 THIS IN THE NONFUNDED CATEGORY. MY REASON FOR THAT IS
11 I'M SUFFERING COGNITIVE DISSONANCE. THIS IS
12 RECOMMENDED FOR FUNDING, AND THE DISCUSSION IN THE
13 WEAKNESSES I SEE, AT LEAST FROM MY LAY PERSPECTIVE, IS
14 UTTERLY DEVASTATING. I DON'T SEE WHAT'S LEFT OF THIS
15 RESEARCH DESIGN AND THIS PROPOSAL AFTER THIS DISCUSSION
16 OF WEAKNESSES. WHEN I LOOK AT THE STRENGTHS, IT SEEMS
17 TO ME MOST OF THE STRENGTHS ARE WHAT THIS TEAM HAS DONE
18 IN THE PAST, AND VERY LITTLE DISCUSSION OF WHAT THIS
19 ACTUAL PROPOSAL IS ABOUT.

20 MS. KING: CONFLICTS?

21 CHAIRMAN KLEIN: CONFLICTS.

22 MS. KING: MICHAEL GOLDBERG AND PHIL PIZZO.

23 CHAIRMAN KLEIN: OKAY. ADDITIONAL
24 DISCUSSION? THERE IS A MOTION AND A SECOND. IS THERE
25 PUBLIC COMMENT?

1 MR. HARRISON: TO MOVE THE APPLICATION TO
2 TIER 3.

3 DR. PENHOET: YES VOTE MEANS MOVE IT TO TIER
4 3. A NO VOTE MEANS LEAVE WHERE IT IS.

5 DR. STEWARD: I THINK THE OTHER ONE THAT WE
6 VOTED TO MOVE TO TIER 3 WAS ON THE BASIS OF IT NOT
7 NEEDING TO USE HUMAN EMBRYONIC STEM CELLS. AND I
8 THOUGHT I HEARD SOMETHING ALONG THOSE LINES IN THIS ONE
9 AS WELL. I JUST WAS WONDERING IF, ZACH, YOU COULD
10 MAYBE SAY SOMETHING ABOUT THE RELATIVE STRENGTH OF THAT
11 COMMENT BETWEEN TWO THOSE GRANTS THAT WE'RE COMPARING
12 HERE.

13 DR. HALL: LET ME NOT COMPARE THE OTHER ONE.
14 LET ME JUST SPEAK TO THIS ONE, WHICH I'D HAVE TO THINK
15 BACK AND CHECK BACK ON THE OTHER ONE. PART OF IT IS
16 SINCE ARLENE AND I ARE ALTERNATING, I HAVEN'T LISTENED
17 TO EVERY DISCUSSION. I'VE BEEN PREPARING ONE WHILE I
18 DO THE OTHER.

19 CHAIRMAN KLEIN: IT'S ALL RIGHT TO ANSWER
20 RELATED TO THIS GRANT.

21 DR. HALL: LET ME JUST ANSWER JUST FOR THIS
22 ONE ALONE. I THINK THE IDEA IS THERE'S NOTHING
23 INTRINSICALLY IN THESE EXPERIMENTS THAT COULD NOT BE
24 DONE WITH MICE, AND THE SYSTEM MIGHT BE EXPERIMENTALLY
25 EASIER. HOWEVER, AT LEAST ONE PERSON SAID IN THE

1 DISCUSSION THAT, GIVEN THAT THE AIM MAY BE ULTIMATELY
2 ELECTROPHYSIOLOGICAL USE OF THESE AND INTEGRATION, THEN
3 IT MIGHT BE BETTER JUST TO GO AHEAD AND BE WORKING WITH
4 HUMAN IN SPITE OF THE FACT OF ITS DIFFICULTY. SO IT'S
5 A PLUS OR MINUS.

6 CHAIRMAN KLEIN: I THINK THAT THERE WAS A
7 COMMENT SPECIFICALLY THAT THEY FELT THAT THE ELECTRICAL
8 SYNCHRONIZATION WITH HUMANS MIGHT BE SIGNIFICANTLY
9 DIFFERENT. AND THAT SINCE PEOPLE ARE MOVING
10 AGGRESSIVELY INTO THIS FIELD, THIS IS A CRITICAL PIECE
11 OF INFORMATION THAT'S NECESSARY. SO THAT THEY
12 RECOMMENDED IT ACTUALLY BE DONE IN HUMANS AS A GREAT
13 CONTRIBUTION TO A VITAL LINK IN MOVING THIS AREA
14 FORWARD. THIS WAS THE CONTEXT.

15 DR. STEWARD: I THINK EVEN HAVING HEARD THAT,
16 I'M GOING TO SPEAK IN FAVOR OF THE MOTION TO MOVE IT TO
17 TIER 3, PARTIALLY BECAUSE OF CONSISTENCY. I DON'T HEAR
18 A COMPELLING REASON WHY THIS SHOULD BE DONE WITH HUMAN
19 EMBRYONIC STEM CELLS, AND I THINK THE SAME KIND OF
20 ARGUMENT COULD BE MADE FOR THE OTHER GRANT THAT WE DID
21 VOTE TO MOVE TO TIER 3. I THINK THAT BY VIRTUE OF
22 BEING CONSISTENT, IT MAKES SENSE TO DO THAT HERE AS
23 WELL.

24 DR. PENHOET: ONE THING THAT IS GOING THROUGH
25 MY MIND ABOUT BOTH OF THESE GRANTS IS, IN LOOKING

1 THROUGH MOST OF WHAT IS IN TIER 1 NOW, MOST OF IT IS
2 VERY FAR FROM THE CLINIC. WE'RE FUNDING A LOT OF VERY
3 BASIC RESEARCH IN THIS FIELD. SINCE PEOPLE ARE --
4 WHETHER THEY'RE COWBOYS OR NOT IS BESIDE THE POINT.
5 PEOPLE ARE DOING STUDIES TODAY OF STEM CELL TRANSPLANTS
6 INTO HEARTS, AND THESE TWO SEEM LIKE THEY MIGHT BE
7 CLOSER TO CLINICAL APPLICATION IF THEY WORK THAN MANY
8 OF THE OTHER GRANTS. IN MY THINKING ABOUT BOTH OF
9 THESE, IT'S HARD FOR ME TO TELL THE DIFFERENCE, IT'S
10 NOT MY FIELD.

11 THAT'S WHY I ASKED IF EXPERTS WERE CONSULTED
12 ABOUT THIS. IT SEEMS TO ME THAT THERE IS SOME VALUE TO
13 BE ASCRIBED TO THIS IN MY MIND BECAUSE OF THE POTENTIAL
14 FOR NEAR-TERM APPLICATION IN HUMANS. AND THERE ARE NOT
15 MANY GRANTS IN THAT CATEGORY AS FAR AS I CAN TELL.

16 DR. MARKLAND: MY CONCERN WITH THIS AS
17 OPPOSED TO THE OTHER WAS A COMMENT IN THE DISCUSSION
18 WHICH INDICATES THAT THE APPLICANT'S PUBLICATION RECORD
19 AND PERHAPS LACK OF PRODUCTIVITY, WHICH IS OF CONCERN
20 IN THIS REGARD.

21 DR. HALL: IN FAIRNESS, I DIDN'T MENTION THAT
22 BECAUSE IF YOU READ THE NEXT LINE, IT SAYS SOMEBODY
23 SAYS, WELL, THEY PUBLISHED, BUT MOSTLY IN
24 BIOENGINEERING JOURNALS, AND I DIDN'T KNOW HOW TO
25 EVALUATE THAT. IT SEEMED TO ME AS SORT OF OFFSETTING,

1 SO I JUST LEFT IT OUT. IT'S THERE FOR EVERYONE TO
2 READ. IT'S IN THE COMMENTS. I DON'T KNOW QUITE WHAT
3 WEIGHT TO PUT IT. IT IS THERE. YOU ARE CORRECT. IT
4 WAS PART OF THE THING.

5 DR. POMEROY: ON THE OTHER HAND, THIS GRANT
6 IS ONE THAT SPECIFICALLY NOTES THAT PRELIMINARY RESULTS
7 WERE OBTAINED AND INCLUDED --

8 CHAIRMAN KLEIN: THAT'S RIGHT.

9 DR. POMEROY: -- THAT SHOWED THE ABILITY TO
10 GROW THE LINE AND DERIVE BEADING EMBRYOID BODIES. SO
11 THERE ARE -- THERE IS A TRACK RECORD EVIDENT WITH THIS
12 PERSON OR FAMILIARITY AT LEAST.

13 CHAIRMAN KLEIN: RIGHT. ALL RIGHT. GOOD
14 DISCUSSION. ANY OTHER COMMENTS?

15 DR. STEWARD: I'LL JUST SAY THAT ED PENHOET
16 HAS SWAYED ME TO VOTE THE OTHER WAY, JUST BY WAY OF --

17 DR. PRICE: I'LL HAVE TO VOTE AGAINST MY OWN
18 RESOLUTION.

19 CHAIRMAN KLEIN: PUBLIC COMMENT? NO PUBLIC
20 COMMENT. ANY ADDITIONAL MEMBERS' COMMENT? NO MEMBERS'
21 COMMENT. CONFLICTS.

22 DR. PRICE: CAN I WITHDRAW THE MOTION?

23 CHAIRMAN KLEIN: AT THIS POINT, SINCE WE'VE
24 HAD A FULL DISCUSSION ON THE MOTION, I THINK WE SHOULD
25 HAVE A VOTE. IT WOULD BE BENEFICIAL. THE CONFLICTS.

1 MS. KING: CONFLICTS: MICHAEL GOLDBERG AND
2 PHIL PIZZO.
3 CHAIRMAN KLEIN: OKAY. ROLL CALL.
4 MS. KING: AGAIN, THE MOTION IS TO MOVE IT TO
5 TIER 3, TO MOVE DOWN TO TIER 3.
6 DR. PENHOET: NO VOTE LEAVES IT IN TIER 2.
7 MS. KING: NO VOTE LEAVES IT WHERE IT IS.
8 YES VOTE MOVES IT DOWN.
9 RICARDO AZZIZ.
10 DR. AZZIZ: NO.
11 MS. KING: PAUL JENNINGS. ROBERT PRICE.
12 DR. PRICE: NO.
13 MS. KING: SUSAN BRYANT.
14 DR. BRYANT: NO.
15 MS. KING: MARCY FEIT.
16 MS. FEIT: NO.
17 MS. KING: MICHAEL FRIEDMAN.
18 MS. KING: FRANCIS MARKLAND.
19 DR. MARKLAND: YES.
20 MS. KING: DAVID KESSLER. BOB KLEIN.
21 CHAIRMAN KLEIN: NO.
22 MS. KING: SHERRY LANSING.
23 MS. LANSING: NO.
24 MS. KING: GERALD LEVEY.
25 DR. LEVEY: NO.

1 MS. KING: TED LOVE. RICHARD MURPHY. TINA
2 NOVA. ED PENHOET.
3 DR. PENHOET: NO.
4 MS. KING: CLAIRE POMEROY.
5 DR. POMEROY: NO.
6 MS. KING: FRANCISCO PRIETO. JOHN REED.
7 DUANE ROTH.
8 MR. ROTH: NO.
9 MS. KING: JOAN SAMUELSON. DAVID
10 SERRANO-SEWELL. JEFF SHEEHY.
11 MR. SHEEHY: NO.
12 MS. KING: JONATHAN SHESTACK. OSWALD
13 STEWARD.
14 DR. STEWARD: NO.
15 MS. KING: JANET WRIGHT.
16 DR. WRIGHT: NO.
17 CHAIRMAN KLEIN: OKAY. THANK YOU.
18 DR. STEWARD: MOVE ON, AND AT THE RISK OF
19 THOROUGHLY CONFUSING EVERYTHING, I WONDER, GIVEN THE
20 DISCUSSION -- I'LL JUST MAKE THE MOTION. I WOULD LIKE
21 TO CONSIDER MOVING THIS ACTUALLY UP NOW, AND PRIMARILY
22 BASED ON DR. PENHOET'S CONVINCING ARGUMENT.
23 CHAIRMAN KLEIN: YOU CAN MAKE THAT MOTION.
24 MR. HARRISON: JUST FOR THE RECORD, THE VOTE
25 ON THE MOTION TO MOVE APPLICATION 242 TO TIER 3 WAS ONE

1 IN FAVOR, 13 OPPOSED.

2 CHAIRMAN KLEIN: ALL RIGHT. DR. STEWARD'S
3 MOTION IS TO MOVE IT INTO TIER 1. THERE'S A SECOND?

4 DR. WRIGHT: SECOND.

5 CHAIRMAN KLEIN: WE'VE HAD A VIBRANT DEBATE.
6 IF THERE'S ANY OTHER COMMENTS? ALL RIGHT. ANY
7 COMMENTS FROM THE AUDIENCE? NO COMMENTS FROM THE
8 AUDIENCE. CONFLICTS.

9 MS. KING: MICHAEL GOLDBERG, PHIL PIZZO.

10 CHAIRMAN KLEIN: CALL THE ROLL.

11 MS. KING: RICARDO AZZIZ.

12 DR. AZZIZ: NO.

13 MS. KING: PAUL JENNINGS. ROBERT PRICE.

14 DR. PRICE: NO.

15 MS. KING: SUSAN BRYANT.

16 DR. BRYANT: YES.

17 MS. KING: MARCY FEIT.

18 MS. FEIT: YES.

19 MS. KING: MICHAEL FRIEDMAN. FRANCIS
20 MARKLAND.

21 DR. MARKLAND: NO.

22 MS. KING: DAVID KESSLER. BOB KLEIN.

23 CHAIRMAN KLEIN: YES.

24 MS. KING: SHERRY LANSING.

25 MS. LANSING: YES.

1 MS. KING: GERALD LEVEY.
2 DR. LEVEY: NO.
3 MS. KING: TED LOVE. RICHARD MURPHY. TINA
4 NOVA. ED PENHOET.
5 DR. PENHOET: NO.
6 MS. KING: CLAIRE POMEROY.
7 DR. POMEROY: NO.
8 MS. KING: FRANCISCO PRIETO. JOHN REED.
9 DUANE ROTH.
10 MR. ROTH: YES.
11 MS. KING: JOAN SAMUELSON. DAVID
12 SERRANO-SEWELL. JEFF SHEEHY.
13 MR. SHEEHY: YES.
14 MS. KING: JONATHAN SHESTACK. OSWALD
15 STEWARD.
16 DR. STEWARD: YES.
17 MS. KING: JANET WRIGHT.
18 DR. WRIGHT: YES.
19 MR. HARRISON: THE MOTION CARRIES EIGHT YES
20 VOTES, SIX NO VOTES.
21 CHAIRMAN KLEIN: OKAY. WE ARE AT NO. 377.
22 DR. CHIU: 377, THE IMMUNOLOGICAL NICHE,
23 EFFECTIVE IMMUNOSUPPRESSANT DRUGS ON STEM CELL
24 PROLIFERATION, GENE EXPRESSION, AND DIFFERENTIATION IN
25 A MODEL OF SPINAL CORD INJURY. THIS IS AN APPLICATION

1 THAT HAS A LOT OF DIFFERENT ELEMENTS IN IT, BUT THE
2 CORE OF IT IS TO TEST A RATHER UNDERSTUDIED AREA OF
3 LOOKING AT THE DIRECT EFFECTS OF IMMUNOSUPPRESSIVE
4 DRUGS, A VARIETY OF IMMUNOSUPPRESSIVE DRUGS ON THE
5 BEHAVIOR, THE PROLIFERATION, AND THE DIFFERENTIATION
6 SURVIVAL OF HUMAN EMBRYONIC STEM CELLS AS WELL AS OTHER
7 STEM CELLS AND AS WELL AS NEUROPROGENITORS DERIVED FROM
8 HUMAN EMBRYONIC STEM CELLS.

9 AND IN TERMS OF CLINICAL APPLICATION, THIS IS
10 IMPORTANT BECAUSE, AS WE KNOW, WHEN IT GOES TO
11 TRANSPLANTATION, IMMUNOSUPPRESSIVE DRUGS ARE HIGHLY
12 LIKELY TO BE USED IN PATIENTS. SO THE DIRECT EFFECT OF
13 IMMUNOSUPPRESSIVE DRUGS ON THE BEHAVIOR OF THESE CELLS
14 WOULD BE AN IMPORTANT CONCERN.

15 STRENGTHS, OF COURSE, IS BECAUSE IT'S A NOVEL
16 AREA OF INVESTIGATION IMPORTANT FOR CLINICAL
17 TRANSLATION. THE PI HAS SOME USEFUL INFORMATION
18 ALREADY PUBLISHED IN THE FIELD AND PROPOSES FEASIBLE
19 EXPERIMENTS TO BE DONE.

20 I SHOULD MENTION THAT THE PI THEN INTENDS TO
21 USE AN IN VIVO MODEL THAT INVOLVES SPINAL CORD INJURY
22 IN RODENTS. HAS EXCELLENT INFRASTRUCTURE IN AN
23 ACADEMIC ENVIRONMENT WHERE THERE ARE CORES AND
24 EXCELLENT COLLABORATORS IN THE SPINAL CORD INJURY
25 MODEL.

1 THE WEAKNESS, HOWEVER, IS THAT THE STUDY
2 DOESN'T REALLY ANSWER THE MAIN QUESTION OF IMMUNE
3 SUPPRESSION BY SOME OF THESE INHIBITORS OR OTHER
4 FACTORS ARE ACTUALLY RESPONSIBLE FOR THE POOR SURVIVAL
5 OF CELLS WHEN HUMAN EMBRYONIC STEM CELLS OR THEIR
6 PRODUCTS ARE TRANSPLANTED TO SPINAL CORD INJURY BECAUSE
7 THE INDIVIDUAL CHOOSES TO USE A NON-SCID-HU MODEL AND
8 OTHER IMMUNO-DEFICIENT ANIMALS TO DO THIS STUDY IN, AND
9 THESE ANIMALS MAY HAVE INHERENT MECHANISMS OTHER THAN
10 THE ABSENCE OF IMMUNE RESPONSE THAT AFFECT THE SURVIVAL
11 OF HUMAN EMBRYONIC STEM CELLS. SO THIS APPEARS TO BE A
12 MAJOR CONCERN.

13 I WILL JUST GO OVER QUICKLY SOME OF THE
14 POINTS POINTED OUT, THAT CURRENTLY THERE IS CONFLICTING
15 DATA ON THE EFFECTS OF IMMUNOSUPPRESSIVE DRUGS; SO,
16 THEREFORE, THIS PARTICULAR AREA IS SOMETHING MUCH
17 NEEDED TO BE STUDIED.

18 THE REVIEW ENCOMPASSED A LENGTHY DISCUSSION
19 REGARDING WHAT LITERATURE THERE IS CURRENTLY AVAILABLE
20 ON THE TOXIC EFFECTS OF THESE DRUGS ON CELLS. SO WHEN
21 THE PI STATES THAT THERE IS NO KNOWLEDGE OF THESE
22 AGENTS IN CLINICAL TRIALS, ONE REVIEWER POINTED TO THE
23 PRESENCE ACTUALLY OF PUBLISHED DATA IN A PARKINSON'S
24 MODEL, NOT A SPINAL CORD INJURY MODEL, BUT CERTAINLY A
25 MODEL WHERE THERE'S TRANSPLANTATION OCCURRING LOOKING

1 AT THE EFFECTS ON TRANSPLANTED CELLS.

2 AND THEN THERE WAS SOME IRRITATING POINTS
3 MADE, I THINK, THAT DAMPENED A LITTLE BIT ENTHUSIASM,
4 SUCH AS THE PI BEING OVERCONFIDENT IN STATING THAT
5 THERE WOULD BE, QUOTE, NO PROBLEM WITH ANY PART OF THE
6 WORK, UNQUOTE, WHICH ANNOYED THE REVIEWERS. BUT THE PI
7 DIDN'T MENTION ANYTHING ABOUT FEDERAL FUNDING. IN
8 GENERAL, IT WAS AN IMPORTANT QUESTION, BUT THE
9 REVIEWERS THOUGHT THAT THE ANIMAL MODEL HAD SOME
10 CONCERNS WITH THE ANIMAL MODEL USED.

11 CHAIRMAN KLEIN: I'D ASK THE BOARD TO
12 DISREGARD THE OVERCONFIDENCE POTENTIALLY OF THE
13 INVESTIGATOR, BUT THIS IS OPEN FOR CONSIDERATION OF A
14 MOTION. IS THERE ANY MEMBER WANTS TO MAKE A MOTION ON
15 THIS ITEM? I DON'T SEE ANY MEMBER WANTING TO MAKE A
16 MOTION. IF THERE IS NOT A MEMBER, WE WILL PASS THE
17 NEXT ITEM.

18 WE'LL PASS THE NEXT ITEM.

19 DR. HALL: THIS IS 387, WHICH IS A PROPOSAL
20 FOR PREDIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS
21 FOR CNS CORTICAL APPLICATIONS. AND BASICALLY THE IDEA
22 IS TO START WITH HUMAN EMBRYONIC STEM CELLS, THEN TO
23 TRY TO DIFFERENTIATE THEM IN CULTURE INTO CELLS THAT
24 THEN CAN BE USED FOR TRANSPLANTATION. AND THE GENERAL
25 IDEA IS TO LOOK AT -- USE TRANSCRIPTION FACTORS WHICH

1 ARE THOUGHT TO BE IMPORTANT IN THE DEVELOPMENT, TO LOOK
2 AT EXPRESSION OF ENDOGENOUS TRANSCRIPTION FACTORS
3 STIMULATED BY DIFFERENT CONDITIONS IN WHICH MODULATORS,
4 GROWTH FACTORS, AND OTHERS WILL BE VARIED TO MIMIC
5 THOSE THAT THE CELLS WOULD EXPERIENCE DURING
6 DEVELOPMENT. THEN THOSE FACTORS THAT ARE IDENTIFIED
7 WOULD THEN BE EXPRESSED IN HUMAN EMBRYONIC STEM CELLS
8 DOING DIFFERENTIATION TO SEE IF A PARTICULAR
9 TRANSCRIPTION CAN DIRECT DEVELOPMENT OF AN IN VITRO
10 PHENOTYPE.

11 SO THEN THESE PREDIFFERENTIATED CELLS WOULD
12 BE POTENTIALLY USED FOR TRANSPLANTATION AND IN VITRO
13 SOURCES OF HUMAN CORTICAL AND RETINAL NEURONS FOR DRUG
14 TESTING, AND THEY'RE GOING TO USE SEVERAL DIFFERENT
15 HUMAN EMBRYONIC STEM CELL LINES.

16 THE REVIEWERS AGREED THAT THE POTENTIAL
17 SIGNIFICANCE WAS IMPORTANT IN THAT THERE'S ONLY LIMITED
18 REPORTS ON DIFFERENTIATION OF NEUROPROGENITORS FROM
19 EMBRYONIC STEM CELLS THAT POSSESS PHENOTYPES OF
20 CORTICAL CELLS IN THE FOREBRAIN, AND THAT UNDERSTANDING
21 DIFFERENTIATION OF FOREBRAIN NEURONS IS NOVEL IN THIS
22 REGARD.

23 THE STRENGTHS OF THE PROPOSAL IS IT'S AN
24 IMPORTANT QUESTION, AND THERE ARE IMPLICATIONS OF BEING
25 ABLE TO GENERATE THESE CELLS, AND THEY WILL BE LOOKING

1 AT, IN PARTICULAR, A SINGLE TRANSCRIPTION FACTOR
2 EXPRESSED BY FOREBRAIN PROGENITORS. AND THEY HAVE SOME
3 PRELIMINARY DATA.

4 THE WEAKNESSES ARE THAT THE PI HAS A LARGE
5 LIST OF GROWTH FACTORS AND PROTEINS FROM THE MATRIX
6 THAT WILL INDUCE THE FOREBRAIN PROGENITORS, BUT HAD NO
7 CLEAR PLAN OF HOW THE EXPERIMENTS WOULD BE DONE. HOW
8 WILL THE VARIOUS FACTORS BE PRIORITIZED? HOW WILL IT
9 BE APPLIED? SINGLY? IN COMBINATION? IN SEQUENCE,
10 ETC.? THERE'S JUST A LACK OF DESCRIPTION. THE SAME IS
11 TRUE OF THE MARKER EXPERIMENTS, WHICH JUST GIVE A LIST
12 OF MARKERS. IN THIS SENSE THE PROPOSAL LACKS A STRONG
13 RESEARCH PLAN WITH A CLEAR RATIONALE OF WHICH FACTORS
14 OR MARKERS ARE LIKELY TO BE IMPORTANT AND WHY THEY WILL
15 BE CHOSEN.

16 A RELATED WEAKNESS IS THAT THE PROPOSAL IS IN
17 SOME WAYS BIOLOGICALLY NAIVE, AND THE INVESTIGATOR IS
18 NOT CONVERSANT WITH THE RELEVANT NEURODEVELOPMENT
19 LITERATURE. THE COMMENT WAS MADE THAT THE APPLICANT
20 APPEARS NOT TO UNDERSTAND, FOR EXAMPLE, THAT THERE'S
21 MORE THAN ONE CORTICAL LINEAGE IN THE FOREBRAIN; THAT
22 IS, TO TALK ABOUT FOREBRAIN NEURONS IS NOT MEANINGFUL.
23 WHAT KIND OF NEURONS ARE YOU TALKING ABOUT?

24 SO THE DISCUSSION, THERE WAS SOME
25 DISAGREEMENT AND DISCUSSION ON THE SIGNIFICANCE OF THE

1 PRELIMINARY DATA AND WHETHER THE INVESTIGATOR HAS THE
2 REQUISITE BIOLOGICAL EXPERTISE TO CARRY OUT THE
3 PROJECT. I THINK THE SCORE REFLECTS THE FACT THAT
4 ALTHOUGH THERE WERE A NUMBER OF WEAKNESSES, THE PROJECT
5 WAS IMPORTANT, AND THIS IS A BEGINNING INVESTIGATOR.

6 CHAIRMAN KLEIN: ALL RIGHT. IS THERE A
7 MOTION TO MOVE ON THIS ITEM?

8 DR. POMEROY: I'LL MAKE A MOTION. MY MOTION
9 IS TO MOVE THIS TO TIER 3. WHEN I SEE A REVIEW THAT
10 SAYS THERE ISN'T AN EXPERIMENTAL PLAN, I CANNOT JUSTIFY
11 APPROPRIATING \$300,000 A YEAR.

12 CHAIRMAN KLEIN: ALL RIGHT. IS THERE A
13 SECOND?

14 DR. AZZIZ: SECOND.

15 CHAIRMAN KLEIN: CONFLICTS.

16 MS. KING: BRYANT, LANSING, AND STEWARD.

17 CHAIRMAN KLEIN: COMMENTS? NO COMMENTS FROM
18 THE BOARD. FROM THE PUBLIC? NO COMMENTS FROM THE
19 PUBLIC. REPEAT THE CONFLICTS AND PLEASE HAVE THE ROLL
20 CALL.

21 MS. KING: BRYANT, LANSING, AND STEWARD.

22 RICARDO AZZIZ.

23 DR. AZZIZ: FOR.

24 MS. KING: PAUL JENNINGS. ROBERT PRICE.

25 DR. PRICE: YES.

1 MS. KING: MARCY FEIT.
2 MS. FEIT: YES.
3 MS. KING: MICHAEL FRIEDMAN. MICHAEL
4 GOLDBERG.
5 MR. GOLDBERG: YES.
6 MS. KING: FRANCIS MARKLAND.
7 DR. MARKLAND: YES.
8 MS. KING: DAVID KESSLER. BOB KLEIN.
9 CHAIRMAN KLEIN: YES.
10 MS. KING: GERALD LEVEY.
11 DR. LEVEY: YES.
12 MS. KING: TED LOVE. RICHARD MURPHY. TINA
13 NOVA. ED PENHOET.
14 DR. PENHOET: YES.
15 MS. KING: PHIL PIZZO. CLAIRE POMEROY.
16 DR. POMEROY: YES.
17 MS. KING: FRANCISCO PRIETO. JOHN REED.
18 DUANE ROTH.
19 MR. ROTH: YES.
20 MS. KING: JOAN SAMUELSON. DAVID
21 SERRANO-SEWELL. JEFF SHEEHY.
22 MR. SHEEHY: YES.
23 MS. KING: JONATHAN SHESTACK. JANET WRIGHT.
24 DR. WRIGHT: YES.
25 CHAIRMAN KLEIN: WE ARE ON 413, NO. 413.

1 WHAT ARE THE CONFLICTS?

2 MR. HARRISON: FOR THE RECORD, THE MOTION
3 WITH RESPECT TO MOVING 387 TO TIER 3 WAS PASSED WITH 12
4 YES VOTES AND NO NO VOTES.

5 CHAIRMAN KLEIN: AND THE CONFLICTS FOR 413,
6 PLEASE.

7 MS. KING: BRYANT, LANSING, AND STEWARD.

8 CHAIRMAN KLEIN: THANK YOU.

9 DR. CHIU: APPLICATION 413 FROM A NEWLY
10 INDEPENDENT INVESTIGATOR ENTITLED "USING HUMAN
11 EMBRYONIC STEM CELLS TO TREAT RADIATION-INDUCED STEM
12 CELL LOSS - BENEFITS VERSUS CANCER RISK." HERE IS ONE
13 WHERE THE TITLE APPARENTLY DOES NOT QUITE FIT THE
14 EXPERIMENTAL PLAN PROPOSED.

15 THE IDEA IS THAT RADIATION SELECTIVELY KILLS
16 NEUROPROGENITOR CELLS. AND THESE EXPERIMENTS ARE TO
17 SEE IF LOCAL IRRADIATION, SOMETHING THAT MANY PATIENTS
18 OFTEN GET TREATED WITH, CHANGES PHENOTYPES OF HUMAN
19 EMBRYONIC STEM CELLS AND STEM CELL DERIVED PROGENITORS
20 THAT ARE TRANSPLANTED INTO THE IRRADIATED TISSUE.

21 SO THIS THE REVIEWERS FOUND TO BE VERY
22 INNOVATIVE AND AN ORIGINAL APPLICATION INVOLVING OF
23 COMMON OCCURRING CLINICAL SITUATION BECAUSE IRRADIATION
24 IS FREQUENTLY USED TO TREAT CANCERS.

25 THE QUESTION IS WHAT DOES IRRADIATION DO TO

1 IMPLANTED STEM CELL FATES AND THEIR DIFFERENTIATION?
2 SO ONE POINT IS RAISED THAT THE AUTHOR SUGGESTS THAT
3 IRRADIATION OF THE BRAIN IS LIKELY TO RESULT IN
4 IMPLANTED STEM CELLS MOVING TOWARD THE ASTROCYTIC FATE
5 RATHER THAN NEURONAL OR OLIGODENDROCYTIC FATE.

6 SO THE STRENGTHS OF THIS APPLICATION IS THAT
7 THE INVESTIGATOR IS EXPERIENCED AND PRODUCTIVE, HAVING
8 PUBLISHED 54 ARTICLES OR MORE IN THE LAST TEN YEARS OR
9 SO. AND MOST OF THE STUDIES HAVE TO DO WITH LOOKING AT
10 GENOMIC INSTABILITY AND THE EFFECTS OF SUCH INSTABILITY
11 ON CELL FATE AND DEATH, SO HIGHLY APPROPRIATE.

12 THE DISCUSSION, DURING THE DISCUSSION IT WAS
13 CLEAR THAT THE DOSE OF IRRADIATION IS IMPORTANT, AND
14 THE APPLICANT HAS PUT QUITE A LOT OF THOUGHT ABOUT THIS
15 VARIABLE IN PLANNING THE STUDIES. THERE ARE SEVERAL
16 ASPECTS OF THE EXPERIMENTAL PLAN. AND THE DESIGN IS TO
17 USE HUMAN EMBRYONIC STEM CELLS THAT HAVE BEEN
18 ENGINEERED WITH A VISIBLE MARKER SO THAT THEY CAN BE
19 TRACKED AFTER TRANSPLANTATION INTO THE IRRADIATED
20 ATHYMIC MICE. OTHER STAINING TECHNIQUES WILL ALSO BE
21 USED, SO THIS IS NOT THE SOLE METHOD.

22 HOWEVER, THE WEAKNESSES IDENTIFIED IS THAT
23 THE APPLICANT IS FOCUSING ON ONE OUTCOME; THAT IS, A
24 NEURAL LINEAGE. SO IF THE TRANSPLANTED CELLS DO NOT
25 NOW CONTINUE ALONG AND BECOME CELLS OF THE NERVOUS

1 SYSTEM, THE APPLICANT HAS NO PLANS TO TRACK OTHER FATES
2 OF THESE CELLS, WHICH THE REVIEWERS DEEMED IMPORTANT.

3 OTHER GENERAL WEAKNESSES INCLUDE THE FAILURE
4 TO DISCUSS POSSIBLE EFFECTS OF IRRADIATION ON NICHE
5 CELLS IN THE TISSUE. SO HOW IT AFFECTS THE
6 ENVIRONMENT, IN PARTICULAR THE ENVIRONMENT THAT DIRECTS
7 THE FATE OF THE TRANSPLANTED STEM CELLS, WAS NOT
8 ADEQUATELY ADDRESSED. FINALLY, THAT IN THE DISCUSSION
9 THEY STATED THERE WAS A VERY STRONG IMPORTANT QUESTION
10 OF WHETHER THE HUMAN EMBRYONIC STEM CELLS EVENTUALLY
11 WILL BE ABLE TO BE USED TO REPLENISH IRRADIATED
12 NEUROPROGENITOR CELLS, WHICH IS THE GOAL OF THIS STUDY.

13 BUT THERE WERE SEVERAL RECOMMENDATIONS. THIS
14 IS UNUSUAL IN THAT IT'S ONE OF THE FEW APPLICATIONS
15 WHERE THE REVIEWERS SUGGESTED CHANGES THAT MIGHT
16 IMPROVE THE APPLICATION, SUCH AS THE AUTHOR SHOULD
17 SYSTEMATICALLY ASSESS SEVERAL DIFFERENT POPULATIONS OF
18 CELLS IN THE IRRADIATED BRAIN, INCLUDING ASTROCYTES,
19 MICROGLIA, OLIGODENDROCYTES, NEURONS, AND INFLAMMATORY
20 CELLS, A WIDER RANGE OF CELLS THAN PROPOSED. IT WOULD
21 BE IMPORTANT TO ASCERTAIN THAT IRRADIATION HAVE SIMILAR
22 EFFECTS ON ALL TISSUES AND MIGHT PROVIDE INSIGHTS INTO
23 THE STEM CELL NICHE IN THE BRAIN AND SUGGESTED DOING
24 BRDU LABELING AND A NUMBER OF OTHER EXPERIMENTS. AND
25 I'LL STOP HERE.

1 CHAIRMAN KLEIN: THANK YOU. IS THERE A BOARD
2 MOTION?

3 MR. ROTH: I'LL MAKE A MOTION THAT WE APPROVE
4 THIS ONE, MOVE IT IN FOR FUNDING. AND I HAVE SEVERAL
5 REASONS FOR IT. ONE, I LIKE THE SUBJECT MATTER. I
6 THINK IT'S ONE OF THESE AREAS THAT'S TERRIBLY IMPORTANT
7 TO HAVE RESEARCH GOING ON. SECOND, I'M ALSO IMPRESSED
8 BY A RELATIVELY NEW INVESTIGATOR WHO'S ACTIVELY SEEKING
9 PUBLICATIONS AND MOVING THE FIELD FORWARD. I THINK IT
10 SHOULD BE FUNDED.

11 CHAIRMAN KLEIN: IS THERE A SECOND?

12 MR. SHEEHY: SECOND.

13 CHAIRMAN KLEIN: THERE'S A MOTION AND A
14 SECOND. ADDITIONAL BOARD COMMENT? SEEING NONE, IS
15 THERE PUBLIC COMMENT? SEEING NONE, RESTATE THE
16 CONFLICTS.

17 MS. KING: BRYANT, LANSING, AND STEWARD.

18 CHAIRMAN KLEIN: ROLL CALL.

19 MS. KING: RICARDO AZZIZ.

20 DR. AZZIZ: YES.

21 MS. KING: PAUL JENNINGS. ROBERT PRICE.

22 DR. PRICE: AYE.

23 MS. KING: MARCY FEIT.

24 MS. FEIT: YES.

25 MS. KING: MICHAEL FRIEDMAN. MICHAEL

1 GOLDBERG.
2 MR. GOLDBERG: NO.
3 MS. KING: FRANCIS MARKLAND.
4 DR. MARKLAND: NO.
5 MS. KING: DAVID KESSLER. BOB KLEIN.
6 CHAIRMAN KLEIN: YES.
7 MS. KING: GERALD LEVEY.
8 DR. LEVEY: NO.
9 MS. KING: TED LOVE. RICHARD MURPHY. TINA
10 NOVA. ED PENHOET.
11 DR. PENHOET: NO.
12 MS. KING: PHIL PIZZO. CLAIRE POMEROY.
13 DR. POMEROY: NO.
14 MS. KING: FRANCISCO PRIETO. JOHN REED.
15 DUANE ROTH.
16 MR. ROTH: YES.
17 MS. KING: JOAN SAMUELSON. DAVID
18 SERRANO-SEWELL. JEFF SHEEHY.
19 MR. SHEEHY: YES.
20 MS. KING: JONATHAN SHESTACK. JANET WRIGHT.
21 DR. WRIGHT: YES.
22 MR. HARRISON: THE MOTION TO MOVE APPLICATION
23 413 TO TIER 1 CARRIES WITH SEVEN YES VOTES AND FIVE NO
24 VOTES.
25 CHAIRMAN KLEIN: THANK YOU. WE'RE NOW AT

1 477. DR. HALL.

2 DR. HALL: THIS IS A LITTLE BIT DIFFERENT
3 PROPOSAL FROM THOSE WE'VE BEEN TALKING ABOUT. AND IT'S
4 FROM AN INVESTIGATOR WHO HAS BEEN INVESTIGATING THE
5 ROLE OF NONCODING RNA'S IN DROSOPHILA TO PLAY A ROLE IN
6 REGULATION DURING CELL DIFFERENTIATION. AND THESE
7 NONCODING RNA'S CONTROL THE EXPRESSION OF GENES WHOSE
8 ACTIVITIES CONTROL SELF-DIFFERENTIATION, AND THEY'VE
9 SHOWN THAT IN THESE SYSTEMS THE INTRODUCTION OF THE
10 NONCODING RNA INTO CELLS CAN CHANGE THEIR DEVELOPMENTAL
11 FATE.

12 THEY'VE IDENTIFIED 32 NONCODING RNA'S IN
13 HUMAN CELLS, PRESUMABLY HOMOLOGOUS, WHICH ORIGINATE
14 FROM DIFFERENT REGULATORS OF CELL DIFFERENTIATION.
15 THESE NONCODING RNA'S IN HUMANS ARE EXPRESSED IN
16 DIFFERENTIATED CELLS, BUT NOT IN HUMAN EMBRYONIC STEM
17 CELLS. AND SO THEIR CENTRAL HYPOTHESIS IS THAT THESE
18 ARE GENES THAT ARE REGULATORY RNA'S THAT ARE DIRECTING
19 DIFFERENTIATION. AND THAT, AS IN THE SIMPLER SYSTEMS,
20 IF THEY COULD EXPRESS THESE RNA'S IN HUMAN EMBRYONIC
21 STEM CELLS, IT WOULD GO A LONG -- THIS WOULD BE A
22 MECHANISM FOR INDUCING CELL DIFFERENTIATION IN THESE
23 CELLS.

24 SO THE REVIEWERS FELT THE PROPOSAL IS NOVEL
25 IN FOCUSING ON THIS SPECIAL CLASS OF RNA'S. EVERYBODY

1 THINKS THAT IT'S IMPORTANT TO UNDERSTAND HOW HUMAN
2 EMBRYONIC STEM CELL DIFFERENTIATION IS CONTROLLED.
3 THAT'S A MAJOR QUESTION. HOW STUDY OF THIS CLASS OF
4 RNA'S WILL IMPACT THIS AREA, HOWEVER, IS LESS CLEAR.

5 AND THE QUESTION IS WHETHER THIS CAN SERVE --
6 GENES COULD ACTUALLY BE HARNESSSED TO CONTROL
7 DIFFERENTIATION.

8 SO THE STRENGTHS OF THE PROPOSAL, IT IS BASED
9 ON A SOLID HYPOTHESIS. THE RESEARCH TEAM IS HIGHLY
10 QUALIFIED TO CARRY OUT THE PROPOSED EXPERIMENTS, AND IN
11 PARTICULAR THE PI'S LAB HAS SHOWN THAT THIS CLASS OF
12 RNA'S INFLUENCE IMPORTANT GROUPS OF REGULATORY GENES IN
13 THE DROSOPHILA MODEL SYSTEM AND HAVE EXTENDED THESE
14 OBSERVATIONS IN MAMMALS, I THINK IN MICE.

15 SO THEN THEY'RE GOING TO ASK WHETHER HUMAN
16 HOMOLOGS OF THESE RNA'S CAN BE INTRODUCED INTO HUMAN
17 EMBRYONIC STEM CELLS TO INTRODUCE DOWNSTREAM REGULATORY
18 GENES AS ALREADY BEEN SEEN IN FLIES AND MICE, AND THEN
19 THEY WILL ADDRESS WHETHER THE PATHWAY CAN ACTUALLY
20 INDUCE LINEAGE SPECIFICATION.

21 SO THE EXPERIENCE WITH THE SUBJECT OF THE PI,
22 THERE IS A COLLABORATOR FOR HUMAN EMBRYONIC STEM CELL
23 RESEARCH, AND THE POSSIBILITY OF DEVELOPING NEW
24 INSIGHTS ARE ALL REGARDED AS STRENGTHS OF THE PROPOSAL.

25 THE WEAKNESS IS VIEWED THAT THE FIRST TWO

1 PARTS OF THE PROJECT JUST EXTEND WORK THAT'S ALREADY
2 BEEN DONE IN FLIES AND MICE AND, THEREFORE, IS NOT
3 EXPECTED TO BE VERY INTERESTING. BUT THE REAL QUESTION
4 IS WHETHER OR NOT EXPRESSION OF THESE GENES IN THE
5 CELLS WILL ACTUALLY DRIVE THEM DOWN DIFFERENTIATED
6 PATHWAYS.

7 SO THE WEAKNESS IS, ONE, LACK OF A PRIORI
8 REASON TO STUDY THIS NEW CLASS OF RNA'S SINCE THEY'RE
9 NOT EXPRESSED IN HUMAN EMBRYONIC STEM CELLS. IT'S NOT
10 CLEAR WHAT CAN BE LEARNED FROM THEIR EXPRESSION, AND
11 THERE'S SOME THOUGHT THAT MAYBE THIS WAS ONLY A
12 PROPOSAL DESIGNED SPECIFICALLY FOR THE RFA.

13 SO IN THE DISCUSSION THE QUESTION WAS THAT
14 THIS WAS SOMEBODY WHO WAS TRYING TO MOVE FROM FRUIT FLY
15 INTO HUMAN EMBRYONIC STEM CELL RESEARCH. AGAIN, SORT
16 OF DEPENDS ON YOUR POINT OF VIEW ABOUT WHETHER YOU'RE
17 ENTHUSIASTIC ABOUT THIS LINE OF RESEARCH OR NOT. ONE
18 VIEW SAYS, LOOK, THEY'RE NOT IN HUMAN EMBRYONIC STEM
19 CELLS. WE DON'T KNOW THAT THEY'RE GOING TO BE
20 IMPORTANT. MAYBE THIS WON'T AMOUNT TO ANYTHING.
21 SOMEBODY ELSE SAYS, LOOK, THESE ARE PEOPLE WHO CAN DO
22 THE WORK. THESE ARE INTERESTING GENES IN OTHER
23 SYSTEMS, LIKELY TO BE INTERESTING IN THESE SYSTEMS, AND
24 SO THE MODEL SYSTEM IS GOOD AND THE EXPECTATIONS ARE
25 CLEAR.

1 SO, ONCE AGAIN, IT'S YOUR CHOICE AS TO HOW
2 YOU WEIGH THOSE VARIOUS FACTORS.

3 CHAIRMAN KLEIN: ALL RIGHT.

4 DR. BRYANT: CAN I MAKE A COMMENT? SO THAT
5 LAST POINT ABOUT THEM NOT BEING IN HUMAN EMBRYONIC STEM
6 CELLS, I DON'T UNDERSTAND THAT BECAUSE A LOT OF THE --
7 WELL, THERE WERE SEVERAL OTHER PROPOSALS WHERE WE'RE
8 LOOKING AT HISTONES AND CHROMATIN THAT ISN'T PRESENT IN
9 A CERTAIN FORM IN EMBRYONIC STEM CELLS, BUT COMES ON
10 DURING DIFFERENTIATION. I'M SURE THAT THAT'S
11 PROBABLY -- I DON'T KNOW. MAYBE IT WASN'T EXPLAINED,
12 BUT JUST BECAUSE THEY'RE NOT IN EMBRYONIC STEM CELLS
13 DOESN'T INVALIDATE LOOKING AT WHAT THEY WOULD DO WHEN
14 THEY ARE INTRODUCED. THAT MIGHT BE WHAT THE POINT OF
15 THE EXPERIMENT.

16 DR. HALL: I THINK THE QUESTION WOULD BE
17 WHETHER THEY'RE PROXIMAL OR DISTAL IN THE PATHWAY, BUT
18 I AGREE WITH YOU.

19 CHAIRMAN KLEIN: ADDITIONAL COMMENT? IS THE
20 DESIRE TO KEEP IT WHERE IT IS OR MOVE IT? IS THERE ANY
21 MOTION? SEEING NO MOTION, I THINK THE COMMITTEE'S
22 DESIRE WOULD BE TO LEAVE IT WHERE IT IS.

23 NOW WE'RE AT AN INTERESTING TIME JUNCTURE
24 HERE. WE'VE HAD SOME VERY LIVELY DEBATES HERE. IS
25 THERE ANY DESIRE OF THE BOARD AT THIS POINT TO CUT OFF

1 THE TIER 1 AND LOOK AT THE REST IN TIER 2 TOMORROW, OR
2 WOULD YOU LIKE TO LOOK AT THE 76S IN TIER 1? WHAT IS
3 THE VIEW OF THE BOARD?

4 MR. ROTH: BOB, I'D LIKE TO MAKE A SUGGESTION
5 THAT WE ASK STAFF TO REORDER THEM TONIGHT WITH
6 EVERYTHING, THE CHANGES WE'VE MADE AND THE PERCENTILES,
7 BECAUSE I HAVE IN MIND TO MAKE A MOTION TOMORROW THAT
8 WE FUND SOMETHING AROUND 30 PERCENT OF THE GRANTS, AND
9 WE'RE VERY CLOSE TO THAT NUMBER HERE. SO IF WE GET IT
10 ALL RECONFIGURED AND LET'S SEE IF WE'RE THERE. IF
11 WE'RE NOT AT 30 PERCENT, PERHAPS WE GO DOWN AND LOOK AT
12 THE 76S.

13 CHAIRMAN KLEIN: IT IS POSSIBLE AS WELL TO
14 CUT OFF TIER 1, AND TO THE EXTENT WE'RE BELOW 30
15 PERCENT, TO CONTINUE WITH THE TIER 2. ANY ADDITIONAL
16 COMMENTS?

17 DR. STEWARD: YEAH. THERE'S ONE PROPOSAL
18 THAT I'D LIKE TO ACTUALLY RAISE FOR DISCUSSION, IF I
19 COULD TONIGHT, OUT OF ORDER A BIT. THAT IS PROPOSAL
20 NO. 180. I'M RAISING IT FOR DISCUSSION BECAUSE IT
21 SEEMS TO BE ONE THAT IS HIGHLY RELEVANT IN TERMS OF
22 POTENTIAL NEAR-TERM THERAPEUTIC APPLICATIONS, AND THERE
23 ARE ASPECTS OF THE WRITTEN REVIEW THAT ARE
24 CONTRADICTORY, IT SEEMED TO ME, AND PERHAPS EVEN MORE
25 THAN CONTRADICTORY, OUT OF THE LINE OF WHAT WE REALLY

1 WANT TO CONSIDER. I'LL JUST RAISE ONE.

2 ONE STATEMENT IS IT'S ALMOST TOO
3 COLLABORATIVE. I'M NOT SURE THAT THAT MAKES ANY SENSE.
4 I'D LIKE TO HEAR MORE ABOUT THAT AND RAISE IT FOR
5 DISCUSSION.

6 CHAIRMAN KLEIN: ALL RIGHT. WHAT ARE THE
7 CONFLICTS ON THIS?

8 MS. KING: AZZIZ, LANSING, LEVEY, AND MEYER.

9 CHAIRMAN KLEIN: OKAY.

10 DR. HALL: I'D JUST MAKE THE COMMENT THAT IN
11 PUTTING THESE TOGETHER, WE WERE SOMETIMES FACED WITH
12 THE FACT THAT WE HAD DIVERGENT VIEWS WHICH WERE NOT
13 ALWAYS EASY TO INTEGRATE INTO A CONSISTENT DOCUMENT.
14 SO UNDOUBTEDLY THAT'S WHAT YOU'RE SEEING.

15 DR. STEWARD: THAT IS EXACTLY THE SENSE I
16 GET.

17 CHAIRMAN KLEIN: MY SENSE OF THAT COMMENT,
18 DR. HALL, IS TO SAY THAT THE STAFF WAS TRYING TO
19 CONSCIENTIOUSLY INTEGRATE COMMENTS, BUT THEY MAY NOT
20 REFLECT THE STAFF'S VIEW.

21 DR. HALL: NONE OF THIS REFLECTS THE STAFF'S
22 VIEW, PLEASE. OUR EFFORT WAS ONLY TO MAKE -- TO TRY TO
23 PUT TOGETHER --

24 CHAIRMAN KLEIN: I WAS TRYING IN THAT
25 PARTICULAR INSTANCE TO DRAW ATTENTION TO THE FACT THAT

1 IT DID NOT REFLECT THE STAFF'S VIEW. THANK YOU. ALL
2 RIGHT. IS THERE A MOTION TO LOOK AT THIS?

3 DR. STEWARD: YES.

4 CHAIRMAN KLEIN: DR. STEWARD HAS MADE A
5 MOTION. IS THERE A SECOND?

6 MR. SHEEHY: DO YOU WANT TO MOVE IT INTO TIER
7 1?

8 CHAIRMAN KLEIN: WOULD YOU LIKE TO MOVE IT IN
9 TIER 1?

10 DR. STEWARD: I THINK THE MOST SENSIBLE THING
11 IS TO GO AHEAD AND MAKE THAT MOTION FOR DISCUSSION
12 PURPOSES, AND THEN VOTE ON IT.

13 CHAIRMAN KLEIN: IS THERE A SECOND?

14 DR. WRIGHT: SECOND.

15 CHAIRMAN KLEIN: THERE IS A SECOND. DR.
16 CHIU, COULD YOU PROVIDE US AN ANALYSIS?

17 DR. CHIU: THIS IS A VERY BIG PROPOSAL. AS I
18 RECALL, THERE WERE A NUMBER OF LETTERS OF INTENT COMING
19 IN THAT GOT CONSOLIDATED INTO ONE SEED APPLICATION.
20 THAT IS BY CHOICE OF THE APPLICANTS, BUT BECAUSE OF
21 THAT, THIS GREW TO BE SUCH A LARGE PROPOSAL, THAT IT
22 GOT ONE OF THE WEAKNESSES IDENTIFIED IS THAT THIS IS A
23 BIG, AMBITIOUS PROPOSAL WHICH READS MORE LIKE A PROGRAM
24 PROJECT GRANT THAN A SEED PROPOSAL. AND I THINK
25 PERHAPS THAT WAS ONE OF THE CRITICISMS THAT LOWERED

1 ENTHUSIASM. ONE WORRIES THAT THERE ARE TOO MANY
2 DIRECTIONS WITH A CATALOG OF PLANNED EXPERIMENTS THAT
3 IS TOO LONG INVOLVING TOO MANY PEOPLE.

4 PI HAS LITTLE PREVIOUS EXPERIENCE WITH HUMAN
5 EMBRYONIC STEM CELLS, LITTLE EXPERIENCE WITH
6 DEVELOPMENTAL BIOLOGY UPON WHICH THE INVESTIGATORS BASE
7 THEIR STRATEGY. COLLABORATIONS ARE IMPRESSIVE, BUT
8 COORDINATION OF THE GROUP OF SCIENTISTS INVOLVED IN THE
9 PROPOSAL WILL BE CHALLENGING.

10 SO LET ME START IN THE BEGINNING OF WHAT IS
11 PROPOSED, AND THAT IS THIS IS AN EYE GRANT BECAUSE OF
12 DEGENERATION OF PHOTORECEPTORS IN THE MACULAR AREA.
13 AGE-RELATED MACULAR DEGENERATION IS AN IMPORTANT ISSUE.
14 AND RECENT REPORTS DESCRIBE RESTORATION OF SOME RETINAL
15 FUNCTION IN A GENETIC RAT MODEL BY USING EMBRYONIC STEM
16 CELL RETINAL PROGENITOR -- RETINAL PIGMENT EPITHELIUM
17 CELLS.

18 SO THIS PROPOSAL AIMS TO DEVELOP METHODS TO
19 OPTIMIZE GENERATION OF HOMOGENEOUS PREPARATIONS OF
20 RPE'S CELLS FROM HUMAN EMBRYONIC STEM CELLS. SO IN
21 THAT SENSE IT'S A DIFFERENTIATION TOWARD A VERY
22 SPECIFIC PHENOTYPE FOR THE PURPOSE OF CURING OR
23 TREATING MACULAR DEGENERATION.

24 THE AIMS ARE TO USE A BUNCH OF FACTORS,
25 INCLUDING GROWTH FACTORS, EXTRA CELLULAR MATRIX

1 TRANSCRIPTION FACTORS, HUGE SPECTRUM OF THINGS THAT
2 COULD REGULATE THE DIFFERENTIATION OF HUMAN EMBRYONIC
3 STEM CELLS INTO THE RETINAL PIGMENT EPITHELIUM.

4 PI PROPOSES TO DEVELOP METHODS TO ENHANCE THE
5 PRODUCTION OF THESE CELLS FROM THE HUMAN CELL LINES,
6 AND TWO OF THE GROUPS HAVE ALREADY DEMONSTRATED THAT
7 RPE CELLS SPONTANEOUSLY ARISE, SO THAT IT'S FEASIBLE.
8 YOU JUST HAVE TO IDENTIFY EXACTLY HOW TO OPTIMIZE IT.
9 PI PROPOSES TO TEST WHETHER THIS PROCESS CAN BE
10 ENHANCED BY CULTURING THE CELLS WITH VARIOUS
11 DEVELOPMENTAL FACTORS SINCE THEY HAVE ALREADY BEEN
12 DEMONSTRATED TO BE CRITICAL FOR RPE DEVELOPMENT IN
13 ANIMAL MODEL SYSTEMS.

14 THEN IN AIM 2 THE PI WILL CHARACTERIZE THESE
15 CELLS FROM A MOLECULAR AND CELLULAR PERSPECTIVE,
16 COMPARE THEM TO NATIVE HUMAN FETAL RPE'S, AND IN AIM 3,
17 THE PI WILL TEST THE THERAPEUTIC POTENTIAL OF THESE
18 HUMAN DERIVED CELLS IN VITRO IN RETINAL CELL OR HUMAN
19 VASCULAR ENDOTHELIAL CELL CULTURES, AND THEN IN A
20 NUMBER OF ANIMAL MODELS OF RETINAL DEGENERATION.

21 THE PATH IS VERY CLEAR. IT IS CLEARLY
22 AMBITIOUS BECAUSE THEY'RE GOING TO TEST SO MANY
23 FACTORS, TARGETING THIS VERY SPECIFIC CELL TYPE, AND
24 THEY HAVE ANIMAL MODELS IN WHICH TO TEST THEM SHOULD
25 THEY BE SUCCESSFUL. AND THE INNOVATION IS QUITE CLEAR

1 AND DESCRIBED HERE, THAT THEY'RE VERY FOCUSED.

2 AS I SAID, THE WEAKNESS IS THE SCOPE AND THE
3 LARGE NUMBER OF COLLABORATORS FOR SUCH A SMALL SEED
4 APPLICATION. CLEARLY THEY HAVE A LOT OF GOOD
5 COLLABORATORS THAT HAVE BEEN DESCRIBED.

6 AND IN THE DISCUSSION IT IS SAID THAT THIS
7 PROPOSAL AIMS TO CREATE METHODS TO GENERATE THESE
8 HOMOGENEOUS POPULATIONS OF RPE'S FOR ULTIMATE
9 THERAPEUTIC POTENTIAL. THIS FIELD HAS GREAT POTENTIAL.
10 INTEREST IN THIS GRANT IS BASED ON PRIOR PUBLICATIONS
11 SHOWING THAT HUMAN EMBRYONIC STEM CELLS CAN BE
12 DIFFERENTIATED INTO RPE'S AND TRANSFERRED INTO RAT
13 MODELS OF PHOTORECEPTOR DEGENERATION. THIS KIND OF
14 WORK HAS BEEN PROPOSED, AND MANY PEOPLE OUTSIDE OF
15 CALIFORNIA ARE ALREADY WORKING ON THIS PROBLEM. AND
16 THE FIELD HAS ALREADY MOVED BEYOND THE STUDIES PROPOSED
17 HERE, SAYS ONE REVIEWER, WHO IS AN EXPERT IN THE EYE.

18 THIS MAKES REVIEWERS SOMEWHAT LESS
19 ENTHUSIASTIC SINCE OTHERS OUTSIDE OF CALIFORNIA HAVE
20 BEEN DOING THIS LINE OF RESEARCH. THE APPROACH IS
21 SOMEWHAT NAIVE IN ATTEMPTING TO DIRECTLY DIFFERENTIATE
22 CELLS, AND REVIEWERS FEEL THAT THE APPLICANT HAS NOT
23 THOUGHT THROUGH THE EXPERIMENTS VERY WELL, AND THAT THE
24 EXPERIMENTS LIKELY WON'T WORK AS PLANNED. DID NOT SAY
25 WHY. BROAD SCOPE IS ANOTHER MAJOR CRITICISM. THE

1 CATALOG OF EXPERIMENTS LISTED AMOUNTS TO A LONG
2 DESCRIPTION OF RELEVANT OBSERVATIONAL APPROACHES, BUT
3 LIKELY TOO BROAD IN SCOPE. AND IT WAS THOUGHT TO BE
4 PERHAPS TOO COLLABORATIVE, QUOTE, UNQUOTE -- I GUESS
5 THAT'S DR. STEWARD'S COMMENT -- WITH EIGHT CO-PI'S AND
6 AN OVERAMBITIOUS RESEARCH PLAN.

7 AND I GUESS IN THAT CONTEXT, THE TOO
8 COLLABORATIVE MIGHT MEAN TOO VAST WITH TOO MANY PEOPLE
9 INVOLVED, PERHAPS, FOR A SMALL SEED GRANT. I'M
10 INTERPRETING THE COMMENT. REVIEWERS THOUGHT THE
11 PROPOSAL LACKED AN APPROPRIATE DISCUSSION OF
12 EXPERIMENTAL DETAIL, POINTED OUT THAT CLAIMS OF HAVING
13 MADE RPE CELLS WERE NOT SUPPORTED BY THE INCLUSION OF
14 RELEVANT DATA, AND THAT THE RPE'S ARE A SMALL
15 PERCENTAGE OF CELLS FROM THE CULTURES. SO IN THEIR
16 GOAL OF GENERATING HOMOGENEOUS CULTURES, THEY HAVE A
17 WAYS TO GO. AND THEY WANTED TO DO IT BY FLUSHING THE
18 APPROPRIATE PHENOTYPES OUT OF THE CULTURE. SO IS THAT
19 A VERY CLEAN WAY OF GETTING HOMOGENEOUS CULTURES WAS
20 RAISED.

21 WHILE THE APPLICANT PROPOSES TO EXPAND THE
22 YIELD OF DIFFERENTIATED RPE'S, THERE MAY BE SOME USE IN
23 TRYING NEW DEVELOPMENTAL PROTOCOLS. THERE WAS NO
24 INDICATION THAT THE APPLICANT'S LAB HAS THE EXPERTISE
25 TO GENERATE RPE LINES IS ANOTHER. IF RPE CELLS ARE

1 ACTUALLY FOUND, THE APPLICANT IS VERY WELL SUITED TO DO
2 THE FOLLOW-UP. THAT IS THE REVIEW.

3 CHAIRMAN KLEIN: DR. PENHOET.

4 DR. PENHOET: QUESTION FOR ARLENE. THIS
5 ISSUE OF THEM BEING BEHIND THE COMPETITION, WERE THEY
6 VIEWED TO BE SIGNIFICANTLY BEHIND?

7 DR. CHIU: I CAN'T ANSWER THAT QUESTION. THE
8 COMMENT WAS JUST MADE THAT OTHERS ARE ALREADY DOING
9 THIS AND AHEAD. I CANNOT -- I HAVE NOTHING TO ANSWER
10 THAT QUESTION WITH.

11 DR. HALL: JUST TO POINT OUT, ED, BECAUSE OF
12 THE GROUPING OF THE GRANTS FOR THE SPECIALISTS, AT THE
13 SAME TIME THIS WAS REVIEWED, THERE WERE SEVERAL OTHER
14 GRANTS REVIEWED. AND ONE VERY SIMILAR TO THIS ONE WAS
15 JUDGED TO BE MUCH BETTER. AND I THINK IT IS ONE OF THE
16 ASTERISKED ONES, IF I'M NOT MISTAKEN; IS THAT CORRECT?
17 I'M NOT SURE. AT ANY RATE, THERE WAS A SENSE THAT THEY
18 WERE REVIEWED AT THE SAME TIME, AND EVEN ON THAT
19 COMPARISON THIS WAS NOT VIEWED TO BE AS STRONG AS THE
20 OTHER ONE.

21 CHAIRMAN KLEIN: ADDITIONAL QUESTIONS?

22 DR. STEWARD: SO LET ME GO AHEAD AND SPEAK IN
23 FAVOR OF THE MOTION HERE. I GUESS, FIRST, I'M A LITTLE
24 CONCERNED ABOUT THE OVERLY AMBITIOUS PIECE. PERHAPS
25 THESE INVESTIGATORS WOULD HAVE BEEN SERVED TO PUT IN

1 ONE OF THE COMPREHENSIVE GRANTS THAT WOULD HAVE ALLOWED
2 THEM TO EXPAND ON THEIR PLANS. I'M NOT -- I DON'T
3 THINK WE SHOULD PUNISH THEM FOR HAVING MADE THE CHOICE
4 THAT THEY DID.

5 NO. 2, IF OUR GOAL IS TO GET AS MANY PEOPLE
6 AS POSSIBLE INVOLVED, IT SEEMS TO ME EIGHT
7 INVESTIGATORS SOUNDS PRETTY GOOD IF YOU CAN REALLY GET
8 THAT MANY PEOPLE ACTIVELY ENGAGED IN A PROBLEM THAT WE
9 ALL RECOGNIZE AS BEING VERY IMPORTANT.

10 CHAIRMAN KLEIN: I THINK THE DISCUSSION WAS
11 ALSO THAT THERE SEEMED TO BE SOME ENTHUSIASM. IS THIS
12 ONE OF THE GRANTS, ARLENE, WHERE THEY THOUGHT IT WAS
13 CLOSER TO CLINICAL APPLICATION AND CLINICAL VALUE?

14 DR. CHIU: I THINK, AS I READ THE REVIEWERS'
15 COMMENTS, THAT IT WAS CLEAR THEY HAD THE ANIMAL MODELS,
16 AND THE BOTTLENECK WOULD BE GENERATING HOMOGENEOUS
17 POPULATIONS OF RPE'S FROM HUMAN EMBRYONIC STEM CELLS,
18 THAT IF THEY ARE UNABLE TO DO THAT, THEN THEY'RE NO
19 BETTER THAN USING ADULT STEM CELLS IS MY INTERPRETATION
20 OF THE REVIEWERS' COMMENTS.

21 MR. ROTH: OS, MY IMPRESSION OF THE COMMENTS
22 HERE ABOUT TOO MANY, TOO AMBITIOUS, TOO MANY PEOPLE IS
23 THE COLLABORATION, WHICH I THINK WE ALL SUPPORT, WHEN
24 IT BECOMES -- AND THE AMOUNT OF MONEY THEY'RE ASKING
25 FOR IS RELATIVELY SMALL TO OTHERS, I WORRY THAT THEY'RE

1 ALL GOING TO TAKE A PIECE OF IT AND GO THEIR SEPARATE
2 WAYS AS OPPOSED TO SOMEBODY REALLY FOCUSING ON THIS AND
3 MOVING IT FORWARD. I THINK I SHARE SOME OF THE CONCERN
4 READING THESE COMMENTS IN HERE, THAT IT'S NOT THE
5 COLLABORATION PIECE, THE FACT IT'S JUST DIFFUSE AND BIG
6 AND ASKING FOR A SMALL AMOUNT OF MONEY COMPARED TO SOME
7 OF THE OTHERS.

8 CHAIRMAN KLEIN: ADDITIONAL COMMENTS?
9 ADDITIONAL COMMENT FROM THE PUBLIC? SEEING NO COMMENTS
10 FROM THE PUBLIC, REPEAT THE CONFLICTS.

11 MS. KING: RICARDO AZZIZ, SHERRY LANSING, AND
12 GERALD LEVEY.

13 CHAIRMAN KLEIN: ALL RIGHT. ROLL CALL.

14 MS. KING: PAUL JENNINGS. ROBERT PRICE.

15 DR. PRICE: NO.

16 MS. KING: SUSAN BRYANT.

17 DR. BRYANT: NO.

18 MS. KING: MARCY FEIT.

19 MS. FEIT: NO.

20 MS. KING: MICHAEL FRIEDMAN. MICHAEL
21 GOLDBERG.

22 MR. GOLDBERG: NO.

23 MS. KING: FRANCIS MARKLAND.

24 DR. MARKLAND: NO.

25 MS. KING: DAVID KESSLER. BOB KLEIN.

1 CHAIRMAN KLEIN: NO.

2 MS. KING: TED LOVE. RICHARD MURPHY. TINA
3 NOVA. ED PENHOET.

4 DR. PENHOET: NO.

5 MS. KING: PHIL PIZZO. CLAIRE POMEROY.

6 DR. POMEROY: NO.

7 MS. KING: FRANCISCO PRIETO. JOHN REED.
8 DUANE ROTH.

9 MR. ROTH: NO.

10 MS. KING: JOAN SAMUELSON. DAVID
11 SERRANO-SEWELL. JEFF SHEEHY.

12 MR. SHEEHY: NO.

13 MS. KING: JONATHAN SHESTACK. OSWALD
14 STEWARD.

15 DR. STEWARD: SO, NO.

16 MS. KING: JANET WRIGHT.

17 DR. WRIGHT: NO.

18 CHAIRMAN KLEIN: OKAY. THANK YOU VERY MUCH.
19 THE VOTE IS?

20 MR. HARRISON: NO. UNANIMOUSLY NO.

21 CHAIRMAN KLEIN: OKAY. AND, JEFF SHEEHY, YOU
22 HAD A GRANT YOU WANTED TO CALL TO OUR ATTENTION.

23 MR. SHEEHY: I HAD ONE I WANTED TO MOVE UP.
24 THIS WILL BE THE ONLY ONE, BUT 295. AND I THINK THE
25 REASON WAS IS THAT THERE WERE NO WEAKNESSES, AND THIS

1 IS A FAIRLY IMPORTANT ISSUE, DERIVATION OF T-CELLS.
2 AND THEY DESCRIBED THIS AS AN ELEGANT, WELL-CONSTRUCTED
3 PROPOSAL, HIGHLY SEASONED AND WELL-FUNDED INVESTIGATOR,
4 COLLABORATOR IS AN ACCOMPLISHED EXPERIMENTAL
5 IMMUNOLOGIST, STRONG ENVIRONMENT FOR CONDUCTING THIS
6 RESEARCH. AND THIS IS REALLY AN IMPORTANT QUESTION,
7 BEING ABLE TO DERIVE T-CELLS FROM EMBRYONIC STEM CELLS
8 AS OPPOSED TO APPLICATIONS.

9 CHAIRMAN KLEIN: OKAY. CONFLICTS.

10 MS. KING: PRICE, LANSING, AND PENHOET.

11 CHAIRMAN KLEIN: OKAY. JEFF, IS THAT A
12 MOTION?

13 MR. SHEEHY: YES. I'D LOVE TO MOVE THIS INTO
14 TIER 1.

15 CHAIRMAN KLEIN: IS THERE A SECOND?

16 MR. ROTH: I'LL SECOND IT JUST SO WE CAN HAVE
17 A CONVERSATION.

18 CHAIRMAN KLEIN: MOTION IS MADE AND SECONDED.
19 ADDITIONAL COMMENTS?

20 DR. ARLENE CHIU, COULD YOU COMMENT ON THE
21 QUESTION OF, BRIEFLY, ON THERE SEEM TO BE, AS JEFF
22 INDICATES, SOME MAJOR STRENGTHS, AND THERE DOESN'T SEEM
23 TO BE A LOT OF SIGNIFICANCE IN THE WEAKNESSES.

24 DR. CHIU: I THINK, IF I READ CORRECTLY, THE
25 WEAKNESSES ARE THAT THE TECHNICAL DESCRIPTIONS ARE

1 SKIMPY, VERY SKIMPY, ALTHOUGH ALL PROCEDURES ARE WELL
2 WITHIN THE TECHNOLOGY USED BY THIS LAB WITH THE
3 POSSIBLE EXCEPTION OF ACHIEVING T-CELL SELECTION OF
4 NONCELL, ETC., IMMUNOREACTIVE.

5 THE STRENGTH OF THIS APPLICATION IS THAT THEY
6 INTEND TO TEST 17 HUMAN EMBRYONIC STEM CELL LINES, AND
7 THAT NO PREVIOUS ATTEMPT TO DO THIS EXPERIMENT HAS BEEN
8 SUCCESSFUL USING THE APPROVED -- PRESIDENTIALLY
9 APPROVED LINES. SO THE QUESTION IS IS THERE SOMETHING
10 THE MATTER WITH THE APPROVED LINES THAT THEY HAVE NOT
11 BEEN SUCCESSFUL? AND PERHAPS TESTING 17, INCLUDING
12 NONAPPROVED LINES, MAY YIELD SOME POSITIVE RESULT, OR
13 WHETHER THIS IS JUST AN EXCEPTIONALLY DIFFICULT
14 EXPERIMENT AND THAT FACTORS NEEDED TO DRIVE THIS
15 DIFFERENTIATION HAS YET TO BE DISCOVERED. I THINK IN A
16 NUTSHELL THAT THERE'S SO LITTLE KNOWLEDGE ABOUT THIS
17 BECAUSE PEOPLE HAVE BEEN UNSUCCESSFUL, THAT THEY DON'T
18 KNOW WHY IT DOESN'T WORK WITH THE FEW EXPERIMENTS
19 TESTED ON THE APPROVED LINES.

20 CHAIRMAN KLEIN: ALL RIGHT. DISCUSSION?

21 MR. SHEEHY: CAN I JUST ASK A QUESTION? I
22 MEAN IT SEEMS LIKE THAT THERE IS ENOUGH POWER IN HOW
23 THEY'RE TRYING TO ANSWER THIS QUESTION, THAT THEY WILL
24 BE ABLE TO COME UP WITH SOME ANSWERS, EVEN IF THEY'RE
25 NEGATIVE. IT SEEMS TO ME THAT THEY'RE TESTING A LOT.

1 THIS IS A BIG PROBLEM. NO ONE HAS BEEN ABLE TO FIGURE
2 IT OUT, SO THEY'RE GOING TO GO AT IT IN A MAJOR WAY,
3 TEST 17 LINES, AND HOPEFULLY THEY WILL GET SOME
4 ANSWERS. EVEN IF THEY'RE NEGATIVE ANSWERS, THAT WOULD
5 BE SIGNIFICANT.

6 DR. CHIU: I THINK THE QUESTION IS THIS, THAT
7 WHETHER THEY'RE TESTING THE 17 LINES WITH EXACTLY THE
8 SAME METHODOLOGY THAT HAVE NOT WORKED ON THE
9 PRESIDENTIAL LINES, THEY WILL FIND OUT IF IT'S
10 SOMETHING WRONG WITH THE LINES RATHER THAN THE
11 METHODOLOGY. IF IT'S A PROBLEM WITH THE METHODOLOGY,
12 THEN PERHAPS THEY WON'T BE ABLE TO FIND IT OUT THIS WAY
13 IS MY READING OF IT.

14 CHAIRMAN KLEIN: DR. BRYANT.

15 DR. BRYANT: JUST READING OVER THIS AGAIN, IT
16 STRIKES ME THAT IT'S MORE -- I DON'T KNOW. I WOULD
17 THINK, WITHOUT BEING AN EXPERT IN THIS PARTICULAR AREA,
18 THAT IT MIGHT BE SOMETHING WRONG -- THEY HAVEN'T FOUND
19 THE RIGHT TREATMENT FOR STEM CELLS, NOT THAT THEY NEED
20 TO TEST 17 OTHER LINES. THAT'S THE PROBLEM WITH IT FOR
21 ME.

22 MR. SHEEHY: I'M JUST READING. IT SOUNDS --
23 WE'RE GOING TO VARY THE CULTURE CONDITIONS TO CLOSELY
24 MIMIC THE REAL SITUATIONS IN HUMANS. THAT SEEMS LIKE
25 THEY'RE GOING TO USE A LOT OF LINES AND TRY A LOT OF

1 DIFFERENT WAYS TO TRY TO AN GET AN ANSWER, WHICH IS
2 KIND OF THE POINT, ISN'T IT?

3 DR. CHIU: IF THEY KNOW HOW BEST TO MIMIC THE
4 SITUATION IN HUMANS. AND THAT'S EXACTLY --

5 MR. SHEEHY: ONE OF THE MOST EXPERIENCED
6 IMMUNOLOGISTS. IF ANYBODY SHOULD KNOW WHAT'S GOING
7 ON --

8 DR. CHIU: AND IF THEY CAN'T MAKE IT WORK AND
9 THE FIELD HASN'T PROGRESSED THAT FAR, THAT'S THE
10 UNKNOWN.

11 MR. SHEEHY: WOULDN'T THIS YIELD JUST A
12 SIGNIFICANT NUMBER OF NEGATIVE ANSWERS SO THAT IF THEY
13 DID INDEED FAIL IN THIS EXPERIMENT, WE WOULD MAKE
14 SIGNIFICANT PROGRESS TOWARDS KNOWING WHAT CELL CULTURES
15 NOT TO USE, WHAT -- IT JUST SEEMS THAT THIS WOULD -- WE
16 SEE A LOT OF NEUROLOGICAL STUFF. WE DON'T SEE A LOT OF
17 STUFF IN IMMUNOLOGY. I THINK THAT THIS SEEMS -- I JUST
18 DON'T SEE MAJOR WEAKNESSES, AND WE HAVE VOTED THROUGH
19 SOME STUFF THAT HAS SOME MAJOR WEAKNESSES, AND THIS
20 SEEMS TO HAVE SOME REAL TIME APPLICATIONS IF YOU CAN
21 MAKE SOME T-CELLS AND MAKE A BIG DIFFERENCE IN A LOT OF
22 PEOPLE'S LIVES ACROSS A WHOLE HOST OF DISEASES.

23 CHAIRMAN KLEIN: JEFF, WAS ONE OF YOUR POINTS
24 THAT THIS WAS A REALLY EMINENT, HIGHLY RECOGNIZED
25 INDIVIDUAL WHO WOULD TEND TO HAVE SOME EFFECTIVE

1 CREDIBILITY AS TO THE SERIOUSNESS OF WHY TRY THIS
2 APPROACH? IS THAT YOUR POINT?

3 MR. SHEEHY: FROM THE STRENGTHS, YOU HAVE A
4 HIGHLY SEASONED AND WELL-FUNDED INVESTIGATOR WHO HAS
5 MADE MANY IMPORTANT CONTRIBUTIONS TO EXPERIMENTAL
6 IMMUNOLOGY, INCLUDING T-CELL DIFFERENTIATION. THE
7 COLLABORATOR IS ALSO AN ACCOMPLISHED EXPERIMENTAL
8 IMMUNOLOGIST, WHO BRINGS EXPERTISE IN MOLECULAR BIOLOGY
9 TO THE PROPOSAL. OVERALL THE ENVIRONMENT SEEMS STRONG
10 FOR CONDUCTING THIS RESEARCH. THE PROPOSAL IS
11 GENERALLY WELL-THOUGHT OUT AND ENCOMPASSES A DIVERSITY
12 OF APPROACHES TO IMPROVE THE CHANCES OF SUCCESS. BOTH
13 PI AND CO-PI ARE WELL-KNOWN WITH A SOLID TRACK RECORD
14 IN EXPERIMENTAL IMMUNOLOGY. THE APPROACHES ARE ELEGANT
15 AND INNOVATIVE AND SOME PRELIMINARY DATA IS PRESENTED.

16 FOR A SEED GRANT, SEEMS PRETTY GOOD TO ME
17 CONSIDERING SOME OF THE OTHER STUFF WE DISCUSSED TODAY.

18 DR. BRYANT: I AGREE. I THINK THIS
19 DESCRIPTION IS MORE POSITIVE THAN IT IS NEGATIVE. I
20 WAS JUST COMMENTING ON MY VIEW OF THAT PARTICULAR
21 APPROACH, BUT I THINK YOU'RE RIGHT. THE REVIEWERS DID
22 LIKE THE GRANT BASICALLY.

23 CHAIRMAN KLEIN: AND, DR. CHIU, COULD YOU
24 COMMENT ON THE PRELIMINARY DATA THAT WAS SUPPORTIVE?

25 DR. CHIU: I THINK THAT -- I DON'T RECALL THE

1 EXACT PRELIMINARY DATA THAT WAS SUPPORTIVE BECAUSE THIS
2 ACTUAL END POINT HAS NOT BEEN SUCCESSFULLY ACHIEVED.
3 BUT THE PI IS EXPERIENCED AND HAS MADE MANY IMPORTANT
4 CONTRIBUTIONS TO THE FIELD, SO CLEARLY UNDERSTANDS
5 T-CELL DIFFERENTIATION IN NORMAL ADULT STEM CELL
6 DIFFERENTIATION SYSTEMS.

7 CHAIRMAN KLEIN: THERE'S PRELIMINARY DATA
8 THAT IS REFERENCED IN HERE. YOU JUST DON'T RECALL THE
9 CHARACTER OF THAT PRELIMINARY DATA.

10 DR. CHIU: MY RECOLLECTION IS THE PRELIMINARY
11 DATA IS FROM ADULT MATERIAL, BUT I DON'T HAVE IT IN
12 FRONT OF ME.

13 CHAIRMAN KLEIN: MAYBE WE COULD -- DR.
14 PENHOET SUGGESTS MAYBE WE COULD RESEARCH THAT OVERNIGHT
15 AND BRING BACK MORE INFORMATION ON THIS ITEM. IS THAT
16 POSSIBLE?

17 MR. SHEEHY: UNLESS PEOPLE WANT TO VOTE. IN
18 GENERAL, THE SEED GRANTS, PRELIMINARY DATA HAS NOT BEEN
19 A DECIDING FACTOR IN MAKING THE SEED GRANT. THE FACT
20 THAT THEY HAVE IT, IRRELEVANT OF WHETHER OR NOT OF HOW
21 MUCH, YOU KNOW, IS IN ITSELF A SIGNIFICANT FACTOR IN
22 THE SEED GRANT. SO IT SHOULD JUST BE ANOTHER STRENGTH.
23 I DON'T THINK WE NEED TO GO INTO GREAT DETAIL.

24 DR. LEVEY: I THINK WE OUGHT TO KEEP IN MIND
25 THE PURPOSE OF SEED GRANTS IS ACTUALLY TO FUND

1 INNOVATIVE PROJECTS FOR WHICH THE NIH WOULDN'T FUND
2 THEM BECAUSE THEY WOULDN'T UNLESS YOU HAD ENOUGH DATA
3 TO BASICALLY HAVE A GRANT OR FINISH THE GRANT. SO THAT
4 IS THE PURPOSE OF SEED GRANTS.

5 DR. CHIU: THE NIH WILL NOT FUND THIS ONE
6 BECAUSE THEY PROPOSE TO USE LINES THAT ARE NOT APPROVED
7 ALSO.

8 CHAIRMAN KLEIN: ALL RIGHT. WE'VE HAD SOME
9 VERY GOOD DISCUSSION. ANY OTHER COMMENTS FROM THE
10 MEMBERS? ANY PUBLIC DISCUSSION? COULD YOU STATE THE
11 CONFLICTS, PLEASE.

12 MS. KING: PRICE, LANSING, AND PENHOET.

13 CHAIRMAN KLEIN: COULD YOU CALL THE ROLL.

14 MS. KING: RICARDO AZZIZ.

15 DR. AZZIZ: YES.

16 MS. KING: PAUL JENNINGS. SUSAN BRYANT.

17 DR. BRYANT: YES.

18 MS. KING: MARCY FEIT.

19 MS. FEIT: YES.

20 MS. KING: MICHAEL FRIEDMAN. MICHAEL

21 GOLDBERG.

22 MR. GOLDBERG: YES.

23 MS. KING: FRANCIS MARKLAND.

24 DR. MARKLAND: YES.

25 MS. KING: DAVID KESSLER. BOB KLEIN.

1 CHAIRMAN KLEIN: YES.

2 MS. KING: GERALD LEVEY.

3 DR. LEVEY: YES.

4 MS. KING: TED LOVE. RICHARD MURPHY. TINA

5 NOVA. PHIL PIZZO. CLAIRE POMEROY.

6 DR. POMEROY: ABSTAIN.

7 MS. KING: FRANCISCO PRIETO. JOHN REED.

8 DUANE ROTH.

9 MR. ROTH: YES.

10 MS. KING: JOAN SAMUELSON. DAVID

11 SERRANO-SEWELL. JEFF SHEEHY.

12 MR. SHEEHY: YES.

13 MS. KING: JONATHAN SHESTACK. OSWALD

14 STEWARD.

15 DR. STEWARD: YES.

16 MS. KING: JANET WRIGHT.

17 DR. WRIGHT: YES.

18 CHAIRMAN KLEIN: THANK YOU. CAN I MAKE A

19 SUGGESTION, THAT I THINK WE'VE HAD AN EXCELLENT SESSION

20 TONIGHT, WE MADE TREMENDOUS PROGRESS, AND THAT WE

21 RECONVENE TOMORROW MORNING. WHAT TIME, IF WE WERE TO

22 RECONVENE, WOULD BE APPROPRIATE?

23 MS. KING: 8:30.

24 CHAIRMAN KLEIN: 8:30 IN THIS ROOM.

25 MS. KING: CORRECT.

1 CHAIRMAN KLEIN: IS THERE BREAKFAST BEFORE
2 THIS?

3 MS. KING: THERE IS, AND THAT WILL BE IN THE
4 ROOM ACROSS THE HALL, NOT THE FIRST THAT YOU STARTED
5 YOUR CLOSED SESSION IN, BUT THE ONE TO THE RIGHT OF IT
6 RIGHT ACROSS FROM THAT DOOR, THE BALBOA ROOM. THAT'S
7 WHERE BREAKFAST WILL BE.

8 AND ONE OTHER THING, YOU CAN LEAVE YOUR
9 BINDERS HERE BECAUSE THOSE ARE NOT CONFIDENTIAL, BUT I
10 WILL COME AROUND AND COLLECT THE SHEET THAT HAS YOUR
11 NAME ON IT AND THE NUMBERS OF THE APPLICATIONS FOR
12 WHICH YOU MUST RECUSE YOURSELVES. I'M GOING TO COLLECT
13 THOSE AND GIVE THEM BACK TO YOU TOMORROW MORNING.

14 CHAIRMAN KLEIN: THANK YOU. AND THANK THE
15 MEMBERS FOR THEIR TREMENDOUS CONTRIBUTIONS. I'D LIKE
16 TO THANK THE STAFF. JAMES HARRISON, WOULD YOU LIKE TO
17 MAKE A COMMENT?

18 MR. HARRISON: I JUST WANT TO MAKE CLEAR FOR
19 THE RECORD ON THE LAST MOTION TO MOVE APPLICATION 295
20 TO TIER 1, THAT IT PASSED WITH 11 VOTES, ONE
21 ABSTENTION, AND ZERO NO VOTES.

22 CHAIRMAN KLEIN: THANK YOU. THANK THE
23 MEMBERS OF THE PUBLIC FOR THEIR PATIENCE. AND MELISSA
24 KING.

25 MS. KING: JUST ONE MORE THING. BREAKFAST IS

1 AT EIGHT IN THAT ROOM ACROSS THE HALL.

2 CHAIRMAN KLEIN: OKAY. IF YOU DON'T WANT TO
3 EAT TOO FAST, GET THERE A LITTLE EARLY. WE WILL START
4 ON TIME.

5 (THE MEETING WAS THEN RECESSED AT 10:10
6 P.M. TO RECONVENE AT 8:30 A.M. ON FEBRUARY 16, 2007.)

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REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT OF THE 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

SHERATON GATEWAY HOTEL
SAN FRANCISCO, CALIFORNIA
ON
FEBRUARY 15, 2007

WAS HELD AS HEREIN APPEARS AND THAT THIS IS THE ORIGINAL TRANSCRIPT THEREOF AND THAT THE STATEMENTS THAT APPEAR IN THIS TRANSCRIPT WERE REPORTED STENOGRAPHICALLY BY ME AND TRANSCRIBED BY ME. I ALSO CERTIFY THAT THIS TRANSCRIPT IS A TRUE AND ACCURATE RECORD OF THE PROCEEDING.

BETH C. DRAIN, CSR 7152
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