BEFORE THE SCIENTIFIC AND MEDICAL ACCOUNTABILITY STANDARDS WORKING GROUP OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE ORGANIZED PURSUANT TO THE CALIFORNIA STEM CELL RESEARCH AND CURES ACT

REGULAR MEETING

LOCATI ON:	MOSCONE CENTER SOUTH		
	747 HOWARD STREET, ROOM 250-260		
	SAN FRANCISCO, CALIFORNIA		

- DATE: THURSDAY, DECEMBER 1, 2005 10 A. M.
- REPORTER: BETH C. DRAIN, CSR CSR. NO. 7152

BRS FILE NO. : 73897

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ADJOURNMENT

1 SAN FRANCI SCO, CALI FORNIA; THURSDAY, DECEMBER 1, 2005 2 3 VICE CHAIR LO: GOOD MORNING, EVERYONE. IF 4 WE COULD GRAB YOUR COFFEE AND PLEASE COME TO THE TABLE. I WANT TO WELCOME YOU ALL TO TODAY'S MEETING OF THE 5 6 STANDARDS WORKING GROUP OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE. I'LL START BY APOLOGIZING FOR 7 THE WET WEATHER. WE WERE HOPING TO HAVE BLUE SKIES FOR 8 YOU. I ASKED STAFF TO ARRANGE IT. AND ONLY THING THEY 9 DIDN'T DO WAS TO GET THE BLUE SKIES TODAY. 10 11 WE HAVE A NUMBER OF PEOPLE WHO WILL BE 12 PHONING IN DURING THE COURSE OF THE DAY AND PEOPLE SORT OF COMING IN AND OUT BECAUSE TODAY, FOR EXAMPLE, IS 13 WORLD'S AIDS DAY, AND JEFF SHEEHY HAS A PRIOR IMPORTANT 14 15 COMMITMENT TO THE WORLD'S AIDS DAY ACTIVITIES. SO I WANT TO FORMALLY CALL THE MEETING TO 16 ORDER. AND I GUESS WE WILL GO AROUND AND DO A FORMAL 17 18 ROLL CALL. 19 MS. SHREVE: I CAN DO THE ROLL CALL. VICE CHAIR LO: KATE CAN DO IT. EVEN BETTER. 20 21 THANK YOU. 22 MS. SHREVE: SHERRY LANSING. BERNARD LO. 23 VICE CHAIR LO: HERE. 24 MS. SHREVE: ALTA CHARO. JOSE CIBELLI. 25 DR. CIBELLI: HERE.

MS. SHREVE: KEVIN EGGAN. 1 2 DR. EGGAN: HERE. 3 MS. SHREVE: MARCY FEIT. ANN KIESSLING. 4 DR. KIESSLING: HERE. MS. SHREVE: PATRICIA KING. ROBERT KLEIN. 5 6 JEFFREY KORDOWER. KENNETH OLDEN. TED PETERS. 7 DR. PETERS: HERE. MS. SHREVE: FRANCI SCO PRI ETO. JANET ROWLEY. 8 9 DR. ROWLEY: HERE. MS. SHREVE: JEFF SHEEHY. 10 11 MR. SHEEHY: HERE. MS. SHREVE: JON SHESTACK. ROBERT TAYLOR. 12 DR. TAYLOR: HERE. 13 MS. SHREVE: JOHN WAGNER. JAMES WILLERSON. 14 15 DR. HALL: DO WE HAVE A QUORUM? DO WE HAVE PEOPLE JOINING US BY PHONE? 16 MS. SHREVE: WE DO, BUT WE EXPECT STARTING AT 17 18 11: 30. 19 DR. HALL: OKAY. HOW MANY SHORT OF A QUORUM ARE WE? 20 21 MS. SHREVE: WE NEED 13 FOR A QUORUM, SO THIS 22 WILL BE LARGELY --DR. HALL: I COUNT. HOW MANY DO WE HAVE 23 24 PRESENT? 25 MS. SHREVE: NINE.

DR. HALL: SO WE'RE SHORT FOUR. 1 VICE CHAIR LO: KATE, CAN YOU JUST FILL US 2 3 IN? WHAT ARE THE IMPLICATIONS OF THAT IN TERMS OF WHAT 4 WE'RE ALLOWED TO DO? MS. SHREVE: I DON'T EXPECT ACTUALLY FORMAL 5 6 VOTES TO BE TAKEN TODAY. WE NEED A QUORUM FOR FORMAL 7 VOTES. VICE CHAIR LO: FOR FORMAL VOTES. WE'RE 8 9 STILL PERMITTED TO HAVE DISCUSSIONS? MS. SHREVE: ABSOLUTELY. 10 11 VICE CHAIR LO: SO THE FIRST ORDER OF 12 BUSINESS IS TO GO OVER THE MINUTES FROM OUR LAST MEETING IN LOS ANGELES ON OCTOBER 24TH, WHICH ARE IN 13 YOUR BINDER UNDER AGENDA ITEM NO. 4, THE YELLOW TAB. 14 SO ANY CORRECTIONS OR ADDITIONS TO THE MINUTES? IF NO 15 CORRECTIONS, MAY I HEAR A MOTION TO APPROVE THEM? 16 MR. HARRISON: BECAUSE YOU DON'T HAVE A 17 18 QUORUM --19 VICE CHAIR LO: WE CAN'T. MR. HARRISON: WE CAN JUST TAKE THEM UNDER 20 21 ADVI SEMENT. 22 VICE CHAIR LO: WE'LL TAKE THAT UNDER ADVISEMENT, AND WE'LL COME BACK TO THAT WHEN WE GET A 23 24 QUORUM. THANKS, JAMES. FORGOT ABOUT THAT. SO THE FIRST ITEM OF BUSINESS, THEN, FROM 25

1 TIME TO TIME THIS COMMITTEE DISCUSSED ISSUES OF 2 INTELLECTUAL PROPERTY. AND THE CIRM IP TASK FORCE ON 3 INTELLECTUAL PROPERTY IS CHAIRED BY ED PENHOET, WHO IS 4 THE VICE CHAIR OF THE ICOC, AND HE IS HERE TODAY TO 5 GIVE US A PROGRESS REPORT ON WHAT THAT TASK FORCE IS 6 DOING AND THEIR THINKING IN THIS VERY IMPORTANT AND 7 ALSO VERY COMPLICATED ISSUE.

8 OUR GOAL IS TO PROVIDE INPUT, BECAUSE WE 9 DON'T HAVE A QUORUM, WE'RE NOT GOING TO BE ABLE TO DO 10 ANYTHING FORMALLY, BUT I THINK IT'S A CHANCE FOR US TO 11 HEAR ABOUT THE DELIBERATIONS OF THE IP TASK FORCE. AND 12 THEN IF WE HAVE STRONG IDEAS, ALSO IT'S A WAY OF OUR 13 PROVIDING INPUT.

ED, THANKS VERY MUCH FOR COMING TO SHARING
WITH US WHAT YOUR COMMITTEE HAS BEEN DOING WITH GREAT
INTEREST TO US.

DR. PENHOET: THANK YOU. GOOD MORNING. 17 THANKS FOR THE OPPORTUNITY TO SHARE A WORK IN PROGRESS 18 19 AT THE IP TASK FORCE WITH YOU. I'M GOING TO GIVE A LITTLE OVERVIEW OF THE INTELLECTUAL PROPERTY SPACE, SO 20 TO SPEAK, AND THEN JEFF SHEEHY, WHO'S A MEMBER OF BOTH 21 22 THE INTELLECTUAL PROPERTY TASK FORCE AND OF YOUR GROUP, IS GOING TO PRESENT WHERE WE ARE IN OUR DELIBERATIONS 23 24 ABOUT HOW WE SHOULD HANDLE IP.

25

WE HAVE TWO GOALS, ONE SHORT-TERM GOAL AND

ONE LONG-TERM GOAL. OUR SHORT-TERM GOAL IS TO MAKE A
 RECOMMENDATION TO THE ICOC AT ITS DECEMBER 6TH MEETING
 ABOUT AN INTERIM POLICY, WHICH WOULD BE APPLICABLE FOR
 TRAINING GRANTS ONLY, AND THEN TO CONTINUE OUR WORK
 WITH A FINAL GOAL OF HAVING IN PLACE BY THE SPRING OF
 2006 AN INTELLECTUAL PROPERTY POLICY FOR THE CIRM AS WE
 GO FORWARD.

8 SO WE ARE IN THE EARLY PHASES OF THIS 9 PROJECT, AND WE'VE, I THINK, MADE GOOD PROGRESS AND 10 WE'RE HAPPY TO HAVE THE OPPORTUNITY TO SHARE THAT 11 PROGRESS WITH YOU.

12 IF YOU LOOK AT WHAT'S GOING TO BE REQUIRED 13 FOR THE TRAINING GRANTS AND, IN FACT, FOR THE GRANTS IN 14 GENERAL, ONCE WE GET TO THAT POINT, THERE ARE BASICALLY 15 THREE SETS OF INPUTS WHICH WILL ALL BE INCORPORATED AT 16 THE END OF THE DAY IN A GRANTS ADMINISTRATION POLICY.

SO THE IP POLICY GROUP IS DEVELOPING -- THE 17 IP TASK FORCE IS DEVELOPING AN INTERIM IP POLICY WHICH 18 19 WILL BE FED INTO THIS. YOUR GROUP IS CONFRONTING THE ISSUES OF INTERIM ETHICAL STANDARDS WHICH HAVE TO BE IN 20 21 PLACE IN ORDER FOR US TO MAKE ANY GRANTS FOR THE TRAINING PROGRAM. THOSE WILL COME TOGETHER WITH A 22 23 VARIETY OF OTHER ADMINISTRATIVE GUIDELINES IN A 24 DOCUMENT WHICH WILL FORM THE INTERIM GRANTS ADMINISTRATION POLICY FOR CIRM, TO WHICH ALL GRANTEES 25

WILL HAVE TO AGREE AS PART OF THEIR RECEIVING A GRANT.
 AND SO IF AND WHEN THEY AGREE THAT THEY WILL
 ESSENTIALLY CONDUCT THEMSELVES ACCORDING TO THE
 PRINCIPLES ARTICULATED IN THAT DOCUMENT, THEN THEY'LL
 PRESUMABLY SIGN THAT DOCUMENT AND AGREE TO DO SO GOING
 FORWARD.

SO AS I SAID, WE'VE BEEN WORKING ON THE 7 8 LEFT-HAND SIDE THERE. JUST TO REMIND YOU ABOUT SOME OF 9 THE BACKGROUND OF THE INTELLECTUAL PROPERTY, BECAUSE I KNOW NOT ALL OF YOU ARE INTELLECTUAL PROPERTY EXPERTS, 10 11 TO BE SURE, FIRST OF ALL, WHAT KINDS OF THINGS 12 CONSTITUTE INTELLECTUAL PROPERTY? AND THE FIRST AND THE ONE THAT RECEIVES THE MOST ATTENTION IS SUBJECT 13 MATTER WHICH IS PATENTABLE. PATENTABLE SUBJECT MATTER 14 CAN INCLUDE COMPOSITIONS OF MATTER. IF YOU INVENT A 15 SUBSTANCE OR YOU INVENT A MACHINE, YOU CAN PATENT THAT 16 17 THING, AND FREQUENTLY THOSE, FOR EXAMPLE, IN THE FIELD OF THERAPEUTICS, WHAT IS GENERALLY PATENTED IS THE 18 19 SUBSTANCE I TSELF. THAT'S THE DRUG OR THERAPY OF ONE SORT OR ANOTHER, BUT ALSO DI AGNOSTI CS. AND AS WE KNOW, 20 21 STEM CELL LINES CAN BE PATENTED. THERE ARE A NUMBER THAT HAVE ALREADY BEEN PATENTED BY VARIOUS DIFFERENT 22 GROUPS, ESPECIALLY BY THE UNIVERSITY OF WISCONSIN, AND 23 24 OWNERSHIP OF THOSE CELL LINES NOW RESIDES IN THE RESEARCH FOUNDATION OF THE UNIVERSITY OF WISCONSIN. 25

PROCESSES ARE ALSO PATENTABLE. METHODS OF 1 DOING SOMETHING, ASSAYS OF DOING SOMETHING; AND WHETHER 2 3 OR NOT YOU GET A PATENT DEPENDS ON THE NUANCES OF THE 4 PATENT LAW, BUT FUNDAMENTALLY PATENTS ARE ALLOWED IF PEOPLE INVENT SOMETHING THAT'S USEFUL; THAT IS, IT HAS 5 TO HAVE UTILITY AND IT'S NOVEL. SO THOSE ARE THE TWO 6 SORT OF BROAD CRITERIA THAT DEFINE PATENTABLE SUBJECT 7 8 MATTER.

9 THERE ARE ALSO OTHER FORMS OF INTELLECTUAL 10 PROPERTY. ONE OF THOSE IS KNOW-HOW; THAT IS, JUST THE ACCUMULATED KNOWLEDGE IN AN ORGANIZATION THAT IS 11 12 CONDUCTING A RESEARCH PROGRAM OF ANY KIND. THAT KNOW-HOW GENERALLY, WHETHER IT'S PATENTED OR NOT 13 PATENTED, IS A FORM OF INTELLECTUAL PROPERTY. IT'S NOT 14 15 A FORMAL FORM OF INTELLECTUAL PROPERTY, BUT IT'S A VERY IMPORTANT FORM BECAUSE, IN FACT, A LOT OF THE NEW 16 KNOWLEDGE WHICH IS GAINED AND THE NEW THINGS WHICH ARE 17 18 DISCOVERED, PROBABLY THERE'S MORE IN THE CATEGORY OF 19 KNOW-HOW THAN THERE IS ACTUALLY IN PATENTABLE SUBJECT MATTER OR PATENTED SUBJECT MATTER. 20 21 AND THEN FINALLY THE OTHER FORM OF

INTELLECTUAL PROPERTY IS COPYRIGHTS. THIS HISTORICALLY
HAD REFERRED TO WRITTEN DOCUMENTS, BUT NOW ALSO COVERS
SOFTWARE AND DATABASES WHICH HAVE BEEN COPYRIGHTED.
AND THEIR USE IS, THEREFORE, PROTECTED.

1 THERE'S JUST A GENERAL ISSUE. WHY DO PEOPLE 2 FILE PATENTS? WHAT IS THE PURPOSE OF PATENTS? AS YOU 3 CAN READ HERE, THE CONSTITUTIONAL CONVENTION ACTUALLY 4 ANTICIPATED THE FILING OF PATENTS TO PROMOTE THE 5 PROGRESS OF SCIENCE AND USEFUL ARTS BY SECURING FOR 6 LIMITED TIMES TO AUTHORS AND INVENTORS THE EXCLUSIVE 7 RIGHT TO THEIR RESPECTIVE WRITINGS AND DISCOVERIES.

THIS HAS TWO VERY IMPORTANT RAMIFICATIONS. 8 9 THE FIRST IS TO FORCE THE INVENTOR TO DISCLOSE THE INVENTION TO ENABLE THE WORK OF OTHERS. AND OFTENTIMES 10 11 THE REALITY OF PEOPLE WHO ARE GENERATING INTELLECTUAL 12 PROPERTY GENERALLY IS THEY HAVE TWO WAYS OF GETTING SOME PRIVATE USE, IF YOU WILL, OF THEIR TECHNOLOGY THAT 13 THEY INVENT. ONE IS TO FILE A PATENT, AND THEN THEY 14 CREATE PROPERTY, REAL PROPERTY. IF THEY ARE GRANTED A 15 PATENT, THE PATENT ITSELF IS REAL PROPERTY. 16

THE OTHER WAY IS TO KEEP IT A SECRET, 17 SO-CALLED TRADE SECRET, WHERE THEY DON'T SHARE THEIR 18 19 KNOW-HOW AND, THEREFORE, THAT IS NOT AVAILABLE TO THE COMMUNITY AT LARGE BECAUSE THEY HAVE, IN ESSENCE, 20 21 DECIDED TO PROTECT THEIR INVENTIONS BY NOT TELLING ANYBODY ABOUT WHAT THEY' VE INVENTED. SO THE PATENT 22 SYSTEM, ONE OF THE IMPORTANT PARTS OF THE PATENT 23 24 SYSTEM, IN ADDITION TO ALLOWING INVENTORS TO GAIN SOME 25 BENEFITS FROM HAVING MADE THE INVENTION, IS ACTUALLY TO

FACILITATE THE DISPERSION OF THE INFORMATION CONTAINED
 IN THE PATENT.

3 AND FORTUNATELY, I THINK, FOR SCIENCE IN THIS 4 COUNTRY, A PATENT HAS TO BE, AS WRITTEN, HAS TO BE ENABLING. ENABLING MEANS IF SOMEBODY READS THAT 5 PATENT, THAT THEY CAN REPRODUCE THE WORK. AND IN 6 ADDITION TO BEING ENABLING, IT HAS TO DISCLOSE THE BEST 7 MODE OF DOING IT. SO YOU CAN'T WRITE A QUARTER OF A 8 9 PATENT ON YOUR INVENTION AND KEEP OUT KEY ISSUES ASSOCIATED WITH ALLOWING SOMEBODY ELSE TO REPEAT THE 10 11 WORK. IF YOU DO, YOUR PATENT WILL BE INVALIDATED. S0 12 YOU MUST DISCLOSE THE BEST MODE, AND YOU MUST DISCLOSE THE ENTIRETY OF THE METHODS THAT LED TO THE PATENT. 13

AND THEN, FINALLY, OF COURSE, THE PATENTS DO ALLOW THE INVENTOR TO ENJOY FINANCIAL BENEFITS OF THE INVENTION AFTER DISCLOSURE. OUR CURRENT PATENT LAW IS THAT A PATENT IS VALID FOR 17 YEARS AFTER THE DATE OF FILING.

19 SO TECHNOLOGY TRANSFER, WHICH IS WHAT WE ARE 20 DEALING WITH PRIMARILY IN THE IP POLICIES, HAS REALLY 21 TWO ROUTES. ONE IS LICENSING. THIS IS THE PROCESS BY 22 WHICH AN OWNER OF AN INVENTION, ACTUALLY THE OWNER OF A 23 PATENTED INVENTION GENERALLY, PERMITS A SECOND PARTY TO 24 USE THE INVENTION. PATENTS PER SE DO NOT PROSCRIBE ANY 25 PARTICULAR USE OF THE PATENT. IF YOU OWN A PATENT, YOU

CAN ALLOW PEOPLE TO FREELY USE YOUR PATENT. YOU CAN 1 CHARGE THEM A LOT OF MONEY. YOU CAN SELECTIVELY 2 3 LICENSE A FEW PEOPLE. IT'S LIKE ANY OTHER PROPERTY. IF YOU'RE THE OWNER OF THAT PROPERTY, YOU HAVE THE 4 RIGHT TO CHOOSE HOW THAT PROPERTY IS ACTUALLY UTILIZED 5 BY YOURSELF OR BY OTHERS. SO THERE IS NO -- THERE'S 6 NOTHING IN THE OWNERSHIP OF A PATENT PER SE THAT 7 DEFINES WHAT'S USED. 8

9 WE'LL GET BACK TO THAT A LITTLE BIT LATER ON BECAUSE SOME OF THE -- IN JEFF'S PRESENTATION, YOU WILL 10 SEE THAT A NUMBER OF THINGS RELATED TO PATENTS AND NOT 11 12 RELATED TO PATENTS WITH RESPECT TO INTELLECTUAL PROPERTY ARE DETERMINED BY SOME IMPORTANT PRINCIPLES 13 WHICH HAVE BEEN IN PLACE FOR SOME TIME NOW IN THE U.S. 14 15 SCIENTIFIC COMMUNITY, AND OFTENTIMES THERE'S CONFUSION ABOUT THE WAY IN WHICH THESE ARE APPLIED VERSUS THE 16 PRINCIPLES THEMSELVES. AND ESPECIALLY AROUND THE LAWS 17 THAT AROSE FROM THE BAYH-DOLE ACT IN 1980, FOR EXAMPLE. 18 19 THERE'S GENERALLY BOTH CONTROVERSY AND CONFUSION ABOUT BAYH-DOLE, BUT IN GENERAL I THINK IT'S IMPORTANT FOR US 20 21 TO SEGREGATE WHAT BAYH-DOLE SAYS AND HOW IT'S APPLIED, WHICH ARE FREQUENTLY QUITE DIFFERENT ISSUES. 22

THEN THE INFORMAL SHARING OF KNOW-HOW IS IN
AGGREGATE PROBABLY MUCH LARGER THAN LICENSING; THAT IS,
THE PUBLICATION OF RESEARCH RESULTS, THE MOVEMENT OF

PEOPLE, FRANKLY, IS A VERY SUBSTANTIAL -- EVERY TIME A 1 PERSON MOVES FROM ONE ORGANIZATION TO ANOTHER, THEY 2 3 CARRY THE KNOWLEDGE THAT THEY' VE ACCUMULATED IN THE 4 FIRST ORGANIZATION TO THE SECOND ORGANIZATION. SO THIS 5 INFORMAL SHARING OF KNOW-HOW, WHICH HAS NOTHING TO DO WITH LICENSING BECAUSE IT'S NOT BASED ON ANY FORMAL 6 7 PATENTS, IS ACTUALLY QUANTITATIVELY PROBABLY, MY OWN GUESS, IT WOULD BE TEN TIMES AS LARGE AS TECHNOLOGY 8 9 WHICH IS SUBJECT TO PATENTS. AND, THEREFORE, WE SPENT 10 A FAIR AMOUNT OF TIME IN OUR TASK FORCE ON THIS ISSUE 11 OF, IN ADDITION TO THE INTELLECTUAL PROPERTY ASSOCIATED 12 WITH PATENTS, WE SPENT A FAIR AMOUNT OF TIME ON 13 DI SCUSSING AND THINKING HARD ABOUT THE ISSUES OF HOW UNPATENTED KNOW-HOW WILL BE SHARED WITHIN THE CIRM 14 15 GRANTEES.

WITH THAT, LET ME STOP HERE AND TAKE SOME 16 QUESTIONS FROM YOU, IF YOU HAVE ANY, ABOUT THIS SORT OF 17 BRIEF INTRODUCTION TO THE PATENT SYSTEM AND THE ISSUES 18 19 THAT WE'RE DEALING AS A RESULT. DO ANY OF YOU --ACTUALLY 20 DR. CIBELLI: WE HAD A QUESTION. 21 LAST MEETING WE WERE DISCUSSING HOW WE CAN MAKE SURE THAT THE GRANTEE WILL SHARE REAGENTS, FOR EXAMPLE, WITH 22 23 OTHER GRANTEES OR MEMBERS OF THE SCIENTIFIC COMMUNITY. 24 IT'S UNDERSTOOD THAT WHEN YOU PUBLISH AN ARTICLE, THEN 25 YOU HAVE TO SHARE THE REAGENTS WITH THE COMMUNITY. BUT

IF THE GRANTEE IS A COMPANY AND THEY MAY NOT WANT TO 1 PUBLISH AN ARTICLE, YOU MAY WANT TO FILE A PATENT. 2 S0 3 WE WENT BACK AND FORTH AND TRIED TO RECONCILE THE TWO 4 THINGS, TRYING TO MAINTAIN THE CONFIDENTIALITY OR WHATEVER THE COMPANY IS TRYING TO CREATE VALUE ON, BUT 5 AT THE SAME TIME THE MONEY WAS GIVEN FROM THE 6 INSTITUTE. THEY SHOULD BE ABLE TO SHARE WHATEVER THEY 7 GENERATE. HAVE YOU THOUGHT ABOUT HOW TO FIX THAT? 8 9 DR. PENHOET: WE HAVE A PRINCIPLE THAT WE'VE ARTICULATED, AND I THINK IT WILL COME OUT IN JEFF'S 10 11 PRESENTATION. WE THINK THERE ARE SOME WAYS TO HANDLE 12 THAT ISSUE. AND AS YOU WILL SEE, ONE OF THE PRINCIPLES -- AND WHAT JEFF WILL SHOW YOU TODAY, WE 13 HAVE NOT FORMULATED A POLICY. IT'S MUCH TOO SOON FOR 14 15 US TO FORMULATE A POLICY. WE HAVE FORMULATED A SET OF PRINCIPLES UPON WHICH OUR POLICY WILL BE BASED. ONE OF 16 THOSE PRINCIPLES IS MUCH EXPANDED SHARING OF REAGENTS 17 AND KNOW-HOW ABOUT WHAT'S GENERALLY PRACTICED TODAY IN 18 19 THE BIOMEDICAL COMMUNITY. SO THAT IS PART OF OUR PRESENTATION, AND JEFF WILL TALK ABOUT THAT. BUT IT'S 20 21 AN EXTREMELY IMPORTANT POINT. I'M

DR. PETERS: I HAVE TWO LARGE QUESTIONS. I'N WONDERING, MR. CHAIR, IF I SHOULD DO THAT NOW OR WAIT UNTIL THE ENTIRE PRESENTATION IS OVER. DISCUSSION QUESTIONS.

VICE CHAIR LO: AT THIS POINT WHY DON'T WE
 JUST HAVE QUESTIONS RELATED TO WHAT ED HAS PRESENTED,
 THE BACKGROUND, AND THERE WILL BE TIME AFTER ED
 FINISHES AND JEFF PRESENTS AND WE SEE WHAT THEIR IDEAS
 ARE TO HAVE BROADER COMMENTS.

DR. PENHOET: PROBABLY BE MORE CLEAR AFTER
JEFF'S PRESENTATION, SO AT THIS POINT I'LL TURN IT OVER
TO JEFF.

9 VICE CHAIR LO: THANKS VERY MUCH. THAT WAS10 VERY CLEAR AND HELPFUL.

MR. SHEEHY: AND THE FIRST THING I WANT TO DO 11 12 WHILE WE HAVE THE ACTUAL STATUTE UP IS, WHILE YOU GUYS ARE READING THAT, IS TO TRY TO NARROW OUR DISCUSSION TO 13 WHAT IT REALLY IS TODAY. AND I THINK JOSE HAS BROUGHT 14 UP THE ISSUE OF COMPANIES, AND I THINK TED IS GOING TO 15 BRING UP SOME LARGER ISSUES, BUT THE REALITY OF WHAT 16 WE'RE LOOKING AT TODAY IS INTELLECTUAL PROPERTY 17 GUI DELINES FOR TRAINING GRANTS, EXCLUSIVELY FOR THAT. 18 19 AND WHEN WE TALK ABOUT INTELLECTUAL PROPERTY GUIDELINES, LET'S TRY TO SEPARATE IN OUR MINDS BETWEEN 20 21 THE GUIDELINES THAT ARE GOING TO APPLY MOSTLY TO 22 UPSTREAM RESEARCH THAT'S DONE AT NONPROFIT ACADEMIC RESEARCH INSTITUTIONS AND THEN SOMETHING THAT'S MORE 23 24 WHAT IAVI CALLS DEVELOPMENT WHERE YOU ACTUALLY MAKE A GRANT DIRECTLY TO A COMPANY, AND THAT COMPANY DEVELOPS 25

A PRODUCT. THOSE TWO ACTUALLY, I THINK, WILL NEED 1 SEPARATE RULES. AND SO WHAT WE'RE TALKING ABOUT TODAY 2 3 FOR TRAINING GRANTS ARE ONLY GOING TO GO TO NONPROFIT 4 ACADEMIC INSTITUTIONS. I DO THINK THAT THIS MAY IN SOME WAYS SERVE AS A TEMPLATE FOR THE LONG-TERM POLICY 5 FOR GRANTS THAT ARE MADE TO ACADEMIC RESEARCH 6 INSTITUTIONS, BUT LET'S NOT CONFUSE THAT WITH WHAT WE 7 MAY END UP DOING IN TERMS OF DEVELOPMENT IP POLICY THAT 8 9 IS GOING TO GO TO A FOR-PROFIT ENTITY THAT IS GOING TO COMMERCIALIZE A PRODUCT. WE MAY END UP WITH A SOMEWHAT 10 DIFFERENT SET OF INTELLECTUAL PROPERTY GUIDELINES FOR 11 12 THAT, AND IT MAY BRING IN SOME OF THOSE LARGER ISSUES 13 THAT I THINK FOLKS MAY WANT TO TALK ABOUT IN TERMS OF PUBLIC BENEFIT. 14

15 AND I REALLY THINK WE NEED TO LOOK AT THE LAW HERE FOR A SECOND BECAUSE THE LAW IS SOMEWHAT 16 CONSTRICTING IN THAT IT GIVES US A VERY NARROW BALANCE 17 BETWEEN PATENTS, ROYALTIES. AND WE HAVE REALLY HAVE A 18 19 TEST TO BALANCE SOME SORT OF -- I TEND TO READ THIS AS A FINANCIAL RETURN. PATENTS, ROYALTIES, AND LICENSES 20 21 TEND TO MEAN TO ME THAT WE'RE GOING TO DERIVE SOME SORT OF THE INCOME STREAM VERSUS PATENTING AND LICENSING 22 23 THAT MIGHT INTERFERE WITH THE ABILITY OF THE SCIENCE TO 24 MOVE FORWARD. SO AS I UNDERSTAND THIS, AND WE MAY WANT 25 TO TALK ABOUT THIS LATER, THIS SEEMS TO BE OUR CORE

INTELLECTUAL PROPERTY KIND OF, IF YOU THINK ABOUT THE
 SCALE, IF WE PUT TOO MUCH ON LICENSING WITH THAT OR IF
 WE GET PEOPLE TO OVERPATENT, WILL THAT SLOW OR LIMIT
 THE ABILITY TO MOVE FORWARD WITH THE SCIENCE THAT A
 MORE OPEN IP POLICY MIGHT PRODUCE.

6 SO THIS JUST KIND OF SHOWS YOU WHERE WE ARE 7 IN THE PROCESS AND THE DIFFERENT DATES. I THINK WE CAN 8 JUST KIND OF FLY THROUGH THIS. THIS TAKES US TO WHERE 9 WE ARE TODAY, DECEMBER 1ST. THE NEXT ICOC MEETING, 10 WE'RE GOING TO TRY TO PUT IN PLACE A WHOLE SET OF 11 INTERIM POLICIES THAT WILL ALLOW THE TRAINING GRANTS TO 12 GO OUT.

13DR. PENHOET: IT'S WORTH NOTING WE'VE HAD TWO14MEETINGS OF THE IP TASK FORCE.

15 DR. HALL: COULD I ASK YOU, JEFF, TO GIVE US 16 SOME SENSE OF THE WORK THAT THE TASK FORCE HAS DONE AT 17 THOSE TWO MEETINGS?

18 MR. SHEEHY: I THINK THE NEXT COUPLE SLIDES. 19 SO WE'VE LOOKED, AND AS YOU AN TELL, THIS IS FAIRLY LONG LIST OF REPORTS THAT HAVE BEEN DISCUSSED. WE HAVE 20 21 HAD TWO EXTENSIVE MEETINGS. WE HAVE HAD -- WE ALSO HAD THE BENEFIT OF AN EXTRAORDINARILY INFORMATIVE MEETING 22 CONDUCTED BY THE LEGI SLATURE LED BY SENATOR DEBORAH 23 24 ORTIZ THAT I FOUND TO BE VERY INFORMATIVE. IF YOU 25 LOOK, A WHOLE SET OF DIFFERENT MODELS THAT HAVE BEEN

BROUGHT FORWARD AND DISCUSSED, AND I THINK WHAT I'D
 LIKE TO DO NEXT IS MAYBE TALK ABOUT -- WE ACTUALLY HAVE
 A LIST OF THE PRESENTATIONS THAT WE'VE SEEN.

4 SO THE FIRST IP TASK FORCE MEETING, WE GOT 5 THE PRESENTATION ON THE CCST REPORT, WHICH IS THE CALIFORNIA COUNCIL ON SCIENCE AND TECHNOLOGY REPORT. 6 7 WE HAD THE OCTOBER 31ST LEGISLATIVE HEARING, WHICH, AS 8 YOU CAN SEE, WE HEARD FROM REBECCA EI SENBERG, WHO'S A 9 WELL-KNOWN EXPERT AND INNOVATOR IN IP POLICY; MERRILL 10 GOOZNER HAD SOME GREAT IDEAS; WE HEARD FROM BOND COUNSEL ABOUT ISSUES RELATED TO TAX-EXEMPT BONDS. YOU 11 12 FOLLOW TO OUR LAST TASK FORCE, WE HEARD FROM REBECCA EISENBERG AGAIN; RICHARD KLAUSNER FORMERLY WITH THE 13 GATES FOUNDATION, WHO DISCUSSED WITH US HOW GATES DOES 14 15 INTELLECTUAL PROPERTY FOR THEIR GRANTS, AND THEY'RE ACTUALLY INCREDIBLY INNOVATIVE, THEIR POLICY. 16 SO AS YOU CAN SEE, THERE'S A LITTLE BIT OF 17 HOMEWORK THAT WE'VE DONE IN GETTING TO THIS POINT. 18 19 NOW, I'D LIKE TO JUST START WITH THE FIRST

20 MODEL. I WANT TO SAY SOMETHING ABOUT THE CCST INTERIM 21 REPORT BECAUSE THIS REPORT WAS COMMISSIONED BY THE 22 LEGISLATURE BECAUSE THERE IS NO INTELLECTUAL PROPERTY 23 POLICY FOR STATE-FUNDED RESEARCH. SO IN A WAY WHAT 24 WE'RE DOING WITH CIRM IS WE'VE KIND OF GOT THE 25 BULL'S-EYE DRAWN ON US, BUT THE LEGISLATURE IS ACTUALLY

SUPPOSED TO BE ADDRESSING THIS ISSUE FOR ALL
 INSTITUTIONS FOR ALL STATE-FUNDED RESEARCH AND
 PRESUMABLY WHEN THEY FINISH THEIR PROCESS, THAT WOULD
 BE SOMETHING THAT WE WOULD WANT TO TAKE PART IN.
 WHAT WE GOT FROM THE CCST WAS AN INTERIM
 REPORT THAT THEY' RE PREPARING FOR THE LEGISLATURE IN

THE HOPE THAT THE LEGISLATURE WILL ADOPT IT AS AN IP 7 POLICY FOR ALL STATE-FUNDED RESEARCH. AND THEY 8 9 BASICALLY DEFAULTED TO A BAYH-DOLE MODEL FOR, I THINK, ALL THE REASONS THAT BAYH-DOLE HAS -- IN THE WAYS IN 10 11 WHICH BAYH-DOLE HAS WORKED UP TO THIS POINT. THERE WAS 12 SOME CONCERN EXPRESSED AT THE UPSTREAM LEVEL ON THE SHARING OF MATERIALS AND KNOWLEDGE. I THINK THAT THAT 13 IS THE THEME THAT COMES OUT IN ALMOST EVERY MODEL THAT 14 15 WE LOOKED AT.

16 SO THIS WAS THE FIRST THING THAT WE GOT. I 17 THINK ALSO WHAT THEY'RE LOOKING AT IS SOMETHING THAT IS 18 MORE ORIENTED TOWARDS NONPROFIT ACADEMIC RESEARCH 19 INSTITUTIONS AND NOT SOMETHING THAT NECESSARILY IS THAT 20 INFORMATIVE IF YOU ARE GOING TO BE TALKING ABOUT MAKING 21 GRANTS TO COMPANIES TO DEVELOP PRODUCTS OR TO CARRY OUT 22 CLINICAL TRIALS.

23 THE NEXT MODEL WE'RE LOOKING AT IS IAVI,
24 WHICH IS THE INTERNATIONAL AIDS VACCINE INITIATIVE.
25 WHAT I LIKE ABOUT THEIR MODEL IS THAT THEY ACTUALLY

1 HAVE BROKEN IT DOWN INTO TWO PIECES THAT KIND OF CAPTURES THIS DICHOTOMY. SO FOR BASIC UPSTREAM 2 3 RESEARCH, THEY ARE CREATED A CONSORTIUM WITH HALF A 4 DOZEN RESEARCH INSTITUTIONS, ACADEMIC RESEARCH 5 INSTITUTIONS, AND THAT CONSORTIUM RETAINS EXCLUSIVE IP RIGHTS WITHIN IT. SO IN A WAY THAT IS A PATENT POOL. 6 7 NOW, THEY DO HAVE VERY INNOVATIVE POLICY THAT THEY DO WHEN THEY GO TO DEVELOPMENT. THIS IS WHEN THEY 8 9 GO TO A COMPANY OR A COMPANY COMES TO THEM. THEY HAVE A PRODUCT THEY WANT TO TRY. THEY ALLOW THE GRANTEES TO 10 OWN THE IP, BUT THEY THEN GO INTO ALL OF THIS VERY 11 12 IMPORTANT ACCESS ISSUE KIND OF AGREEMENTS. SO THEY REQUIRE, FOR INSTANCE, VACCINES BE PROVIDED AT 13 REASONABLE COST TO DEVELOPING COUNTRIES. AND IF THEY 14 DON'T, THEY RETAIN A MARCH-IN RIGHT THAT ALLOWS THEM TO 15 LICENSE THAT VACCINE PRODUCT TO AN IN-COUNTRY 16 MANUFACTURER SO THAT THAT VACCINE WILL BE AVAILABLE IN 17 THAT COUNTRY. 18 19 THEY ENCOURAGE THE COMMERCIALIZATION OF DISCOVERIES. THIS IS NOT, BY THE WAY, THAT DIFFERENT 20

FROM WHAT GATES DOES, EXCEPT THAT GATES NEGOTIATES A SEPARATE ACCESS POLICY FOR DEVELOPING COUNTRIES WITH EACH GRANTEE BEFORE THE GRANT IS MADE. SO AS A PART OF YOUR GRANT PROPOSAL, YOU HAVE TO SUBMIT YOUR PLAN FOR MAKING YOUR PRODUCT AVAILABLE TO PEOPLE IN THE

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1 DEVELOPING WORLD OR IN LOW INCOME COUNTRIES.

AND THEN THE LAST WE HAVE IS REBECCA 2 3 EI SENBERG' S RECOMMENDATIONS. AND SHE RECOMMENDS THAT 4 WE ALLOW OUR GRANTEES TO OWN IP RIGHTS. THIS IS AN IMPORTANT PART THAT'S COME UP. RESERVE THE RIGHT FOR 5 CIRM RESEARCHERS TO USE CIRM-FUNDED IP. WE SHOULDN'T 6 HAVE TO PAY FOR IP TWICE. IF SOMEONE AT AN INSTITUTION 7 PATENTS SOMETHING, ONE OF OUR GRANTEES SHOULDN'T HAVE 8 9 TO PAY A FEE TO THAT INSTITUTION IN ORDER TO GET ACCESS TO USE THE STEM CELL LINE, THAT REAGENT, OR WHATEVER IT 10 11 MAY BE THAT WAS DEVELOPED IF IT WAS DEVELOPED WITH CIRM 12 MONEY.

EVALUATE THE EXCEPTIONAL CIRCUMSTANCES ASPECT 13 OF FEDERAL LAW FOR NONPROPRIETARY APPROACH TO 14 15 FURTHERING CIRM TECHNOLOGY TRANSFER GOALS. I THINK WE'RE GOING TO BRING ED BACK AT SOME POINT TO TALK MORE 16 SPECIFICALLY ABOUT THIS REALLY COMPLEX AREA OF LAW THAT 17 I'M NOT SURE I UNDERSTAND YET, BUT IT REALLY IS ONE 18 19 MORE ELEMENT AT THIS UPSTREAM LEVEL OF RESEARCH TOWARDS FURTHERING GREATER SHARING, WHICH IS THE ONE NEGATIVE 20 21 ASPECT THAT'S BEEN BROUGHT UP AGAIN AND AGAIN ABOUT BAYH-DOLE IS THAT THERE'S THIS TENDENCY TO LICENSE, TO 22 23 PATENT, AND TO IN SOME WAY IMPEDE THE SHARING OF THESE 24 TOOLS AND THESE UPSTREAM PRODUCTS THAT EVERYONE NEEDS 25 TO HAVE ACCESS TO IN ORDER FOR THE RESEARCH TO MOVE

1 FORWARD.

2 ENCOURAGE THE DISSEMINATION OF DATA AND
3 BIOMEDICAL MATERIALS, SO THERE'S A REAL BIAS THERE
4 TOWARDS OPEN-SOURCE PUBLICATION, SAY, PUBLIC LIBRARY OF
5 SCIENCE.

AVOID A TAX ON ANY REVENUES GENERATED BY
CIRM-FUNDED INVENTIONS. AND THIS WAS SOMETHING, AND IT
WILL BE INTERESTING TO SEE HOW WE HANDLE THIS, BUT
SHE'S BASICALLY SAYING DON'T TAKE A ROYALTY.

10 AND THEN THE LAST IS AVOID A PATENT POOLING 11 APPROACH AS A FOUNDATIONAL PRINCIPLE, BUT RESERVE THE 12 RIGHT TO ENABLE ONE IF A NEED ARISES.

MERRILL GOOZNER PUT FORWARD A VERY 13 INTERESTING PATENT POOLING PROPOSAL, AND IT'S A VERY 14 15 INTERESTING CONCEPT. MAYBE ONCE WE GET GOING, IT'S SOMETHING THAT WE MIGHT WANT TO LOOK AT. AND THAT WAS 16 KIND OF REBECCA EISENBERG'S APPROACH IS THAT IT'S A 17 VERY INTERESTING IDEA. THERE'S SOME MODELS. UC DAVIS 18 19 IS PART OF A PATENT POOL FOR IP THAT'S BEEN DEVELOPED FOR AGRICULTURAL PRODUCTS. IF WE GET A GOOD MODEL THAT 20 21 WORKS WITH OUR INSTITUTIONS THAT WE'RE WORKING WITH, THEN PERHAPS THAT'S SOMETHING WE MIGHT WANT TO LOOK AT 22 23 DOWN THE ROAD. 24 DR. CIBELLI: WHAT DO YOU MEAN BY PATENT

25 POOLI NG?

1 MR. SHEEHY: THAT IS A GOOD QUESTION. IF YOU LOOK, IF YOU TAKE THE IAVI MODEL, BASICALLY THE RIGHTS 2 3 ARE ALL HELD COLLECTIVELY WITHIN THIS CONSORTIUM, SO 4 THEY HAVE A NARROW GROUP OF RESEARCH INSTITUTIONS THAT THEY' RE FUNDING. ANYTHING THAT' S DEVELOPED BY ANY OF 5 THOSE INSTITUTIONS IS HELD COLLECTIVELY IN THIS POOL, 6 AND PRESUMABLY ANY BENEFIT FINANCIALLY THAT COMES FROM 7 THAT WOULD BE SHARED OUT IN SOME WAY AMONGST THOSE 8 DIFFERENT PARTICIPANTS. THIS IS NOT CLEAR YET HOW MANY 9 PARTICIPANTS THERE ARE GOING TO BE. WHAT ARE WE? I 10 THINK THE FIRST ROUND OF GRANTS WAS 16 DIFFERENT 11 12 INSTITUTIONS GOT GRANTED. WE HAD 28 APPLICATIONS. WE REALLY DON'T KNOW WHAT OUR POOL IS -- AT LEAST FOR THE 13 NONPROFIT ACADEMIC WORLD, WE DON'T REALLY KNOW WHAT 14 15 THAT POOL WOULD BE, BUT THE IDEA IS THAT RATHER THAN EACH INSTITUTION LICENSING, PATENTING AND LICENSING FOR 16 THEMSELVES, THAT PATENT WOULD BE HELD AS PART OF A 17 LARGER SET THAT ANYONE WITHIN THAT POOL COULD USE 18 19 FREELY. DOES THAT ENOUGH? DR. CIBELLI: IT'S JUST THAT IF YOU ARE GOING 20 21 TO ALLOW THEM TO OWN THEIR IP, YOU ARE SAYING FIRST THAT YOU ARE GOING TO ALLOW GRANTEES TO OWN THE IP 22 23 RI GHTS.

24 MR. SHEEHY: THE POOL, OR LIKE THE IAVI 25 EXAMPLE, A CONSORTIUM WOULD OWN THE IP RIGHTS.

1 DR. CIBELLI: I CAN SEE THAT AS A NIGHTMARE FOR THE TECHNOLOGY TRANSFER OFFICES OF ALL THE 2 3 INSTITUTIONS TO COME UP WITH THE SAME POLICY. 4 DR. HALL: IT'S BEING RECOMMENDED THAT WE AVOID AND LEAVE OPEN THE POSSIBILITY OF LATER. I THINK 5 THE ADVANTAGE IS, AND ED OR OTHERS ON THE GROUP MAY 6 WANT, ADVANTAGE IS THAT YOU' RE ABLE -- ANY PARTICULAR 7 THERAPEUTIC DEVELOPMENT MAY REQUIRE A NUMBER OF PATENTS 8 9 THAT YOU HAVE TO NEGOTIATE SEPARATELY WITH A WHOLE LOT SO THE IDEA IS IF YOU POOL THESE, IT'S BOTH 10 OF PEOPLE. EASIER AND IT'S A MORE POWERFUL POSITION; THAT IS, YOU 11 12 CAN OFFER BUNDLED PATENTS, AS IT WERE, AROUND A 13 PARTICULAR TECHNOLOGY THAT HAS EVERYTHING YOU NEED IN ORDER TO DO THIS. I THINK ONE OF REBECCA EISENBERG'S 14 15 POINTS THAT SHE MADE IN HER PRESENTATION WAS THAT WE NEED VERY MUCH TO BE AWARE THAT WE ARE A SMALL PART OF 16 A LARGER ENTERPRISE THAT EXTENDS NATIONWIDE AND 17 WORLDWIDE AND ONE THAT'S WELL UNDERWAY. AND SHE 18 19 RECOMMENDED ON THAT BASIS, FOR EXAMPLE, THAT WE BE SURE THAT WE ARE COMPATIBLE WITH BAYH-DOLE WHATEVER WE DO, 20 21 BUT THE OTHER POINT THAT SHE MADE WAS THAT IT WASN'T 22 CLEAR THAT OUR POSITION WAS GOING TO BE STRONG ENOUGH 23 TO MAKE THIS WORTH THE TROUBLE AT THIS STAGE. AND SHE THOUGHT, FOR THE REASONS YOU SAY, AND LATER ON, IF WE 24 25 HAVE IMPORTANT PIECES, I THINK THAT SHE URGED THAT WE

MIGHT CONSIDER THAT. IS THAT A FAIR SUMMARY? YEAH. 1 DR. CIBELLI: BEFORE WE MOVE ON, DO YOU MIND 2 3 IFI ASK. SO RESERVING THE RIGHT OF THE CIRM 4 RESEARCHERS TO USE CIRM FUNDED IP, YOU ARE GOING TO HAVE TO DEFINE CIRM RESEARCHER BETTER JUST BECAUSE I 5 DON' T KNOW HOW YOU ARE GOING TO ENFORCE THAT. A PERSON 6 MAY HAVE SOME MONEY OR PART OF A SALARY COMING FROM A 7 GRANT FROM CIRM AND HAS THE RIGHT TO USE ANY IP FROM 8 9 CIRM? I JUST DON'T KNOW HOW YOU ARE GOING TO -- YOU'RE GOING TO HAVE TO BE VERY --10

DR. HALL: THEY HAVE SALARY COMING, IT'S PRESUMABLY ON A RESEARCH GRANT. AND IF SOMETHING IS DISCOVERED ON THAT RESEARCH GRANT, EVEN IF THEY DON'T HAVE SALARY, IT'S FUNDED BY CIRM, THEN WOULD BE IDENTIFIED AS CIRM IP, AND THEY WOULD BE A CIRM RESEARCHER.

DR. CIBELLI: THAT PERSON, LET'S SAY,
STANFORD, WANTS TO USE A TECHNOLOGY THAT IS BEING
DEVELOPED SOMEWHERE IN SAN DIEGO BY ANOTHER RESEARCHER
THAT IS FUNDED BY CIRM, HE CAN DO IT WITHOUT VIOLATING
THE IP?

DR. HALL: ONE OF THEM -- IF IT'S DEVELOPED BY CIRM AND IT'S DEFINED AS CIRM IP, THEN ANYBODY ELSE THAT'S FUNDED BY CIRM WOULD HAVE ACCESS TO THAT FOR RESEARCH PURPOSES WITHOUT PAYING A FEE.

DR. TAYLOR: I GUESS WHAT I FIND INTERESTING, 1 2 AND THIS IS REALLY A WONDERFUL SUMMARY, BUT, JEFF, YOU 3 INTRODUCED THIS AS POLICY FOR THE TRAINING GRANTS 4 INITIALLY. AND THESE POLICIES ACTUALLY DON'T MAKE A LOT OF SENSE TO ME FROM A TRAINING GRANT POINT OF VIEW. 5 THEY SOUND MORE LIKE THE POLICIES FOR THE RESEARCH 6 7 GRANTS. NOW THAT WE'RE GETTING TO THE POINT THAT JOSE BROUGHT UP, I THINK THAT ANYONE WHO COMES UNDER THE 8 TRAINING RUBRIC, WHICH COULD BE GRADUATE COURSES, IT 9 SEEMS TO ME -- I DON'T KNOW HOW THE TRAINING GRANTS 10 HAVE BEEN PROPOSED AND WHAT THE VARIOUS STRATEGIES ARE 11 WITHIN THOSE TRAINING GRANTS, BUT IT'S GOING TO BE AN 12 AWFULLY BROAD UMBRELLA TO DUMP ALL OF THE IP INTO, IT 13 14 SEEMS TO ME.

15 DR. HALL: FOR THOSE PURPOSES, IT WOULD BE THE PEOPLE WHO ARE SUPPORTED BY STIPENDS, CIRM 16 17 STIPENDS. IF IN A LAB THEY MAKE A DISCOVERY, WHICH IS THE WHOLE POINT OF THIS EXERCISE, THEN WE WOULD HAVE 18 19 A CLAIM TO THAT DISCOVERY UNDER THIS RUBRIC. SO IT'S NOT ANYBODY WHO TAKES A CIRM-FUNDED COURSE. IT IS 20 21 THOSE PEOPLE WHO ARE DIRECTLY SUPPORTED THROUGH STIPENDS THAT WOULD THEN -- IT MIGHT BE PART OF AN 22 23 IMPORTANT DISCOVERY OR EVEN ALONE MAKE AN IMPORTANT 24 DISCOVERY. AND SO IT IS TO COVER THOSE INSTANCES THAT 25 WE HAVE THIS. SO THEY ARE TRAINEES, BUT IT IS THEIR

1 RESEARCH ACTIVITIES THAT WE ARE CONCERNED WITH. DOES

2 THAT MAKE SENSE?

3 DR. TAYLOR: (NODS.) 4 MR. SHEEHY: AND TO ELABORATE, NO ONE ANTICIPATES A LOT OF THE IP COMING OUT OF TRAINING 5 GRANTS, TO BEGIN WITH, BUT SO MAYBE I SHOULD CONTINUE. 6 SO THESE ARE THE QUESTIONS THAT WE'VE BEEN 7 USING TO GUIDE OUR POLICY DISCUSSIONS WHICH HAVE LED US 8 9 TO COME UP WITH THIS SET OF BROAD PRINCIPLES. WHO SHOULD OWN ANY INVENTIONS THAT ARISE FROM 10 11 CIRM FUNDING? HOW SHOULD CIRM REQUIRE THE SHARING OF 12 DATA, TOOLS, TECHNOLOGY, AND INTELLECTUAL PROPERTY? SHOULD CIRM CREATE A RESEARCH EXEMPTION FOR THE USE OF 13 INTELLECTUAL PROPERTY FOR BASIC RESEARCH PURPOSES? 14 15 WHAT LICENSING REQUIREMENTS SHOULD BE ADOPTED BY CIRM GRANTEES? AND, LASTLY, SHOULD CIRM RETAIN MARCH-IN 16 17 RI GHTS? AND, AGAIN, THIS IS FOR TRAINING GRANT IP 18 19 POLICY FOR NONPROFIT ACADEMIC INSTITUTIONS. SO SHARING POLICY, THIS IS THE TYPES OF 20 21 SUBJECT MATTER CATEGORIES THAT ARE UNDER DISCUSSION. SO WE HAVE DATA, WE HAVE TECHNOLOGY AND PROCESSES, 22 23 BIOLOGICAL MATERIALS AS DEFINED BY THE NIH, TO INCLUDE 24 CELL LINES, MONOCLONAL ANTIBODIES, REAGENTS, ANIMAL 25 MODELS, COMBINATIONAL CHEMISTRY LIBRARIES, CLONES AND

CLONING TOOLS, DATABASES AND SOFTWARE. THIS IS THE
 STUFF WE'RE TALKING ABOUT WHEN WE SAY SHOULD WE REQUIRE
 THE SHARING, WHICH I THINK IS RELATED TO THE ISSUE THAT
 WE WERE TALKING ABOUT IN TERMS OF THE STEM CELL BANK.

5 AND SO THE INTERIM POLICY CONCEPTS FOR 6 TRAINING GRANTS IS, TO ANSWER THE FIRST QUESTION, WHO 7 SHOULD OWN THE INVENTIONS, THE GRANTEES SHOULD OWN THE 8 TECHNOLOGY. THAT MEANS THAT THOSE NONPROFIT -- THOSE 9 16 NONPROFIT ACADEMIC RESEARCH INSTITUTIONS WHO ARE 10 GETTING THE TRAINING GRANTS WOULD RETAIN THE RIGHT TO 11 THEIR INVENTIONS.

12 DATA SHARING, WE WANT, AND THIS IS OUR PRINCIPLE, WE WANT TO PUSH THE ENVELOPE OF CURRENT 13 PRACTICE TOWARDS MORE OPEN SHARING. SO WE SUPPORT THE 14 15 WIDEST POSSIBLE SHARING. AND AN ISSUE THAT WE DIDN'T REALLY -- THAT BELONGS IN HERE, BUT DIDN'T REALLY GET 16 INTRODUCED WELL, WAS A BLAS AGAINST NONEXCLUSIVE 17 LICENSING. SO WHILE WE WANT THE GRANTEES TO OWN THEIR 18 19 TECHNOLOGY, AS PART OF ENCOURAGING DATA SHARING, WE WANT TO ENCOURAGE OUR GRANTEES TO NOT OBTAIN EXCLUSIVE 20 21 LICENSES. WE BELIEVE WE SHOULD CREATE A RESEARCH EXEMPTION. SO IF SOMEONE WANTS TO USE THE IP FOR 22 23 RESEARCH, THEY SHOULD BE ABLE TO USE IT. LICENSING, WE DISCUSSED A ROYALTY RETURN. 24 25 AND IT WAS INTERESTING. WE HAD SOMEONE FROM THE

UNIVERSITY OF CALIFORNIA AND SOMEONE FROM STANFORD FROM 1 THEIR OFFICE OF TECHNOLOGY TRANSFER. AND SO THE 2 3 GENERAL FEELING WAS THAT THERE WASN'T A LOT OF 4 ENTHUSIASM FOR A SO-CALLED TAX OR SOME FINANCIAL RETURN BACK TO CIRM, BUT IT WAS SOMETHING THAT SEEMED 5 FEASIBLE. THEY SUGGESTED THAT WE SET A THRESHOLD 6 BECAUSE A LOT OF PATENTS NEVER PRODUCE ANY MEASURABLE 7 RETURN, AND IT'S COSTLY TO OBTAIN A PATENT. 8 SO THE NUMBER THAT WAS THROWN OUT WAS \$500,000. SO IF THEY 9 10 RECEIVED A RETURN OF OVER 500,000, THEN SOME PORTION OF THAT IN THE WAY OF ROYALTY WOULD COME BACK TO CIRM. 11 12 AND AS THE PERSON FROM STANFORD SAID, I BELIEVE, OUT OF 400 PATENTS, THEY ONLY HAD TWO THAT 13 REACHED THAT THRESHOLD. AND ONE CAN I MAGI NE FOR 14 15 TRAINING GRANTS, IT'S FAIRLY NARROW. BUT THAT SEEMS TO AT LEAST -- DIDN'T SEEM TO INDICATE THAT THAT WOULD 16 IMPEDE THE PROGRESS OF THE SCIENCE, THAT IT WOULD FIT 17 18 WITHIN THE EXISTING MODELS THAT ARE USED BY ACADEMIC 19 RESEARCH INSTITUTIONS. IT SEEMED TO BE SOMETHING THAT COULD BE IMPLEMENTED BY THEIR OFFICES OF TECHNOLOGY 20 21 TRANSFER AS LONG AS WE DON'T GET GREEDY. DR. EGGAN: CAN I ASK OUT OF WHAT HAT THEY 22 23 PULLED THAT NUMBER OF \$500,000 AND HOW IT WAS JUSTIFIED

25 THINK IT'S CERTAINLY MUCH LESS EXPENSIVE THAN THAT, AND

24

BECAUSE ALTHOUGH IT'S EXPENSIVE TO PROCESS A PATENT, I

CERTAINLY IT'S A MUCH LOWER THRESHOLD THE UNIVERSITY IS
 MAKING SOME SUBSTANTIAL SUM OF MONEY WHICH COULD BE
 DISBURSED BACK TO OTHER RESEARCHERS AND CIRM.

4 MR. SHEEHY: ACTUALLY THE RETURN BACK DID NOT 5 COME TO CIRM. THE RETURN BACK, I BELIEVE, AND THIS IS 6 A LARGER POLICY ISSUE, BUT I BELIEVE THE RETURN BACK 7 GOES TO THE GENERAL FUND OF THE STATE OF CALIFORNIA. 8 IT'S NOT CLEAR THAT WE HAVE THE RIGHT TO COLLECT MONEY 9 AND AGAIN REDISBURSE IT. WE HAVE OUR FUNDING STREAM. 10 DR. PENHOET: WE LISTENED TO THE NUMBER AND

11 NOTED THAT THAT'S WHAT THEY SAID. IT'S NOT PART OF OUR12 PROPOSAL.

13 DR. HALL: AS A FORMER VICE CHANCELLOR FOR RESEARCH, MAY I ANSWER THAT QUESTION? I THINK THE 14 15 ARGUMENT WAS MADE THAT THE POINT IS NOT TO PAY THE EXPENSES FOR THAT PARTICULAR PATENT, BUT THAT IN ACTUAL 16 FACT TO PAY FOR THE LOSERS AS WELL. THAT WHEN YOU 17 18 PATENT A LARGE NUMBER OF DISCOVERIES, YOU ARE MAKING AN 19 INVESTMENT, AND YOU KNOW THAT ONLY ONE OF THOSE IS LIKELY TO PAY OFF. SO WHAT YOU NEED TO DO IS TO COVER 20 21 THE EXPENSES FOR THE ENTIRE INVESTMENT BASED ON THAT. AND SO I THINK IT WASN'T A ONE-TO-ONE THING. 22 WHETHER THE NUMBER IS CORRECT OR NOT, I DON'T KNOW, BUT I THINK 23 24 THAT WAS THE GENERAL PRINCIPLE THAT WAS BEING ESPOUSED. AND I THINK THE POINT THAT WAS MADE WAS 25

UNIVERSITIES MAKE AN INVESTMENT AND TAKE A RISK WHEN 1 THEY DO THIS. AND IF WE'RE GOING TO SHARE THE 2 3 BENEFITS, WE NEED TO EITHER SHARE THE RISK OR WE NEED 4 TO ALLOW THEM TO RECOUP THEIR COSTS BEFORE WE CASH IN. DR. CIBELLI: THIS IS A DEPARTURE FROM THE 5 BAYH-DOLE ACT. I DON'T KNOW WHY YOU ARE GETTING SO 6 GREEDY. YOU WANT TO SHOW THE STATE OF CALIFORNIA THAT 7 YOU ARE GETTING SOMETHING BACK. IS THAT WHY YOU ARE 8 9 DOING THIS, AS A POLITICAL MOVE? 10 MR. SHEEHY: I THINK IT ACTUALLY IS -- I MEAN I PERSONALLY AM AMBIVALENT ABOUT THIS TAX CONCEPT. I 11 12 DO THINK, THOUGH, IT MEETS THE TEST THAT WE HAVE TO MEET IN PROP 71. SO IT'S LESS A POLITICAL QUESTION 13 THAN REALLY A STATUTORY QUESTION. AND IT'S NOT CLEAR 14 TO ME THAT WE CAN KIND OF BLITHELY IGNORE ASKING FOR A 15 RETURN IF A RETURN CAN BE OBTAINED, ESPECIALLY ONE THAT 16 DOESN'T SEEM TO UNDULY BURDEN THE INSTITUTION, IT 17 DOESN'T INTERFERE WITH THEIR ABILITY TO DO RESEARCH. 18 19 AND IT'S AT A POINT WHERE THEY'RE MAKING A LOT OF MONEY, A SIGNIFICANT AMOUNT OF MONEY, \$500,000. HALF A 20 21 MILLION DOLLARS, THEY'RE MAKING MONEY. PERSONALLY, MY GOAL WAS, WHEN WE HAD THIS 22 23 DISCUSSION, I ACTUALLY TRIED TO DO BAYH-DOLE ON A LITTLE BIT OF -- TRIED TO NARROW BAYH-DOLE, WHICH SAYS 24 25 THEY' RE SUPPOSED TAKE THEIR RETURNS OFF THESE PATENTED

1 INVENTIONS AND REINVEST THEM IN RESEARCH AND EDUCATION AND DIRECT THAT BACK INTO STEM CELL RESEARCH. 2 S0 3 RATHER THAN LET THE INSTITUTIONS -- THERE SEEMED TO BE 4 SOME WILLINGNESS FROM THE INSTITUTIONAL FOLKS ON THE IP TASK FORCE TO DIRECT IT, SAY, BACK FOR STEM CELL 5 RESEARCH. I ALMOST FEEL LIKE THAT THAT WOULD BE MY 6 BIAS, TO REINVEST IT WITHIN THE INSTITUTION BACK IN 7 WHAT IS OUR PRIMARY MISSION AS -- CIRM'S PRIMARY 8 MISSION, WHICH IS TO FURTHER RESEARCH AND STEM CELL 9 THERAPIES. BUT IT REALLY IS ALMOST MORE AT THIS POINT 10 A LEGAL QUESTION THAN ANYTHING ELSE. 11

DR. CIBELLI: CAN I ASK YOU THE BACKGROUND OF WHERE THIS CAME FROM? ARE THERE OTHER, LIKE THE GATES FOUNDATION HAS SOMETHING LIKE THIS. WHERE DID YOU GET THIS IDEA?

16 DR. PENHOET: PROP 71 SAYS THAT THE STATE 17 WILL BENEFIT. IF YOU GO BACK TO THE FIRST SLIDE WE 18 SHOWED YOU --

DR. CIBELLI: THE BENEFIT COULD BE ACTUALLY
SEEN AS, I DON'T KNOW, MORE BUSINESS IN CALIFORNIA,
MORE PEOPLE COMING TO CALIFORNIA.

DR. PENHOET: THOSE THINGS ARE TRUE, BUT THERE WAS AN EXPECTATION OF A DIRECT FINANCIAL RETURN IN PROP 71. WE'RE TRYING TO UNDERSTAND THE LAW WITH RESPECT TO THAT. THAT'S WHERE IT CAME FROM, PROP 71

1 I TSELF.

2 MR. SHEEHY: THE ACTUAL LANGUAGE -- I CAN 3 THROW IT BACK UP. SEE, TO BENEFIT FROM THE PATENTS, 4 ROYALTIES, AND LICENSES, THAT SEEMS TO ME -- I'M NO 5 LAWYER, BUT IT SEEMS TO SAY GET THE CASH, TO JUST PUT 6 REALLY NARROWLY.

DR. HALL: THE EXPECTATION THAT WE WILL DO 7 8 THAT ON BEHALF OF MANY LEGISLATORS AND OTHERS, THAT 9 THERE SOME FINANCIAL RETURN TO THE STATE FROM OUR IP. DR. CIBELLI: IT'S A SHORTSIGHTED POLICY THAT 10 11 YOU' RE DOING BECAUSE I THINK THAT THE MONEY WILL COME 12 WHEN THE INSTITUTION GETS STRONGER OR WHEN THE COMPANY GETS A STRONG FOOTING. THEY' RE GOING TO HAVE TO PAY 13 TAXES, OF COURSE, AND THAT'S THE WAY THE MONEY IS GOING 14 TO COME BACK. 15

MR. SHEEHY: AGAIN, I'D LIKE TO SEPARATE THIS 16 FROM COMPANIES. IT DOESN'T SEEM TO ME THAT THERE'S 17 18 ANYTHING WRONG WITH ASKING FOR A RETURN. WE MAKE A 19 DIRECT GRANT TO A COMPANY. THE COMPANIES, IT SEEMS TO ME, ARE IN THE HABIT OF PAYING FOR CAPITAL IN SOME 20 21 FASHION, WHETHER STOCK OR ROYALTIES. IT JUST SEEMS KIND OF -- I'M NOT AN ARDENT CAPITALIST, BUT IT SEEMS 22 23 LIKE PEOPLE IN BUSINESS --24 DR. CIBELLI: I THINK COMPANIES SHOULD GET A

25 LOAN, NOT A GRANT.

1 MR. SHEEHY: WHATEVER WE DO WITH COMPANIES, I THINK THAT THAT BECOMES A SEPARATE SUBJECT. 2 THAT'S WHY 3 I TRIED TO KEEP THIS FOCUSED ON NONPROFIT RESEARCH 4 INSTITUTIONS. AND THE ONLY THING THAT MIGHT HAVE BLASED THIS IS THE OVERLY HONEST TECHNOLOGY TRANSFER 5 PERSON FROM STANFORD, WHO DID ADMIT THAT THERE ARE 6 CIRCUMSTANCES WHERE THEY DO CARVE OFF A PIECE. 7 FOR INSTANCE, FOR THE HOWARD HUGHES INVESTIGATOR, THAT 8 9 ACTUALLY THEY DO CARVE OFF A PIECE OF THE ROYALTY AND GIVE IT THE HOWARD HUGHES. IF THAT HAPPENS ALREADY, 10 THAT THEY'RE NIBBLING FOR SOMEBODY ELSE, IT'S KIND OF 11 12 HARD TO SAY, WELL, WHY CAN'T WE GET A NIBBLE WHEN WE HAVE THIS LIST STARING US STRAIGHT IN THE FACE. 13 DR. EGGAN: AGAIN, THIS IS A SUBTLY DIFFERENT 14 15 SITUATION BECAUSE THOSE INVESTIGATORS FOR THE HOWARD HUGHES ARE EMPLOYEES OF THE MEDICAL INSTITUTE, AND, IN 16 FACT, THERE ARE COUPLE QUESTIONS OVER OWNERSHIP OVER 17 18 THAT IP IN THAT SITUATION. AND THESE PEOPLE AREN'T 19 GOING TO BE EMPLOYEES PER SE OF CIRM. SO I THINK IT IS A DIFFERENT -- I THINK IT'S A DIFFERENT PRECEDENT IN 20

THAT CASE. MAYBE OTHER EXAMPLES OF THAT'S TRUE, AND I
THINK WE SHOULD PAY ATTENTION TO THAT, BUT THAT MAY NOT
THE INFORMATIVE EXAMPLE.

24 MR. SHEEHY: TO MY MIND, WHAT THAT WAS 25 RELEVANT TO WAS THE FEASIBILITY FOR A TECHNOLOGY

TRANSFER OFFICE AT AN ACADEMIC INSTITUTION TO TAKE A - IN OTHER WORDS, THEY HAVE AN EXISTING MODEL THAT
 THEY' RE USING FOR THEIR RESEARCH RIGHT NOW.

4 DR. ROWLEY: I THINK WE'RE JUST ARGUING OVER 5 SOMETHING THAT'S VERY TRIVIAL BECAUSE IF THE STANFORD 6 DATA ARE ACCURATE, YOU SAID TWO OUT OF 400, SO 398 7 GRANTS ARE NOT SUBJECT TO TAX. AND I THINK WE SHOULD 8 LOOK AT THE LARGER PICTURE RATHER THAN THE OUTLIERS, AT 9 LEAST AS WE'RE GOING THROUGH THIS.

10 VICE CHAIR LO: JEFF, LET ME -- I WANT TO SORT OF MAKE SURE WE'RE CLEAR ON SORT OF WHAT OUR GOALS 11 12 HERE TODAY ARE, THAT WE DON'T WANT TO TRY AND REDO THE IP TASK FORCE. AS ONE OF THE SLIDES SHOWED, THEY 13 LOOKED AT A TREMENDOUS AMOUNT OF INFORMATION, HEARD 14 15 FROM A LOT OF DIFFERENT PEOPLE, AND I THINK OUR ROLE SHOULDN'T BE TO TRY AND REWRITE THEIR BROAD PRINCIPLES. 16 I THINK WHAT WE SHOULD DO IS AFTER JEFF HAS A CHANCE TO 17 FINISH, IF THERE ARE BIG PICTURE ITEMS IN TERMS OF 18 19 LARGE PRINCIPLES THAT WE THINK THEY'VE MISSED OR IF THERE'S STRONG DI SAGREEMENT WITH THE WAY THEY FRAMED 20 21 IT, I THINK THAT WOULD BE IMPORTANT, BUT LET'S NOT TRY AND GET TO THE DETAILS OF HOW THESE PRINCIPLES WILL BE 22 23 IMPLEMENTED. AS ED AND JEFF HAVE SAID, THIS IS JUST SORT OF THEIR FIRST STEP, AND THERE WILL BE MANY 24 OPPORTUNITIES LATER TO WORK OUT THE DETAILS. AND I 25

THINK WE WOULD BE ABLE, EITHER AS INDIVIDUALS OR A
 GROUP, TO FEED INTO THAT PROCESS. THIS, I THINK, IS
 MEANT TO BE A BIG PICTURE.

JEFF, CAN I ASK YOU FINISH.
MR. SHEEHY: THE OTHER PARTS OF LICENSING IS
THAT WE DID ASK THAT OUR RECIPIENT INSTITUTIONS, IN THE
EVENT THAT THEY DO LICENSE THEIR PATENTED INVENTIONS,
SHOW A PREFERENCE FOR COMPANIES WITH A PLAN FOR PATIENT
THERAPY ACCESS. SO IT'S ALMOST KIND OF A REACH-THROUGH
PROVISION.

AND THEN WE MAINTAIN MARCH-IN RIGHTS, BUT
 MARCH-IN RIGHTS IDENTICAL TO BAYH-DOLE. WE WANTED TO
 MIRROR BAYH-DOLE AT THIS POINT.

SO THAT'S IT. WE TRIED -- IF YOU NOTICE, WE 14 15 REALLY ARE KIND OF HEWING TO BAYH-DOLE. AND THE THOUGHT IS, AT LEAST FOR NONPROFIT ACADEMIC 16 INSTITUTIONS, WE SHOULD NOT GET TOO FAR AWAY. 17 18 AS I SAID, WHEN CCST DELIVERS THEIR FULL REPORT ON ALL 19 STATE-FUNDED RESEARCH TO THE LEGI SLATURE, PRESUMABLY THE LEGISLATURE WILL TAKE ACTION AND SET POLICY FOR ALL 20 21 STATE-FUNDED RESEARCH, WE MIGHT THEN REVISIT THIS AND DO SOMETHING THAT -- IT WOULD MAKE SENSE TO DO 22 SOMETHING THAT'S CONSISTENT WITH THAT. WE WOULD HATE 23 24 TO PUT IN SOMETHING THAT IS BROADLY DIFFERENT FROM 25 BAYH-DOLE AND THEN POTENTIALLY COMPLETELY DIFFER FROM

WHAT THE STATE DOES SOMETIME, I WOULD HOPE, IN THE NEXT 1 YEAR WHEN THEY GET THEIR CCST REPORT AND ADDRESS 2 3 INTELLECTUAL PROPERTY FOR ALL STATE-FUNDED RESEARCH. 4 VICE CHAIR LO: JEFF AND ED, AS I READ YOUR PRINCIPLES, IT STRIKES ME YOU ARE TRYING TO BE 5 CONSISTENT WITH BAYH-DOLE AND PLAN TO BE CONSISTENT 6 WITH THE STATE RECOMMENDATIONS. BUT IN A SENSE, I LIKE 7 YOUR TERM OF PUSHING THE ENVELOPE OF CURRENT PRACTICE 8 9 TO TRY AND DO MORE TO ENCOURAGE MORE OPEN SHARING THAN IS CURRENTLY THE PRACTICE OR IS CURRENTLY REQUIRED, BUT 10 NOT WANTING TO MAKE A RADICAL CHANGE THAT IS UNTESTED 11 12 AND REALLY DRAMATICALLY DIFFERENT THAN BAYH-DOLE. DR. PENHOET: WE WERE ADVISED BY MANY OF OUR 13 ADVISORS THAT WE COULD DO A NUMBER OF THINGS WITHIN THE 14 15 BAYH-DOLE FRAMEWORK, BUT THAT IT WOULD BE UNWISE FOR US TO DO SOMETHING THAT'S INCOMPATIBLE WITH BAYH-DOLE 16 BECAUSE IT WOULD REQUIRE, FIRST OF ALL, THE FEDERAL LAW 17 SAYS IF THERE'S \$1 OF FEDERAL MONEY INVESTED IN THE 18 19 PROGRAM, YOU HAVE TO FOLLOW THE FEDERAL LAW. AND ONE OF THE THINGS WE'RE TRYING TO AVOID IS THAT 20 21 CIRM-RELATED RESEARCHERS ARE ISOLATED FROM THEIR 22 COLLEAGUES, AND YOU CAN'T COMMINGLE FUNDS AND PEOPLE BECAUSE OF AN IP POLICY WHICH IS FUNDAMENTALLY 23 DIFFERENT THAN FEDERAL POLICY. 24 25 SO WE'RE TRYING TO COME UP WITH A SYSTEM

WHICH IS COMPATIBLE, BUT NOT IDENTICAL WITH BAYH-DOLE. 1 VICE CHAIR LO: TED, YOU HAD SOME COMMENTS 2 3 EARLIER YOU WANTED TO RESERVE. I'LL LET YOU STEP IN. 4 DR. PETERS: JEFF KNOWS HOW I THINK, BUT I WOULD LIKE TO JUST INQUIRE TO SEE HOW THE IP TASK FORCE 5 MIGHT RESPOND TO A SCENARIO THAT HAS ONE EXEMPTION TO 6 THESE PRINCIPLES AND THAT'S STEM CELL LINES. LET ME 7 RUN THIS SCENARIO BY YOU AS A POSSIBILITY. 8 9 SUPPOSE WE DECIDE THAT FOR SCIENTIFIC REASONS WE WANT A LARGE NUMBER OF STEM CELL LINES TO BE 10 AVAILABLE. SUPPOSE IT'S 10,000 THAT WE WANT. AND WE 11 12 COULD FORECAST THAT A PATENT ON EVERY SINGLE STEM CELL LINE WOULD BECOME OBSTRUCTIONIST IN ITS IMPACT. AND 13 SUPPOSE WE SAY THAT ANYONE WHO TAKES CIRM MONEY TO 14 ESTABLISH A STEM CELL LINE WOULD BE PROHIBITED FROM 15 FILING FOR A PATENT ON IT. AND, IN FACT, CIRM WOULD 16 ENCOURAGE A LARGE NUMBER OF STEM CELL LINES TO BE 17 ESTABLISHED VERY EARLY IN THE PROGRAM. AND THEN WE 18 19 COULD LEAVE ALL OF THESE PRINCIPLES OBTAIN FOR EVERYTHING THAT WOULD BE DOWNSTREAM PRODUCT 20 21 DEVELOPMENT, ETC., BUT HAVE THAT SINGLE EXEMPTION FOR THE NO. 1 UNIT AT THE RESEARCH LEVEL, THE STEM CELL 22 23 LINE. 24 HOW WOULD THE IP TASK FORCE RESPOND TO A 25 SUGGESTION OF THAT NATURE?

1 MR. SHEEHY: I GUESS I COULD TELL YOU HOW I WOULD RESPOND. WE TALKED AT ONE POINT ABOUT FORCING OR 2 3 REQUIRING RESEARCHERS AT THIS UPSTREAM LEVEL TO SHARE 4 AS WIDELY AS POSSIBLE, WE HAD SOME DISCUSSION. EVERYBODY IN CALIFORNIA, EVERYBODY ACROSS THE COUNTRY, 5 EVERYBODY AROUND THE WORLD. AND I THINK THAT THE IP 6 COMMITTEE WAS BLASED TOWARDS AS WIDELY AS POSSIBLE. 7 BUT, YOU KNOW, SHARING AND PATENTING ARE REALLY TWO 8 9 DIFFERENT THINGS. IF YOU PATENT AND YOU SHARE, THAT 10 GETS YOU WHERE YOU WANT TO GO.

AND ONE OF THE THINGS THAT I BROUGHT UP, 11 12 WHICH I THINK I WAS A LITTLE SHOT DOWN ON, BUT I SAID THAT IF OUR RESEARCHERS ARE GOING TO SHARE, THEY HAD 13 THE RIGHT TO NOT SHARE IF THE PEOPLE THEY WERE SHARING 14 15 WITH WOULDN'T SHARE BACK. SO A RECIPROCITY CLAUSE BECAUSE WHY SHOULD WE GIVE EVERYTHING TO EVERYBODY AND 16 THEN THEY, OH, NO, WE'RE NOT GOING TO SHARE WITH YOU? 17 18 BUT THAT KIND OF CAPTURES MY PROBLEM WITH 19 JUST LETTING EVERYTHING GO. WHAT HAPPENS IF OTHER FOLKS HAVE MATERIALS OR STEM CELL LINES OR SOMETHING? 20 21 WHERE IS OUR BARGAINING POWER? I HAVE A FEELING THAT WHATEVER COMES OUT IN TERMS OF THERAPY IS GOING TO BE 22 23 WHOLE COLLECTIONS OF PATENTABLE MATERIAL FROM SEVERAL 24 DIFFERENT ENTITIES AND PLACES AND INSTITUTIONS AND 25 RESEARCHERS, AND I THINK PULLING THAT PRODUCT TOGETHER

I S GOING TO REQUIRE SOME LEVERAGING, BUT I COULD BE
 WRONG.

VICE CHAIR LO: ED, DO YOU WANT TO COMMENT ON
THAT IN TERMS OF PATENTING VERSUS SHARING? DO YOU WANT
TO COMMENT ON THIS ISSUE OF PATENTING AND NOT
NECESSARILY PRECLUDING WIDE SHARING?

7 DR. PENHOET: THE RESEARCH EXEMPTION THAT WE 8 WOULD HAVE IN MIND IF ALL 10,000 WERE PATENTED, FOR THE 9 SAKE OF THE DISCUSSION, OUR RESEARCH EXEMPTION WOULD 10 SAY THAT ANY OTHER CIRM-FUNDED RESEARCHER COULD USE 11 THOSE ROYALTY FREE WITHOUT HAVING TO PAY ANYTHING FOR 12 THE USE OF THOSE CELL LINES. SO THEY WOULD BE INCLUDED 13 IN OUR LIST OF MATERIALS.

IF IT CAME TO SOMEBODY WANTING TO DEVELOP ONE 14 15 OF THOSE CELL LINES INTO A THERAPY, THAT'S SOMETHING WE HAVE NOT YET DISCUSSED IN TERMS OF THAT PATENT. 16 WOULD WE WANT TO MAKE -- IF THEY WERE ALL PATENTED, WOULD WE 17 WANT TO MAKE NONEXCLUSIVE LICENSES ON ALL 10,000 18 19 AVAILABLE TO EVERYONE, OR WOULD WE PREPARED TO LICENSE EXCLUSIVELY TO AN ENTITY ONE OF THOSE CELL LINES WHICH 20 21 HAPPENED TO BE THE KEY TO DIABETES OR SOME OTHER DISEASE. WE HAVEN'T REALLY GOTTEN INTO THAT LEVEL, AND 22 I THINK THAT -- BUT HOW FAR THIS RESEARCH EXEMPTION 23 24 REALLY GETS PUSHED AND HOW FAR YOU DEFINE RESEARCH. 25 ONE THING WE DO HAVE TO KEEP IN MIND, AND

THAT DOES WEIGH ON OUR DISCUSSION, IS THAT AS WE SPEAK 1 THERE IS VERY LITTLE PRIVATE CAPITAL GOING INTO STEM 2 3 CELL THERAPIES. AND WE DON'T WANT TO SET UP A SYSTEM 4 WHICH DISCOURAGES COMPANIES FROM INVESTING IN THIS DEAL AND DEVELOPING THERAPIES BECAUSE NONE OF THE NONPROFIT 5 GRANTEES WILL AT THE END OF THE DAY DEVELOP THERAPIES 6 WHICH WILL BE BROADLY AVAILABLE. SO IT'S A BALANCE 7 REALLY BETWEEN OUR DESIRE FOR SIGNIFICANTLY EXPANDED 8 9 SHARING OF DATA, INFORMATION, TOOLS, CELL LINES AT THE SAME TIME NOT DESTROYING THE COMMERCIAL OPPORTUNITY 10 11 WHICH WOULD BE A DISINCENTIVE FOR INVESTMENT BY THE 12 PRIVATE SECTOR IN THIS WHOLE ENTERPRISE. IT'S THAT BALANCE THAT WE'RE TRYING TO ACHIEVE. WE'RE NOT THERE 13 YET, SO LARGER DI SCUSSI ON. 14

DR. KIESSLING: JEFF, IT WILL BE HELPFUL TO 15 ME IF WE CAN DO LIKE A CONCRETE EXAMPLE OF HOW THIS IS 16 GOING TO WORK BECAUSE ONE OF THE THINGS THAT I CAN SEE 17 THE TRAINING GRANT DOING IS A POST-DOC IS GOING TO 18 19 DEVELOP A VERY USEFUL CELL LINE, EITHER A MODIFICATION OF AN EXISTING LINE OR A BRAND NEW LINE. THAT'S WHAT 20 21 THOSE KINDS OF PEOPLE ARE GOING TO BE DOING IN THE LAB. NOW, THIS PERSON HAS LINE Q. HOW DO YOU SEE 22 THAT LINE BEING SHARED LIKE INSTANTLY AND STILL PROTECT 23 THE PATENT RIGHTS OF THE INSTITUTION OR THAT PERSON? 24 25 DR. PENHOET: I THINK IN THAT PARTICULAR

INSTANCE, FOLLOWING UP ON THIS, THE RESEARCH EXEMPTION
 THAT WE WOULD SEEK IS THE OWNER OF THE TECHNOLOGY, THE
 UNIVERSITY IN THIS CASE, WOULD BE ALLOWED TO FILE A
 PATENT ON THAT CELL LINE, BUT THEY WOULD BE OBLIGATED
 TO PROVIDE THE MATERIAL AND THE CELL LINE AND A ROYALTY
 FREE LICENSE TO USE IT TO ALL OTHER CIRM INVESTIGATORS
 FOR RESEARCH PURPOSES ONLY.

8 DR. KIESSLING: WHAT WOULD THE TIME FRAME OF 9 THAT BE?

10DR. PENHOET: THE STANDARD NOW IS SUBSEQUENT11TO PUBLICATION. THERE'S A LOT OF CONCERN ABOUT PEOPLE12GETTING CELL LINES WHICH ARE NOT VERY WELL

CHARACTERIZED YET. THERE'S A RELUCTANCE FOR PEOPLE TO 13 GIVE THEM AWAY THE NEXT DAY AFTER THEY'RE GENERATED 14 15 WI THOUT KNOWING MUCH ABOUT THEM, WI THOUT STUDYING THEM FOR A WHILE TO MAKE SURE THAT THEY HAVE A GOOD 16 UNDERSTANDING OF WHAT THAT CELL LINE IS. SO THE 17 18 TRADITIONAL ROLE IS AT THE TIME OF PUBLICATION THEN YOU 19 REQUIRE SHARING. DR. KIESSLING: SO THIS DOESN'T SEEM TO BE 20

21 DIFFERENT FROM THE WAY THINGS ACTUALLY WORK NOW.

DR. PENHOET: IT IS. THAT'S WHY WE'RE SAYING WE'RE TRYING TO PUSH THE ENVELOPE. THE PRIMARY CRITICISM OF BAYH-DOLE IS NOT OF THE ACT ITSELF. IT'S HOW IT'S PRACTICED BY THE UNIVERSITIES IN THIS COUNTRY.

SO WE DO WANT TO PUSH THEM FURTHER TOWARDS SHARING
 REAGENTS AND KNOW-HOW AND PATENTED TECHNOLOGY FOR
 RESEARCH PURPOSES.

4 VICE CHAIR LO: IF I JUST REMIND US THAT THIS TIES IN VERY CLOSELY WITH WHAT WE DISCUSSED LAST TIME 5 WITH SHARING OF MATERIALS, AND WE TALKED ABOUT HAVING A 6 REQUIREMENT FOR IN THAT SCENARIO, ANN, HAVING A DEPOSIT 7 IN THE STEM CELL BANK THAT WAS APPROVED BY CIRM -- WE 8 HAVE TO WORK THAT OUT -- TO MAKE IT WIDELY AVAILABLE SO 9 THAT THE IP POLICY AND SORT OF A GRANTS REQUIREMENT TO 10 11 SHARE REMEMBER, AND WE TALKED ABOUT SORT OF TIME LIMITS 12 AND CHARACTERIZING THE LINES AND THINGS LIKE THAT, SO DIFFERENT PIECES THAT NEED TO BE PUT TOGETHER, BUT I 13 THINK IT'S ALL CONSISTENT WITH WHAT ED AND JEFF 14 PRESENTED AS USING THIS BASIC FRAMEWORK OF ALLOWING 15 PATENTING, BUT TRYING TO PUSH IT TOWARDS MUCH BROADER 16 SHARING THAN IS CURRENTLY THE PRACTICE AND USING A 17 NUMBER OF TOOLS TO TRY TO ENCOURAGE THAT, AT LEAST IN 18 19 THE UPSTREAM BASIC RESEARCH END OF THINGS, WHICH IS WHERE WE WOULD, I THINK, WANT TO SEE THE WIDEST USE OF 20 21 THESE STEM CELL LINES.

22 MR. SHEEHY: ANY IDEAS THAT COULD BE PUT --23 WE NEED REAL POLICY THAT GO INTO ADMINISTRATIVE LAW 24 CODE THAT WE THEN PRESUMABLY WILL ENFORCE. I ACTUALLY 25 THINK SOME OF THIS STUFF WE TALKED ABOUT HERE IN TERMS

OF BANKING SEEMS TO HAVE THAT DEGREE OF SPECIFICITY.
 AND BECAUSE THEY' RE REGISTERED WITH THE BANK, THERE
 SEEMS A BETTER OPPORTUNITY TO ENFORCE THAT TOO.

4 DR. PENHOET: WE'D BE HAPPY TO PROVIDE TO YOU ANY OF THOSE DOCUMENTS THAT WE LISTED ON THAT SHEET. I 5 HOPE WE'RE GOING TO LEAVE YOU ALL WITH A COPY OF THIS 6 PRESENTATION SO YOU HAVE IT. BUT I WOULD THINK A STUDY 7 JUST RELEASED BY THE NATIONAL ACADEMIES, THE NATIONAL 8 9 RESEARCH COUNCIL ON THIS WHOLE ISSUE OF PATENTING GENES AND PROTEINS, AND IT'S PERFECTLY APPLICABLE TO STEM 10 11 CELLS AS WELL. IT'S A LOVELY DOCUMENT IN MANY 12 DIFFERENT WAYS. IT HAS A GOOD REVIEW OF THE HISTORY OF ALL OF THIS, AND ABOUT A DOZEN SPECIFIC RECOMMENDATIONS 13 ALONG THESE LINES. SO I THINK WE'D BE HAPPY TO MAKE 14 15 COPIES FOR YOU BEFORE YOU LEAVE HERE TODAY AND MAKE SURE YOU GET A COPY OF THAT. 16

17 VICE CHAIR LO: THAT WOULD BE GREAT. WE VAN18 GET THAT ELECTRONICALLY.

19DR. MAXON:NO,IT'S NOT AVAILABLE20ELECTRONICALLY YET.IT'S A PREPUBLICATION COPY.

VICE CHAIR LO: AGAIN, THIS IS VERY MUCH A
WORK IN PROGRESS. AND WHAT WE HEARD TODAY WAS SORT OF
THE BIG PRINCIPLES WHICH WILL ANIMATE THE IP WORKING
GROUP'S SUBSEQUENT DELIBERATIONS AS WE GET MORE
SPECIFIC. I GUESS ONE THING WOULD BE VERY IMPORTANT IN

THE NEXT COUPLE OF MINUTES, ARE THERE OVERRIDING POINTS
 THAT WE WOULD WANT TO TRY AND CONVEY THROUGH ZACH BACK
 TO THE ICOC WITH THIS REPORT, NOT TO REWRITE OR UNDO
 THE REPORT, BUT IF THERE ARE ANY IDEAS.

5 DR. HALL: ED WILL MAKE A PRESENTATION TO THE ICOC NEXT TUESDAY THAT I PRESUME IS SIMILAR TO WHAT'S 6 DONE HERE. IT WILL BE MY JOB, THEN, TO CONVEY WHATEVER 7 POINTS THAT YOU WISH TO MAKE IN ADDITION ABOUT IT. 8 - I 9 TAKE AS ONE TED PETERS' SUGGESTION THAT CONSIDERATION 10 BE GIVEN TO THE IDEA OF EXEMPTING STEM CELL LINES FROM THE PATENT PROVISIONS. AND I DON'T KNOW IF YOU HAVE 11 12 OTHER SPECIFIC POINTS THAT YOU WOULD LIKE ME TO CONVEY 13 TO THE ICOC. NOW IS THE TIME TO RAISE THEM.

14 DR. PETERS: THANK YOU FOR THAT, ZACH. AND 15 MY NEXT THOUGHT IS AT A VERY HIGH LEVEL OF ABSTRACTION, SO IT MAY OR MAY NOT CONTRIBUTE. THERE ARE ACTUALLY 16 TWO DIFFERENT PRINCIPLES IN PROP 71 FOR US TO CONSIDER 17 AT THIS PARTICULAR POINT. AND ONE OF THEM IS THE ONE 18 19 ALREADY CITED; NAMELY, THAT THE STATE OF CALIFORNIA SHOULD GET SOME DIRECT FINANCIAL RETURN. ANOTHER ONE 20 IS THAT AT THE END OF THE DAY, WE WANT LOW COST 21 THERAPEUTIC PRODUCTS AVAILABLE TO THE LARGEST NUMBER OF 22 23 CITIZENS OF CALIFORNIA IN THOSE IN THE WORLD ON THE 24 OTHER END.

25

TO WHAT EXTENT, AND THIS IS A PHILOSOPHICAL

QUESTION, DID THIS CONCERN FOR LOW COST DELIVERY INFORM
 THE KIND OF DELIBERATIONS THAT THE TASK FORCE HAS WITH
 REGARD TO THE IP POLICIES?

4 MR. SHEEHY: I THINK IT WAS WHY WE WANTED TO LOOK AT IAVI, WHY WE HAD RICHARD KLAUSNER FROM THE 5 GATES FOUNDATION ADDRESS US. BUT I THINK 6 PHILOSOPHICALLY WE HAVE TO ASK OURSELVES WHAT IS OUR 7 MISSION. WE ARE NOT A HEALTHCARE DELIVERY AGENCY. 8 WF 9 ARE A RESEARCH FUNDING AGENCY. AND AT LEAST AT THIS POINT IN TERMS OF THE SCIENCE WHAT WE'RE FUNDING IS 10 11 VERY UPSTREAM. SO IT'S VERY DIFFICULT TO TALK ABOUT 12 MOVING ACCESS WHEN THERE'S NOT A PRODUCT. WE DON'T KNOW WHAT THE PRODUCT LOOKS LIKE. WE DON'T KNOW HOW 13 IT'S GOING TO BE DELIVERED. WE DON'T KNOW HOW MUCH 14 IT'S GOING TO COST. 15

AND THAT'S WHERE I ALWAYS PREFERRED 16 PERSONALLY TO SEPARATE HOW I LOOK AT THIS BETWEEN, AS 17 IAVI DOES, BETWEEN RESEARCH AND BETWEEN DEVELOPMENT. I 18 19 BELIEVE THAT IF WE ARE AT A POSITION -- IN A POSITION WHERE WE'RE ACTUALLY GOING TO MAKE A GRANT OR A LOAN OR 20 21 WHAT HAVE YOU DIRECTLY TO A COMPANY, THAT IF A COMPANY IS DOING SOMETHING, THERE'S A PRODUCT. AND AT THAT 22 POINT WE LOOK AT THE PRODUCT, AND WE SAY THEN WE HAVE 23 24 MORE LEVERAGE. IF YOU LOOK AT GATES OR IAVI, THAT'S 25 THE POINT THAT THEY TEND TO EXERT THEIR LEVERAGE IS

1 WHEN PEOPLE ARE TALKING SPECIFICALLY ABOUT A PRODUCT.

GATES ASKS THEM TO COME IN WITH A PLAN. 2 I AVI 3 HAS SPECIFIC STIPULATIONS WITH THE MARCH-IN RIGHT TO 4 ALLOW THE MANUFACTURER IN COUNTRY OF THE VACCINE PRODUCT IF IT'S NOT PROVIDED AT APPROPRIATE COST. 5 BUT THERE'S SOMETHING TANGIBLE THERE. AND HERE IT'S HARD 6 FOR -- IT DOESN'T SEEM LIKE THAT IT WOULD DO ANYTHING 7 BUT IMPEDE THE DEVELOPMENT OF THE SCIENCE TO ATTACH ALL 8 OF THESE VERY NOBLE IDEAS AT THIS LEVEL OF RESEARCH AT 9 THE RESEARCH INSTITUTION FUNDING LEVEL. 10

11

DR. PETERS: THANKS.

12 DR. PRIETO: IF I COULD JUST MAKE A COMMENT AS ANOTHER MEMBER OF THE TASK FORCE, THAT I THINK A 13 NUMBER OF US ARE VERY CONCERNED ABOUT THIS ISSUE OF 14 15 ACCESS, BUT REALLY DON'T KNOW SEE WE, AS THE CIRM, CAN SOLVE THAT ISSUE FOR THERAPIES THAT DON'T YET EXIST 16 WHEN WE HAVE A HEALTHCARE SYSTEM THAT DOESN'T EVEN 17 PROVIDE ACCESS TO CHEAP THERAPIES THAT EXIST WIDELY. 18 19 SO IT'S SORT OF BEYOND ANYTHING WE'RE CAPABLE OF. WE HAVE TO KEEP THIS IN MIND, BUT IT'S NOT A PROBLEM WE 20 21 CAN SOLVE.

22 DR. EGGAN: I KNOW IT'S NORMALLY THE ROLE OF 23 THE RESEARCH INSTITUTION ITSELF TO SECURE LICENSE 24 RIGHTS FOR DIFFERENT TYPES OF TECHNOLOGY FOR THEIR 25 RESEARCHERS, BUT I WONDER IF THERE'S EVER BEEN A

PRECEDENT FOR THERE BEING A ROLE OF ORGANIZATIONS LIKE 1 CIRM TO SECURE COLLECTIVE LICENSING RIGHTS FOR VARIOUS 2 3 TECHNOLOGIES FOR THEIR GRANTEES. HAS THAT EVER BEEN 4 DONE? I THINK IT'S IMPORTANT THAT WE NOT LOOK AT THESE ISSUES IN A VACUUM, BUT RECOGNIZE SORT OF THE IP 5 LANDSCAPE THAT EXISTS TODAY WITH RESPECT TO STEM CELL 6 SCIENCE AND RECOGNIZE THAT WARF AND UNIVERSITY OF 7 WISCONSIN HAVE A VERY POWERFUL POSITION THAT ALL OF 8 THESE INSTITUTIONS ARE GOING TO HAVE TO DEAL WITH 9 INDIVIDUALLY. IT'S, IN FACT, IN A WAY ONE REASON WHY 10 THE SPECIFIC OF PATENTING INDIVIDUAL CELL LINES 11 12 PROBABLY I SN' T A VERY GOOD EXAMPLE BECAUSE THERE I SN' T A LOT OF ROOM TO MANEUVER ON NEW IP THERE PROBABLY. 13 IS IT POSSIBLE TO DO THINGS LIKE THAT? 14 15 DR. PENHOET: IT'S THEORETICALLY POSSIBLE, BUT CIRM WORKS UNDER A VERY, VERY STRONG FINANCIAL 16 CONSTRAINT. THE AMOUNT OF MONEY AVAILABLE TO CIRM TO 17 DO ALL OF HIS ACTIVITIES IS 6 PERCENT OF THE GRANT 18 19 BUDGET. AND IT'S ONE OF THE REASONS WHY, FOR EXAMPLE, CIRM OWNING THE TECHNOLOGY FROM ITS GRANTEES' WORK 20 21 WOULD NOT BE POSSIBLE. THE CIRM COULDN'T AFFORD TO PURSUE IT. IT SIMPLY DOESN'T HAVE ENOUGH MONEY. 22 23 FOR A COMPARISON SAKE, FOR EXAMPLE, I'M 24 PRESIDENT OF GORDON AND BETTY MOORE FOUNDATION. OUR 25 OVERHEAD ON GRANTS RUNS ABOUT 10 OR 11 PERCENT OF THE

GRANT-MAKING BUDGET, AND WE TRY TO RUN A PRETTY TIGHT
 SHIP. IT'S SIMILAR FOR THE GATES FOUNDATION, FOR THE
 HEWLETT FOUNDATION, FOR THE PACKARD FOUNDATION. SO WE
 HAVE ONLY ABOUT HALF THAT MONEY, CIRM, SO WE DON'T
 REALLY HAVE ANY MONEY TO INVEST IN OBTAINING LICENSES
 FOR OUR GRANTEES UNFORTUNATELY.

IF IT WAS POSSIBLE FOR US TO NEGOTIATE A
ROYALTY FREE LICENSE WITHOUT ANY PAYMENTS, WE WOULD BE
HAPPY TO TRY TO ENTERTAIN THAT, BUT THE COLD REALITY IS
6 PERCENT IS A VERY SMALL NUMBER TO ACTUALLY GET ALL OF
THE WORK DONE THAT CIRM HAS TO DO JUST IN ADMINISTERING
A GRANT PROGRAM. SO IT'S ONE OF OUR BIGGEST
CONSTRAINTS.

DR. EGGAN: SO WHAT I'M SAYING IS THAT IN 14 15 PRINCIPLE WARF SHOULD BE LICENSING THESE THINGS WITHOUT DIRECT ROYALTIES TO THESE ACADEMIC INSTITUTIONS, BUT I 16 CAN TELL YOU, BEING FROM AN ACADEMIC INSTITUTION THAT'S 17 18 DEALING WITH WARF, THEY ARE NOT EASY TO DEAL WITH 19 INDIVIDUAL INSTITUTION TO INSTITUTION. THEY'RE TAKING A MUCH MORE DIFFICULT POSITION THAN MANY PEOPLE WHO 20 21 SHARE ACADEMIC IP FROM UNIVERSITY TO UNIVERSITY. SO. I'M WONDERING IF THE SORT OF COLLECTIVE 22 POSITION MIGHT NOT BE A BAD ONE TO TAKE. 23 DR. PENHOET: IF IT'S POSSIBLE FOR US TO 24 25 BROKER SUCH AN ARRANGEMENT, THAT WOULD -- I ACTUALLY

THINK ONE OF THE REASONS, NOT THE MOST IMPORTANT BY ANY 1 MEANS, BUT FOR US TO CREATE A RESEARCH EXEMPTION AND TO 2 3 SET A STANDARD FOR GOOD BEHAVIOR TO ENCOURAGE THEM TO 4 DO THE SAME THING FRANKLY. WE HAVE HAD CONVERSATIONS WITH THEM ABOUT GLOBAL LICENSES FOR ALL OF OUR 5 6 GRANTEES. THEY -- HOW TO SAY THIS IN A --7 VICE CHAIR LO: DECLINED TO AGREE. DR. HALL: I'M WATCHING WITH INTEREST HOW 8 YOU' RE GOING TO DESCRIBE THIS. 9 10 DR. PENHOET: LET ME SAY NOT FORTHCOMING AT 11 LEAST IN OUR INITIAL DISCUSSIONS. 12 DR. TAYLOR: I THINK THE OTHER SIDE OF THIS THOUGH DOES EXIST. I KNOW WHEN I WAS UCSF, I WAS GIVEN 13 THE OPPORTUNITY TO PERSONALLY PURSUE A PATENT 14 15 APPLICATION OUTSIDE OF THE UNIVERSITY MECHANISM ONCE THEY HAD KIND OF LOST INTEREST OR FELT THAT THE 16 INVESTMENT WAS TOO GREAT. SO IF YOU COULD FIND SOMEONE 17 TO BROKER THIS, AND SOUNDS LIKE CIRM ISN'T IT 18 19 PRESENTLY, I DON'T BELIEVE THAT AT LEAST THE UC SYSTEM WOULD PREVENT THAT FROM OCCURRING TO DO IT OUTSIDE OF 20 21 THE UNI VERSI TY. 22 DR. PRIETO: QUESTION. IF WE DECIDE AS OUR 23 BANKING MECHANISM TO CONTRACT OUT THE BANK RATHER THAN ADMINISTER IT OURSELVES, COULD THE BANK SERVE THAT 24 25 PURPOSE?

MR. SHEEHY: THAT'S KIND OF MY QUESTION. 1 BUT, AGAIN, YOU KNOW, THIS BECOMES A RESOURCE ISSUE 2 3 BECAUSE NOT ONLY IS IT THE 6 PERCENT, BUT WE'RE LIMITED 4 TO 50 EMPLOYEES. SO WE WOULD HAVE TO DO AN RFA FOR SOMEONE TO MANAGE IP FOR US. IS THAT A BETTER USE OF 5 CIRM MONEY THAN GRANTING FOR RESEARCH? THAT'S --6 7 DR. EGGAN: NO. BECAUSE IT WILL INHIBIT THE 8 RESEARCH DIRECTLY. 9 MR. SHEEHY: THAT'S AN IMPORTANT -- THAT'S IMPORTANT INFORMATION THAT WE NEED TO KIND OF GRAPPLE 10 11 WITH BECAUSE MY BLAS WOULD BE TOWARDS DOING WHAT WILL 12 HELP THE RESEARCH. AS FRANCI SCO SUGGESTED, WE'RE PROBABLY GOING TO HAVE TO SET UP AN ESCRO, WE'RE 13 PROBABLY GOING TO HAVE TO SET UP A STEM CELL BANK. 14 WE 15 COULD LICENSE -- WE COULD EASILY WITH UC OR STANFORD OR ANY OFFICE OF TECHNOLOGY TRANSFER ASK FOR APPLICATIONS 16 FOR INSTITUTIONS UP AND DOWN STATE AND ASK THEM TO 17 MANAGE IP FOR US. IF THERE'S A CLEAR SENSE AND IF 18 THAT'S FEEDBACK THAT WE NEED TO TAKE TO THE ICOC, THEN 19 PLEASE I THINK WE NEED TO KNOW THAT BECAUSE WE DON'T 20 21 WANT THE SCIENCE IMPEDED BECAUSE ALL THE PATENTS ARE HELD AT AN INDIVIDUAL INSTITUTE LEVEL. 22

23 VICE CHAIR LO: LET ME TRY AND SUM THIS UP
24 BECAUSE I DON'T WAS TO TRY AND DO ALL THE FUTURE THINGS
25 THE IP TASK FORCE IS DOING. BUT I'M HEARING STRONG

SUPPORT FOR THE IP TASK FORCE'S GOAL OF ENHANCING 1 ACCESS TO BASIC RESEARCHERS TO THE MATERIALS THAT ARE 2 3 DISCOVERED UNDER CIRM FUNDING AND PATENTED. AND THAT 4 WE WOULD ALSO ENCOURAGE THE CIRM TO TRY AND FIND INNOVATIVE WAYS OF MAKING THAT HAPPEN IN PRACTICE, 5 INCLUDING LOOKING AT SETTING UP A STEM CELL BANK, WHICH 6 WE FAVOR FOR OTHER REASONS, THAT WOULD ALSO TRY AND 7 CLEAR AWAY SOME ACCESS PROBLEMS THAT CURRENTLY NOW 8 9 EXIST UNDER BAYH-DOLE WITH THE CURRENT PATENTS ON STEM CELL LINES. BUT I THINK -- LET'S TRY AND KEEP IT AT 10 11 THAT LEVEL OF GENERALITY, AND I THINK THE SPECIFIC 12 SUGGESTION OF TRYING TO NEGOTIATE WITH WARF IS SOMETHING I THINK WILL NEED TO BE WORKED OUT IN MUCH 13 MORE DETAIL, BUT I'M NOT SURE THAT'S SOMETHING WE 14 15 SHOULD BE TRYING TO DO TODAY. SO IF THERE ARE ANY OTHER BIG, BURNING ISSUES 16 THAT WE WANT TO SORT COMMUNICATE BACK TO THE ICOC, 17 OTHERWISE I'D LIKE TO SORT OF MOVE ON. 18 19 DR. HALL: CAN WE ASK FOR, EVEN THOUGH WE DON'T HAVE A QUORUM AND CAN'T GET APPROVAL, COULD WE 20 21 ASK FOR A MOTION THAT WOULD INDICATE SUPPORT FOR THE BROAD OUTLINES OF WHAT THE IP TASK FORCE DOES? YOU 22 DON'T WANT TO DO THAT. YOU CAN'T DO THAT. 23

24 MR. HARRISON: WHAT YOU CAN DO IS ASK FOR A 25 SENSE OF THE WORKING GROUP WITH RESPECT TO THE

PRINCIPLES THAT JEFF AND ED HAVE OUTLINED THIS MORNING. 1 DR. HALL: THAT'S EXACTLY WHAT. THANK YOU. 2 3 VICE CHAIR LO: PROCEDURALLY HOW WE ACTUALLY DO THAT? DO I ASK FOR SOMEONE TO SUGGEST THAT AS THE 4 SENSE OF THE MEETING THAT WE SUPPORT --5 MR. HARRISON: BERNIE, IF WE COULD CHECK FOR 6 A MOMENT. I THINK A COUPLE OF PEOPLE MAY HAVE JOINED 7 ON THE PHONE. SO IT'S POSSIBLE WE HAVE A QUORUM NOW. 8 9 VICE CHAIR LO: GREAT SUGGESTION. DO WE HAVE PEOPLE ON THE PHONE NOW? 10 MS. CHARO: HI, THIS IS ALTA. CAN BARELY 11 12 MAKE YOU OUT, SO I'LL BE CALLING BACK AND FORTH LOT TRYING TO GET A BETTER CONNECTION. 13 VICE CHAIR LO: WELCOME, ALTA. ANYONE ELSE 14 15 ON THE LINE? DR. WAGNER: THIS IS JOHN WAGNER AT THE 16 UNIVERSITY OF MINNESOTA. I ALSO AM HAVING A DIFFICULT 17 18 TIME, BUT WE'LL KEEP ON TRYING. 19 VICE CHAIR LO: WE CERTAINLY WELCOME DR. WAGNER, AND WE WELCOME YOU TO THE GROUP. DO YOU 20 21 WANT TO -- MAYBE WHAT CAN DO IS JUST GO AROUND THE ROOM 22 AND INTRODUCE OURSELVES. WE ALSO HAVE ANOTHER NEW MEMBER. SO LET'S INTRODUCE OURSELVES AND ASK OUR TWO 23 24 MEMBERS TO SAY A WORD. I'M BERNIE LO FROM UCSF, CO-CHAIRING THE 25

1 MEETING TODAY. 2 DR. HALL: ZACH HALL, PRESIDENT OF CIRM. 3 MS. FEIT: MARCY FEIT, I'M A PATIENT 4 ADVOCATE. VICE CHAIR LO: AND A NEW MEMBER. WELCOME TO 5 6 MARCY. 7 DR. CIBELLI: I'M JOSE CIBELLI FROM MICHIGAN 8 STATE. 9 DR. KIESSLING: I'M ANN KIESSLING FROM 10 HARVARD. 11 DR. PRIETO: I'M FRANCISCO PRIETO, DIABETES 12 PATIENT ADVOCATE ON THE ICOC. DR. PETERS: TED PETERS FROM THE CENTER FOR 13 THEOLOGY IN THE NATURAL SCIENCES IN BERKELEY. 14 15 DR. ROWLEY: JANET ROWLEY FROM THE UNIVERSITY OF CHI CAGO. 16 DR. EGGAN: KEVIN EGGAN FROM HARVARD 17 18 UNIVERSITY AND THE *STOWERS MEDICAL INSTITUTE. 19 DR. TAYLOR: ROBERT TAYLOR FROM EMORY UNIVERSITY IN ATLANTA. 20 VICE CHAIR LO: MARCY, DO YOU WANT TO JUST 21 SAY A FEW WORDS. JEFF, I'M SORRY. 22 MR. SHEEHY: JEFF SHEEHY, PATIENT ADVOCATE 23 24 FOR HIV AND AIDS FROM THE ICOC. 25 VICE CHAIR LO: MARCY, WOULD YOU LIKE TO JUST

TELL US A LITTLE BIT ABOUT YOURSELF SO WE GET TO KNOW
 YOU BETTER.

3 MS. FEIT: I'M MARCY FEIT, AND I'M PRESIDENT 4 AND CEO FOR VALLEY CARE HEALTH SYSTEM. IT'S A HEALTH 5 SYSTEM IN THE EAST BAY. I'M A REGISTERED NURSE. I'VE 6 BEEN IN HEALTHCARE FOR 35 YEARS, AND I'M A PATIENT 7 ADVOCATE FOR DIABETES TYPE 2.

8 VICE CHAIR LO: JOHN, WOULD YOU LIKE TO JUST9 SAY A FEW WORDS ABOUT YOURSELF?

DR. WAGNER: OH, SURE. WELL, MY BACKGROUND, 10 11 AS SOME OF YOU MAY OR MAY NOT KNOW, IS ORIGINALLY IN 12 BONE MARROW TRANSPLANTATION, AND THERE I'M THE CLINICAL DIRECTOR OF OUR STEM CELL INSTITUTE HERE AT THE 13 UNIVERSITY OF MINNESOTA. AND OUR DIRECTOR IS CURRENTLY 14 15 KATHERINE *. OUR WORK HAS BEEN PRINCIPALLY IN ADULT STEM CELLS; HOWEVER, WE ALSO WORK ON EMBRYONIC STEM 16 CELLS HERE. MY SPECIFIC ROLE IS REALLY IN DEVELOPING 17 18 STRATEGIES FOR THE TRANSLATIONAL DEVELOPMENT AND MOVING 19 TOWARDS CLINICAL TRIALS, AND HOPEFULLY WILL BE SOME BACKGROUND THAT MAY BE HELPFUL TO THIS COMMITTEE. 20 21 VICE CHAIR LO: GREAT. WELCOME TO THE BOTH JOHN AND MARCY. AND I HOPE JOHN AND ALTA WILL GET THE 22

23 PHONES WORKING. WE'RE AT MOSCONE CENTER. IT'S KIND OF
24 A CAVERNOUS ROOM.

25

WE DON'T HAVE A QUORUM, AND GIVEN SORT OF

1 THE --

2 DR. ROWLEY: WE DO WITH THE TWO ON THE PHONE, 3 DON'T WE?

4 VICE CHAIR LO: NO, WE ACTUALLY DON'T, SO 5 WE'RE TOLD. I WOULD SUGGEST THAT RATHER THAN TRYING TO 6 TAKE A SENSE OF THE MEETING, THAT WE JUST ASK ZACH TO 7 CONVEY BACK THE SENTIMENTS HERE. THIS IS AN ONGOING 8 PROCESS, AND WE CERTAINLY WILL HAVE THE ABILITY TO SORT 9 OF HAVE INPUT TO THE IP WORKING GROUP, AND WE'LL LOOK 10 FORWARD TO FUTURE UPDATES FROM THEM.

AND JUST TO REMIND EVERYONE, THAT WE, OF COURSE, ARE ALWAYS WELCOME TO ATTEND THE IP MEETINGS AS MEMBERS OF THE PUBLIC. AND I THINK ALSO THEY'D BE WILLING TO SHARE WITH US DOCUMENTS THAT THEY RECEIVE TO HELP US IN OUR DELIBERATIONS. I WANT TO THANK ED AND JEFF FOR COMING AND MAKING SUCH A VERY LUCID AND CLEAR PRESENTATION.

18 SO WITH THAT, WHAT I'D LIKE TO DO IS TURN TO 19 THE NEXT TOPIC ON OUR AGENDA, WHICH IS INFORMED 20 CONSENT, AND I JUST WANT TO SORT OF TRY AND PUT A FRAME 21 AROUND IT. THIS IS OBVIOUSLY A VERY IMPORTANT TOPIC 22 THAT WE ARE GOING TO NEED TO ADDRESS IN THE STANDARDS 23 THAT --

24 DR. CIBELLI: DID YOU ASK THE PUBLIC FOR 25 COMMENTS ON THE IP POLICY?

VICE CHAIR LO: I'M NOT ACTUALLY NOT GOING TO 1 DO THAT BECAUSE WE'VE HAD A SERIES OF PUBLIC MEETINGS, 2 3 AND THEY' VE HAD OPPORTUNITY TO HAVE THAT INPUT. AND I 4 THINK FOR THE SAKE OF -- I THINK THAT THAT WOULD BE THE BETTER WAY TO DO THAT. THIS IS REALLY MORE OF AN 5 INFORMATIONAL UPDATE FOR US. I'LL MAKE SURE THE PUBLIC 6 HAS INPUT ON THE SUBSTANTIVE ISSUES WE'RE GOING TO TALK 7 ABOUT WHERE WE'RE REALLY MOVING TOWARDS OUR 8 9 RECOMMENDATIONS.

10 SO I DON'T THINK THERE'S ANY NEED TO SORT OF 11 REMIND OURSELVES THAT INFORMED CONSENT FOR DONATION OF 12 MATERIALS TO BE USED IN STEM CELL RESEARCH,

PARTICULARLY GENERATION OF NEW CELL LINES, IS A CRUCIAL
ISSUE. CERTAINLY THE PUBLICITY OVER THE SOUTH KOREAN
STEM CELL LINES SORT OF UNDERSCORES THE IMPORTANCE THE
PUBLIC PLACES ON THE CONSENT ISSUES. AND WE HAVE A
NUMBER OF CHALLENGES, I THINK, TO SORT THROUGH. AND
HOPEFULLY I'D LIKE TO TRY AND MAKE THIS THE MAIN FOCUS
OF THE MEETING TODAY.

I THINK OUR GOAL TODAY IS REALLY TO REACH
AGREEMENT ON A CONCEPTUAL LEVEL, NOT NECESSARILY TO TRY
AND GET THE LANGUAGE EXACTLY RIGHT, BUT TO SORT OF
LEAVE CONSIDERABLE DISCRETION TO STAFF AND LEGAL
COUNSEL TO HELP US CRAFT IN REGULATORY LANGUAGE THE
IDEAS THAT WE CAN AGREE ON. SO IT'S SOMEWHAT SIMILAR

TO WHAT WE TRIED TO DO AT OUR LAST MEETING FOR THE
 BANKING AND THE ESCRO DEFINITIONS.

3 I JUST WANTED TO SAY A LITTLE BIT TO TRY AND 4 PUT ALL THIS IN CONTEXT. ALREADY THERE'S A LOT OF EXISTING LAW, REGULATION, GUIDELINES THAT ALL 5 RESEARCHERS AND I WOULD SAY EXCLUDING STEM CELL 6 RESEARCHERS IN CALIFORNIA HAVE TO DEAL WITH. 7 SO THE ONE ISSUE WE NEED TO THINK ABOUT AND I THINK TRY AND 8 9 REACH AGREEMENT ON TODAY IS DO WE WISH TO INCORPORATE INTO THE RECOMMENDATIONS WE MAKE FOR REGULATIONS FOR 10 CIRM-FUNDED RESEARCH, DO WE WANT TO INCORPORATE THE 11 12 EXISTING REGULATIONS, LAWS, AND RECOMMENDATIONS ON INFORMED CONSENT? THESE WOULD INCLUDE, FOR EXAMPLE, 13 THE COMMON RULE REGULATIONS THAT GOVERN ALL HUMAN 14 15 SUBJECTS RESEARCH IN FEDERALLY FUNDED INSTITUTIONS, 16 SUCH AS OUR UNIVERSITY.

THERE ARE STATE LAWS IN CALIFORNIA DEALING 17 WITH INFORMED CONSENT FOR RESEARCH IN PARTICULAR. 18 AND, 19 OF COURSE, THE NATIONAL ACADEMY OF SCIENCE RECOMMENDATIONS FROM THEIR MAY 2005 REPORT, SOME OF 20 21 WHICH DEAL WITH INFORMED CONSENT. ONE QUESTION IS DO 22 WE WANT TO SAY OUR CIRM RESEARCHERS NEED TO COMPLY WITH THESE THREE DIFFERENT KINDS OF REGULATIONS? AND THEN 23 IF WE DECIDE TO DO THAT, DO WE DO IT BY JUST CITING THE 24 25 COMMON RULE OF CALIFORNIA LAW SUCH AND SUCH AND THE NAS

REPORT, OR DO WE ACTUALLY CUT AND PASTE THOSE SECTIONS
 AND PUT THEM INTO OUR REGULATIONS? IF WE DO, IT WILL
 MAKE OUR REGULATIONS A LOT LONGER, BUT A LOT MORE
 EXPLICIT. I THINK THAT'S ONE QUESTION OF SEVERAL I'D
 LIKE US TO TRY AND THINK ABOUT TODAY.

SECONDLY, WHEN WE LOOK AT ALL THAT, THERE ARE 6 A NUMBER OF ISSUES THAT ARE PECULIAR TO DONATION OF 7 BIOLOGICAL MATERIALS FOR STEM CELL RESEARCH THAT DON'T 8 9 QUITE GET AS MUCH EMPHASIS AS PERHAPS WE MIGHT WANT THEM TO HAVE IN THOSE EXISTING REGULATIONS, LAWS, AND 10 11 NAS RECOMMENDATIONS. I JUST LISTED SEVERAL THAT WE 12 MIGHT WANT TO CONSIDER ADDING AS ADDITIONS AND 13 **REFINEMENTS**.

14ONE IS THE NOTION THAT CONSENT NEEDS TO BE15FREE OR VOLUNTARY AS WELL AS INFORMED. IF YOU LOOK AT16THE COMMON RULE IN CALIFORNIA LAW, MOST OF IT REALLY17HAS TO DO WITH INFORMING WHAT DO RESEARCHERS NEED TO18DISCLOSE TO RESEARCH PARTICIPANTS IN ORDER TO MAKE SURE19THEIR CONSENT IS INFORMED?20CERTAINLY THE CONCERNS ABOUT UNDUE INFLUENCE

21 WI TH OOCYTE DONORS REMINDS US THAT CONSENT NEEDS TO 22 VOLUNTARY AS WELL AS INFORMED.

23 SECOND ISSUE IS RECONTACT OF DONORS OF
24 MATERIALS FOR NEW STEM CELL LINES. THE NAS GUIDELINES
25 DEAL WITH THAT QUITE EXPLICITLY AS DO SOME OF THE

CALIFORNIA LAWS, BUT IN THE CONTEXT OF PROVIDING 1 INFORMATION ON RESEARCH TESTS BACK TO THE PARTICIPANTS 2 3 IN RESEARCH AS SORT OF THE REASON FOR RECONTACT. DO WE 4 WANT ALSO TO MAKE CLEAR TO DONORS OF MATERIALS THAT THEY MAY WISH -- THAT THE RESEARCHERS MAY WISH TO 5 6 RECONTACT THEM, NOT FOR THEIR BENEFIT, BUT TO BENEFIT POTENTIAL RECIPIENTS IN TRANSPLANTATION FROM CELL LINES 7 DERIVED FROM THEIR MATERIAL; IN OTHER WORDS, THE 8 RECONTACT WOULD BE TO GET MORE INFORMATION FROM THEM 9 ABOUT THEIR HEALTH STATUS IN THE FUTURE. 10 11 DR. EGGAN: OR MORE MATERIAL. 12 VICE CHAIR LO: ALSO MORE MATERIAL. BUT THE RECONTACT WOULD BE NOT FOR THE BENEFIT OF PROVIDING 13 POTENTIALLY BENEFICIAL INFORMATION BACK, BUT TO SORT OF 14 15 ASK THEM TO SORT OF HELP RESEARCHERS OUT. AND FINALLY, SPECIFIC CONCERNS ABOUT OOCYTE 16 DONATION. AS YOU KNOW, THERE WAS A BILL INTRODUCED IN 17 18 THE LEGI SLATURE, PASSED BY BOTH HOUSES, VETOED BY THE 19 GOVERNOR, SETTING FORTH ADDITIONAL REQUIREMENTS FOR

20 CONSENT IN THE OOCYTE RETRIEVAL SITUATION.

21 MR. HARRISON: I THINK WE HAVE BOB KLEIN,

22 WHO'S JUST JOINED.

23 VICE CHAIR LO: HI, BOB.

24 MR. KLEIN: HI. MY UNDERSTANDING IS YOU NEED 25 ME FOR A QUORUM?

1 DR. HALL: NO. THE MOMENT IS PASSED. THANK 2 YOU. 3 VICE CHAIR LO: WE NEED YOU IN SPIRIT, BUT WE 4 DON'T NEED YOU FOR A QUORUM AT THIS POINT. MR. KLEIN: OKAY. IF I COULD FINISH A FEW 5 6 CRITICAL CALLS, THEN I'LL COME OVER. 7 VICE CHAIR LO: GREAT. WE'LL LOOK FORWARD TO SEEING YOU WHEN YOU GET HERE. THANKS, BOB. 8 9 SO THAT IN THIS CONTEXT OF PARTICULAR CONCERNS ABOUT OOCYTE DONATION, WE WANT TO PUT IN 10 11 HEIGHTENED REQUIREMENTS FOR INFORMED CONSENT IN THAT 12 CONTEXT. NEXT SLIDE. THERE HAVE BEEN SEVERAL SUGGESTIONS THAT ONE MIGHT MAKE ABOUT ENHANCING THE 13 CONSENT PROCESS -- LET ME JUST BACK UP. 14 15 ONE PROBLEM, IF YOU LOOK AT, AND IN YOUR FOLDER UNDER BINDER TAB 7 YOU CAN SEE WHAT SPELLING OUT 16 ALL THE DIFFERENT REQUIREMENTS FOR CONSENT LOOKS LIKE. 17 18 AS ALL OF US WHO ARE EITHER RESEARCHERS, PATIENTS, OR 19 RESEARCH PARTICIPANTS KNOW, WHAT HAPPENS IS THAT MEANS THE CONSENT FORM GETS LONGER AND LONGER AND LONGER. 20 S0 21 EVERY TIME SOMEONE ADDS MORE REQUIREMENTS, IT JUST LENGTHENS THE CONSENT FORM. 22 THE PROBLEM WITH THAT IS THAT ALL THE 23 24 EMPIRICAL RESEARCH WE HAVE ABOUT HOW DOES CONSENT WORK

25 IN EITHER CLINICAL OR A RESEARCH SETTING IS THAT

1 LENGTHENING THE CONSENT FORM DOESN' T HELP, AND THAT IN SPITE TERRIFIC CONSENT FORMS, MANY IF, IN FACT, LIKELY 2 3 THE MAJORITY OF RESEARCH PARTICIPANTS, ARE SERIOUSLY 4 MISINFORMED ABOUT THE PROJECT THEY' RE GETTING INVOLVED WITH AND THE NATURE OF RESEARCH. SO I THINK ONE OF THE 5 BACKGROUND ISSUES IS WHILE IT'S IMPORTANT TO MAKE SURE 6 PEOPLE HAVE ALL THE INFORMATION THEY NEED TO MAKE A 7 CONSENT WHETHER OR NOT TO DONATE MATERIALS FOR 8 9 RESEARCH, LENGTHENING THE CONSENT FORM IN AND OF ITSELF MAY NOT BE AN EFFECTIVE WAY TO ACHIEVE THAT GOAL. 10

WHAT ARE SOME OTHER OPTIONS FOR TRYING TO 11 12 ENHANCE CONSENT RATHER THAN JUST HAVING MORE DETAILED CONSENT FORMS? ONE MIGHT BE TO ACTUALLY ASSESS 13 COMPREHENSION RATHER THAN SIMPLY ADD TO THE FORM. 14 S0 15 IT'S ASKING QUESTIONS TO SEE WHETHER OR NOT THE RESEARCH PARTICIPANT ACTUALLY UNDERSTANDS KEY FEATURES, 16 ESSENTIAL FEATURES, ABOUT THE RESEARCH. THE IDEA BEING 17 IF THEY DON'T, THEY NEED MORE DISCUSSION BEFORE THEY'RE 18 19 ALLOWED TO AGREE TO PARTICIPATE.

20 SECOND OPTION IS TO HAVE AN INDEPENDENT 21 PERSON, SOMEONE WHO'S NOT PART OF THE RESEARCH TEAM, 22 OBSERVE DISCUSSIONS BETWEEN THE RESEARCHERS AND THE 23 POTENTIAL SUBJECT. THIS TENDS TO HAVE A LOT OF 24 *SALUTORY EFFECT IN TERMS OF MAKING THAT DISCUSSION 25 CLEARER, HELPING THE PERSON ASK QUESTIONS, CLARIFYING

1 THINGS, AND SO FORTH.

FINALLY, REPEATING DISCUSSIONS OVER TIME 2 3 SEEMS TO HAVE SOME BENEFIT ON ENHANCING UNDERSTANDING. 4 IF YOU REMEMBER ANN KIESSLING'S PRESENTATION AT OUR FIRST MEETING, WHERE SHE TALKED ABOUT THE PROCESS HER 5 GROUP HAS DEVELOPED, I THINK ACTUALLY, ANN, I THINK, 6 CORRECT ME IF I'M WRONG, I THINK YOU ACTUALLY USE ALL 7 OF THESE APPROACHES. YOU ACTUALLY ASK QUESTIONS TO SEE 8 9 WHAT PEOPLE UNDERSTAND. YOU HAVE SOMEONE WHO'S NOT PART OF THE RESEARCH TEAM BE PRESENT DURING THOSE 10 DI SCUSSI ONS, AND YOU HAVE THOSE DI SCUSSI ONS REPEATED 11 12 OVER TIME WITH OPPORTUNITIES TO ASK QUESTIONS, TO 13 CLARIFY, AND SO FORTH.

14 SO THESE ARE THREE BROAD APPROACHES THAT WE 15 MIGHT WANT TO THINK ABOUT, AND I WOULD SAY PERHAPS 16 SPECIFICALLY IN THE CONTEXT OF OOCYTE DONATION BECAUSE 17 THAT SEEMS TO HAVE RAISED THE MOST CONCERNS AMONG THE 18 PUBLIC.

19 IF WE WANT TO THINK ABOUT HOW TO IMPLEMENT IN 20 REGULATIONS SOME SORT OF ASSESSMENT OF WHAT PEOPLE 21 ACTUALLY UNDERSTAND, THERE'S DRAFT LANGUAGE THAT ALTA 22 AND I AND A FEW OTHERS HAVE WORKED ON, WHICH WE CAN 23 SHOW IF WE GET TO THAT. IF WE GO BACK, I SORT OF 24 PROPOSED AS A WAY OF JUST ORGANIZING OUR DISCUSSION, A 25 SERIES OF NESTED QUESTIONS. GO BACK TO THE VERY FIRST

SLIDE, GEOFF. JUST BECAUSE IT'S SUCH A BIG TOPIC, I 1 THINK WE REALLY WANT TO TRY AND WORK EFFICIENTLY. I 2 3 WOULD SUGGEST, NOT THAT THIS IS NECESSARILY THE BEST 4 MODEL OR THE ONLY MODEL, BUT ONE THAT WE THINK ABOUT USING JUST TO SORT OF GO THROUGH A SET OF ISSUES. 5 LET, WITH THAT, TOSS IT OPEN TO THE COMMITTEE 6 7 FOR YOUR THOUGHTS. LET ME JUST SAY, HAVING TRIED TO LEARN FROM 8 9 THE LAST MEETING, WHAT I'LL TRY AND DO IS KEEP A LIST OF PEOPLE WHO WANT TO TALK, AND MAKE SURE WE GET TO 10 EVERYBODY. JOSE AND KEVIN AND THEN MARCY. 11 12 DR. CIBELLI: I KNOW WE'RE NOT VOTING, BUT I SUPPORT THE IDEA OF HAVING PEOPLE THIS COOL-OFF PERIOD, 13 I THINK YOU CALL IT, AFTER THEY HAVE BEEN ENGAGED IN 14 15 WILLINGNESS TO DONATE. BUT ALSO I THINK WE SHOULD THINK ABOUT TRAINING, SOME SORT OF TRAINING FOR THE 16 PERSON THAT IS GOING TO EXPLAIN THE INFORMED CONSENT TO 17 THE DONOR. SO MAYBE THAT WOULD BE SOMETHING THAT THE 18 19 ESCRO'S CAN DO, HAVE SOME SORT OF ONLINE TRAINING OR REFRESHMENT EVERY YEAR, THAT PEOPLE HAVE TO GO BACK AND 20 21 RETRAIN THEMSELVES. SO HAVE A DESIGNATED PERSON TO DO THE INFORMED CONSENT. I THINK IT'S IMPORTANT TO HAVE 22 23 SOMEONE QUALIFIED.

24 DR. EGGAN: JUST TO SPEAK TO THIS BROAD ISSUE 25 OF HOW SPECIFIC YOU WANT TO BE, I WOULD AS A SCIENTIST

ARGUE FOR BEING AS SPECIFIC AS POSSIBLE. AND I THINK
THERE ARE TWO REASONS TO DO THAT. ONE IS THAT IT WILL
LEVEL THE PLAYING FIELD AMONG CALIFORNIA INSTITUTIONS.
IT WILL BE CLEAR TO EVERYONE HOW THEY'RE SUPPOSED TO
BEHAVE AND SO EVERYONE WILL BEHAVE MORE SIMILARLY
INSTEAD OF ALLOWING THEM INTUIT WHAT THEY'RE SUPPOSED
TO DO IN A VACUUM.

SECONDLY, IT WILL HELP THINGS GO FASTER. I 8 9 CAN TELL FOR SOMEONE WHO'S BEEN WORKING THROUGH THESE ISSUES WITH A RELATIVELY NAIVE IRB OVER THE LAST COUPLE 10 OF YEARS, THEY KEEP REALIZING THAT THERE ARE NEW THINGS 11 12 THAT THEY HAVEN'T DEALT WITH AS THEY'VE GONE ALONG. S0 IF A LARGER GROUP CONSIDERS THOSE ISSUES, CERTAINLY THE 13 NATIONAL ACADEMY OF SCIENCE CONSIDERING ISSUES AND 14 15 MAKING POLICY STATEMENTS HELPED IMMEASURABLY, AND TO HAVE THESE BE ENDORSED BY ANOTHER BODY WILL HELP GET 16 CLEAR HOW DIFFERENT INSTITUTIONS ARE TO PROCEED AND 17 WHAT THE BEST WAY AS AN INVESTIGATOR IT IS TO DO THESE 18 19 TYPES OF EXPERIMENTS. IT WILL MAKE THINGS GO FASTER. MS. FEIT: HAVING WORKED EXTENSIVELY WITH 20 21 CONSENT FORM OVER 35 YEARS WITH THOUSANDS OF PATIENTS, I THINK -- I APOLOGIZE IF THIS WAS DISCUSSED EARLIER. 22 23 I'M NEW TO THE COMMITTEE. I THINK A DEFINED TIME-OUT FOR THE INDIVIDUAL, A TIME WHERE THERE IS NO CONTACT 24 FROM THE RESEARCH TEAM, BUT SOMEONE ELSE OFFERED A 25

NUMBER TO CALL, BUT IT GIVES THE INDIVIDUAL TIME TO 1 LOOK UP WORD DEFINITIONS, TO UNDERSTAND THE MATERIAL 2 3 THAT YOU ARE GIVING THEM SO THAT THEY FULLY UNDERSTAND 4 WHAT THEY' RE DOING. AND THEN SOMEONE ELSE TO CALL OTHER THAN THE RESEARCH TEAM THAT THEY CAN ASK 5 QUESTIONS ABOUT, THAT THEY FEEL COMFORTABLE, AND THEN 6 COME BACK AFTER THAT AND THEN RESIGN SAYING THEY HAD 7 THE TIME-OUT AND THEY HAD THE OPPORTUNITY TO REALLY 8 9 THINK THIS THROUGH.

I MEAN THE SIMPLEST THINGS LIKE I'VE HAD 10 PATIENTS SAY, I LOOKED UP DEFINITIONS OF WORDS THAT I 11 12 DIDN'T UNDERSTAND AND WE TAKE FOR GRANTED A LOT IN SCIENCE WORDS AND MEANINGS OF WORDS AND NOT CLEARLY 13 UNDERSTANDING THAT THE PATIENTS DON'T HAVE ANY IDEA 14 15 WHAT WE'RE TALKING ABOUT. SO I WOULD JUST ADVOCATE FOR THAT TO BE SPELLED OUT. IF IT'S THREE DAYS, IF IT'S A 16 FIVE-DAY TIME-OUT, WHATEVER IT IS, THAT IT'S SPELLED 17 OUT, AND THAT THE RESEARCH TEAM SHOULD LET, THEN, THE 18 19 DONOR ALONE AND LET THEM ABSORB THE MATERIAL AND HAVE SOMEBODY ELSE THEY CAN CONTACT TO GO THROUGH IT WITH 20 21 THEM, THAT WOULD BE -- JUST BECAUSE THIS IS A VERY SENSITIVE AND HIGH PROFILE ISSUE. AND I THINK THAT 22 WOULD HELP SUPPORT A CLEAR UNDERSTANDING THAT THE 23 24 DONORS HAD TIME TO UNDERSTAND.

25

DR. ROWLEY: I THINK IT'S IMPORTANT TO

1 EMPHASIZE.

2 VICE CHAIR LO: ALTA. 3 MS. CHARO: IN THAT OF THAT PREVIOUS COMMENT, I'D LIKE TO JUST ASK FOR CLARIFICATION. ARE WE TALKING 4 ABOUT WHAT WE'RE GOING TO RECOMMEND AS BEST PRACTICES 5 WITHIN THE WORLD OF CIRM-FUNDED RESEARCH, PERIOD? OR 6 ARE WE ALSO TALKING ABOUT PRACTICES THAT WE WOULD 7 REQUIRE TO HAVE BEEN FOLLOWED BY OTHERS BEFORE A 8 9 CIRM-FUNDED RESEARCHER COULD USE SOMEBODY ELSE'S LINES? IN OTHER WORDS, I'M TRYING TO FIGURE OUT IF WE'RE 10 11 TALKING ABOUT WHAT WE'RE GOING TO DO WHEN IT'S OUR 12 MONEY BEING SPENT TO ACTUALLY RECRUIT AN EGG DONOR, OR IF WE'RE ALSO TALKING ABOUT WHAT CONSTITUTES THE 13 MINIMUM STANDARD FOR AN ETHICALLY DERIVED LINE. 14 15 VICE CHAIR LO: GREAT DISTINCTION. LET'S RIGHT NOW TALK ABOUT WHAT WE'RE REQUIRING OF OUR 16 RESEARCHERS. IF WE CAN AGREE ON THAT, THEN LET'S LATER 17 ON COME BACK TO HOW MUCH OF THAT DO WE WANT TO APPLY TO 18 19 OTHER RESEARCHERS DERIVING LINES WITH OTHER FUNDS. MS. CHARO: THANKS. SORRY TO INTERRUPT. 20 21 VICE CHAIR LO: BY THE WAY, ALTA AND JOHN, IF YOU WANT TO SPEAK, JUST SORT OF SHOUT THAT YOU WANT TO 22 SPEAK AND I'LL PUT YOU IN THE QUEUE. 23 DR. ROWLEY: I JUST WANT FOR A POINT OF 24 CLARIFICATION AND ASKING YOU HOW YOU DEFINE RESEARCHERS 25

BECAUSE IT'S CLEAR HERE THAT THE GUIDELINES STATE THAT 1 THE INDIVIDUAL DONOR IS CONTACTED BY A PHYSICIAN OR 2 3 SOME INDIVIDUAL NOT DIRECTLY INVOLVED IN THE RESEARCH. 4 SO IT ISN'T THE RESEARCHER WHO'S GOING TO DEVELOP THE CELL LINES WHO'S ASKING YOU FOR EITHER OOCYTES OR 5 PERMISSION. IT'S ANOTHER INDIVIDUAL WHO'S DOING THAT. 6 7 VICE CHAIR LO: ROB AND THEN FRANCISCO. DR. TAYLOR: MY POINT WAS REALLY QUITE 8 SIMILAR. I ABSOLUTELY SUPPORT WHAT YOU ARE SUGGESTING 9 10 HERE, AND I THINK IT IS IMPORTANT THAT THAT WAITING 11 PERIOD, AS WELL AS THE COUNSELING AND ASCERTAINMENT OF 12 UNDERSTANDING BY THE DONOR COMES FROM SOMEBODY OTHER THAN THE CLINICIAN WHO'S CARING FOR THAT PATIENT 13 CLINICALLY BECAUSE MANY OF THESE MAY COME FROM THAT 14 15 SOURCE AND ALSO THE RESEARCHERS. SO I THINK TRAINED INDIVIDUALS, SEPARATION OF CHURCH AND STATE, AND SORT 16 OF WAITING PERIOD. COOLING OFF PERIOD REMINDS ME TOO 17 MUCH OF HANDGUNS, BUT SOME KIND OF A WAITING PERIOD, I 18 19 THINK, IS IMPORTANT.

20 DR. PRIETO: COMMENT BRIEFLY THAT I THINK IT 21 IS IMPORTANT TO HAVE A TIME-OUT, BUT ALSO THAT I THINK 22 THE DISTINCTION THAT JANET BROUGHT UP IS SOMETHING THAT 23 DONORS MIGHT NOT REALLY SEE BETWEEN -- I THINK THEY 24 WOULD PERCEIVE THE PERSON ASKING THEM TO DONATE AS A 25 MEMBER OF THE RESEARCH TEAM. SO WE NEED TO LOOK AT A

COMPLETELY NEUTRAL OR MORE FURTHER REMOVED PERSON AS A
 SOURCE FOR THEM TO GO BACK TO ANSWER QUESTIONS.

3 DR. KIESSLING: TWO COMMENTS. ONE, THE 4 PROGRAM THAT WE SET UP ESTABLISHED OR SOLVED THE COOLING OFF PERIOD BY INFORMING THE DONORS THAT NOBODY 5 WOULD CONTACT THEM. THAT EARLY IN THE RECRUITMENT, 6 WHEN THEY WERE GOING THROUGH THE INITIAL SCREENING 7 PROCESS, THEY WERE RESPONSIBLE FOR CONTACTING THE 8 OFFICE TO MAKE THEIR NEXT APPOINTMENT. NO ONE WOULD 9 10 CALL THEM.

11 SECONDLY, THE CONFUSION OR THE INTEREST 12 AROUND MAKING SURE THAT EGG DONORS ARE CONSENTED MAY --THIS IS SOMETHING THAT'S OPEN FOR DISCUSSION BECAUSE 13 WE'VE NOT DONE THIS, ALTHOUGH I'VE THOUGHT ABOUT IT. 14 15 IT'S POSSIBLE THE TWO BIG ASPECTS FOR ASKING SOMEONE TO DONATE EGGS IS DO THEY UNDERSTAND WHAT MIGHT BECOME OF 16 THE CELLS DERIVED FROM THEIR EGGS. THAT'S A BIG PIECE. 17 DO THEY UNDERSTAND THE BIOLOGY. DO THEY UNDERSTAND 18 19 EXACTLY WHAT'S GOING TO HAPPEN WITH WHAT THEY'VE DONATED? THAT'S ONE CONSIDERATION. 20

AND, TWO, DO THEY UNDERSTAND THE RISKS TO THEMSELVES? SO IT'S POSSIBLE THAT THE WAY TO REALLY ESTABLISH THIS KIND OF A CONSENT PROCESS IN THIS PARTICULAR CASE IS TO ACTUALLY HAVE TWO DIFFERENT CONSENT FORMS SO THAT THIS GETS SEPARATED IN THE

DONOR'S MIND. ON THE ONE HAND, SHE NEEDS TO JUST 1 SIMPLY CONSIDER THE RISKS TO HERSELF, THE TIME 2 3 COMMITMENT, WHAT THIS IS GOING TO MEAN TO HER AND HER 4 FAMILY TO DO THIS. AND SECONDLY, AS A SECOND CONSIDERATION, DOES SHE FULLY UNDERSTAND THE LONG-TERM 5 OUTCOME OF WHAT SHE'S DOING? AND THIS IS BASICALLY TWO 6 7 PROCESSES THAT WHEN YOU TALK TO THESE WOMEN, YOU REALLY UNDERSTAND THEY' RE MIXING THEM TOGETHER, AND IT MIGHT 8 BE CLEARER IF THEY WERE SEPARATE. 9

10 DR. EGGAN: COUPLE THINGS. I WOULD AGREE 11 WITH ANN, THAT MAYBE A SOLUTION FOR THE COOLING OFF 12 PERIOD IS THIS LEAVING THE RECONTACT IN THE HANDS OF 13 THE POTENTIAL DONOR. THIS SEEMS LIKE A REASONABLE 14 APPROACH.

15 I GUESS IT IS IMPORTANT THAT WE MOVE FORWARD IN SUCH A WAY THAT THINGS CAN BE AS, I GUESS, AS 16 REMOVED FROM CRITICISM AS POSSIBLE, BUT ALSO THERE 17 18 NEEDS TO BE A RECOGNITION THAT THESE MECHANISMS MUST 19 WORK. AND SO I THINK IT'S DIFFICULT TO IMAGINE WHO THE PERSON WOULD BE THAT WOULD BE FULLY REMOVED FROM THE 20 21 RESEARCH TEAM, WHO WOULD BE INVOLVED IN DONATION AND WHAT THAT MECHANISM WOULD BE IF THAT'S THE GOAL. 22 S0 CERTAINLY ONE APPROACH WOULD BE FOR THE RESEARCH TEAM 23 24 TO HIRE A DEDICATED RESEARCH ADMINISTRATOR WHO WOULD 25 TAKE CHARGE OF THESE THINGS AND WOULD BE A REGISTERED

NURSE AND WOULD BE AN INDEPENDENT PERSON. THAT WOULD
 BE ONE THING THAT COULD BE DONE AND HAS BEEN DONE BY
 PEOPLE.

4 THIS MAY NOT ALWAYS BE POSSIBLE DEPENDING ON WHAT THE PROJECT IS. AND SO I THINK TO EXPECT ALWAYS 5 THIS SORT OF INFORMED CONSENT PROCESS TO BE FARMED OUT 6 TO SOME SORT OF INDEPENDENT AGENT IS HARD TO IMAGINE AS 7 BEING A FUNCTIONAL APPROACH FOR MOST RESEARCH STUDIES. 8 SO I THINK BEFORE WE SAY ABSOLUTELY THAT'S THEY WAY IT 9 SHOULD BE DONE, I THINK THERE SHOULD BE A BROADER 10 11 DI SCUSSI ON ABOUT THAT.

12 AND THEN I THINK IT'S ALSO IMPORTANT TO RECOGNIZE THAT MANY OF THESE PROCESSES SUCH AS EGG 13 DONATION ARE MULTISTEP, COMPLICATED PROCESSES. AND ONE 14 15 WAY TO HANDLE THOSE IS TO HAVE MULTISTEP INFORMED THAT IS, OF COURSE, THAT'S GOING TO HAPPEN 16 CONSENT. ANYWAY FOR A PROCESS LIKE EGG DONATION IN THE UNITED 17 18 STATES. IT'S GOING TO BE NEED INFORMED CONSENT RIGHT 19 BEFORE THE PERSON, FOR INSTANCE, UNDERGOES GENERAL ANESTHESIA FOR THE EGG RETRIEVAL. THAT'S ANOTHER WAY 20 TO SORT OVERCOME THE COMPLICATED NATURE OF THE PROCESS. 21 I THINK THAT SHOULD BE ENCOURAGED. 22

23 VICE CHAIR LO: ROB.

24 DR. TAYLOR: JUST A QUICK POINT ABOUT IN 25 WOMEN OR COUPLES WHO ARE UNDERGOING CONVENTIONAL IVF

AND MAY COMPLY AND WANT TO PARTICIPATE IN A PROGRAM 1 LIKE THIS, THAT TIME-OUT PERIOD MAY BE A LITTLE BIT 2 3 MORE DIFFICULT TO ACCOMPLISH IN THAT THE IVF PROCESS IS 4 AN INTENSIVE AND RELATIVELY SHORT PERIOD OF TIME IN WHICH THERE'S LOTS OF CONTACT BETWEEN THE CLINICAL 5 OFFICE AND THE PATIENT. AND IF PART OF THAT PROCESS 6 REQUIRES SOME -- I'M JUST CONCERNED THAT IT MAY EXCLUDE 7 COUPLES UNDERGOING IVF FOR THEIR OWN CLINICAL FERTILITY 8 9 REASONS WHO MAY WANT TO PARTICIPATE. WE MIGHT HAVE LANGUAGE THAT WOULD ACTUALLY PREVENT THEM, BECAUSE OF A 10 11 PERIOD OF TIME OF WAITING OR THIS REQUIREMENT THAT THEY 12 CAN'T REALLY BE CONTACTED BY THE OFFICE, DEPENDING, AND I SEE THAT AS STILL PROBABLY BEING THE MOST PREVALENT 13 MECHANISM FOR OBTAINING THESE MATERIALS. I WOULDN'T 14 15 WANT TO WRITE THAT OFF RIGHT UP FRONT.

16 DR. KIESSLING: I ACTUALLY THINK IT'S MORE 17 IMPORTANT FOR THE PATIENTS GOING THROUGH INFERTILITY 18 TREATMENT TO HAVE A TIME-OUT.

19 VICE CHAIR LO: DO YOU WANT TO SAY A LITTLE20 MORE ABOUT THAT?

21 DR. KIESSLING: I ACTUALLY THINK IT'S MORE 22 CRUCIAL THAT THE PEOPLE WHO ARE GOING THROUGH 23 INFERTILITY TREATMENT BE ALLOWED THE OPPORTUNITY FOR A 24 TIME-OUT. I THINK THERE'S A LOT OF THE PRESSURES ON 25 THOSE COUPLE, AND I THINK FOR THEM TO PARTICIPATE IN

RESEARCH, IT'S EVEN MORE CRITICAL THAT THEY HAVE A
 LITTLE TIME TO REFLECT ON WHETHER THEY WANT TO DO IT IN
 ADDITION TO THEIR INFERTILITY NEEDS. SO I SORT OF
 THINK IT'S MORE CRITICAL FOR THAT GROUP THAN IT IS FOR
 THE WOMEN COMING FORTH BECAUSE THEY'VE GOT TYPE 1
 DIABETES IN THEIR FAMILIES.

7 DR. ROWLEY: BUT, AGAIN, THIS WAS DEALT WITH 8 IN THE NATIONAL ACADEMY REPORTS, THAT ANYONE WHO IS 9 GIVING EMBRYOS NO LONGER NEEDED FOR THEIR OWN FAMILY 10 HAVE TO BE RECONSENTED IN ORDER FOR THOSE EMBRYOS TO BE 11 THEN USED FOR RESEARCH. SO THEY HAVE UP TO YEARS AS A 12 TIME-OUT, IF YOU WILL.

VICE CHAIR LO: JUST TO CLARIFY, I THINK WE 13 NEED TO BE VERY CAREFUL TO DISTINGUISH THE DONATION OF 14 15 FROZEN EMBRYOS REMAINING AFTER INFERTILITY TREATMENT IS COMPLETED FROM DONATION OF FRESH OOCYTES FROM THE SAME 16 HORMONAL MANIPULATION AND OOCYTE RETRIEVAL CYCLE AS 17 18 WELL AS TO BE USED TO GENERATE OOCYTES FOR INFERTILITY 19 TREATMENT. SO I THINK, AS I UNDERSTOOD YOU, ROB, YOUR COMMENTS HAD TO DO WITH IF YOU ARE GOING TO ASK THEM TO 20 21 DONATE FRESH OOCYTES FROM A CYCLE WHERE THEY' RE ALSO DONATING FOR INFERTILITY TREATMENT, THERE ARE TIME 22 CONSTRAINTS IN TERMS OF TIMING OF MANIPULATIONS. 23 24 DR. TAYLOR: I WAS THINKING OF THE FROZEN

25 OOCYTE DONATION MODEL BECAUSE MOST COUPLES DON'T REALLY

KNOW WHAT THE OUTCOME IS OF THEIR PREGNANCY CYCLE UNTIL 1 AFTER THE FACT. BUT I DO THINK THAT IF YOU SORT OF 2 3 PROSCRIBED OR REQUIRED A WAITING PERIOD THAT COUPLES 4 UNDERGOING IVF COULDN'T REALLY ACCOMMODATE IN THEIR INTENSE SCHEDULE, IT WOULD BE NICE FOR THEM TO STILL 5 HAVE THE OPPORTUNITY, AND I AGREE WITH JANET, THAT THEY 6 REQUIRED TO ACTUALLY RECONSENT. YOU COULD, I GUESS, 7 MAYBE CALL THAT YOUR TIME-OUT. 8

VICE CHAIR LO: AGAIN, FOR MY UNDERSTANDING 9 WAS THAT THE NAS REPORT SORT OF BUILT THAT TIMING AFTER 10 THE OOCYTES ARE IN THE FREEZER. THERE'S LOTS OF MONTHS 11 12 OR YEARS TO DECIDE WHAT TO DO WHAT TO DO. THAT IS A COOLING OFF -- LITERALLY A COOLING OFF PERIOD WHEN 13 THEY'RE IN THE FREEZER, BUT A TIME-OUT WHICH WOULD 14 15 SATISFY WHAT WE'RE TALKING ABOUT BEFORE, I THINK. DR. EGGAN: WE SHOULD BE CAREFUL OUR 16 TERMINOLOGY, EMBRYO, OOCYTE. I THINK THERE ARE 17 CIRCUMSTANCES WHICH ARE NOT DIRECTLY SPOKEN TO BY THE 18 19 NAS GUIDELINES. THERE MAY BE CIRCUMSTANCES WHERE A COUPLE IS UNDERGOING IVF WHERE THERE WILL BE DISCARDED 20 21 MATERIAL THAT WE'LL BE USING. I THINK IT'S STILL AN ONGOING DI SCUSSI ON ABOUT WHETHER OR NOT WE SHOULD 22 SUPPORT THE SORT OF DIVERSION OF MATERIAL GENERATED FOR 23 24 AN ACTIVE ATTEMPT AT PREGNANCY TOWARDS RESEARCH, BUT 25 THERE MAY BE CIRCUMSTANCES WHERE IT IS USEFUL AND,

INDEED, WHERE IS NO QUESTION. SO, FOR INSTANCE, NAS 1 DIRECTLY ENCOURAGES FREEZING OF EMBRYOS DONATED, BUT 2 3 THERE MAY BE OTHER EMBRYOS, SUCH AS THOSE THAT ARE 4 AFFECTED BY A VARIETY OF DISEASES WHICH HAVE BEEN DIAGNOSED BY PGD WHICH WOULD BE DE FACTO DISCARDED 5 6 WHICH COULD BE USED FOR RESEARCH. THERE WOULD BE NO PROBLEM FOR THAT. THAT WOULD BE A SORT OF CIRCUMSTANCE 7 THAT'S BEING DISCUSSED HERE WHERE THERE IS AN 8 9 OPPORTUNITY TO USE THAT MATERIAL. IT WILL BE THROWN AWAY OTHERWISE, SO IT REALLY ISN'T THAT DIFFICULT OF A 10 11 DISCUSSION. SO TO MANDATE A COOLING OFF PERIOD COULD 12 BE DIFFICULT IN THAT SITUATION. VICE CHAIR LO: KEVIN, WOULD YOU INCLUDE 13 OOCYTES THAT FAIL TO FERTILIZE? 14 15 DR. EGGAN: I THINK THAT'S SOMETHING THAT WE SHOULD HAVE AS A BROAD CONVERSATION. I THINK ANN AND I 16 AGREE THAT THAT'S A TROUBLED SOURCE OF MATERIAL FOR A 17 18 VARIETY OF REASONS, PARTICULARLY WHAT I SAID BEFORE. 19 OTHER PEOPLE DI SAGREE WITH THAT. AND CERTAINLY *HEFA HAS SAID THAT THEY ENDORSE THAT, SO I THINK THAT'S AN 20 21 OPEN --22 VICE CHAIR LO: LET'S TRY AND FOCUS ON SORT OF THE NORMAL SITUATION, NOT THE UNUSUAL ONES. WE'LL 23 24 PUT OFF FOR LATER.

25

MS. FEIT: I JUST WANT TO AGAIN GO BACK AND

SAY THIS. IF I'M DONATING ANY PART OF MY BODY AND YOU 1 SAY I'M GOING TO FREEZE IT FOR FIVE YEARS OR TEN YEARS, 2 3 I'VE CHECKED OUT. IT'S THERE. I DON'T HAVE TO WORRY 4 ABOUT IT. THEN IF YOU COME BACK TO ME AND SAY, WELL, MARCY, WE'RE GOING TO DO THIS WITH IT. YOU'VE SET ME 5 ON WHOLE ANOTHER PATH AND I DESERVE TIME TO THINK ABOUT 6 WHAT YOU' RE GIVING ME, THE INFORMATION YOU' RE GIVING 7 ME, AND WHAT YOU PLAN TO DO. I JUST WANT TO STATE 8 9 THAT. THAT IS HOW PATIENTS AND DONORS THINK. SO DON'T UNDERESTIMATE THAT, BECAUSE THEY HAVE FIVE YEARS, THAT 10 THEY CLEARLY UNDERSTAND WHAT YOU PLAN TO DO. THAT'S MY 11 12 ONLY COMMENT.

DR. EGGAN: I THINK I AGREE WITH THAT FULLY. 13 VICE CHAIR LO: SO JUST TO CLARIFY, IT 14 STRIKES ME THAT ONCE YOU THEN SAY NOW WOULD YOU LIKE 15 TO -- THESE EMBRYOS ARE IN THE FREEZER. NOW WOULD YOU 16 LIKE TO CONSIDER DONATING FOR RESEARCH, THE CLOCK 17 STARTS AGAIN. AFTER THAT INITIAL CONVERSATION, YOU CAN 18 19 THEN SAY WE'RE NOT GOING TO RECONTACT YOU FOR X, WHATEVER, AND THINK ABOUT IT, TALK TO SO AND SO. 20 21 MS. FEIT: IF YOU HAND ME A STACK OF INFORMATION AND GIVE ME A LOT OF TERMINOLOGY THAT I'VE 22 NEVER SEEN BEFORE AND YOU GIVE ME A CONCEPT THAT I'VE 23 24 NEVER HEARD OF BEFORE, I HAVE A LOT OF THINK OF, TWO, 25 THREE DAYS, SOMETHING SO THAT I CAN SIT DOWN, I CAN ASK

SOME QUESTIONS WHETHER IT'S WITH A CASE MANAGER, A 1 REGISTERED NURSE, A COUNSELOR, ANYBODY THAT I CAN JUST 2 SORT OF DIGEST THE INFORMATION. YOU KNOW, IT'S A 3 4 CRITICAL DECISION. I NO LONGER WANT THIS. I'M GOING TO GIVE IT TO YOU. I'M GOING TO LET YOU DO. I HAVE TO 5 HAVE MORE INFORMATION AND SOME TIME TO THINK ABOUT IT. 6 THAT'S ALL. I'M NOT SAYING IT HAS TO BE FOREVER. I'M 7 JUST SAYING THEY CAN'T GO FROM ONE ROOM AND THEN SIGN A 8 9 DOCUMENT AND ASSUME THAT THEY UNDERSTAND.

10 YOU POINTED OUT IN THE BEGINNING THEIR 11 COMPREHENSION, THEIR APPREHENSION, AND THEN THE MORAL, 12 ETHICAL DUTY WE HAVE TO MAKE SURE AS MUCH AS WE COULD 13 THAT THEY UNDERSTOOD WHAT WE WERE GOING TO DO. THAT 14 WAS ALL.

15 VICE CHAIR LO: THERE'S NO TIME CONSTRAINT AT
16 THAT POINT BECAUSE THEY'RE FROZEN. YOU CAN TAKE DAYS,
17 WEEKS, MONTHS EVEN.

18 LET ME JUST SAY THAT THIS WOULD BE A 19 DEPARTURE FROM THE WAY CONSENT TO DONATE FROZEN EMBRYOS FOR RESEARCH PURPOSES IS CURRENTLY DONE. I THINK A LOT 20 21 OF TIME THAT WAS ACTUALLY COUPLED WITH THE BILL GET FOR 22 THE STORAGE FEES IN THE FREEZER. AND IT'S LITERALLY IF YOU DON'T WANT TO PAY AND YOU DON'T WANT TO KEEP THEM 23 24 FROZEN, ONE OPTION IS DONATE TO RESEARCH, AND YOU DON'T HAVE ANY OF THIS KIND OF DISCUSSION NECESSARILY. 25

DR. EGGAN: WELL, BUT IN A SENSE MAYBE THAT'S 1 A SIMILAR SITUATION. IF IT'S SENT OUT WITHOUT DIRECT 2 3 PATIENT INTERACTION WITH THE BILL, AND THEY RECEIVE THE 4 BILL AND THIS DOCUMENT IN THE MAIL, THEY CAN DECIDE TO WAIT AS LONG AS THEY WANT TO WAIT BEFORE THEY RECONTACT 5 THE IVF CLINICIAN. SO THERE REALLY ALREADY IS BY THAT 6 SORT OF APPROACH A DE FACTO TIME-OUT OR COOLING OFF 7 THERE IS NO DIRECT COERCION OR ENCOURAGEMENT 8 PERI OD. 9 TO DONATE EMBRYOS. IT'S ON THOSE PEOPLE TO DECIDE WHAT 10 TO DO. THEY COULD JUST AS EASILY NOT PAY THE BILL AND DECIDE TO DISCARD THE EMBRYOS, WHICH IS THE OTHER 11 12 OPTION.

DR. TAYLOR: BUT I THINK -- SO WE ARE TALKING 13 ABOUT A STAGED CONSENT PROCESS, AND I DON'T WANT US TO 14 MISS THE FIRST STAGE BECAUSE REALLY ANYBODY FOR WHOM 15 EMBRYOS ARE GOING TO BE FROZEN AND STORED POTENTIALLY 16 FOR RESEARCH ARE GOING TO HAVE TO GO THROUGH THE 17 INITIAL CONSENTING PROCESS. AND I JUST WANT TO MAKE 18 19 SURE THAT THERE'S GOING TO BE ENOUGH TIME BUILT IN FOR THAT TO OCCUR WITH ALL OF THEIR CLINICAL CONSENTING AS 20 21 WELL AND A GOOD MECHANISMS FOR THAT. I DON'T THINK --WE DON'T WANT TO HAVE THE ONLY EMBRYOS THAT WE WOULD 22 ULTIMATELY HAVE ACCESS TO WOULD BE CLINICALLY FROZEN 23 24 EMBRYOS THAT THE COUPLE HAS NOW DECIDED NOT TO USE. 25 THAT WOULD BE REALLY GOING BACK AFTER THE BARN DOOR IS

1 KIND OF CLOSED.

I THINK WE WANT TO HAVE CONSENT RIGHT UP
FRONT AT SOME LEVEL, NOT THE FINAL CONSENT, BUT SOME
LEVEL OF INFORMED, FREE, AND KIND OF UNDERSTOOD
COMPREHENDED CONSENT. SO THAT NEEDS TO BE BUILT INTO
THAT COUPLE OF WEEKS PERIOD THAT WE'VE BEFORE THE CASE
IS EXECUTED.

DR. PRIETO: I WOULD AGREE THAT I THINK IN 8 9 ANY INSTITUTION THAT'S CONSIDERING THAT SORT OF USE OF EMBRYOS DOWNSTREAM, THAT SOME INITIAL CONSENT SHOULD 10 11 INVOLVE AT LEAST THE BASIC STATEMENTS, THAT ONE 12 CONSIDERATION DOWN THE ROAD MAY BE THE USE OF EMBRYOS FOR RESEARCH, AND WE WANT YOU TO BE AWARE OF THAT AND 13 THINK ABOUT IT WITHOUT THAT BEING THE FINAL STEP. 14 15 DR. EGGAN: OR, IN FACT, MORE EXPLICITLY

16 THERE COULD BE A CHECK BOX OR SOMETHING LIKE THAT WHICH 17 SAYS WOULD YOU -- DO YOU HAVE A RESEARCH DISPOSITION, 18 AND WOULD YOU BE, IN PRINCIPLE, INTERESTED IN DONATING 19 YOUR DISCARDED EMBRYOS OR OTHER MATERIALS FOR RESEARCH. 20 AND IMMEDIATELY THAT PERSON COULD BE PROVIDED WITH THE 21 PERTINENT INFORMATION.

22DR. TAYLOR:THAT'S HOW I THINK A LOT OF23PLACES ARE DOING IT.

VICE CHAIR LO: GIVE THEM THE OPTION TO
 RECEIVE MORE INFORMATION ABOUT THAT DURING THE INITIAL

1 EVALUATION. OTHER THOUGHTS?

DR. ROWLEY: I WANT TO MAKE TWO OR BRING UP 2 3 TWO OTHER ISSUES. ONE, AND KEVIN COULD SPEAK TO THIS 4 FAR MORE KNOWLEDGEABLY THAN I, BUT THERE NOW ARE REPORTS OF USING MATERIALS OTHER THAN OOCYTES FOR 5 SOMATIC CELL NUCLEAR TRANSFER. THAT'S NOT DEALT WITHIN 6 THE GUIDELINES RIGHT NOW AT ALL. AND IF, IN FACT, SOME 7 OF THESE OTHER TECHNIQUES REALLY BECOME MORE WIDELY 8 9 USED, THEN YOU CAN SAY OOCYTE DONATION IS ALMOST A MOOT 10 POINT.

THE OTHER THING IN SOME OF THESE GUIDELINES 11 12 THAT WE WERE SENT, YOU ARE GOING TO EXPLAIN TO THE PATIENT EXACTLY WHAT'S GOING TO BE DONE WITH THESE 13 EMBRYOS AND THE RESULTANT CELL LINE. THAT'S ABSOLUTELY 14 15 IMPOSSIBLE BECAUSE NO ONE KNOWS NOW WHAT SOME INVESTIGATOR IS GOING TO DO A YEAR OR TWO YEARS DOWN 16 THE LINE WITH THOSE CELL LINES. SO I THINK THAT TO 17 18 IMPLY THAT YOU CAN, A, TELL A PATIENT WHAT'S GOING TO 19 HAPPEN IN TERMS OF RESEARCH OR ALLOW THE PATIENT TO SAY I DON'T WANT IT TO BE USED FOR THIS OR THAT KIND OF 20 21 STUDY, WHICH IS, AGAIN, IN THESE GUIDELINES RIGHT NOW, THAT THE PATIENT CAN OPT OUT OF CERTAIN KINDS OF 22 RESEARCH, I THINK THAT'S NOT GOING TO BE A PRACTICAL 23 24 APPROACH. AND I WOULD URGE THAT WE NOT INCLUDE THAT IN 25 THE GUIDELINES.

VICE CHAIR LO: JANET RAISED SEVERAL POINTS
 THAT WE NEED TO TRY AND KEEP TRACK OF.

3 DR. EGGAN: THERE IS JUST A BRIEF STATEMENT 4 IN THE NAS GUIDELINES ENCOURAGING SCIENTISTS TO PURSUE ALTERNATIVES TO THE USE OF OOCYTES IN CREATING 5 PATIENT-SPECIFIC OR GENETICALLY TAILORED STEM CELL 6 LINES, AND I THINK IT'S IMPORTANT FOR US TO TRANSPOSE 7 THAT TYPE OF MATERIAL INTO OUR GUIDELINES AND 8 SUGGESTIONS, BUT I THINK IT'S ALSO IMPORTANT TO POINT 9 THAT OUT THESE TECHNOLOGIES FOR THE TIME BEING ARE FAR 10 11 FROM REPLACING THE TECHNIQUES THAT WE KNOW CAN WORK AND 12 THAT HAVE BEEN DEVELOPED IN SOUTH KOREA AND THAT WERE 13 USED TO CLONE DOLLY.

SO FOR THE TIME BEING, THE ONLY FUNCTIONAL 14 15 MEANS THAT WE HAVE OF MAKING TAILORED CELL LINES IS THROUGH SOMATIC CELL NUCLEAR TRANSPLANTATION AND 16 DONATED OOCYTES. AND, AGAIN, THE ONLY METHODOLOGY 17 18 WHICH HAS WORKED IS SOMATIC CELL NUCLEAR 19 TRANSPLANTATION INTO OOCYTES DIRECTLY AND SPECIFICALLY DONATED FOR RESEARCH. AND ATTEMPTS THUS FAR TO DO THAT 20 21 WITH FAILED TO FERTILIZE OOCYTES HAVE NOT YET BEEN 22 SUCCESSFUL.

SO I THINK FOR THE TIME BEING, IF THIS IS AN
IMPORTANT PRIORITY, THEN WE HAVE TO PUT THE ETHICAL
SAFEGUARDS IN PLACE TO MAKE SURE THE RESEARCH CAN GO

1 FORWARD AS WE KNOW IT CAN WORK.

AS FAR AS OPTING OUT, I THINK I TEND TO AGREE WITH JANET. AND IT'S GOING TO MAKE DOWNSTREAM USE OF ANY INDIVIDUAL CELL LINE EXTREMELY DIFFICULT, AND I THINK WE WOULD HOPE THAT ENOUGH PEOPLE WILL STEP FORWARD TO DONATE WITH A BROAD CONSENT THAT IT MIGHT BE SIMPLEST TO ONLY USE RESOURCES FROM THOSE DONORS TO MOVE FORWARD.

9 DR. KIESSLING: IT SEEMS LIKE FROM THIS DISCUSSION THAT IT'S GOING TO BE MORE FRUITFUL IF WE 10 11 FOCUS ON THE TYPES OF THINGS BEING DONATED IN TERMS OF 12 THE CONSENT. FOR INSTANCE, WHY DON'T WE JUST DISCUSS INFORMED CONSENT FOR WOMEN DONATING EGGS? AND THEN 13 DISCUSS INFORMED CONSENT FOR COUPLES DECIDING TO DONATE 14 LEFT-OVER EMBRYOS BECAUSE THE CIRCUMSTANCES, THEY'RE 15 REALLY TWO VERY DIFFERENT PROCESSES. 16

DR. PRIETO: I JUST WANTED TO COMMENT ON WHAT 17 KEVIN SAID. I THINK IT WOULD CERTAINLY BE PRACTICALLY 18 19 DIFFICULT TO TRY TO PARSE OUT EVERY POTENTIAL AND IMPOSSIBLE REALLY POTENTIAL DOWNSTREAM USE OF 20 21 MATERIALS. AND I THINK A BROAD GENERAL CONSENT IS WHAT WE WANT TO ASK PEOPLE FOR, POINTING OUT, AS THE 22 23 NATIONAL ACADEMIES GUIDELINES OUTLINE SOME OF THIS, 24 SOME OF THE POTENTIAL USES AND ALLOWING PEOPLE JUST TO OPT IN OR OUT AT THAT POINT. 25

 1
 VICE CHAIR LO: OKAY. I'M A LITTLE CONFUSED

 2
 NOW.

3 DR. PRIETO: THE CONSENT SHOULD BE FAIRLY 4 GENERAL AT THE BEGINNING AND INCLUDE THESE POTENTIAL 5 USES, BUT NOT LIMITED TO, AND NOT GIVING PEOPLE 6 MULTIPLE OPTIONS OF I'LL AGREE TO THIS, BUT NOT THAT, 7 AND FAILING TO ADDRESS TECHNIQUES THAT DON'T EVEN EXIST 8 YET, BUT THAT MIGHT TWO YEARS FROM NOW.

9 VICE CHAIR LO: AM I HEARING THAT WHAT YOU WOULD LIKE TO SEE IN TERMS OF FUTURE USES IS A CONSENT 10 SAYING BASICALLY I'M GOING TO DONATE THESE. I 11 12 UNDERSTAND THEY' RE GOING TO BE USED FOR STEM CELL LINES. AND IN THE FUTURE PEOPLE MAY WANT TO DO 13 RESEARCH THAT WE CAN'T EVEN THINK ABOUT, CAN'T CONCEIVE 14 OF TODAY, BUT AS LONG AS IT'S APPROVED BY THE IRB OR 15 ESCRO OR WHATEVER, I GIVE MY CONSENT TO THAT RESEARCH 16 AND NOT ALLOW THEM TO SAY, WELL, I DON'T WANT YOU TO 17 USE IT -- DON'T USE CELLS DERIVED FROM ME TO BE 18 19 INJECTED INTO NONHUMAN BLASTOCYSTS, FOR EXAMPLE, BUT I WILL ALLOW IT TO BE USED -- ARE YOU SAYING THAT WE 20 21 WOULD LIKE TO HAVE DONATION OF OOCYTES FOR SORT OF ANY PURPOSE IN THE FUTURE THAT'S APPROVED BY AN ESCRO AND 22 HAS SCIENTIFIC VALIDITY. 23

24DR. EGGAN: THE OOCYTES ARE GOING TO BE25DONATED FOR THE USE OF DERIVING STEM CELL LINES, AND

THOSE STEM CELL LINES, I THINK, SHOULD BE ABLE TO BE
 USED FOR MOLECULAR, CELLULAR, AND DEVELOPMENTAL BIOLOGY
 IN THE BROADEST SENSE.

4 DR. HALL: AS WELL AS FOR THERAPEUTIC.
5 DR. EGGAN: AND THE POTENTIAL FOR DEVELOPMENT
6 OF THERAPEUTICS.

7 DR. TAYLOR: AGAIN, I GUESS IF WE HAD A TWO-STAGED CONSENT PROCESS, THE FIRST BEING FAIRLY 8 9 GENERAL AND NOT ASKING FOR THESE SPECIFICS, BUT A SECOND STAGE IN WHICH YOU ARE ADDRESSING MORE SPECIFIC 10 USES OF THE CELLS, I DO BELIEVE, AND THIS IS SOMETHING 11 12 THAT WE DISCUSSED IN SAN FRANCISCO A COUPLE OF YEARS BACK, THAT THERE ARE GOING TO BE DONORS WHO ARE VERY 13 INTERESTED IN DONATING MATERIALS TO UNDERSTAND EARLY 14 15 HUMAN EMBRYOLOGY, BUT DON'T WANT TO SEE A PROPAGATED CELL LINE WITH THEIR GENETIC MATERIAL. SO I THINK THE 16 OPPORTUNITY TO OPT OUT OF SPECIFIC THINGS SHOULD BE ONE 17 OF THE RIGHTS THAT A DONOR HAS. AND THAT MAYBE IF WE 18 19 HAD A MORE GENERAL CONSENTING PROCESS UP FRONT THAT WAS THEN LOOKED AT MORE SPECIFICALLY IN THE SECOND STAGE, 20 21 WE COULD ACTUALLY SORT OUT WHERE THE CELLS GO FOR WHAT 22 PURPOSES.

DR. EGGAN: BUT FOR THAT MIGHT NOT -- THAT
SPECIFIC EXAMPLE, IT SEEMS LIKE THOSE ARE SEPARATE
STUDIES WHICH MIGHT INVOLVE DIFFERENT TYPES OF CONSENT.

SO YOU' RE SAYING FOR THE DERIVATION, WOULD THERE BE 1 CELL LINES DERIVED UNDER CERTAIN CIRCUMSTANCES WHICH 2 3 WILL ONLY BE USED FOR CERTAIN PURPOSES. I SUPPOSE 4 THAT'S POSSIBLE, BUT THEN THERE NEEDS TO BE SOME SORT OF ASTERISK PLACED BY THOSE CELL LINES. HOW WE DO THAT 5 IN THE FUTURE. THAT CERTAINLY MAY BE SOMETHING WHICH 6 7 FALLS ON THE INVESTIGATOR THEMSELVES AS FAR AS DISTRIBUTION OF THOSE CELL LINES INTO ANY PARTICULAR 8 9 BANK.

10DR. TAYLOR: I AGREE IT MAKES IT MORE11COMPLICATED, BUT I THINK --

12 DR. EGGAN: MY GUESS I WOULD SAY THAT ONE MIGHT WANT AN ENTIRELY -- INSTEAD OF HAVING IT BE THAT 13 IN A PARTICULAR CONSENT PROCESS, PEOPLE OPT FOR 14 15 DIFFERENT COURSES, THAT SHOULD BE AN ENTIRELY DIFFERENT CONSENT STREAM IF THAT'S THE INTENTION. IF YOU WANT TO 16 DO A PARTICULAR STUDY OR DERIVE CELL LINES FOR A 17 PARTICULAR PURPOSE, THAT'S A TOTALLY DIFFERENT CONSENT 18 19 PROCESS THAN IN GENERAL THE DERIVATION OF LINES FOR WHICH THE INTENTION IS BROAD DISTRIBUTION. 20

21 MS. FEIT: HOW ARE YOU GOING TO TRACK THAT? 22 I MEAN HOW WOULD TRACK -- IF I'M THE DONOR, HOW ARE YOU 23 GOING TO TRACK MY DONATION THROUGH ALL THAT? I THINK 24 THAT WOULD BE VERY DIFFICULT. I THINK YOUR FIRST 25 STATEMENT ABOUT KEEPING IT BROAD, BUT SAYING THAT IT

WILL BE USED FOR SCIENCE IN THESE MANNERS, AND THAT ANY 1 TIME THAT MY DONATION WILL BE USED IN APPROVED RESEARCH 2 3 VALIDATED BY THESE ORGANIZATIONS, AND ONLY THAT TYPE OF 4 RESEARCH, I THINK I HAVE A COMFORT LEVEL THAT I'VE DONE THE RIGHT THING. BUT I THINK YOU HAVE TO ASK YOURSELF 5 HOW ARE WE GOING TO TRACK AN INDIVIDUAL PERSON'S 6 REQUEST THROUGH ALL OF THE DIFFERENT OPPORTUNITIES THAT 7 MIGHT OCCUR AS A RESULT OF THE DONATION. THAT'S THE 8 9 ONLY QUESTION I HAVE.

DR. EGGAN: I GUESS I CAN THINK OF ONE 10 SPECIFIC EXAMPLE TO SORT OF ACTUALLY DRAW A BROADER 11 12 LINE BETWEEN TWO DIFFERENT CONSENT PROCESSES. ONE PERSON MIGHT BE COMFORTABLE WITH DONATING THEIR EMBRYOS 13 FOR THE DERIVATION OF STEM CELL LINES WHICH WILL BE 14 15 PROPAGATED OVER A VERY LONG PERIOD OF TIME AND COULD HELP MANY DIFFERENT SCIENTISTS. ANOTHER STUDY OF 16 INTEREST WOULD BE TO SAY TAKE HUMAN PREIMPLANTATION 17 EMBRYOS AND DO SOME EXPERIMENTAL STUDY ON THOSE EMBRYOS 18 19 THEMSELVES TO BETTER UNDERSTAND THE EMBRYO, WHICH COULD HELP ONE LATER IN DERIVING STEM CELL LINES, THAT 20 21 EXPERIMENT ITSELF DOES NOT -- IT'S AN EMBRYOLOGICAL EXPERIMENT. IT DOESN'T RESULT IN THE GENERATION OF A 22 STEM CELL LINE ITSELF; AND IN THE PROCESS OF THE 23 EXPERIMENT, THE EMBRYO IS DESTROYED. THIS WOULD BE AN 24 ENTIRELY TYPE OF CONSENT PROCESS. AND PEOPLE WHO WOULD 25

CONSENT TO A MAY NOT CONSENT TO B. AND I THINK THAT'S 1 THE SORT OF THING THAT YOU ARE POINTING TOWARDS. 2 3 SO I THINK THOSE ARE SEPARATE --4 DR. TAYLOR: YOU CAPTURE BOTH GROUPS. DR. EGGAN: BUT I THINK -- I DON'T KNOW IF 5 ONE CAN CAPTURE BOTH GROUPS UP FRONT. 6 7 VICE CHAIR LO: IT SOUNDS, IF I CAN TRY AND PURSUE THIS, I THINK IT'S AN IMPORTANT POINT. 8 ON THE 9 ONE HAND, YOU ARE SAYING IF YOU'RE GOING TO ASK FOR DONATION TO DERIVE A NEW EMBRYONIC STEM CELL LINE, WE 10 11 ARE GOING TO SAY YOU HAVE -- THE DONOR MUST UNDERSTAND 12 THAT THOSE STEM CELL LINES COULD BE USED FOR A LOT OF THE DIFFERENT PURPOSES, SOME OF WHICH WE MAY NOT BE 13 ABLE TO PREDICT, BUT THEY WILL BE OVERSEEN BY THIS 14 15 ESCRO MECHANISM. IF YOU ARE NOT COMFORTABLE WITH THAT, THERE'S STILL ANOTHER OPTION TO DONATE EMBRYOS FOR ALLY 16 SCIENTIFIC PROJECTS THAT DO NOT INVOLVE CREATION OF 17 STEM CELL LINES, BUT MAY INVOLVE GENETIC RESEARCH, 18 19 DEVELOPMENTAL RESEARCH. BECAUSE WE DON' T EXPECT THOSE CELLS TO BE PROPAGATED IN THE LAB, WE SHOULD BE ABLE TO 20 21 SAY WHAT THEY WILL BE USED FOR IN A MUCH MORE CLOSED-ENDED WAY, BUT THAT WOULD BE DIFFERENT TYPES OF 22 23 RESEARCH. 24 DOES THAT CAPTURE, ROB, WHAT YOU WERE 25 CONCERNED WITH?

DR. TAYLOR: THAT SOUNDS GOOD TO ME. 1 JUST FOR MARCY, I THINK THAT THE TRACKING MECHANISM OF HOW 2 3 THESE LEAST STEM CELL LINES ARE GOING TO BE USED, I SEE 4 THAT FALLING TO THE ESCRO. I THINK IT'S GOING TO BE ACTUALLY ONE OF THE IMPORTANT RESPONSIBILITIES OF THE 5 ESCRO, NOT ONLY TO MAINTAIN A RUNNING LIST OF THE KINDS 6 OF CELLS THAT YOU HAVE IN YOUR SYSTEM, BUT ALSO TO BE 7 SURE THAT THE THINGS THAT THEY' RE CONSENTED FOR ARE 8 9 WHERE THEY' RE ACTUALLY GOING.

DR. EGGAN: I WOULD SAY THAT THE REAL
RESPONSIBILITY LIES WITH THE INVESTIGATOR, AND THAT
THERE SHOULD BE OVERSIGHT BY THE ESCRO.

13 VICE CHAIR LO: AGAIN, THE OTHER THING, WE NEED THIS TO TIE EVENTUALLY TO BANKING ISSUE. IF WE'RE 14 15 DEPOSITING MATERIALS, INCLUDING STEM CELL LINES, IN BANKS, THEN PRESUMABLY I'M HEARING THAT WE DON'T WANT 16 THE BANK TO HAVE TO TRY AND KEEP TRACK OF YOU CAN USE 17 THIS LINE FOR PURPOSE ONE AND SEVEN, BUT NOT FOR TWO, 18 19 SIX, AND 18. WE PREFER THAT ALL THOSE BE USED FOR ANYTHING AS LONG IT'S APPROVED BY THE ESCRO AND HAS 20 21 SCIENTIFIC MERIT.

DR. ROWLEY: IT IS POSSIBLE FOR BANKS TO ACTUALLY SAY THAT THEY WILL ONLY ACCEPT CELL LINES THAT HAVE A BROAD CONSENT FORM FOR USE IN MANY DIFFERENT EXPERIMENTS, INCLUDING THOSE THAT WE DON'T ENVISION AT

1 THE PRESENT TIME. AND I THINK WE'RE GOING TO GET 2 OURSELVES IN SO MANY KNOTS, THAT IT'S GOING TO BE JUST 3 AN UNUSABLE, UNENFORCEABLE PROCESS. I THINK WE'VE GOT 4 TO AVOID THAT BECAUSE WE DON'T FLOW WHAT THE FUTURE IS 5 GOING TO BE. AND TO HAVE TO GO BACK AND REVISE THIS 6 EVERY TIME SOME NEW NUANCE COMES FORWARD IS, I THINK, A 7 MISTAKE.

VICE CHAIR LO: SO THEN IT STRIKES ME THIS 8 9 SOUNDS TO ME LIKE SORT OF A KEY ELEMENT, YOU REALLY WANT TO MAKE SURE PEOPLE UNDERSTAND WHEN THEY DONATE 10 11 THAT THERE'S LOT OF PURPOSES THAT WE CAN'T ANTICIPATE, 12 AND YOU HAVE TO FEEL COMFORTABLE THAT THE SCIENTISTS AND THE OVERSIGHT BODIES WILL BE RESPONSIBLE IN ONLY 13 ALLOWING RESEARCH THAT'S SCIENTIFICALLY MERITORIOUS AND 14 15 ETHICALLY ACCEPTABLE.

DR. TAYLOR: AT THE RISK OF THROWING IN 16 ANOTHER KNOT, I THINK THAT THE RECONTACT ISSUE IN THIS 17 18 PARTICULAR FIELD IS ABSOLUTELY CRITICAL. WE REALLY 19 DON' T KNOW WHAT THE FUTURE IS. WE REALLY DO NEED TO HAVE MECHANISMS TO GET BACK TO INDIVIDUALS AND FIND OUT 20 21 BOTH HEALTH INFORMATION ABOUT THE DONORS AS WELL AS CONSENTING KINDS OF ISSUES, PARTICULARLY AS WE GO 22 23 FORWARD. SO I CAN ENVISION THAT THERE WOULD BE PEOPLE 24 WHO DON'T WANT TO BE RECONTACTED AND DO WANT TO DONATE, 25 AND THERE CAN BE SOME SPECIFIED END POINTS THERE, BUT I

WOULD HOPE THAT THOSE DONORS THAT ARE WILLING TO BE
 RECONTACTED WILL FORM A SUBSET OF SAMPLES THAT CAN THEN
 BE USED IN MORE INNOVATIVE WAYS.

4 VICE CHAIR LO: CAN SOMEONE HELP ME UNDERSTAND THE PSYCHOLOGY OF DONORS, I SUPPOSE. 5 HOW LIKELY IS IT THAT SOMEONE WHO DECIDES TO DONATE FOR 6 THIS FUTURE RESEARCH WOULD SAY BUT I DON'T WANT TO BE 7 RECONTACTED TO GIVE FURTHER INFORMATION THAT YOU TELL 8 9 ME MIGHT BE USEFUL TO ASSURE THE SAFETY IN TRANSPLANTATION EXPERIMENTS. I'M TRYING TO GET --10 11 BECAUSE IT STRIKES ME THAT IF WE FOLLOW THE PRINCIPLE, 12 THAT WE'D REALLY LIKE TO HAVE CELL LINES THAT ARE UNRESTRICTED IN TERMS OF DONOR PREFERENCES BECAUSE IT 13 WOULD GIVE YOU THE MOST FLEXIBILITY TO CARRY OUT 14 DIFFERENT TYPES OF RESEARCH. ARE WE LOSING A LOT OF 15 CELL LINES BECAUSE DONORS SAY, WELL, THAT GOES A LITTLE 16 BIT TOO FAR. I WILL LET YOU DO ANY TYPE OF RESEARCH, 17 BUT I DON'T WANT TO BE RECONTACTED. DO YOU HAVE ANY 18 19 SENSE OF THAT?

20 MS. FEIT: HAVING WORKED WITH ORGAN DONORS A 21 LOT, I CAN TELL YOU THAT IT'S VERY GRATIFYING, IT'S A 22 VERY STRESSFUL DECISION, AND IT'S USUALLY TRAGIC TO 23 MAKE A DONATION. BUT ONCE IT'S DONE MANY TIMES THEY 24 GET A WONDERFUL LETTER OR CALL FROM THE NETWORK TELLING 25 THEM WHAT HAPPENED. AND IT'S VERY REWARDING TO KNOW

1 THAT SOMETHING VERY POSITIVE CAME OUT OF A SITUATION.

I THINK IN TERMS OF THE GENERAL THINKING OF
PEOPLE WHO MAKE THESE DECISIONS IS THAT WE CAN MAKE AN
ASSUMPTION HERE THAT THE RESEARCH WE'RE LOOKING FORWARD
TO IS GOING TO HAVE SOME VERY POSITIVE THINGS HAPPEN,
THERAPIES, CURES, CHANGES IN HOW WE APPROACH DISEASE.
SO HAVING A RECONTACT IS A VERY SUPPORTIVE THING TO
ENCOURAGE DONATION.

9 IT'S BEEN MY IMPRESSION IF THEY AGREE TO BE10 CONTACTED, THAT THAT'S A VERY POSITIVE THING.

DR. EGGAN: I ALWAYS HATE TO BE CONTRARY, BUT 11 12 I THINK CERTAINLY IN THE CASE OF ORGAN DONATION, THAT MAKES A LOT SENSE BECAUSE IN MANY CASES IT'S THIS 13 INDEPENDENT DECISION TO DO SOMETHING PHILANTHROPIC. 14 15 WITH AT LEAST DONATION OF DISCARDED EMBRYOS AFTER IVF, I THINK IT'S IMPORTANT TO NOTE THAT, ALTHOUGH 16 DISSOCIATED FROM THE ORIGINAL PROCESS OF IVF, FOR MANY 17 COUPLES IT'S, I THINK, REASONABLE TO SAY THAT IT MAY BE 18 19 THE MOST DIFFICULT TIME IN THEIR LIVES, THE PROCESS OF UNDERGOING ASSISTED REPRODUCTION. AND AT LEAST SOME 20 21 IVF CLINICIANS THAT I'VE TALKED TO FEEL VERY UNCOMFORTABLE ABOUT RECONTACTING PATIENTS AND CLIENTS 22 WHO HAVE UNDERGONE THAT PROCESS, WHICH HAS NOW DISTANCE 23 24 IN THEIR LIFE. SO CERTAINLY SOME TYPES OF DONORS, IT 25 WOULD BE VERY APPROPRIATE TO RECONTACT. AND FOR OTHERS

I THINK WE SHOULD BE MORE CAREFUL AS TO WHAT THAT'S
 GOING TO MEAN TO THEM TO SORT OF DREDGE THAT PERIOD OF
 THEIR LIFE UP AGAIN. I'D LOVE TO HEAR ANN'S OPINION ON
 THAT.

DR. KIESSLING: AT THE RISK OF SOUNDING 5 REDUNDANT, THIS IS GOING TO BE MUCH MORE CONSTRUCTIVE 6 IF WE SEPARATE OUT WHAT WE'RE TALKING ABOUT. I THINK 7 RECONTACTING A WOMAN WHO COMES FORWARD TO DONATE HER 8 9 EGGS FOR STEM CELL RESEARCH IS A VERY DIFFERENT PROCESS FROM RECONTACTING COUPLES THAT HAVE GONE THROUGH IVF. 10 11 I THINK TO GET THIS DISCUSSION REALLY WRAPPED UP, I 12 THINK WE WANT TO SEPARATE OUT WHAT IT IS WE'RE CONSENTING TO OR WHO'S CONSENTING TO WHAT. WE KEEP 13 LUMPING THESE TWO THINGS TOGETHER. 14

VICE CHAIR LO: LET'S KEEP FOCUSED NOW ON THE
OOCYTE DONORS, WHICH I THINK ARE THE MOST COMPLEX AND
SORT OF CONTROVERSIAL IN SOME WAY.

DR. CIBELLI: I THINK ANN READ MY MIND. I WANTED TO SAY THAT. THAT WE'RE JUST MIXING EVERYTHING. YOU'RE MIXING DONATION OF FROZEN EMBRYOS WITH EGGS OR WITH GAMETES, AND YOU THROW ANOTHER ONE, SOMATIC CELLS FROM PATIENT TO HAVE SOME SORT OF DISEASE. SO JUST PICK ONE. AND I THINK WE ARE GOING TO HAVE A SEPARATE CONSENT FORM FOR DIFFERENT THINGS.

25

DR. TAYLOR: BERNIE, I WOULD SAY IF WE'RE

GOING TO PICK OOCYTE DONATION AS THE ONE TO START WITH,
 I THINK IT SHOULD BE FURTHER SEPARATED FROM DONORS WHO
 ARE CONTRIBUTING OOCYTES TO AN IVF CYCLE VERSUS THOSE
 WHOA RE STRICTLY DONATING TO A SCIENTIFIC PROTOCOL.
 BECAUSE THOSE OOCYTES, I THINK, ARE SIMILAR TO THE
 EMBRYOS THAT ANN THINKS ARE BEING CONFUSED INTO THIS.
 VICE CHAIR LO: RIGHT. WHY DON'T WE START

WITH DONATION SOLELY EXPRESSLY FOR THE PURPOSE OF 8 9 SO I GUESS THAT'S SORT OF SIMILAR TO WHAT, RESEARCH. 10 ANN, YOUR GROUP IS SET UP TO DO. IT STRIKES ME THAT MAYBE IF WE SORT OF GO THROUGH SOME OF THE THINGS WE'VE 11 12 BEEN TALKING ABOUT, WE WOULD WANT THERE TO BE A TIME-OUT PERIOD. WE WOULD WANT THERE TO BE SOME SORT 13 OF ASSESSMENT THAT THEY UNDERSTAND CRUCIAL FEATURES. 14 15 IT SEEMS LIKE ONE OF THE CRUCIAL FEATURES IS THAT A LOT RESEARCHERS ARE GOING TO HAVE ACCESS TO MATERIALS 16 DERIVED FROM YOUR DONATION, THAT WE CAN'T REALLY EVEN 17 PREDICT, AND WE DON'T WANT THERE TO BE ANY RESTRICTIONS 18 19 ON THAT, AND THAT THERE ALSO THE POSSIBILITY OF 20 RECONTACT.

AND SO IN THAT CONTEXT, MAYBE WE SHOULD JUST STOP THERE. DO WE WANT TO HAVE A COOLING OFF PERIOD FOR THAT TYPE OF OOCYTE DONATION -- NOT COOLING OFF PERIOD. MARCY, YOU TERM WAS TIME-OUT PERIOD, WHICH SEEMS TO BE FAIRLY EASY TO BUILD IN BECAUSE IT'S AN

ELECTIVE CYCLE. AND THAT COULD EITHER BE A TIME-OUT
 PERIOD OR YOU A HAVE TO -- WE'RE NOT GOING TO CONTACT
 YOU. YOU HAVE TO CONTACT US. WHY DON'T WE START WITH
 THAT, AND WE'LL JUST TRY AND CHIP AWAY AT THESE ISSUES
 ONE BY ONE.

DR. TAYLOR: I WAS JUST GOING TO SAY THAT 6 WHAT'S NICE ABOUT THIS IS IT REMOVES THE COERCION 7 FACTOR FROM THE CLINICAL CARE. IT'S NOT LIKE A WOMAN 8 9 IS GOING TO BE UNDERGOING IVF FOR HER CLINICAL CARE, AND SHOULD SHE DO HER -- IT DOESN'T REMOVE THE 10 11 INVESTIGATOR'S POTENTIAL COERCION AS WE'VE KIND OF 12 RECENTLY HEARD IN THE LITERATURE RECENTLY. SO I THINK THAT'S JUST -- THERE IS STILL COERCIVE ELEMENT. IT 13 SEEMS TO ME THAT A TIME-OUT PERIOD WOULD BE A 14 15 APPROPRI ATE. VICE CHAIR LO: ANY OBJECTIONS TO A TIME-OUT 16 PERI OD? 17 SECOND QUESTION, I GUESS, WOULD BE DO WE WANT 18 19 THE PERSON OBTAINING CONSENT, WOULD YOU WANT THERE TO BE SOME ASSESSMENT OF WHAT THE DONOR ACTUALLY 20 21 UNDERSTANDS AS OPPOSED TO WHAT WAS DISCLOSED? IS THAT WHAT SOMETHING WE WANT TO BUILD IN? 22 DR. EGGAN: IT'S HARD TO DO THAT. WHAT WOULD 23 24 BE THE MECHANISM FOR DOING THAT TO REALLY TRY TO 25 UNDERSTAND WHAT SOMEONE ELSE UNDERSTANDS, AND THE

1 PROCESS OF INFORMED CONSENT IS TRICKY.

DR. KIESSLING: I ACTUALLY THINK THAT'S 2 3 REALLY IMPORTANT. AND I THINK THAT, AS I MENTIONED 4 EARLIER, I THINK IT'S GOT TO BE BROKEN INTO TWO PIECES. SHE HAS TO UNDERSTAND WHAT THE RISKS ARE TO HER, AND I 5 THINK THAT'S THE MOST CRITICALLY IMPORTANT, THAT SHE'S 6 BEEN READ WHAT THESE RISKS ARE, BUT THAT SHE REALLY 7 UNDERSTANDS THAT THIS IS NOT WITHOUT RISK, AND THAT 8 9 SHE'S ASSUMING THOSE RISKS OF HER OWN FREE WILL.

10 AND THEN I THINK SHE NEEDS TO UNDERSTAND THE 11 SCIENCE OF WHAT MIGHT HAPPEN. I THINK THOSE ARE TWO 12 PIECES, AND I ACTUALLY THEY CAN BE PRETTY EASILY 13 ASSESSED.

VICE CHAIR LO: ONE NOTION, KEVIN, MIGHT BE
JUST TO ASK THE QUESTION AND TO SAY YOU' VE GOT TO GET
THE RIGHT ANSWERS. IF WE COULD FLIP UP TO ONE OF THE
LAST SLIDES WHERE I HAD SUGGESTED SOME LANGUAGE.

18 SO THIS IS SORT OF AN ATTEMPT TO SAY THIS IN 19 REGULATORY TERMS. RESEARCHERS OBTAINING INFORMED CONSENT FOR THE DONATION OF OOCYTES -- WE NEED TO AMEND 20 21 IT -- SOLELY FOR RESEARCH, NOT ALSO SIMULTANEOUSLY FOR CLINICAL IVF. SO ASCERTAIN THAT THE DONORS UNDERSTOOD 22 THE ESSENTIAL FEATURES OF RESEARCH. RESEARCHERS MAY 23 24 MEET THIS REQUIREMENT BY FOLLOWING A PROCESS THAT IS 25 APPROVED BY THE RELEVANT I RB OR ESCRO. THE ESSENTIAL

FEATURES THAT MUST BE UNDERSTOOD SHALL INCLUDE AT
 LEAST, AND THEN THE LIST IS ON THE NEXT SLIDE, AND IT
 GIVES THE IRB, ESCRO OF THE INSTITUTION TO REQUIRE
 DONORS TO UNDERSTAND THE ADDITIONAL ISSUES.

AND THE NEXT SLIDE, KATE, THESE NUMBER OF 5 THINGS ARE ALL SUGGESTIONS, AND THEY'RE ONLY 6 SUGGESTIONS. ONE, EMBRYOS WILL BE CREATED FOR 7 RESEARCH, WHICH WILL NOT BE USED FOR REPRODUCTIVE 8 9 PURPOSES. THERE ARE MEDICAL RISKS IN OOCYTE DONATION. 10 AND WE NEED TO THINK THROUGH HOW SPECIFIC, BUT ONE THING TO SAY, THAT THEY' RE GOING TO GET DETAILED 11 12 INFORMATION ON THESE RISKS. I DON'T KNOW WHETHER YOU ACTUALLY WANT TO SAY YOU HAVE TO UNDERSTAND THERE'S 13 RISK OF HYPEROVULATION SYNDROME. THE RESEARCH WILL NOT 14 BENEFIT DONORS OR ANY OTHER INDIVIDUALS DIRECTLY AT 15 THIS TIME. AND, FOUR, STEM CELL LINES DEVELOPED FROM 16 THEIR OOCYTES WILL BE GROWN IN THE LAB AND SHARED WITH 17 OTHER RESEARCHERS. AND I THINK THERE WE NEED TO SAY 18 19 SOME MORE ABOUT THE WHOLE RANGE OF PURPOSES, SOME WHICH WE CAN'T PREDICT. 20

21 THE STEM CELL LINES MAY BE PATENTED, BUT 22 DONORS WILL NOT SHARE IN ANY REVENUE. DONORS RECEIVE 23 NO PAYMENT EXCEPT FOR REIMBURSEMENT FOR OUT-OF-POCKET 24 EXPENSES.

25

IF STEM CELLS ARE TRANSPLANTED INTO PATIENTS,

RESEARCHERS MAY WANT TO CONTACT YOU TO GET MORE 1 INFORMATION ABOUT YOUR HEALTH. AND POTENTIAL DONORS 2 3 ARE FREE TO DECLINE TO DONATE OOCYTES FOR RESEARCH 4 WITHOUT ANY NEGATIVE IMPACT ON THEIR CLINICAL CARE. 5 AGAIN, SOME OF YOU MAY SAY, WELL, NO, SIX IS 6 NO GOOD OR THREE IS NO GOOD, BUT THESE ARE THE KINDS OF THINGS THAT ONE MIGHT THINK ABOUT. 7 DR. EGGAN: I'M NOT WORRIED ABOUT WHAT'S GOOD 8 9 OR NOT GOOD, BUT HOW DO YOU ADMINISTER THIS TEST. THAT'S I'M WORRIED ABOUT IS HOW DO YOU -- IS IT YOU 10 GIVE THEM A WRITTEN TEST, AND THEY HAVE TO GET A 11 12 HUNDRED PERCENT RIGHT, AND IF THEY DON'T, YOU HAVE TO WHAT'S THE MECHANISM? 13 RETEST THEM. MS. FEIT: WE DO IT ALL THE TIME. WE ASSESS 14 15 THE INDIVIDUAL'S KNOWLEDGE OF UNDERSTANDING A WE DO MAJOR SURGERIES, AND WE PUT THEM 16 PROCEDURE. 17 THROUGH A WHOLE BUNCH OF INFORMATION ABOUT THE RISKS, ANESTHESIA RISKS, RISKS AFTER. SO I THINK THERE ARE 18 19 WAYS TO DO THAT. 20 DR. EGGAN: BUT I GUESS AS A RESEARCHER, WHAT 21 IS THE MECHANISM? I REALLY WANT TO KNOW. WHEN I'M BUILDING MY RESEARCH STUDY AND THIS IS AN IMPORTANT 22 COMPONENT OF THE STUDY, WHAT IS THE MECHANISM? IS IT A 23 24 BACK-AND-FORTH CONVERSATION WITH THEM? IS IT SOME KIND 25 OF TEST THAT I CAN SCORE, WHICH I CAN HAND TO MY IRB,

1 WHICH SAYS ABSOLUTELY OBJECTIVELY THIS PERSON

2 UNDERSTANDS. I'M REALLY INTERESTED IN GETTING DOWN --3 I CAN RECOGNIZE THAT IT'S IMPORTANT, AND I AGREE IT'S 4 IMPORTANT. I WANT TO GET DOWN TO KNITTY GRITTY OF HOW 5 WE DO IT.

MS. FEIT: IF IT WERE ME, I WOULD HAVE ONE OF 6 MY RESEARCH NURSES DEVELOP AN INTERACTIVE MODULE, WHO 7 PUTS THE DONOR PRIVATELY THROUGH AND ASSESS WHETHER THE 8 9 DONOR REALLY UNDERSTANDS THE INFORMATION WE GAVE THEM. AND THAT'S REALLY HOW I WOULD APPROACH IT, 10 11 SIMPLISTICALLY. I THINK THAT, AGAIN, DEFINITIONS, 12 MAKING SURE THE DONOR UNDERSTANDS SOME OF THE DEFINITIONS, AND THEN JUST PUTTING THEM BACK THROUGH 13 THE QUESTIONS, AND IT CAN BE DONE IN AN INTERACTIVE 14 15 MODULE THAT THE DONOR SAYS YES, NO, I UNDERSTAND, YES. AND THEN YOU DO ASCERTAIN. THEY CAN SAY, NO, I DON'T 16 UNDERSTAND THIS QUESTION. I DON'T UNDERSTAND THIS 17 18 CONCEPT. 19 DR. EGGAN: IS IT ENOUGH TO SAY -- IF THEY SAY THEY UNDERSTAND IT -- WHAT I'M DRIVING AT IS 20 21 BECAUSE THEY SAY THEY UNDERSTAND IT DOESN'T MEAN THEY DO. THIS IS THE COMPLICATION. THAT'S WHAT TRYING TO 22

23 GET AT THE BOTTOM OF.

24 VICE CHAIR LO: THESE ARE VERY IMPORTANT25 PRACTICAL QUESTIONS.

1 DR. EGGAN: SIGNING AT THE BOTTOM OF THE 2 CONSENT FORM SAYS THEY UNDERSTAND, RIGHT, SO IT'S NOT 3 REALLY ANY DIFFERENT.

4 DR. KIESSLING: KEVIN, THE PERSON THAT WE FOUND TO DO THIS FOR US IS AN ATTORNEY WHO IS ALSO A 5 NURSE, WHO ALSO WENT THROUGH INFERTILITY TREATMENT. 6 AND SHE TALKS TO THE DONORS ONE ON ONE AND SIMPLY ASKS 7 SHE'S A TRAINED QUESTION ASKER, SO SHE SIMPLY 8 THEM. 9 ASKS THEM QUESTIONS. DO YOU UNDERSTAND THE RISKS? WHAT ARE THE TOP THREE RISKS? DO YOU UNDERSTAND 10 WHATEVER? AND THEN THAT PERSON PROVIDES A REPORT. 11 12 I THINK IT'S ALSO POSSIBLE TO DRAW UP A PAPER TEST THAT WOULD ALSO SATISFY THAT. THIS IS VERY 13 COMPLICATED. WE HAVEN'T DRAWN UP A PAPER TEST BECAUSE 14 15 WE' VE BEEN VERY SATISFIED THAT THIS INDEPENDENT PERSON WHO GETS TO TALK TO THE DONOR IN PRIVATE KIND OF IS 16

17 TRAINED TO UNDERSTAND IF THIS PERSON IS REALLY18 COMFORTABLE WITH WHAT THEY'RE DOING.

A BIG SIDELINE CONCERN ABOUT THIS IS THAT THIS DONOR IS DOING THIS FREE OF COERCION FROM ANYONE IN HER FAMILY. SO THIS INDEPENDENT MONITOR IS ABLE TO FIGURE OUT DOES SHE UNDERSTAND WHAT SHE'S BEEN TOLD? AND THIS IS FREQUENTLY TWO OR THREE MONTHS AFTER SHE INITIALLY READ THE CONSENT FORM. THIS IS NOT TWO OR THREE DAYS. IT TAKES MONTHS TO GET THROUGH THE

SCREENING PROCESS. SO IF SHE STILL UNDERSTANDS IT, IF
 SHE REMEMBERS IT, IF SHE STILL UNDERSTANDS IT, IF SHE
 KNOWS THE RISKS, THE MONITOR CAN FIGURE THAT OUT PRETTY
 COMFORTABLY.

5 YOU COULD ALSO DEFINE A SET OF QUESTIONS THAT 6 YOU WOULD LIKE ASKED AND THE ANSWERS THAT YOU EXPECT, 7 BUT THIS IS REALLY NOT HARD TO DO.

8 VICE CHAIR LO: THE OTHER THING, I GUESS, WE 9 SHOULD TRY AND DISTINGUISH BETWEEN REGULATIONS AND BEST 10 PRACTICES. MY SENSE IS, KEVIN, YOU'RE GOING TO WANT TO 11 DO THIS REALLY WELL AND PUT A FAIR AMOUNT OF EFFORT, 12 GET SOME COLLABORATORS WHO ARE PSYCHOLOGISTS. THAT'S 13 GREAT. I THINK YOU AND ANN AND GROUPS LIKE YOU SHOULD 14 PUBLISH HOW YOU DO IT AS A MODEL, AS A TEMPLATE.

IN REGULATION, I'M NOT SURE WE WANT TO BE TOO 15 PRESCRIPTIVE AT THIS POINT. THAT'S WHY ONE SUGGESTION 16 WAS TO SAY THESE ARE THE TOPICS. ULTIMATELY IT IS UP 17 18 TO YOUR I RB OR ESCRO TO SAY WE APPROVE OF YOUR PLAN. 19 BUT TO GIVE A LOT OF FLEXIBILITY AT THIS POINT TO ALLOW DIFFERENT INVESTIGATIVE TEAMS TO FIGURE OUT HOW TO BEST 20 21 DO THIS. I THINK THERE ARE CLEARLY MODELS FROM THE TRANSPLANT SETTING WHERE, FOR EXAMPLE, PEOPLE WHO DO 22 LIVE DONORS OF LIVER SEGMENTS AND KIDNEYS GO THROUGH 23 24 THIS VERY, VERY COMPLICATED PROCESS WHERE ALL THESE 25 ISSUES GET TALKED ABOUT IN DETAIL.

1 THE OTHER EXTREME IN AIDS CLINICAL TRIALS IN 2 DEVELOPING COUNTRIES WHERE THERE'S A LOT OF CONCERN 3 THAT PEOPLE DON'T UNDERSTAND THAT IT'S RESEARCH AND NOT 4 CLINICAL CARE, AND THEY CAN STILL GET AIDS EVEN THOUGH 5 THEY'RE GETTING A VACCINE. IT'S A PAPER AND PENCIL 6 QUESTIONNAIRE. IT'S A YES/NO. SO IT'S REALLY BASIC, 7 AND THAT MAY BE TOO BASIC FOR HERE.

8 SO THERE'S A WHOLE GAMUT, THAT WE MAY NOT9 WANT TO BE TOO PRESCRIPTIVE.

DR. ROWLEY: IF I CAN JUST COMMENT ON THAT 10 11 FOR A MINUTE. IN THE MATERIAL WE WERE SENT, THERE WAS 12 A PLEA, THAT AT LEAST IN CALIFORNIA, THAT IT BE UNIFORMLY DONE AND THAT ONE INSTITUTION DOESN'T HAVE A 13 SINGLE QUESTION -- THAT WAS THE EXAMPLE GIVEN IN THE 14 MATERIALS DISTRIBUTED -- AND SOME OTHER INSTITUTION 15 HAVE A 20-QUESTION QUESTIONNAIRE. SO YOUR IDEA IN ONE 16 SENSE IS APPEALING, BERNIE, BUT AT LEAST, AS I SAY, THE 17 MATERIAL WE WERE SENT, THERE WAS THE IDEA EXPRESSED 18 19 THAT THERE SHOULD BE UNIFORMITY WITHIN THE STATE OF 20 CALI FORNI A.

VICE CHAIR LO: ABSOLUTELY. THANK YOU.
DR. CIBELLI: GOING BACK TO THE CONSENT FORM.
WE'RE TALKING ABOUT DONATING EGGS EXCLUSIVELY. ARE YOU
GOING TO TELL THEM IN THE CONSENT FORM WHAT ARE YOU
GOING TO DO WITH THE EGGS, OR WHAT YOU'RE NOT GOING TO

1 DO WITH THE EGGS? SO HOW MUCH DETAIL ARE YOU GOING TO 2 PROVIDE ON THAT CONSENT FORM ABOUT THE USE OF THE EGGS? 3 YOU CAN DO MANY THINGS. YOU CAN JUST DESTROY THEM 4 RIGHT AWAY AND DO SOME PROTEOMIC ANALYSIS, OR YOU CAN 5 JUST DO NUCLEAR TRANSFER, PRODUCE A CELL LINE, AND IT 6 WILL BE USED FOR MANY, MANY YEARS. SO WHAT ARE THE 7 THINGS YOU ARE GOING TO TELL THEM?

8 VICE CHAIR LO: AGAIN, I THOUGHT WE WERE 9 TALKING PRIMARILY IN THE CONTEXT OF DERIVING A STEM 10 CELL LINE FROM THEIR EGGS, BUT YOU'RE RIGHT. OTHER 11 RESEARCHERS MAY WANT TO DO SOMETHING THAT DOES NOT 12 INVOLVE A STEM CELL LINE CREATION.

DR. CIBELLI: WE CAN CREATE A LINE BY
FERTILIZATION, NUCLEAR TRANSFER, YOU CAN DO IT BY
PARTHENOGENESIS, SO HOW MUCH INFORMATION --

VICE CHAIR LO: THOSE ARE ISSUES THAT
CERTAINLY THE IRB NEEDS TO DEAL WITH. I GUESS THE
QUESTION IS DO WE WANT TO BE THAT SPECIFIC IN THE
REGULATIONS? THAT'S A CHOICE POLICY I THINK WE NEED TO
MAKE.

21 DR. CIBELLI: WHAT ARE THE RIGHTS OF THE 22 DONOR? ISN'T SHE ENTITLED TO KNOW, OR IT'S JUST TRUST 23 TO THE ESCRO THAT THEY ARE GOING TO DO THE RIGHT THING? 24 DR. EGGAN: I WOULD THINK THAT IT'S NOT 25 ENOUGH TO ASK A WOMAN TO DONATE HER EGGS FOR STEM CELL

RESEARCH IN GENERAL. AND THE PROXIMAL EVENT SHOULD BE
 WELL PRESCRIBED IN THE CONSENT. SO WE'RE ASKING YOU TO
 DONATE YOUR EGGS FOR A SOMATIC CELL TRANSPLANTATION TO
 MAKE A CELL LINE WHICH WILL BE BROADLY USED, OR WE'RE
 ASKING YOU TO DONATE YOUR EGGS FOR PARTHENOGENESIS, OR
 MAYBE PERHAPS IN THE SAME CONSENT FORM, ONE OR THE
 OTHER IF YOUR INTENT WITH THAT.

8 BOTH OF THOSE HAVE A RELATIVE -- THE GOAL IS 9 THE SAME, TO DERIVE THE CELL LINE WHICH WILL BE USED 10 BROADLY, BUT THEN IT SEEMS LIKE IT'S FORT OF A 11 DIFFERENT THING TO DONATE YOUR EGG, WHICH THEN MAY BE 12 DESTROYED FOR AN EXPERIMENT AND A NEW STEM CELL LINE 13 WILL BE MADE. I DON'T KNOW.

14DR. HALL:DNA CONTRIBUTION IS DIFFERENT FOR15ONE THING.

VICE CHAIR LO: CERTAINLY I GUESS IF YOU ARE
DEALING WITH FRESH OOCYTES, YOU KNOW WHAT YOU ARE GOING
TO BE DOING WITH IT, RIGHT. IT'S NOT AN OPEN-ENDED
THING. THERE'S ONLY SEVERAL EXPERIMENTS YOU'RE LIKELY
TO DO AT THAT POINT BECAUSE YOU HAVE TO BE SET UP TO
USE THE OOCYTES RIGHT AWAY.

DR. TAYLOR: I WAS JUST GOING TO SAY THAT IRB'S REQUIRE A CERTAIN LEVEL OF EXPLANATION ABOUT THE PROTOCOL. I DON'T THINK THIS PROCESS IS GOING TO MOVE BEYOND AN EXISTING EXPECTATION THAT DONORS ARE GOING TO

1 HAVE A PRETTY CLEAR IDEA ABOUT WHAT THE EXPERIMENTAL
2 PROTOCOL INVOLVING THEIR MATERIALS IS GOING TO INCLUDE.
3 DR. CIBELLI: SO WHAT ARE YOU SAYING, THAT WE
4 DON'T HAVE TO WORRY ABOUT?
5 DR. TAYLOR: I THINK THAT YOUR IRB IS GOING
6 TO MAKE YOU WORRY ABOUT THAT, SO YOU'RE NOT GOING TO
7 HAVE THE OPPORTUNITY JUST TO TAKE SOMEBODY'S EGGS AND

8 DO WHATEVER YOU WANT WITH THEM.

9 DR. CIBELLI: NO. WHAT I'M SAYING WE DON'T 10 HAVE TO WORRY ABOUT TALKING RIGHT NOW ABOUT THAT.

11 DR. TAYLOR: I DON'T THINK SO.

12 VICE CHAIR LO: THAT'S A CHOICE WE NEED TO MAKE, OR WE MAY WANT TO SAY THAT YOU NEED TO, FOR 13 EXAMPLE, SAY WHETHER OR NOT IT'S GOING TO BE USING 14 15 SOMATIC CELL NUCLEAR TRANSFER RATHER THAN FERTILIZATION RATHER THAN PARTHENOGENESIS. PEOPLE MAY HAVE VERY --16 IT'S CONCEIVABLE SOMEONE SAY, WELL, THAT'S PERFECTLY 17 OKAY. I'M NOT SO SURE ABOUT THAT. AND I DON'T WANT IT 18 19 FOR THAT.

20 DR. CIBELLI: CAN I ASK YOU QUESTION ABOUT 21 THE LAW, THE CALIFORNIA LAW. ARE THERE ANY STATEMENTS 22 ABOUT DONATION OF GAMETES, LIKE YOU CAN'T DO THIS WITH 23 THE GAMETES YOU GET, THINGS THAT YOU CANNOT DO? 24 DR. LOMAX: THE EXISTING LAW TALKS ABOUT 25 STATEMENTS THAT WHAT THEY WILL BE USED FOR, BUT IT

DOESN'T -- IT'S ACTIVE STATEMENTS ABOUT THE INTENDED 1 USE, BUT THERE'S NO STATEMENTS ABOUT PROHIBITION IN THE 2 3 LAW, THAT ACTUALLY WE'RE CURRENTLY EXEMPTED OUT OF IN 4 PROPOSITION 71. BUT THE INTENT OF THAT LAW IS TO PROVIDE KNOWLEDGE ABOUT THE INTENDED USE OF THE 5 6 MATERIAL THAT'S BEING DONATED. DR. CIBELLI: WHAT IF WE WANT TO MAKE STEM 7 CELLS FROM A DAY 21 EMBRYO THAT HAS TO BE PUT INTO THE 8 9 UTERUS AND SOMEHOW FLUSH IT OUT TO GET A CELLS FROM 10 THAT? 11 VICE CHAIR LO: THERE'S A PROHIBITION BEYOND 12 14 DAYS. DR. ROWLEY: TWELVE. 13 VICE CHAIR LO: TWELVE DAYS. SORRY. YOU' RE 14 15 ABSOLUTELY RIGHT. DR. CIBELLI: THAT TAKES CARE OF THAT. 16 THAT'S NOT A PROBLEM. AND ANN ACTUALLY ASKED THE 17 18 QUESTION TO ME. CAN YOU FERTILIZE GAMETE AND PRODUCE 19 EMBRYONIC STEM CELLS FROM IT, OR DO YOU HAVE TO USE JUST EMBRYOS THAT HAVE -- TO GET A CELL LINE THAT IS 20 21 PRODUCT OF FERTILIZATION, CAN YOU GET IT FROM AN EGG 22 THAT SOMEONE DONATED? 23 DR. LOMAX: YES. 24 VICE CHAIR LO: AND FERTILIZE THE EGG. 25 DR. EGGAN: ONLY IN THE STATE OF

MASSACHUSETTS IS THAT EXPRESSLY FORBIDDEN. AND OTHER 1 STATES -- ONLY IN MASSACHUSETTS IS THAT SPECIFICALLY 2 3 PROHIBITED. THERE ARE OTHER STATES WHERE EVERYTHING IS 4 OFF THE BOOKS. AS FAR AS I KNOW, MASSACHUSETTS IS THE ONLY STATE WHICH WOULD ALLOW YOU TO DERIVE FROM 5 DISCARDED IVF EMBRYOS OR OTHER IVF EMBRYOS, BUT NOT 6 SPECIFICALLY ALLOW YOU TO MIX OOCYTE AND SPERM IN A 7 DISH FOR THE PURPOSE OF STEM CELL RESEARCH. 8

9 VICE CHAIR LO: AGAIN, JUST SO WE'RE CLEAR, 10 WE WERE TALKING ABOUT INCORPORATING EXISTING CALIFORNIA LAW, EVEN THOUGH WE'RE NOT REQUIRED TO UNDER PROP 71, 11 12 INTO OUR GUIDELINES. AND ON THE FOURTH PAGE BEHIND TAB 7 ON THIS SIDE, WE'VE REPRODUCED THE RELEVANT LAW THAT 13 HAS TO DO WITH DONATION OF GAMETES, EMBRYOS, AND 14 15 SOMATIC CELLS FOR CELL LINES. SO, AGAIN, TO ANSWER YOUR QUESTION, THE EXISTING LAW FOR THAT DOES NOT 16 EXCLUDE CERTAIN TYPES OF THINGS, BUT IT SPECIFIES 17 CERTAIN THINGS THAT MUST BE TOLD TO PROSPECTIVE DONORS. 18 19 BY INCORPORATING THAT INTO OUR REGULATIONS, THIS WILL NEED TO BE DISCLOSED DONORS DONATING OOCYTES SOLELY FOR 20 21 RESEARCH. 22 DR. KIESSLING: THIS IS SAFETY CODE SECTION 23 24175? VICE CHAIR LO: NO. THIS IS SAFETY CODE 24

25 SECTION 125315, ACTUALLY PAGE 4 BEHIND TAB 7.

DR. LOMAX: YES, THAT'S CORRECT. 1 2 DR. ROWLEY: SECTION B. 3 DR. LOMAX: SECTION B STARTS ON THE PREVIOUS 4 PAGE, AND THE LIST OF REQUIREMENTS FOLLOWS. VICE CHAIR LO: 5 NEXT PAGE. DR. PRIETO: I THOUGHT I WAS HEARING FROM 6 KEVIN EARLIER THAT HE FEELS MOST SCIENTISTS WOULD 7 PREFER THAT THIS BE PRETTY CLEARLY LAID OUT SO THAT THE 8 9 EXPECTATIONS WERE CLEAR FROM THE BEGINNING. I THINK THE ADVANTAGE OF REFERENCING THESE IS THAT IT IS 10 11 ALREADY LAID OUT THERE, BUT I DON'T THINK THAT IT 12 ADDRESSES SOME OF THE SPECIFIC ISSUES WITH REGARDS TO STEM CELL RESEARCH THAT ARE ADDRESSED. I THINK WE 13 WOULD WANT TO ADD THAT BECAUSE THERE ARE CERTAINLY 14 15 UNIQUE FEATURES OF THIS RESEARCH THAT ARE ADDRESSED IN THE NATIONAL ACADEMIES' GUIDELINES, BUT ARE NOT IN 16 CALIFORNIA LAW NOW. 17 18 VICE CHAIR LO: SO, AGAIN, ONE PROPOSAL FOR 19 US TO DO IS TO INCORPORATE, NOT JUST THESE CALIFORNIA LAWS, BUT ALSO THE NAS RECOMMENDATIONS FROM THEIR 20 21 REPORT. WE HAVE TO THINK ABOUT HOW TO ACTUALLY DO THAT TECHNICALLY, BUT THAT WOULD THEN ALSO BE INCORPORATED 22 AS REQUIREMENTS THAT RESEARCHERS MUST DISCLOSE IN THE 23 24 PROCESS OF OBTAINING CONSENT. SO THAT'S --

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DR. PRIETO: IT'S SOMETHING I WOULD FAVOR,

AND I THINK IT WOULD GIVE US THE ADVANTAGE OF BEING 1 CONSISTENT WITH THE ELEMENTS OF EXISTING CALIFORNIA 2 3 LAW. 4 VICE CHAIR LO: RIGHT. THESE ARE ALL THINGS THAT CURRENTLY STEM CELL RESEARCHERS IN CALIFORNIA 5 6 WOULD BE SUBJECT TO -- REQUIRED TO DO ANYWAY UNDER THEIR EXISTING OBLIGATIONS. 7 FIRST, I WANT TO MAKE SURE. I DON'T KNOW IF 8 9 WE'VE LOST JOHN AND ALTA. MS. CHARO: NO, I'M HERE. 10 VICE CHAIR LO: DO YOU HAVE ANY COMMENTS OR 11 12 THOUGHTS AT THIS POINT? MS. CHARO: WELL, TO BE HONEST, I'M HERE, BUT 13 I REALLY CAN'T HEAR. 14 15 VICE CHAIR LO: WE CAN HEAR YOU. MS. CHARO: I'M GLAD YOU CAN, BUT YOU GUYS 16 ARE BASICALLY JUST A LOT OF FUZZ. 17 18 DR. WAGNER: I THINK I'M ON THE SAME LINE AS 19 ALTA, BUT I MADE -- I'VE WRITTEN A LOT OF COMMENTS ALONG THE WAY. UNFORTUNATELY, YOU' VE CHANGED DI RECTI ON 20 21 A NUMBER OF TIMES FOR A NUMBER OF GOOD REASONS. BUT 22 FROM A PRACTICAL POINT OF VIEW, I ACTUALLY DO SOME OF 23 THIS WORK. I CAN TELL YOU THAT, FIRST OFF, WHEN I'M 24 WORKING IN AN IVF CENTER, I'M NOT INVOLVED WITH THE OOCYTE DONATIONS. THERE WILL BE PREIMPLANTATION 25

GENETIC DIAGNOSIS IN AN IVF. THERE'S A CLEAR-CUT --1 THERE'S SOME PRACTICAL ISSUES, AND THERE'S THINGS TO 2 3 OVERCOME SOME OF THOSE ISSUES. BUT TYPICALLY FAMILIES 4 OR COUPLES WILL COME IN, AND THEY WILL -- IF THEY'RE GOING THROUGH IN VITRO FERTILIZATION FOR THE PURPOSE OF 5 INFERTILITY, THOSE COUPLES WILL COME IN. AND THOSE 6 7 EXCESS EMBRYOS, IF THAT'S WHAT YOU WANT TO CALL THEM, ARE THEN STORED, AND THEN THEY' RE RECONNECTED WITH 8 ANYBODY FOR YEARS. AND SOMEWHERE DOWN THE LINE, 9 10 SOMEONE CONTACTS US FROM THE IVF CENTER AND SAYS HERE'S A COUPLE THAT MAY BE INTERESTED. 11

BUT IN ANY EVENT, THERE'S WAYS THAT WE CAN DO THAT BETTER PERHAPS. FROM A PRACTICAL POINT OF VIEW, IF IT WAS DISCUSSED, AND MAYBE YOU'RE GOING TO DO THAT NOW BECAUSE IT'S COME AROUND, BUT THE ISSUE OF RECONTACT IS REALLY A DIFFICULT ISSUE, AS WAS STATED BY A FEW PEOPLE.

THE IVF CENTERS, REMEMBER THE IVF CENTERS ARE 18 19 NOT REALLY PART OF THE RESEARCH TEAM IN AT LEAST IN THE ONES I'VE DEALT WITH. THEY PLAY A ROLE, BUT ON THE 20 21 OTHER HAND, THEY ALSO ARE NOT THAT INVOLVED. AND SO WE CAN ONLY ASK SO MUCH OF THEM. I THINK I CAN COME UP 22 WITH SOME IDEAS ON HOW WE MIGHT BE ABLE TO GET A MORE 23 BALANCED OR BETTER CONSENT PROCESS, BUT WE CAN ONLY 24 25 EXPECT SO MUCH FROM THEM, OR ELSE WE'RE GOING TO HAVE

TO PROVIDE THE CONSENTER BECAUSE THEY DON'T UNDERSTAND
 NECESSARILY ALL THE DETAILS OF WHAT MIGHT BE DONE WITH
 IT.

4 ON THE OTHER HAND, THEY MAY KNOW A CURSORY AMOUNT ABOUT OF ES CELL LINES AND WHAT THEY MIGHT BE 5 USED FOR, BUT OPTIMAL PEOPLE TO PROVIDE THAT CONSENT. 6 7 AS A RESEARCHER, I MAY BE 2,000 MILES AWAY. IT'S A BIT DIFFERENT IN CALIFORNIA PERHAPS, BUT I'M WORKING WITH 8 9 THE IVF CENTER IN ATLANTA, I CAN'T JUST POP DOWN THERE 10 OR ANYONE ON MY TEAM OR EVEN TO HIRE SOMEONE TO GET 11 THAT, BUT WE COULD COME UP MAYBE WITH STRATEGIES ON HOW 12 YOU MIGHT BE ABLE TO HELP THAT ALONG. BUT LET ME TELL YOU THE IDEA OF RECONTACT, IVF CENTERS WHO ARE PRIMARY 13 POINT PEOPLE, DON'T WANT TO DO THAT A LOT OF THE TIME, 14 15 AT LEAST IN MY OWN EXPERIENCE.

THE OTHER THING IS THAT GIVEN THE IDEA OF 16 RECONTACT FOR THE PURPOSE OF HEALTH SCREENING, REMEMBER 17 18 THAT WE'RE DEALING WITH ADULT COUPLES ALREADY. AND SO 19 HEALTH SCREENING SHOULD BE DONE REALLY PART OF THE ENTIRE PROCEDURE UP FRONT RATHER THAN HAVING TO GO BACK 20 21 AND DECIDE THAT BECAUSE DO I WANT TO ES CELL LINE, WHICH BY THE WAY WE ARE CREATING ES CELL LINES, IF YOU 22 23 GO BACK AND PLANT IT AFTER THE FACT, AFTER YOU' VE SPENT 24 ALL THE MONEY AND TIME CREATING THE CELL LINE, WHICH IS 25 STILL A VERY INEFFICIENT PROCESS. THEN YOU GO BACK AND

FIND OUT, OH, THERE'S SOME PROBLEM THAT WOULD HAVE
 PREVENTED ME FROM USING IT. I WANT TO KNOW THAT UP
 FRONT. I DON'T WANT TO HAVE TO GO BACK AND DO THAT
 ANYWAY.

YOU WANT TO HAVE A CLEAR WAY OF CONNECTING IF 5 YOU REALLY HAD TO. THINK ALSO ABOUT THE CORD BLOOD 6 BANKING PROCESS THAT'S BEEN PUBLICIZED IN THE RECENT 7 WE DON'T GO BACK FOR THEM IN THE MAJORITY OF 8 PAST. 9 CASES, IF EVER. EVEN THOUGH WE DON'T HAVE A CHILD --REMEMBER, A BABY IS BORN, WE DON'T HAVE ANY GENETIC 10 11 HISTORY ON THAT BABY, AND WE DON'T GO BACK THERE EITHER 12 BECAUSE OF THE FACT THAT WE LIVE IN A MOBILE POPULATION, AND IT'S JUST NOT EASY IF WE SAY THAT WE 13 LOCK OURSELVES INTO DOING THAT. THAT'S A REALLY 14 DIFFICULT THING TO HAVE TO GO BACK AND DO. IF YOU' RE 15 REALLY PLANNING UP FRONT TO DO IT, WELL, GREAT, BUT 16 JUST KNOW THAT WHAT ARE YOU GOING TO DO IF YOU CAN'T GO 17 BACK? IF YOU CAN'T CONNECT WITH THEM, DO YOU NOT USE 18 19 THAT CELL LINE? DO I REALLY WANT TO INVEST IN SOMETHING OR MAKING A CELL LINE, WHICH, AGAIN, DON'T 20 21 FORGET THE EFFICIENCY IS POOR; THEREFORE, YOU GOT TO GO THROUGH A LOT OF POTENTIAL EMBRYOS TO CREATE A CELL 22 LINE TO THEN FIND OUT AT THE END WE CAN'T USE IT FOR 23 24 SOME REASON BECAUSE THEY CAN' T GO BACK AND REDISCUSS 25 THIS WITH THE FAMILY OR EVEN WITH CONSENT BECAUSE OF

THE FACT THAT I HAVE A NEW IDEA, A NEW PROTOCOL THAT I
 WANT TO USE IN TERMS OF STUDYING SOME NEW AREA WITH THE
 ES CELLS.

4 SO YOU GOT TO KEEP THAT IN MIND THAT IT'S 5 JUST NOT VERY PRACTICAL TO DO. I'M NOT SURE THAT WE 6 REALLY NEED TO DO IT ALTHOUGH MAYBE IN THE ARGUMENT 7 TODAY, WE MIGHT HAVE GIVEN RESPONSES WHY WE SHOULD AND 8 I JUST COULDN'T HEAR THEM. IN ANY EVENT, FROM A 9 PRACTICAL POINT OF VIEW, IT IS REALLY TOUGH.

10 I AGREE WITH YOU THAT IVF SHOULD BE SEPARATED FROM THE EGG DONATION, BUT IVF -- AND I THINK THIS WAS 11 12 BROUGHT UP. IVF IS NOT ALWAYS THE SAME. INFERTILITY AND PGD ARE VERY DIFFERENT, AND THERE IS REASONS WHY 13 WITH PGD YOU MIGHT WANT TO USE FRESH EMBRYOS AND, 14 15 THEREFORE, YOU' RE GOING TO HAVE TO CONSIDER THE CONSENT EARLY ON. BUT REMEMBER, THIS IS A DECISION THAT CAN BE 16 DISCUSSED WELL IN ADVANCE OF THE ACTUAL IVF PROCEDURE 17 IF YOU REALLY WANTED TO BECAUSE THESE ARE PEOPLE THAT 18 19 ARE GOING INTO THIS, NOT FOR INFERTILITY, BUT GOING INTO IT FOR OTHER REASONS. THEREFORE, THE CONSENT 20 21 PROCESS -- I AGREE WITH THE WHOLE CONCEPT OF HAVING PLENTY OF TIME TO GET THE CONSENT AND HAVING TIME TO 22 THINK ABOUT IT AND TIME TO ASK QUESTIONS. 23 AND I GET 24 CONSENTS EVERY DAY FOR A LIFE THREATENING PROCEDURE CALLED BONE MARROW TRANSPLANT, AND WE CERTAINLY KNOW 25

HOW TO GET CONSENTS FOR SUCH TRICKY THINGS AS 1 TRANSPLANTS. I THINK WE CAN COME UP WITH WAYS, FOR 2 3 EXAMPLE, HOW DO YOU THIS SO THAT THE INVESTIGATOR WHO 4 REALLY IS THE EXPERT IN ES CELLS, NOT THE IVF TEAM, CERTAINLY CAN DO THAT BY CREATING A VIDEO. THERE'S 5 THINGS THAT YOU CAN DO THAT YOU CAN MAKE IT A LESS 6 COERCIVE AND MOST OBJECTIVE AS POSSIBLE, EVEN ENDING 7 THAT WITH THE WAY WE DO IT IN TERMS OF TRYING TO FIND 8 9 OUT HOW WELL THEY UNDERSTAND THE PROCESS IS THAT, AS SOME OF YOU HAVE ALREADY STATED, IS SIMPLY TO ASK A 10 11 NUMBER OF KEY QUESTIONS.

12 I THINK IN THIS PARTICULAR CASE, YOU ARE ALSO 13 GOING TO HAVE TO FIGURE A WAY THAT YOU CAN HAVE A WAY 14 OF ADDRESSING QUESTIONS THAT THE IVF TEAM MIGHT NOT 15 NECESSARILY KNOW HOW TO ADDRESS. BUT THINK ABOUT THAT 16 SOME MORE.

17 SO THE ELEMENTS THAT YOU' VE ALL DISCUSSED ARE 18 IMPORTANT, BUT SOMETIMES WHAT I'M HEARING IS SOMETHING 19 THAT ISN'T GOING TO BE EASY TO PUT INTO PRACTICE. I'M 20 NOT REALLY SURE WHAT YOU GAIN FROM SOME OF THIS IN THE 21 END.

22 MS. CHARO: SINCE OF MY MANY OTHER 23 COLLEAGUES, ONE OF THE FEW PEOPLE I CAN HEAR CLEARLY, I 24 JUST WANTED TO ADD A WORD, WHICH IS THAT I WOULD LIKE 25 TO ENDORSE THE NOTION OF PRACTICALITY. BERNIE MAY

REMEMBER, WE WENT AROUND ON THIS QUESTION ABOUT DONOR 1 CONTROL OF TISSUE USES IN THE CONTEXT OF THE CLINTON 2 3 BIOETHICS COMMISSION. WE FOUND THAT THERE WAS A 4 GENUINE DISAGREEMENT ABOUT WHETHER IT WAS REALISTIC FOR PEOPLE TO CONSENT PROSPECTIVELY TO AN UNKNOWN RANGE OF 5 RESEARCH FACILITIES, SOME OF WHICH WEREN'T EVEN 6 CONCEIVABLE AT THE TIME OF DONATION. THE MAJORITY OF 7 US FELT THAT THIS IS A CHOICE PEOPLE OUGHT TO BE ABLE 8 9 TO MAKE ESPECIALLY WHEN WE HAVE ASKED FOR PROTECTION FOR THEIR OWN CONFIDENTIALITY DOWN THE LINE BECAUSE THE 10 11 PROBLEM WITH TRACING EACH LINE BACK TO ITS ORIGINAL SET 12 OF CONDITIONS IS TREMENDOUS AND MAKES IT SO MUCH HARDER FOR THE LINES TO BE SHARED AROUND. 13

14 I WOULD JUST LIKE TO URGE THAT WE KEEP OUR
15 EYE ON FACILITATING THE RESEARCH AS MUCH AS ON MAKING
16 SURE THAT AS A SUBSTANTIVE AND POLITICAL MATTER WE
17 PROTECT THE ETHICS OF THE DONATIONS.

VICE CHAIR LO: OKAY. THANKS TO BOTH. 18 WE 19 ARE REQUIRED, AS A MATTER OF UNION REGULATIONS, TO BREAK FOR LUNCH AT 12:45. I'M NOT SURE WHETHER IT'S 20 21 THE UNIONS PROTECTING US OR IT'S REALLY A WORK RULE FOR 22 THE EMPLOYEES, BUT WE PROBABLY SHOULD ADHERE TO THAT. 23 DR. TAYLOR: IS THAT THE PLUMBING UNION? VICE CHAIR LO: I'M JUST BEING TOLD WHAT --24 25 REPORTING WHAT I WAS TOLD. WHY DON'T WE BREAK NOW FOR

LUNCH, AND OUR LUNCH PERIOD IS HOW LONG, 45 MINUTES,
 WHICH MEANS WE'LL COME BACK HERE AT 1: 30. THANKS VERY
 MUCH.

4 (A RECESS WAS TAKEN.) 5 VICE CHAIR LO: WHY DON'T WE RECONVENE FROM OUR LUNCH, WHICH I DON'T THINK REPRESENTS THE FINEST IN 6 SAN FRANCISCO CUISINE. WHY DON'T WE RECONVENE, AND I 7 THOUGHT WE WOULD START BY WE'VE NOT HAD AN OPPORTUNITY 8 9 FOR PUBLIC COMMENT YET, AND I WANTED TO START BY INVITING MEMBERS OF THE PUBLIC TO MAKE COMMENTS IF 10 THERE'S ANYONE WHO WOULD LIKE TO COMMENT. AND FOR THE 11 12 RECORD, COULD YOU JUST STATE YOUR NAME AND AFFILIATION, 13 PLEASE.

14 MR. REED: YES, DON REED. GOING BACK TO THIS 15 MORNING -- BY THE WAY, WE APPRECIATE THE OPPORTUNITY FOR PUBLIC COMMENT. YOU MIGHT HAVE NOTICED THAT ONE 16 PARTICULAR ATTACK THAT THE OPPOSITION HAS NOT MADE 17 18 AGAINST PROP 71 FOR A LONG TIME IS THAT THE PUBLIC HAS 19 NOT BEEN INCLUDED. THEY HAVE NOT SAID THAT BECAUSE YOU GUYS HAVE MADE A SPECIFIC COMMITMENT TO GET PUBLIC 20 21 INVOLVEMENT ALL THE WAY, 51 PUBLIC MEETINGS, FANTASTIC, AND WITH PUBLIC COMMENT AT EACH ONE. 22

23 GOING BACK TO THIS MORNING, WE DON'T WANT --24 AS A PERSON WHO WANTS EVERY DOLLAR TO BE SPENT ON 25 RESEARCH AND EVERY POSSIBLE AVENUE MADE EASY FOR THE

SCIENTISTS, WE DON'T WANT ONE MORE RESTRICTION ON THE 1 SCIENTISTS OR INSTITUTION THAN WE ABSOLUTELY HAVE TO 2 3 HAVE. LAST I HEARD, THERE WAS A COMMITTEE, CIRM 4 COMMITTEE, WHICH WAS A LIAISON COMMITTEE BETWEEN THE CIRM AND SACRAMENTO. IF WE ONLY HAVE FIVE DAYS BETWEEN 5 NOW AND THE DECEMBER 6TH WHEN YOUR RECOMMENDATIONS ARE 6 MADE, I WONDER IF THERE ISN'T SOME WAY TO AT LEAST 7 SPEAK TO THAT COMMITTEE AND MAKE SURE THAT WE'RE NOT 8 9 OFFERING SOMETHING NOT NEEDED.

10 FOR INSTANCE, WE'VE TALKED ABOUT THE REVENUE 11 STREAM AND THE TAX. THE LAST I HEARD, THE SCA 13 12 THREAT, WHICH SENATOR ORTIZ AUTHORED, DID NOT -- SHE 13 WAS NO LONGER TRYING FOR REVENUE STREAM. SO I DON'T 14 THINK WE SHOULD OFFER SOMETHING THAT'S NOT BEING 15 DEMANDED. WE NEED EVERY PRECIOUS DOLLAR. WE DON'T 16 WANT TO GIVE ANYTHING AWAY. ALL FOR RESEARCH.

17 SECONDLY, ON THE EGG SITUATION, ENGLAND TEACHES A COURSE IN EGG DONATION. THEY TEACH A COURSE, 18 19 AND EVERY EGG DONOR HAS TO PASS A TEST. NOW, JUST LIKE CALIFORNIA DRIVING TEST, IF YOU DON'T PASS IT, YOU TAKE 20 21 IT AGAIN. AND THEN ONCE YOU ARE FULLY UNDERSTANDING IT, THERE'S MY OPINION COMES IN, ONCE THE RESEARCH HAS 22 23 BEEN MADE CLEAR, ONCE YOU HAVE EXPLAINED ALL THE 24 POSSIBLE USES, THEN I THINK THERE SHOULD BE ONE 25 QUESTION. WOULD YOU LIKE TO HELP POSSIBLY SAVE LIVES

AND ALLEVIATE SUFFERING WITH THE PRECIOUS GIFT OF
 OOCYTES? IF THEY SAY YES, THEN THAT'S IT. WE DON'T GO
 BACK AND ASK THEM A YEAR LATER CAN WE DO IT FOR
 SOMETHING DIFFERENT. WE MAKE CLEAR THAT THERE'S A
 VARIETY OF POSSIBILITIES, AND THEN ONE QUESTION AND THE
 ANSWER AND THAT'S IT.

ALSO, THEY MAY NOT EVEN WANT TO BE REASKED 7 AGAIN. THEY'D SAY, NOW WE'VE GOT TO GO THROUGH THIS 8 9 BIG DECISION AGAIN? MAYBE NOT. LET'S EDUCATE THEM THOROUGHLY, MAKE SURE THEY UNDERSTAND, MAKE SURE THEY 10 11 SEE THE PROMISE AND THE POSSIBILITY OF THE RESEARCH, 12 AND ASK THEM A QUESTION. THEY SIGN, HAVING PASSED THE TEST, SO THEY CAN NEVER SAY THEY DIDN'T UNDERSTAND, AND 13 THEN WE LET IT HAPPEN. THANK YOU. 14

15 VICE CHAIR LO: THANK YOU. ANY OTHER PUBLIC16 PERSONS WANT TO COMMENT? OKAY. THANKS.

17 I WANTED TO TRY AND GO BACK TO SOME OF THE
18 ISSUES -- FOR THOSE MEMBERS OF THE PUBLIC WHO JUST CAME
19 IN, WE WERE ASKING FOR PUBLIC COMMENTS. SO IF YOU
20 WANTED TO MAKE A COMMENT, THIS WOULD BE A TERRIFIC
21 TIME.

22 GOING BACK TO THIS MORNING, I WANTED TO TRY 23 AND SUMMARIZE OUR DISCUSSION AND SEE IF WE HAVE 24 AGREEMENT ON AT LEAST SOME OF THE BROAD ISSUES. AND, 25 AGAIN, LIMITING OUR DISCUSSION FOR THE MOMENT TO OOCYTE

DONATION SOLELY FOR THE PURPOSE OF RESEARCH, AND THESE
 ARE WOMEN DONATING JUST FOR RESEARCH, NOT
 SIMULTANEOUSLY FOR INFERTILITY TREATMENTS.

4 SOME OF THE THINGS WE DISCUSSED THIS MORNING I'D LIKE TO GET A SENSE, EVEN THOUGH WE CAN'T DO A 5 QUORUM, WAS WHETHER WE HAVE BROAD AGREEMENT ON THIS. 6 ONE IS THERE'D BE A, QUOTE, TIME-OUT. I DON'T THINK 7 THAT'S THE MOST ELEGANT LANGUAGE, BUT IT'S WHAT WE WERE 8 USING. SOME TIME FOR REFLECTION, QUESTION/ANSWER 9 BEFORE ORIGINALLY BEING ASKED TO MAKE A DECISION. 10 SECOND WAS THAT WE HAVE SOME ASSESSMENT TO 11

ENSURE THAT THE OOCYTES DONORS UNDERSTAND CRUCIAL
FEATURES, INCLUDING, ONE, THE SCIENCE OF HOW MATERIALS
WILL BE USED; AND, TWO, THE MEDICAL RISKS OF OOCYTE
RETRIEVAL.

AND I GUESS THE NEXT IS SORT OF A SUB-BULLET. 16 OVER LUNCH ANN MENTIONED THAT ONE OF THE THINGS HER 17 18 DONORS ARE VERY INTERESTED IN IS WHAT'S ACTUALLY GOING 19 TO HAPPEN TO THE OOCYTES IN THE LAB. AND SHE MENTIONED THAT MANY WOMEN ARE WILLING TO HAVE -- IN FACT, THEIR 20 21 DONORS ARE WILLING TO HAVE THEIR OOCYTES USED FOR SCNT OR EVEN FOR PARTHENOGENESIS, BUT NOT TO FERTILIZATION 22 IN ORDER TO PRODUCE AN EMBRYONIC STEM CELL LINE. 23 S0 24 THAT BE SORT OF A SUB-BULLET UNDER THE SCIENCE OF HOW 25 MATERIALS WILL BE USED.

I THOUGHT I HEARD AGREEMENT, BUT I WANT TO 1 CHECK, THAT WE DIDN'T WANT DONORS TO IMPOSE RESTRICTION 2 3 ON SPECIFIC SUBSEQUENT DOWNSTREAM RESEARCH USES OF 4 OOCYTES. AND THIS WOULD BE WITH THE UNDERSTANDING THAT IT WOULD PASS ESCRO APPROVAL. AND SOMEONE REMINDED ME 5 OVER LUNCH OBVIOUSLY THERE ARE THINGS THAT ARE NOT 6 PERMISSIBLE UNDER CIRM-FUNDED, KEEPING THE 12- TO 7 14-DAY RESTRICTION, NO BREEDING OF HUMAN ANIMAL 8 9 CHIMERAS, AND SO FORTH. SO WE NEED TO PUT LAWFUL 10 DOWNSTREAM USES.

11 IS THERE ANOTHER SLIDE? BACK UP. THAT'S OUR 12 NEXT TOPIC. SO I JUST WANTED TO SEE IF WE CAN SUMMARIZE THIS MORNING'S DISCUSSION AND MAYBE JUST GO 13 THROUGH EACH OF THESE POINTS AND SEE WHETHER THERE'S 14 15 BROAD AGREEMENT AS TO TRYING TO PUT INTO REGULATORY LANGUAGE THIS NOTION OF, FIRST, A TIME-OUT PERIOD. ANY 16 CONCERNS ABOUT THAT OR OBJECTIONS TO TRY TO MAKE THAT 17 18 ONE OF THE REGULATIONS? 19 NOD YOUR HEADS. I CAN'T TAKE A VOTE. NOD YOUR HEADS IF YOU AGREE. 20 21 AND THEN SOME ASSESSMENT OF THE CRUCIAL

FEATURES OF THE SCIENCE AND THE RISKS, INCLUDING THE
IMMEDIATE USE TO WHICH THE OOCYTES ARE BEING USED.
DR. TAYLOR: I WAS GOING TO SAY THAT IT SEEMS

25 TO ME THAT WE SHOULD PROBABLY HAVE A BULLET POINT FOR

1 THE DONOR'S OWN PERSONAL HEALTH RISKS.

2 DR. PRIETO: ISN'T THAT UNDER THE RISKS OF 3 PARTICIPATION.

4 VICE CHAIR LO: SECOND BULLET NO. 2.

5 DR. PRIETO: TALKING ABOUT THE MEDICAL RISKS, 6 SPECIFIC RISKS THAT THE DONOR.

VICE CHAIR LO: WE WANT TO TRY AND HAVE 7 SOME -- NOW, THERE'S ONE THING THAT WAS LEFT -- I 8 9 WASN'T QUITE CLEAR ON HOW WE LEFT IT. THE NOTION OF HOW UNIFORM OR PROSCRIPTIVE SHOULD WE BE ABOUT HOW THAT 10 11 ASSESSMENT IS DONE. ON THE ONE HAND, THERE WAS SOME 12 SENTIMENT THAT EVERYBODY IN CALIFORNIA OUGHT TO DO THE SAME THING SO THAT PEOPLE DON'T SAY, WELL, GEE, THAT 13 PLACE IS REALLY HAVING A PRETTY EASY TEST. 14

15 ON THE OTHER HAND, THERE'S THE I DEA THAT WE MAY WANT TO ALLOW FLEXIBILITY FOR DIFFERENT 16 INVESTIGATIVE INSTITUTIONS TO DEVELOP WAYS OF DOING 17 18 THIS THAT WORK WELL AND SORT OF TEST DIFFERENT MODELS. 19 A QUESTION FOR US IS DO WE WANT TO -- HOW PRESCRIPTIVE DO WE WANT TO BE IN TERMS OF NOT JUST THE ISSUES THAT 20 21 NEED TO BE ADDRESSED, BUT HOW THEY' RE ACTUALLY GOING TO 22 BE EVALUATED.

23 DR. CIBELLI: I DO HAVE A COMMENT, MORE LIKE 24 A QUESTION TO MARCY HERE. DO YOU THINK THAT THE PERSON 25 THAT ACTUALLY WILL ASK THE DONOR TO SIGN THE CONSENT

FORM IN THIS CASE A RESEARCH NURSE? DO THEY HAVE TO GO 1 THROUGH SOME TRAINING JUST FOR THIS PARTICULAR 2 3 EXERCISE, OR IS IT SOMETHING THAT WE CAN GIVE THEM THE 4 FORM AND READ IT, AND THEY WILL BE QUALIFIED ENOUGH TO SAY I CAN INFORM THE PERSON AND GET A STRAIGHT ANSWER? 5 MS. FEIT: I KNOW THE RESEARCH NURSES I'VE 6 WORKED WITH ARE EXTENSIVELY TRAINED IN WHAT THEY'RE 7 DOING. THEY HAVE TO UNDERSTAND WHAT THEY' RE ASKING. 8 9 THEY HAVE TO FULLY UNDERSTAND EVERYTHING. 10 DR. CIBELLI: DO THEY GO THROUGH A TRAINING 11 PERI OD? 12 MS. FEIT: YES. 13 DR. CIBELLI: THERE IS A TRAINING PERIOD. VICE CHAIR LO: TO FOLD IT BACK, DO YOU WANT 14 THERE TO BE IN THE REGULATIONS THE PERSON OBTAINING 15 CONSENT HAS TO HAVE ADEQUATE TRAINING, AND WE SAY LEAVE 16 IT UP TO THE IRB TO ENSURE. 17 18 DR. CIBELLI: IT DOESN'T HAVE TO BE A BURDEN 19 THAT IS GOING TO LIMIT THE RESEARCH AND MAKE THINGS MORE BUREAUCRATIC. IN MY INSTITUTION, FOR EXAMPLE, 20 21 MICHIGAN STATE, IF I WANT TO USE -- IF I'M WORKING BIOSAFETY LEVEL TWO, I HAVE TO BE TRAINED EVERY YEAR. 22 MAYBE THE FIRST TIME IT TAKES THREE OR FOUR HOURS, AND 23 24 THEN EVERY YEAR ON THE WEB I HAVE TO DO A REFRESHMENT COURSE, AND IT TAKES 15 MINUTES, SOMETHING LIKE THAT. 25

1 VICE CHAIR LO: DO YOU WANT TO SORT OF MAKE A 2 RECOMMENDATION?

3 DR. CIBELLI: MY RECOMMENDATION WOULD BE THAT 4 THE PERSON THAT IS GOING TO INTERVIEW THE DONOR HAS TO BE TRAINED IN HOW TO DO IT BECAUSE AT THE END, LIKE 5 KEVIN WAS SAYING, WHEN YOU SIGN THE INFORMED CONSENT, 6 YOU' RE SAYING THAT YOU UNDERSTOOD EVERYTHING. WELL, DO 7 YOU REALLY UNDERSTAND IT OR NOT? 8 DR. TAYLOR: I WAS JUST GOING TO SAY THAT 9 IRB'S SORT OF ALLOW THIS TO HAPPEN IN A LOT OF 10 11 DIFFERENT WAYS. I THINK THAT THIS MIGHT BE AN ESCRO 12 REQUIREMENT OR AN ESCRO RESPONSIBILITY BECAUSE, PARTICULARLY IF WE'RE TALKING FOR A RELATIVELY UNIFORM 13 PROCEDURE ACROSS THE VARIOUS CENTERS, I THINK THE 14 ESCRO'S SHOULD PROBABLY APPROVE OR FOLLOW THE 15 QUALIFICATIONS OF THIS CONSENT OBTAINING INDIVIDUAL. 16 THE WAY THE IRB'S DO IT NOW IN MOST 17 INSTITUTIONS ARE THE PI OF THE PROJECT SORT OF VERIFIES 18 19 THAT THERE'S AN APPROPRIATE PERSON TO DO IT, BUT WE COULD ADD ANOTHER LAYER OF SUPERVISION. AND I THINK IT 20 21 PROBABLY I SN' T REALLY THE I RB' S RESPONSIBILITY TO DO THAT. THEY DON'T HAVE THAT RESPONSIBILITY FOR OTHER 22 23 PROTOCOLS, SO IT SEEMS TO ME THAT IT WOULD BE MORE OF 24 AN ESCRO THING. 25 MS. FEIT: WOULDN'T IT BE BETTER FOR US TO

HAVE A MORE GLOBAL POSITION AND SAY THAT WE WILL 1 REQUIRE THAT A THOROUGH ASSESSMENT BE MADE OF THE 2 3 PATIENT'S UNDERSTANDING OF THE CONDITIONS AND THE 4 EXPECTATIONS OF THE DONATION. AND THEN HAVE AVAILABLE A BEST PRACTICE PROGRAM FOR PEOPLE TO LOOK AT. 5 THIS IS 6 WHAT WE EXPECT. YOU DON'T HAVE TO ADOPT IT 7 IDENTICALLY. EACH INSTITUTION HAS ITS NUANCES, BUT CERTAINLY WE COULD PUT OUT WHAT WE BELIEVE IS THE BEST 8 PRACTICE IN THIS BEHAVIOR. 9 10 DR. EGGAN: I'D AGREE WITH MARCY IN THAT 11 REGARD. ANOTHER WAY THAT ONE CAN HELP SAFEGUARD 12 AGAINST COERCION AND LACK OF CLARITY AND UNDERSTANDING

13 IN THE DONOR IS TO HAVE A SAFEGUARD WHERE ANY14 PARTICULAR MEMBER OF THE RESEARCH TEAM, BE IT THE

15 RESEARCH NURSE WHO'S CONSENTING OR A CLINICIAN WHO'S

16 DI RECTLY INVOLVED IN THE RETRIEVAL PROCEDURE CAN

17 ESSENTIALLY VETO THE PARTICIPATION OF THAT PERSON IF

18 SOME REASON THEY BELIEVE THEY ARE AN INAPPROPRIATE

19 DONOR, THE WORD OF A SINGLE ONE OF THE MEMBERS OF THE

20 TEAM TO REMOVE THEM SHOULD BE ENOUGH TO DISQUALIFY THEM

21 FROM PARTICIPATION. THIS WOULD BE A REASONABLE

22 SAFEGUARD WHICH COULD HELP TOO.

23DR. PRIETO:THAT'S SETTING A PRETTY HIGH24BAR.

25 DR. KIESSLING: THAT'S ACTUALLY HOW WE DO IT.

ANYBODY ON THE TEAM HAS QUESTIONS, THE DOCUMENT DOESN'T
 COME THROUGH. I DON'T KNOW THAT YOU WANT TO PUT THAT
 IN THE REGULATION.

4 DR. HALL: THE OTHER WAY AROUND, THAT IT 5 REQUIRES THE APPROVAL OF ALL THE PEOPLE WHO HAVE HAD 6 CONTACT.

7 DR. EGGAN: THAT'S CERTAINLY A MORE POSITIVE 8 WAY TO SPIN IT.

9 MS. FEIT: BUT THAT COULD BE PUT IN BEST PRACTICE. I THINK IF WE HAVE IN OUR REGULATIONS THAT 10 11 WE SAY DEFINITELY AN ASSESSMENT, THERE HAS TO BE PROOF 12 OF A THOROUGH ASSESSMENT OF THE PATIENT'S UNDERSTANDING AND WILLINGNESS TO MOVE FORWARD WITH DONATION, AND THEN 13 WE HAVE AVAILABLE A BEST PRACTICE MODEL THAT 14 15 INCORPORATES THE STANDARDS THAT YOU' VE TALKED ABOUT. AND SAY THIS IS WHAT THE INSTITUTE RECOMMENDS AS A BEST 16 PRACTICE UNDER THIS GUIDELINE. 17 18 VICE CHAIR LO: LET ME JUST SORT OF INSERT

THE REGULATORY ISSUE, THAT IN PUTTING BEST PRACTICES
INTO THESE REGULATIONS IS GOING TO CAUSE PROBLEMS WITH
THE ADMINISTRATIVE LAW OFFICE. SO WE'LL NEED TO
CONSULT WITH LEGAL COUNSEL AND STAFF AS TO WHETHER IT'S
POSSIBLE. WHAT YOU CAN DO IS SAY THIS MAY BE
FULFILLED, FOR EXAMPLE, IN THE FOLLOWING WAY, NOT
EXCLUSIVELY, BUT, FOR EXAMPLE, SOMETHING. SO WE'LL

HAVE TO FIGURE OUT HOW TO COUCH THAT, AND THAT MAY BE A
 PROBLEM THAT WE NEED TO SORT THROUGH.

3 DR. EGGAN: I DON'T KNOW IF MARCY IS WILLING, 4 BUT THAT'S SOMETHING OFFLINE THAT MAYBE I'M HAPPY TO 5 WORK WITH HER ON.

VICE CHAIR LO: MARCY, ANN, AND KEVIN COULD
SORT OF COME UP WITH SOME OF THAT, THAT WOULD BE
USEFUL. I THINK THIS DOES GIVE A CHANCE TO SORT OF
FORGE NEW TERRITORY.

DR. CIBELLI: I DO WANT TO ADDRESS THE 10 11 COMMENT THAT THE MEMBER OF THE PUBLIC MADE ON THE FACT 12 THAT ENGLAND HAS THIS COURSE FOR DONORS. AND I THINK IT'S A GREAT IDEA, BUT THE PROBLEM WOULD BE TO BE ABLE 13 TO MAINTAIN CONFIDENTIALITY OF WHO ACTUALLY IS 14 15 ATTENDING TO THIS CLASS ON HOW TO LEARN ABOUT RISKS AND BENEFITS OF DONATING EGGS. SO THAT'S THE DRAWBACK OF 16 HAVING SOMETHING OPEN LIKE THAT. 17

18 DR. KIESSLING: ONE OF THE THINGS THAT WE 19 MIGHT HAVE TO CONSIDER IS THAT WE SPEND SOME TIME WITH THE DONORS ACTUALLY FOR THEM TO UNDERSTAND WHY IT'S 20 21 DECIDED THAT THEY CAN'T PARTICIPATE BECAUSE THIS CAN 22 GET TO BE A PRETTY PERSONAL THING. AND SO WE ACTUALLY SPEND SOME TIME EXPLAINING TO THEM THAT THERE'S A WHOLE 23 24 VARIETY OF REASONS THAT THEY MAY NOT BE ALLOWED TO GO 25 FORWARD.

I DON'T KNOW HOW YOU WANT TO SAY THAT. IT'S 1 PART OF THEM UNDERSTANDING THERE ARE RISKS OF 2 3 PARTICIPATION, THAT THEY MAY BE -- IT MAY BE DECIDED 4 THAT THEY CAN'T PARTICIPATE, AND THEY NEED TO BE 5 PREPARED FOR THAT. VICE CHAIR LO: OKAY. FINE. ANY OTHER 6 7 COMMENTS ON THIS? ANY PUBLIC COMMENTS ON THESE? LET'S MOVE ON THEN. KATE, ON THE NEXT SLIDE 8 9 THERE IS AN ISSUE -- REMEMBER WE VERY RIGHTLY, I THINK, SAID WE'RE GOING TO LIMIT THE FIRST PART OF THE 10 11 DISCUSSION TO DONATION OF OOCYTES SPECIFICALLY FOR 12 RESEARCH. THERE'S OBVIOUSLY A COMPLEMENTARY ISSUE OF WOMEN WHO ARE ALSO DONATING OOCYTES FOR A WOMAN IN AN 13 INFERTILITY PRACTICE OTHER THAN THEMSELVES OR ANOTHER 14

15 WOMAN. WHAT ABOUT THE ISSUE OF THEY'RE ALSO DONATING16 SOME OOCYTES FOR RESEARCH PURPOSES?

SO I GUESS THERE ARE TWO ISSUES. ONE, IT'S 17 NOT JUST A CONSENT ISSUE. SOME OF IT IS HOW DO WE 18 19 CHANGE THE CONSENT. THE OTHER ISSUE IS IS SOMETHING THAT WE WOULD APPROVE OF OR ENCOURAGE OR DI SCOURAGE? 20 21 AND IT'S A COMPLICATED ISSUE. I KNOW SEVERAL OF YOU HAVE THOUGHT ABOUT THIS IN SOME DETAIL, BUT IT MIGHT BE 22 WORTH PAYING ATTENTION TO THAT BECAUSE THAT'S ANOTHER 23 24 POTENTIAL SORT OF SOURCE OF OOCYTES FOR RESEARCH 25 PURPOSES. WHY DON'T WE ADDRESS THIS TOPIC NEXT.

DR. TAYLOR: WELL, I GUESS A COUPLE OF THE 1 ISSUES THAT I THINK ARE OF INTEREST HERE ARE THAT WOMEN 2 3 WHO ARE RECRUITED FOR OOCYTE DONATION FOR IVF PROGRAMS 4 TEND TO BE YOUNG WOMEN FROM WHOM WE CAN GET LOTS AND LOTS OF EGGS ACTUALLY, OFTENTIMES MANY MORE THAN WHAT 5 ARE NEEDED FOR THE IVF PROCEDURE ITSELF BECAUSE THEY 6 ARE EGGS FROM YOUNG, TYPICALLY FERTILE WOMEN. 7 THEI R SUCCESS OF IMPLANTATION AND PROGRESSION TO PREGNANCY IS 8 ALSO VERY HIGH, SO THE YIELD IS ACTUALLY TYPICALLY VERY 9 10 GOOD. SO BECAUSE OF THE COMBINATION OF THEIR AGE, PLUS THE REQUIREMENT TO TRANSFER FEWER OF THE EMBRYOS THAT 11 12 ARE DERIVED FROM THOSE WOMEN, THEY DO HAVE EXTRA EXCESS EMBRYOS THAT OBVIOUSLY PREDOMINANTLY ARE USED FOR THAT 13 COUPLE'S FUTURE FAMILY BUILDING, BUT CERTAINLY WOULD 14 HAVE MATERIALS THAT COULD BE USED FOR RESEARCH. 15

ONE OF THE COMPLICATING FEATURES IS THAT 16 THERE IS COMPENSATION FOR THESE INDIVIDUALS THAT IS 17 18 PROSCRIBED IN PROP 71. AND WHETHER -- I'M HAVING 19 DIFFICULTY CONCEPTUALLY THINKING OF HOW ONE MIGHT BE ABLE TO SEPARATE COMPENSATION FOR A CERTAIN NUMBER OF 20 21 OOCYTES FOR PURPOSES OF IVF AND NONCOMPENSATION FOR ONES THAT WOULD GO TOWARDS RESEARCH PURPOSES, BUT THAT 22 23 WOULD BE AN ISSUE THAT I THINK SHOULD BE DISCUSSED. AND, AGAIN, AS ANN HAS POINTED OUT, THESE WOMEN ARE 24 25 PROBABLY MOTIVATED SOMEWHAT DIFFERENTLY THAN THE WOMEN

1 WHO WOULD PRESENT FOR OOCYTE DONATION FOR PURE

2 SCIENTIFIC PURPOSES.

3 SO I GUESS THOSE WOULD BE THE COMMENTS THAT I 4 HAVE TO MAKE.

DR. EGGAN: IT SEEMS TO ME THAT THERE'S EVEN 5 A BROADER ISSUE AT STAKE IN THIS SITUATION, AND THAT IS 6 THAT BECAUSE OF THE INFERTILITY OF THE COUPLE THAT'S 7 BEING DONATED FOR AND THE FACT, AS I UNDERSTAND IT, 8 THAT AT LEAST THROUGH THE STRUCTURE OF THE PAYMENT FOR 9 IVF, ESSENTIALLY THE INFERTILE COUPLE BEARS THE COST OF 10 11 THE OOCYTE DONATION OF THE WOMAN. IN A SENSE THOSE 12 OOCYTES IN A DE FACTO SENSE BECOME THAT WOMAN'S EGGS. AND THEY ARE RELYING ON THOSE EGGS TO TREAT THEIR 13 INFERTILITY. AND SO IN A SENSE IN MY MIND, WITH 14 15 COMPELLING EVIDENCE I COULD BE CONVINCED OTHERWISE PERHAPS, BUT IT SEEMS THAT THAT IS IN A SENSE DE FACTO 16 THE SAME AS DIVERTING THE WOMAN'S OWN EGGS FROM HER OWN 17 REPRODUCTIVE EFFORTS. AND I CAN SEE HOW THAT'S A 18 19 CHALLENGING THING TO WANT TO CONSIDER. I THINK THE PRIMARY THING TO BE CONCERNED 20 21 ABOUT HERE IS THE POTENTIAL OF CONFLICT OF INTEREST BETWEEN THE CLINICIAN AND THE PATIENT AND THE CLINICIAN 22 AND THE RESEARCH SCIENTIST WITH WHICH HE'S 23 24 COLLABORATING. AND I GUESS THIS IS CERTAINLY SOMETHING

25 THAT ANN HAS MENTIONED TO ME AS PROBLEM BEFORE, AND I

GUESS THERE NEEDS TO BE SOME SORT OF SYSTEMATIC
 DISCUSSION ABOUT HOW AND/OR IF THAT CONFLICT OF
 INTEREST CAN BY RESOLVED BECAUSE IT SEEMS TO ME THAT'S
 THE CENTRAL CONCERN.

5 DR. CIBELLI: I WANT TO ASK WHAT IS THE 6 LIKELIHOOD OF THE SCENARIO OF THIS TO HAPPEN, ACTUALLY 7 THAT A COUPLE IS COMING TO YOUR CLINIC AND SAY, OKAY. 8 TAKE HALF OF WHAT I'M GIVING YOU CAN COLLECT. 9 FERTILIZE THOSE FOR ME AND THEN DONATE THE OTHER ONES. 10 IS THAT -- IS IT WORTH TALKING ABOUT THIS OR THIS WILL 11 NEVER HAPPEN?

12 DR. TAYLOR: I'M NOT AWARE OF THAT SITUATION COMING UP BEFORE, BUT IT'S NOT COMPLETELY UNUSUAL TO 13 HAVE A SINGLE DONOR HAVE TWO SETS OF COUPLES APPROACH A 14 15 SINGLE DONOR AND SAY WE'D LIKE HALF OF YOUR EGGS FOR OUR CYCLE AND HALF OF YOUR EGGS. SO FOR COST SHARING 16 PURPOSES, THERE HAVE BEEN SHARED DONORS. THERE'S BEEN 17 SOME DISCUSSION ABOUT THIS WITHIN THE IVF PRACTICES AS 18 19 TO WHETHER YOU CREATE CONFLICTS AND ISSUES WHEN ONE COUPLE GETS PREGNANT AND THE OTHER ONE DOESN'T. 20 BUT 21 THAT PRACTICE HAS BEEN USED IN THE PAST. SO I DON'T SEE IT BEING NECESSARILY INTRINSICALLY DIFFERENT THAN A 22 SPLIT BETWEEN A SCIENTIFIC PROJECT AND A FERTILITY 23 24 SEEKING COUPLE, BUT ADMITTEDLY THERE ARE CONCERNS. 1 25 THINK MAYBE SOME OF THE CONCERNS THAT COME FORWARD IF

SOMEBODY FAILS AT GETTING PREGNANT, THEN DO THEY SAY,
 WELL, IF WE HAD ACCESS TO ALL OF THE EGGS THAT THE
 DONOR GAVE US, WE MIGHT HAVE HAD A DIFFERENT PREGNANCY
 OUTCOME.

DR. EGGAN: IT SEEMS LIKE IF THAT'S 5 PREPRESCRI BED BEFORE THE PROCEDURE ACTUALLY OCCURS, 6 THAT THAT'S GOING TO BE THE SITUATION, THAT IT COULD BE 7 THAT NEITHER COUPLE GOT PREGNANT FROM THE DONATION TOO. 8 ONE THING I WOULD BE CONCERNED ABOUT WOULD BE IS THERE 9 SOME SORT OF OBJECTIVE CRITERION THAT CAN BE USED FOR 10 11 SPLITTING THOSE DONATED EGGS INTO TWO POOLS BECAUSE 12 THAT WOULD BE THE PROBLEMATIC THING. SO IF YOU'RE SPLITTING THE MATERIAL, IS IT AN UNBIASED SPLIT OF THE 13 MATERIAL AND IS THERE A CHANCE FOR THE COUPLE WHO'S 14 15 TRYING TO GET PREGNANT TO WORRY ABOUT THAT SORT OF 16 THI NG?

DR. TAYLOR: I THINK TYPICALLY YOU WOULD WANT 17 TO IDENTIFY WHAT LOOKED TO BE THE HEALTHIEST LARGEST 18 19 TYPICALLY FOLLICLES FOR FERTILITY PURPOSES; AND IF THERE WERE SMALLER FOLLICLES THAT COULD BE OOCYTES THAT 20 21 COULD BE RECOVERED, YOU MIGHT SORT OF CALL THEM AS SORT OF SECOND RATE. BUT THE TRUTH IS THE CORRELATION NOW 22 BETWEEN FOLLICLE SIZE AND OOCYTE QUALITY ISN'T REALLY 23 LINEAR, AND THERE'S SOME QUESTION NOW ABOUT SOME OF THE 24 25 CRITERIA THAT WE USE FOR IDENTIFYING WHAT'S A GOOD

LOOKING FOLLICLE LIKELY TO HAVE A GOOD EGG VERSUS A NOT 1 SO GOOD LOOKING FOLLICLE. SO I THINK IT'S A BIT OF A 2 3 GRAY AREA, BUT IT MIGHT BE DIFFICULT, PLUS YOU CAN SEE 4 HOW MANY FOLLICLES ON ULTRASOUND THERE ARE, BUT TYPICALLY YOU GET 80 PERCENT OF THAT NUMBER IN TERMS OF 5 OOCYTES RECOVERED, BUT THERE ARE EXCEPTIONS TO THAT 6 RULE. IT MAY BE YOU' RE GOING IN AND YOU THINK YOU ARE 7 GOING TO GET 30 EGGS AND YOU ONLY GET SEVEN, AND THAT 8 9 WOULD KIND OF CHANGE YOUR MANAGEMENT IN MIDSTREAM. DR. CIBELLI: COULD I ASK YOU ANOTHER 10 QUESTION? DID YOU EVER GET A DONOR THAT DID IT FOR 11 12 FREE? DR. TAYLOR: WE'VE NOT HAD THAT EXPERIENCE IN 13 SAN FRANCI SCO. 14 DR. CIBELLI: IF YOU'RE TALKING OF A SCENARIO 15 WHERE YOU HAVE TO PAY, WE CAN'T BECAUSE IT'S PROHIBITED 16 BY LAW. THAT'S A MOOT POINT. 17 18 DR. TAYLOR: ANN' S CERTAINLY HAD EXPERIENCE 19 GETTING DONORS THAT ARE JUST COMPENSATED FOR THEIR TIME AWAY FROM -- TRAVEL TIME OR WHATEVER, RIGHT. I THINK 20 21 IT'S JUST A MATTER OF WE'VE NEVER REALLY TRIED TO ESTABLISH THAT TYPE OF A PROGRAM HERE. 22 23 VICE CHAIR LO: MAYBE I CAN ASK JAMES A POINT 24 OF CLARIFICATION. MY UNDERSTANDING WAS THAT PROP 71 25 DOES NOT ALLOW US TO COMPENSATE FOR TIME, ONLY FOR

1 OUT-OF-POCKET EXPENSES FOR DONATION.

2 DR. KIESSLING: ACTUALLY IT DOESN'T SAY OUT 3 OF POCKET. 4 VICE CHAIR LO: IT SAYS EXPENSES. DR. KIESSLING: BUT THE TERM "OUT OF POCKET," 5 THAT WAS HOTLY DEBATED IN MASSACHUSETTS ACTUALLY, AND 6 7 WE GOT INVOLVED IN THAT DEBATE. THEY SPECIFICALLY DID NOT USE THE TERM "OUT OF POCKET." 8 9 VICE CHAIR LO: BUT FOR CALIFORNIA, WHAT'S OUR UNDERSTANDING? 10 11 MR. HARRISON: THE SPECIFIC LANGUAGE READS, 12 "STANDARDS PROHIBITING COMPENSATION TO RESEARCH DONORS OR PARTICIPANTS WHILE PERMITTING REIMBURSEMENT OF 13 EXPENSES. " 14 15 DR. KIESSLING: SO IT BECOMES THE DEFINITION OF EXPENSES. 16 VICE CHAIR LO: JAMES, DOES THAT INCLUDE 17 18 COMPENSATION FOR TIME? 19 MR. HARRISON: I THINK BOB KLEIN, WHO WAS RESPONSIBLE FOR THIS PROVISION, HAS STATED IN THE PAST 20 21 THAT IT WAS MEANT TO EXCLUDE COMPENSATION FOR TIME. 22 DR. PRIETO: HOW ABOUT LOST INCOME? 23 MR. HARRISON: INCLUDING LOST INCOME. 24 DR. TAYLOR: I MISSPOKE. DELETE THAT FROM THE RECORD. 25

1 DR. EGGAN: IT SEEMS IN THIS SAME VEIN ANOTHER EVEN PERHAPS MORE IMPORTANT THING TO DISCUSS IS 2 3 THE SOURCE, WHICH FALLS INTO THIS RUBRIC, IS THE SOURCE 4 OF MATERIAL WHICH IS CURRENTLY BEING USED IN GREAT 5 BRITAIN FOR NUCLEAR TRANSPLANTATION EXPERIMENTS, WHICH ARE SO-CALLED FAILED TO FERTILIZE OOCYTES. AND I THINK 6 IT'S PROBABLY IMPORTANT FOR THIS PANEL TO MAKE SOME 7 SORT OF STATEMENT TO AT LEAST HAVE A DISCOURSE ON THE 8 9 TOPIC OF THE USE OF THESE OOCYTES AND WHAT WE THINK THE 10 CONCERNS THERE OR THE BENEFITS ARE.

11 VICE CHAIR LO: STRIKES ME WE SHOULD SEPARATE
12 THAT AND MAKE THAT OUR NEXT TOPIC.

DR. KIESSLING: I THINK ONE OF THE WAYS THAT 13 THIS MIGHT WORK IS TO HAVE A CLINIC, AS THERE IS ONE IN 14 ENGLAND, AT LEAST ONE, IN WHICH THE ENTIRE POLICY OF 15 THAT CLINIC IS THAT SOME EGGS GO FOR RESEARCH. IF THAT 16 WERE A CLINICWIDE POLICY SO THAT EVERYONE WHO 17 APPROACHED THAT CLINIC WHO WENT THERE SO THAT IT WAS 18 19 NOT AN INDIVIDUAL PATIENT-BY-PATIENT CONSENT PROCESS, BUT IT WAS A KNOWN PRACTICE IN THAT CLINIC, THEN I 20 21 THINK YOU MIGHT BE ABLE TO USE SOME OF THE EGGS THAT YOU RECOVERED. AND I DON'T KNOW HOW YOU ARE GOING TO 22 WORK AROUND THE EXPENSES ISSUE, BUT I THINK YOU MIGHT 23 24 BE ABLE TO USE SOME OF THE EGGS FOR RESEARCH UNDER 25 THOSE CIRCUMSTANCES.

OTHER THAN THAT, I CAN'T THINK OF A 1 PATIENT-BY-PATIENT SCENARIO IN WHICH YOU ARE GOING HAVE 2 3 PEOPLE BEING ABLE TO DONATE EGGS, EITHER SHARED EGGS 4 FROM THEIR DONORS OR DONATE EGGS THEMSELVES FOR 5 RESEARCH. DR. EGGAN: THAT WHOLE CLINIC WOULD HAVE TO 6 7 FUNCTION, AS I WOULD INTERPRET THE LEGISLATION, AS SAYING THAT WHOLE POOL OF DONORS COULDN'T BE 8 9 COMPENSATED. DR. KIESSLING: IT STILL MIGHT WORK. 10 DR. CIBELLI: ANOTHER QUESTION FOR ROBERT. 11 12 DO YOU EVER HAVE COUPLES THAT COME AND ACTUALLY SHE'S FERTILE, SO SHE CAN PRODUCE HER OWN EGGS, AND THEY SAID 13 WE ARE GOING TO USE HALF OF EGGS AND FERTILIZE THEM, 14 15 AND THE REST YOU CAN GIVE IT TO SOMEONE ELSE THAT NEEDS EGGS OR JUST FREEZE THEM FOR LATER USE? DID YOU EVER 16 HAVE THAT? SO THEY DON'T WANT TO FERTILIZE MORE THAN 17 18 THEY ACTUALLY NEED. 19 DR. TAYLOR: OUR BUILT TO ACTUALLY FREEZE EGGS SUCCESSFULLY IS STILL NOT VERY GOOD. IT'S 20 21 IMPROVING AND THERE ARE SOME PROGRAMS THAT HAVE HAD 22 SOME SUCCESS DOING THAT, BUT THERE ARE NOT VERY MANY PROGRAMS AROUND THE COUNTRY. AND THOSE THAT DO HAVE 23 24 EGG FREEZING PROTOCOLS, THOSE ARE EXPERIMENTAL PROTOCOLS AT THIS STATE. SO IN GENERAL WHAT COUPLES 25

WILL DO IS THEY WILL FERTILIZED THE NUMBER OF OOCYTES 1 THAT THEY GENERATE EVEN WITH THE EXPECTATION THAT THEY 2 3 MAY ONLY TRANSFER SOME OF THEM. AND THEN THE REMAINING 4 EMBRYOS THAT ARE MADE CAN EITHER BE DESTROYED, THEY CAN BE FROZEN FOR FUTURE USE, OR DONATED TO OTHER COUPLES, 5 THAT ESSENTIALLY ARE ADOPTED OUT BECAUSE THAT'S REALLY 6 AN EMBRYO ADOPTION. THERE ARE EXTRA EMBRYOS. THEY'VE 7 ALREADY SORT OF MISSED THE OPPORTUNITY TO BE FERTILIZED 8 9 MAYBE WITH THE SPERM OF ANOTHER PARTNER FOR ANOTHER COUPLE, SO IT'S A LITTLE DIFFERENT FROM EGG DONATION. 10 DR. CIBELLI: SO WE DON'T HAVE TO WORRY ABOUT 11 12 THAT THEN? WE'RE NOT GOING TO GET SPARE EGGS FROM A 13 COUPLE.

14DR. TAYLOR: CERTAINLY IT'S GOING TO BE15FEASIBLE TO DO THAT, TO GET SPARE EGGS. THERE REALLY16HASN'T BEEN A PRACTICE OPPORTUNITY THAT'S BEEN --

17 DR. CIBELLI: IF CALIFORNIA DECIDES TO GO 18 FORWARD WITH THIS RESEARCH AND THINGS ARE GOING WELL 19 AND WE SEE A LOT OF PROGRESS, MAYBE PEOPLE WILL START 20 COMING FORWARD AND SAY, WELL, IF I GIVE YOU MORE THAN 21 TEN, YOU CAN GIVE FIVE FOR RESEARCH.

DR. EGGAN: THAT'S ALSO PERHAPS TROUBLING BECAUSE WHAT DOES IT MEAN TO BE A SPARE OOCYTE? IF THE COUPLE IS INFERTILE, THEY NEED EVERY EGG THEY'VE GOT IN ORDER TO GET PREGNANT, WHICH IS WHY THEY WALKED IN THE

AGAIN, I WOULD LIKE TO THINK, AS A SCIENTIST, I 1 DOOR. WOULD LIKE TO THINK THIS IS A VERY WORTHWHILE AND 2 3 REASONABLE SOURCE OF MATERIAL. I THINK WHEN AN 4 INFERTILE COUPLE COMES TO A DOCTOR AND THEY'RE UNDERGOING MEDICAL TREATMENT TO TREAT THEIR FERTILITY, 5 IT SEEMS LIKE IT'S THE DOCTOR'S RESPONSIBILITY TO DO 6 EVERYTHING IN THEIR POWER TO GIVE THAT COUPLE A BABY. 7 THAT'S WHY THEY ARE THERE FIRST AND FOREMOST. 8

9 AND SO EVEN IF THE WOMAN IS INFERTILE, THE MAN'S INFERTILE AND IT MAY NOT BE CLEAR WHY, SO YOU MAY 10 NEED TO FERTILIZE EVERY SINGLE ONE OF THOSE EGGS OR 11 12 ATTEMPT TO DO SO IN ORDER TO GIVE THAT COUPLE THE BEST CHANCE OF HAVING A CHILD. AND SO IT MAY BE A DIFFICULT 13 THING TO DO MAY BE, IT MAY BE A DIFFICULT EQUATION TO 14 15 COMPUTE TO KNOW HOW MANY OF THOSE EGGS IT'S SAFE TO GIVE AWAY TO RESEARCH AND STILL BE ABLE TO PROTECT THE 16 OPPORTUNITY OF THAT COUPLE TO HAVE A BABY. 17

DR. CIBELLI: I'M JUST THINKING ON THE 18 19 CONSENT FORM SCENARIO, THAT'S WHAT WE'RE TALKING TODAY. I'M NOT TALKING ABOUT THE ETHICS OF COERCING COUPLES TO 20 21 START DONATING EGGS BECAUSE THEY HAVE BIGGER PROBLEMS IN THEIR MIND. BUT IF THEY WANT TO DO IT FOR X REASON, 22 23 MAYBE ONE OF THE PARENTS WILL SAY, OH, THEY THINK THIS IS GOING TO HELP RESEARCH, DO WE HAVE MEDICAL CONSENT 24 25 FORMS THAT WE'RE TALKING ABOUT? ARE WE GOING TO HAVE

THE COOLING OFF PERIOD THAT WE NEED ON THAT DONOR TO
 THINK THINGS THROUGH OR THINGS LIKE THAT?

3 DR. TAYLOR: I DON'T KNOW IF THIS IS WHERE 4 YOU WANT THE DISCUSSION TO GO, BUT JOSE RAISES AN INTERESTING SCENARIO WHERE IN A KNOWN CASE OF MALE 5 FACTOR WHERE THERE'S A VERY WELL LOW SPERM COUNT AND 6 YOU' RE PLANNING TO DO ICSI, DIRECTLY INJECT SPERM INTO 7 EGGS, AND IF YOU WERE TO COLLECT LOTS OF EGGS FROM AN 8 9 OTHERWISE PROBABLY FERTILE WOMAN WHO JUST HASN'T BEEN 10 SUCCESSFUL BECAUSE OF HER HUSBAND' S PROBLEM, PARTNER' S PROBLEM, YOU COULD EASILY GET TEN EGGS AND IT'S 11 12 TECHNICALLY KIND OF DIFFICULT TO DO ICSI IN THAT MANY CASES IN A GIVEN PERIOD OF TIME. SO YOU COULD FIVE 13 EGGS LEFT OVER THAT POTENTIALLY COULD BE USED FOR 14 15 RESEARCH PURPOSES IF THAT COUPLE WERE APPROPRIATELY CONSENTED UP FRONT. SO I CAN SAY SOME SCENARIOS WHERE 16 17 THAT COULD OCCUR.

VICE CHAIR LO: I HAVE A COUPLE OF PEOPLE. 18 19 LET ME JUST CLARIFY. JOSE RAISED A POINT THAT I THINK WE NEED TO KEEP IN MIND. ALTHOUGH WE TALK ABOUT THE 20 21 CONTEXT OF CONSENT, THIS IS REALLY A MUCH BIGGER ISSUE. 22 I DON'T THINK WE CAN SEPARATE CONSENT FROM THE WHOLE ISSUE OF THE ETHICS OF DONATING OOCYTES SIMULTANEOUSLY 23 FOR RESEARCH AND CLINICAL CARE. SORT OF AT THE RISK OF 24 25 CONFUSING, WE NEED TO SORT OF COMBINE THOSE TWO ISSUES

1 JUST FOR THIS ONE TOPIC.

DR. HALL: JUST TO SAY THAT IT SEEMS TO ME 2 3 THAT THE PROBLEM IS YOU DON'T WANT TO TAKE THE EGGS FOR 4 RESEARCH PURPOSES UNTIL YOU KNOW THAT YOU' VE EXHAUSTED ALL POSSIBLE REMEDIES FOR FERTILITY PURPOSES. 5 AND BY THE TIME YOU KNOW THAT, THAT IS, BY THE TIME YOU KNOW 6 THAT YOU HAVE A SUCCESSFUL PREGNANCY, THE EGGS ARE NO 7 LONGER USEFUL. SO I SEE THAT AS A REAL COMPLICATION IN 8 9 TERMS OF THAT SCENARIO. THERE MAY BE SPECIFIC 10 SITUATIONS SUCH AS THE ONE YOU MENTIONED, WHICH IS 11 PROBABLY RELATIVELY RARE WHERE THERE MIGHT BE CASES IN WHICH THEY WOULD, BUT I THINK AS A GENERAL RULE, IT 12 POSES A REAL ETHICAL DILEMMA TO GIVE UP. AND WE WERE 13 JUST SAYING AT LUNCH TODAY FOR A WOMAN WHO MAY HAVE 14 DONATED SOME EGGS FOR RESEARCH AND THEN DOES NOT GET 15 PREGNANT, SHE MAY ALWAYS SAY HAD I NOT DONATED THOSE 16 EGGS, I MIGHT HAVE A CHILD. SO I THINK IT'S A VERY 17 TRICKY GROUND WE'RE ON HERE. 18

19 VICE CHAIR LO: I'M GOING TO PUSH A BIT. IS
20 IT SO TRICKY THAT WE SHOULD NOT ALLOW CIRM FUNDS TO BE
21 USED WITH THESE KINDS OF OOCYTES?

22 MS. FEIT: WELL, ZACH JUST SAID WHAT I WAS 23 GOING TO SAY. I THINK UNLESS WE ENSURE THAT THERE'S 24 SUCCESS WITH THE COUPLE AND THE PREGNANCY, THEN I DON'T 25 THINK THAT WE CAN BECAUSE YOU WILL ALWAYS WONDER IF THE

TWO EGGS I GAVE AWAY WAS THE PREGNANCY. SO I REALLY
 THINK WE CAN'T. I DON'T SEE HOW WE CAN GO DOWN THAT
 PATH.

4 DR. PRIETO: BEFORE WE COMPLETELY PRECLUDE IT, I THINK WE SHOULD CONSIDER THAT WHAT WE'RE LOOKING 5 AT RIGHT NOW IS THE CURRENT STATE OF THE ART AND THAT 6 COULD CHANGE AND ALMOST CERTAINLY WILL CHANGE IN TERMS 7 OF THE DIFFICULTY OF OBTAINING THE OOCYTES, THE RATES 8 9 OF SUCCESS, YOU KNOW, THE PROBABILITY OF SUCCESS THAT YOU CAN OFFER TO A COUPLE COMING INTO THIS PROCESS, AND 10 11 THAT MAY BE VERY DIFFERENT THREE OR FOUR YEARS FROM NOW 12 FROM WHAT IT IS NOW. IF WE ANTICIPATE THAT SITUATION AND AT LEAST PUT APPROPRIATE SAFEGUARDS IN PLACE, EVEN 13 THOUGH WE MAY NOT HAVE ANYONE COMING FORWARD NOW, FIVE 14 YEARS FROM NOW CONCEIVABLY WE COULD. 15

VICE CHAIR LO: ANOTHER OPTION WOULD BE TO
SAY AT THIS TIME WE DON'T PERMIT IT, BUT LEAVE IT OPEN
TO CHANGE.

19DR. EGGAN:THAT'S PRECISELY WHAT I WOULD20ENCOURAGE BECAUSE I THINK IF WE DO SEE THAT OOCYTE21FREEZING BECOMES A VIABLE OPTION, THAT'S GOING TO22CHANGE THE ENTIRE LANDSCAPE IMMEDIATELY.23SITUATIONS, ALTHOUGH IT MAY BE RARE IN ONE PARTICULAR24PRACTICE, TO HAVE A SITUATION WHERE THERE'S AN25INFERTILE MAN WHO IS HAVING HIS TESTES BIOPSIED TO FIND

A VERY RARE SPERM WHICH IS BEING USED TO INJECT INTO 1 EGGS WHERE THERE ARE LEFT-OVER EGGS. THERE ARE CERTAIN 2 3 CLINICS THAT SPECIALIZE IN MALE INFERTILITY AND 4 PROBABLY HAVE THIS PROBLEM MORE. I KNOW SHERMAN SILBER IN ST. LOUIS WOULD PROBABLY BE A GOOD EXAMPLE OF THIS. 5 HE'S SOMEONE WHO'S A REAL EXPERT IN TREATING MALE 6 FERTILITY. INFERTILE MEN GO THERE AND ALMOST CERTAINLY 7 THERE'S PROBABLY ON A REGULAR BASIS SURPLUS EGGS AT A 8 9 CLINIC LIKE THAT.

10 I THINK, AGAIN, TO REALLY PRECLUDE IT
11 ABSOLUTELY IS -- I HESITATE TO DO THAT. I DON'T KNOW
12 HOW TO BALANCE THESE TWO CONCERNS OUT BESIDES WALKING
13 THROUGH THE VARIOUS POSSIBILITIES VERY EXPLICITLY.

DR. HALL: I THINK IT'S SIMPLE; THAT IS, YOU 14 15 HAVE A PHRASE "UNTIL FERTILITY IS ASSURED." AND THEN IF YOU FREEZE THE EGGS, THEN PRESUMABLY YOU WAIT UNTIL 16 AFTER THE TREATED, OR YOU CAN DO IT ANOTHER WAY. 17 18 FERTILITY METHODS ARE EXHAUSTED, WHICH WOULD BE MORE 19 ADEQUATE. I THINK YOU COULD FIND LANGUAGE THAT WOULD -- I THINK WHAT WE'RE SAYING IS THAT IN THOSE 20 21 SITUATIONS, THE PRIORITY HAS TO BE FERTILITY FIRST AND RESEARCH SECOND. AND THAT ONLY AFTER ONE HAS EXHAUSTED 22 23 ALL POSSIBILITIES FOR FERTILITY CAN THEN RESEARCH BE 24 CONSI DERED.

25

I THINK WE COULD LEAVE IT TO OUR VERY ABLE

STAFF TO FIND LANGUAGE THAT MIGHT EXPRESS THAT. I
 THINK IT SEEMS TO ME THAT'S THE IMPORTANT, IF WE WERE
 TO PULL ANYTHING OUT OF THIS DISCUSSION, THAT THAT'S
 WHAT IT WOULD BE.

5 DR. EGGAN: THAT SEEMS GREAT TO ME. I MIGHT 6 SAY THAT THIS IS SUCH AN IMPORTANT POINT, THAT YOU 7 MIGHT GIVE PEOPLE AN OPPORTUNITY FOR PUBLIC COMMENT ON 8 JUST THIS.

9 VICE CHAIR LO: WE'RE NOT GOING TO VOTE, BUT
10 THIS IS CERTAINLY AN ISSUE WHERE PUBLIC COMMENT WILL BE
11 EXTREMELY HELPFUL. AND YOU THOUGHT THROUGH THIS AS YOU
12 WERE SETTING UP YOUR PROGRAM AND CHOSE, AS I UNDERSTAND
13 IT, TO NOT TO TRY AND RECRUIT OOCYTE DONORS FOR
14 RESEARCH THROUGH IVF PRACTICES.

15 DR. KIESSLING: RIGHT.

VICE CHAIR LO: DO YOU WANT TO JUST SORT OF 16 FILL US IN ON THE BACKGROUND OF THAT? 17 18 DR. KIESSLING: THE PRACTICE OF IVF AND 19 ATTEMPTING FERTILITY FOR COUPLES IS REALLY DIFFERENT FROM WHAT YOU WOULD DO FOR SOMEBODY COMING THROUGH FOR 20 21 RESEARCH PURPOSES. AND PART OF THE DIFFERENCE IS THE 22 RISK OF OVARIAN HYPERSTIMULATION SYNDROME. SO PEOPLE WHO ARE GOING THROUGH AN INFERTILITY CYCLE ARE WILLING 23 24 TO RISK THAT TO JUST GET THREE OR FOUR MORE EGGS. THAT'S NOT SOMETHING YOU CAN DO FOR PEOPLE WHO ARE 25

1 SIMPLY INVOLVED IN THE RESEARCH PROTOCOL.

SO YOU END UP ON THE VERY FAR SIDE OF BEING 2 3 VERY, VERY CONSERVATIVE IN TERMS OF HOW MUCH 4 STIMULATION THE DONORS FOR RESEARCH PURPOSES ARE GIVEN. THE EGG COLLECTION NUMBERS ARE MUCH, MUCH LOWER, BUT 5 SIMULTANEOUSLY HER RISK OF ANY KIND OF OVARIAN 6 7 COMPLICATION ARE ALSO EITHER ZERO OR MUCH, MUCH LOWER. THE WHOLE -- PLUS THE FACT THAT DONOR 8 9 SCREENING FOR RESEARCH PURPOSES IS DIFFERENT FROM DONOR SCREENING FOR INFERTILITY IN THAT INFERTILITY, ALL THE 10 11 PRACTICE OF RECRUITING DONORS FOR INFERTILITY MORE HAS 12 SORT OF DEFAULTED TO SPECIALISTS IN THAT AREA. THEY ALSO SCREEN PEOPLE FOR LOTS OF GENETIC DISEASES FOR 13 DIFFERENT KINDS OF EVEN HISTORIES OF ALCOHOLISM AND 14 15 THAT SORT OF THING, WHICH IS NOT SOMETHING THAT YOU NECESSARILY NEED TO SCREEN PEOPLE FOR IF THEY'RE 16 DONATING EGGS FOR STEM CELL DERIVATION. SO THOUGH THE 17 HISTORY TAKING IS DIFFERENT, THE ACCEPTANCE CRITERIA 18 19 ARE ALSO DIFFERENT. SO WE STARTED USING ALL THE CRITERIA FROM AN 20 21 INFERTILITY PRACTICE, AND SORT OF SYSTEMATICALLY

22 DELETED OR CHANGED A LOT OF THOSE GUIDELINES WHEN WE

23 REALIZED THAT WHAT WE WERE DOING WAS SO VERY DIFFERENT
24 FROM FAMILY PLANNING.

25

DR. TAYLOR: I THINK THAT'S EXACTLY RIGHT,

1 ALTHOUGH I MIGHT ARGUE THAT SCREENING BY HISTORY FOR DONORS THAT MAY BE USED TO DERIVE THERAPEUTIC STEM CELL 2 3 LINES MIGHT, IN FACT, NEED TO BE MORE RIGOROUS THAN IT 4 IS FOR INFERTILE COUPLES IF WE'RE TALKING ABOUT SO I'M ACTUALLY A PROPONENT FOR THE ABILITY 5 THERAPY. TO RECONTACT INDIVIDUALS FOR DISEASES THAT DEVELOP 6 7 LATER ON IN THEIR LIVES. AND I THINK THAT NOT ONLY IS THAT IMPORTANT, IT'S ALSO GOING TO BE EXTREMELY 8 IMPORTANT UP FRONT, IF WE'RE TALKING ABOUT USING THESE 9 CELLS AS THERAPEUTIC AGENTS, TO MAKE SURE THAT WE'RE 10 BEING AS RIGOROUS ABOUT THE QUALITY OF THEIR GENETIC 11 BACKGROUND, ETC., ETC., AS WE POSSIBLY CAN BE. 12

DR. KIESSLING: I THINK THAT THE DONORS FOR 13 RESEARCH ARE ACTUALLY MORE OPEN TO BEING RECONTACTED 14 15 THAN THE DONORS WHO DONATE EGGS FOR FERTILITY. I THINK PEOPLE WHO HAVE DONATED EGGS FOR FERTILITY WANT TO 16 REMAIN ANONYMOUS BY AND LARGE, AND I THINK THE WOMEN 17 WHO ARE WILLING TO DO THIS FOR RESEARCH PURPOSES, THEY 18 19 WANT THEIR CONFIDENTIALITY PROTECTED, BUT I THINK THEY'RE TO BE RECONTACTED SHOULD THE SCIENCE NEED IT. 20 21 VICE CHAIR LO: SO WHAT I'M HEARING IS ETHICAL CONCERNS ABOUT ALLOWING WOMEN TO SIMULTANEOUSLY 22 23 DONATE OOCYTES FOR RESEARCH AND FOR IVF, THAT AT THE CURRENT TIME FREEZING NOT BEING AN OPTION, IF WE ALLOW 24 IT TO HAPPEN AT ALL, IT WOULD HAVE TO BE IN PRETTY 25

EXCEPTIONAL CIRCUMSTANCES, LIKE MALE INFERTILITY OR A
 CLINIC THAT REQUIRES IT. SO LET US TRY AND CRAFT
 LANGUAGE THAT AT LEAST DISCOURAGES THIS AND PERHAPS
 PROHIBITS IT EXCEPT FOR CERTAIN EXCEPTIONS.

5 THIS IS SUCH AN IMPORTANT TOPIC, SO I JUST 6 WANT TO STOP FOR A MINUTE HERE AND JUST ASK IF THERE 7 ARE ANY MEMBERS OF THE PUBLIC WHO WANT TO COMMENT ON 8 THIS PARTICULAR ISSUE OF SIMULTANEOUSLY DONATING 9 OOCYTES FOR BOTH RESEARCH AND IVF.

MR. REED: I JUST HATE THE THOUGHT THAT A 10 WOMAN WHO IS WILLING TO GO THROUGH THE INCONVENIENCE 11 12 AND HASSLE AND DISCOMFORT AND TIME LOST FROM WORK COULD NOT IN SOME WAY HAVE HER LOSSES MADE UP. I HOPE THAT 13 THE TIME IN A WAY SEPARATE FROM US THAT SOME CHARITY 14 15 CAN EVEN BE SET UP TO HELP THEM RECOVER FROM THE LOSSES THAT THEY ARE GOING TO BE ASKED TO GO THROUGH TO HELP 16 FOR THIS ALTRUISTIC PURPOSE. THEY' RE TRYING TO HELP 17 SAVE LIVES AND STOP SUFFERING. IT DOESN'T SEEM RIGHT 18 19 THAT THEY SHOULD NOT AT LEAST HAVE THE TIME LOST FROM WORK MADE UP. I DON'T KNOW IF IT'S POSSIBLE NOW, BUT I 20 21 JUST FROM MY HEART I THINK THAT IT'S RIGHT. DOWN IN TIME WE WILL HAVE TO FIND A WAY FOR THAT. 22

23 MR. REYNOLDS: MY NAME IS JESSE REYNOLDS.
24 I'M WITH THE CENTER FOR GENETICS IN SOCIETY. FIRST, I
25 THINK WE'VE SEEN FROM THE NEWS REPORTS THE LAST COUPLE

WEEKS HOW SERIOUS THE ISSUES ARE AROUND PROPERLY
 SOURCING EGGS FOR RESEARCH. AND I'M GLAD TO SEE THE
 SENSE OF THE BOARD IS THAT IN THE CASE OF FERTILITY
 DONATIONS, THAT THE FERTILITY COMES FIRST AND THEN THE
 RESEARCH SECOND. I THINK YOU'D AGREE THAT THE HEALTH
 OF THE WOMAN COMES BEFORE EITHER OF THOSE.

AND A COUPLE OF VERY IMPORTANT POINTS HAVE 7 BEEN BROUGHT UP. I THINK DR. EGGAN BROUGHT UP THE 8 I DEA, THE CONCERN THAT THE DOCTOR RESPONSIBLE FOR THE 9 10 EGG EXTRACTION MIGHT FIND HIM OR HERSELF IN A SITUATION OF A CONFLICT BETWEEN SERVING THE INTERESTS OF THE 11 12 PATIENT AND THE INTERESTS OF THE RESEARCHERS. AND DR. KIESSLING BROUGHT UP HOW THIS GETS MORE COMPLICATED 13 WHEN YOU CAN GET MY MORE EGGS BY ADMINISTERING MORE 14 15 HORMONES, WHICH RAISES THE RISK OF MEDICAL COMPLICATIONS. IT'S FOR THIS REASON THAT OUR CENTER 16 HAS ADVOCATED HAVING A PHYSICIAN WHO IS FULLY 17 INDEPENDENT OF THE RESEARCH BE RESPONSIBLE FOR THE 18 19 ENTIRE EGG EXTRACTION PROCESS, BOTH MEDICALLY AND PROBABLY ALSO FOR THE INFORMED CONSENT, A PHYSICIAN WHO 20 21 IS NOT AFFILIATED WITH THE RESEARCH OR RECEIVING ANY 22 TYPE OF COMPENSATION FOR THE EGGS. THAT WOULD HELP 23 BUILD IN A FIREWALL BETWEEN THE INTERESTS OF THE RESEARCH AND THOSE OF THE PATIENT. 24 25 VICE CHAIR LO: AS I UNDERSTAND IT, THIS IS

1 SIMILAR TO, FOR EXAMPLE, THE REQUIREMENTS WE HAVE IN 2 TRANSPLANTATION, THAT THE PERSON WHO RETRIEVES THE 3 ORGAN NOT BE RESPONSIBLE FOR THE CLINICAL CARE OF THE 4 PATIENT WHO'S THE DONOR IN THE CADAVERIC CASE, OF THE 5 LIVE DONOR IN A LIVING DONOR CASE.

DR. TAYLOR: YOUR FINAL RECOMMENDATION WENT 6 7 BEYOND THAT, AND THAT WOULD BE SUGGESTING THAT A THI RD-PARTY SURGEON DO THE NEPHRECTOMY FOR THE RENAL 8 9 TRANSPLANTATION. AND I GUESS AS A CLINICIAN WHO'S SPENT A LOT OF TIME IN CLINICAL TRAINING, I WOULD WANT 10 11 TO KNOW THAT THAT PROCEDURE WAS BEING DONE UNDER THE 12 BEST POSSIBLE CIRCUMSTANCES, I GUESS. IT'S AN INTERESTING MODEL. IT WOULD MEAN THAT THERE WOULD BE A 13 STEM CELL RETRIEVAL CENTER, CLINIC WHERE EVERYBODY WAS 14 15 CLINICALLY TRAINED AND HAD ALL THE EXPERIENCE THAT AN EXPERIENCED IVF PHYSICIAN WOULD HAVE, YET WAS NOT BEING 16 REMUNERATED FOR THAT. AND IT'S KIND OF A CURIOUS 17 MODEL, BUT UNDER THE RIGHT CIRCUMSTANCES, I WOULD BE 18 19 ABLE TO ACCEPT THAT.

20 DR. CIBELLI: ARE YOU READY TO OFFER THIS, 21 THIS PARTICULAR ONE.

22 VICE CHAIR LO: I THINK SO.

DR. EGGAN: JUST TO EXPAND ON THIS ISSUE OF
COMPENSATION FOR EGG DONATION, I THINK IT IS AN
IMPORTANT ONE. AND I THINK IT'S IMPORTANT TO MAKE THE

1 STATEMENT THERE ARE MANY PEOPLE THAT BELIEVE THAT THIS COURSE THAT WE'RE TAKING, WHICH IS PRESCRIBED BY 2 3 CALIFORNIA LAW, IS THE WRONG ONE. I THINK WE SHOULD 4 ACKNOWLEDGE THAT. THERE ARE LAW IN THE UNITED STATES WHICH ALSO STATE WHICH PEOPLE SHOULD HAVE EQUAL ACCESS 5 TO THE ABILITY TO PARTICIPATE IN HUMAN SUBJECTS 6 7 RESEARCH. AND THERE ARE THOSE THAT BELIEVE THAT BY NOT 8 COMPENSATING, YOU RESTRICT CERTAIN PEOPLE FROM BEING 9 ABLE TO PARTICIPATE. INDEED, AS YOU SAY, THERE ARE MANY PEOPLE WHO HAVE RELATIVES SUFFERING FROM 10 DEBILITATING DISEASE WHO BELIEVE, TRUE OR NOT, THAT 11 12 THIS RESEARCH MIGHT HELP THEIR LOVED ONES AND ARE INTERESTED IN PARTICIPATING. AND I THINK IT'S FAIR TO 13 SAY THAT MANY OF THOSE PEOPLE WILL NOT BE ABLE TO 14 15 PARTICIPATE BECAUSE WE WILL NOT BE ABLE TO COMPENSATE. NONETHELESS, THE LAW IS SPECIFIC TO THIS ISSUE, AND I 16 THINK THAT'S WHERE WE HAVE TO LOOK TO THAT. 17

DR. KIESSLING: THE STATUTE, JUST TO KIND OF 18 19 ELABORATE, THE STATUTE IS INTERESTING IN THAT IT ALLOWS COMPENSATION FOR EVERYONE INVOLVED EXCEPT THE DONOR. 20 21 THE DOCTORS ARE TO BE COMPENSATED, THE CLINICS WILL BE 22 COMPENSATED, CERTAINLY THE DRUGS WILL BE PURCHASED. S0 THE ONLY INDIVIDUAL WHO'S PART OF THIS VERY EXPENSIVE 23 24 PROCESS AND IT COSTS ABOUT 20 OR \$25,000 FOR AN OOCYTE 25 COLLECTION WHO WILL NOT BE COMPENSATED FOR THEIR TIME

IS THE DONOR. AND I THINK IT'S SIMPLY A MATTER OF HOW
 YOU INTERPRET EXPENSES. I DON'T THINK THAT THIS IS AN
 INSURMOUNTABLE PROBLEM WITH THE CALIFORNIA STATUTE.

4 DR. ROWLEY: ISN'T THAT TRUE FOR ALL ORGAN 5 DONATION? THE ONLY PERSON NOT COMPENSATED FOR THE 6 KIDNEY IS THE DONOR?

DR. EGGAN: THIS IS TRUE, BUT THEN IT'S A 7 QUESTION OF WHETHER OR NOT OOCYTES ARE LIKE KIDNEY OR 8 9 WHETHER OR NOT THEY'RE LIKE SPERM. IT'S TRUE -- OR BLOOD. IT'S TRUE THAT THE RISKS OF DONATING OOCYTES 10 11 ARE GREATER THAN RISKS OF DONATING BLOOD, BUT THEY MAY 12 NOT BE AS SEVERE AS THE RISKS OF DONATING A KIDNEY. AND SO THIS HAS BEEN ONE OF THE PROBLEMS WITH OOCYTE 13 DONATION AND COMPENSATION IS THAT IT'S HARD FOR US TO 14 15 DECIDE WHICH ONE OF THOSE THINGS IT'S LIKE.

16 VICE CHAIR LO: WHY DON'T WE MOVE ON BECAUSE 17 I THINK THE LAW IS WRITTEN AND CANNOT AT THIS POINT BE 18 AMENDED. SINCE THE AUTHOR OF THE PROPOSITION IS ON 19 RECORD AS SAYING HE INTERPRETS IT TO MEAN WE CAN'T PAY 20 PEOPLE FOR THEIR TIME, I THINK AT THIS POINT IT'S A 21 MATTER OF HAVING TO CHANGE THE LAW.

DR. CIBELLI: THERE ARE CASES THAT I DON'T THINK WE EVER TALK ABOUT WHERE, FOR EXAMPLE, SOME WOMEN, YOUNG WOMEN MAY HAVE BEEN DIAGNOSED WITH CANCER AND HAVE TO UNDERGO CHEMOTHERAPY OR RADIOTHERAPY AND SO

THERE IS GOING TO BE A WIPE-OUT OF ALL THE GERM CELLS.
 AND NOW THERE ARE PROTOCOLS WHERE THEY CAN FREEZE THEIR
 PIECES OF OVARY AND BE LATER USED FOR MAKING BABIES IF
 THEY NEED TO.

5 I WONDER WHAT WE'RE GOING TO SAY ABOUT 6 DONATING MATERIALS THAT CAN BE LATER USED AS A SOURCE 7 OF EGGS. EVEN IN THE CASES OF OVARIAN CANCER, YOU MAY 8 STILL HAVE PIECES OF THE OVARY THAT CAN BE -- YOU CAN 9 IN VITRO MATURE EGGS EVEN THOUGH THAT TECHNOLOGY IS NOT 10 QUITE READY.

VICE CHAIR LO: I THINK THAT IN THE FUTURE WE
NEED TO BE OPEN TO, IF THAT BECOMES WIDESPREAD AND
AVAILABLE AND SORT OF AN ACCEPTED PRACTICE, TO ALLOW
THAT TO BE ANOTHER PATHWAY.

15 DR. EGGAN: I WOULD GO FURTHER THAN THAT. I WOULD SUGGEST THAT THIS A PARTICULAR TYPE OF RESEARCH 16 THAT CIRM SHOULD DECIDE TO FUND, THAT IT SHOULD 17 18 ENCOURAGE RESEARCH IN OOCYTE FREEZING, THAT IT MIGHT 19 CONSIDER RFA'S FOR ALTERNATIVE SOURCES OF OOCYTES. IT MIGHT ENCOURAGE RESEARCH ON IN VITRO MATURATION OF 20 21 EGGS, OVEROPTIMIZED MATERIAL FROM CANCER PATIENTS BECAUSE THESE ARE THE SORTS OF ENABLING ADVANCES THAT 22 WE NEED IN STEM CELL SCIENCE TO TAKE OOCYTE DONATION 23 24 OFF THE TABLE. AND THEY' RE WI THIN REACH. THEY' RE JUST SORT 25 NOT BEING DONE BECAUSE THERE'S NOT AN INTEREST.

1 OF THE IN VITRO FERTILIZATION APPARATUS IS FUNCTIONAL

2 AS IS FOR THE MOST PART.

3 VI CE CHAI R LO: OKAY.

4 MS. COONEY: IS IT POSSIBLE -- MARY ANN 5 COONEY. I'M A STUDENT AT THE GTU. IS IT POSSIBLE THAT 6 IF THE PROCEDURES FOR FREEZING OOCYTES IMPROVED IN THE 7 FUTURE, THAT A YOUNG WOMAN WHO IS DONATING EGGS COULD 8 BE COMPENSATED BY HAVING SOME OF HER EGGS FROZEN IN 9 CASE SHE COULD NOT, IN FACT, BECOME PREGNANT IN THE 10 FUTURE?

11 VICE CHAIR LO: THANK YOU. I'M WANTING TO 12 SWITCH TO ANOTHER TOPIC. AS WE GO THROUGH OUR LIST, WHAT I HAVE ON MY LIST ARE FAILED TO FERTILIZE OOCYTES, 13 DONATION OF EMBRYOS AS OPPOSED TO OOCYTES, AND THEN 14 15 CRITERIA FOR USE OF HUMAN EMBRYONIC STEM CELL LINES WHICH ARE NOT DERIVED WITH CIRM FUNDING, BUT WHICH 16 CIRM-FUNDED RESEARCHERS WISH TO USE. DO WE SORT OF 17 WANT TO SORT OF CHARACTERIZE THE KEY FEATURES OF 18 19 CONSENT THAT NEED TO BE PRESENT IN THOSE LINES? DO YOU WANT TO TALK ABOUT FAILED TO FERTILIZE 20 21 OOCYTES AS A POTENTIAL SOURCE OF MATERIALS FOR DERIVATION OF NEW STEM CELLS? LET ME JUST SAY SORT OF 22 23 AS BACKGROUND, WHEN ROB WAS AT UCSF, WE THOUGHT ABOUT 24 THIS A LOT, ACTUALLY HAD APPROVED A PROTOCOL FOR THAT. AND WE THOUGHT THE KEY ISSUE WAS HOW IS THAT 25

DETERMINATION OF FAILED TO FERTILIZE MADE? AND WE SAID 1 THAT IF THE EMBRYOLOGIST MAKING THAT DETERMINATION WAS 2 3 TOTALLY INDEPENDENT OF THE RESEARCH TEAM AND DID NOT 4 KNOW WHEN HE OR SHE WAS MAKING THE DECISION TO DISCARD OR NOT WHETHER IT COULD BE USED FOR RESEARCH, THAT THAT 5 WOULD ENSURE SORT OF AN ABSOLUTELY OBJECTIVE 6 7 ASSESSMENT. AND ONLY AFTER YOU DECIDED IT WAS GOING TO BE THROWN OUT, COULD YOU THEN SORT OF OPEN THE ENVELOPE 8 9 AND SAY, OH, BUT THIS WOMAN OR THE DONOR AGREED TO ALLOW IT TO BE USED FOR RESEARCH, BUT TO MAKE SURE 10 11 THERE WAS NO KIND OF SHADING OF THE DETERMINATION OF 12 FAILED TO FERTILIZE BECAUSE THE PERSON MAKING THAT 13 DETERMINATION KNEW IT MIGHT BE USED FOR RESEARCH. 14 ROB, YOU WERE INVOLVED VERY MUCH IN THIS 15 DI SCUSSI ONS. DR. TAYLOR: THAT KIND OF BLINDING WAS 16 ACTUALLY QUITE EASY FOR US IN OUR OWN IVF PROGRAM JUST 17 18 BECAUSE THE EMBRYOLOGY LABORATORY IS KIND OF ISOLATED 19 AND IT'S A FAIRLY HIGH THROUGHPUT PLACE AND ALL THE MATERIALS GET HANDLED THE SAME WAY, AND IT'S NOT CLEAR 20

22 RESEARCH PROTOCOL OR NOT.

21

THE PRACTICE, AND IT'S EVOLVED A LITTLE BIT
OVER THE YEARS, AND IT'S BEEN A WHILE SINCE I'VE BEEN
INVOLVED IN IT DIRECTLY, BUT TYPICALLY WE WOULD DO AN

TO THE EMBRYOLOGIST WHETHER PATIENTS HAD CONSENTED TO

INSEMINATION OF THE FRESH OOCYTES, AND IF THEY FAILED
 TO FERTILIZE, THERE WAS A PERIOD OF TIME WHERE WE WERE
 DOING WHAT WE CALL A SECOND DAY INSEMINATION OR WE'D
 ASK THE PARTNER TO COME BACK IN WITH A FRESH SPERM
 SAMPLE AND TRY TO INSEMINATE THE SECOND DAY. TYPICALLY
 IT WAS EXTREMELY RARE, QUITE HONESTLY, FOR THOSE SECOND
 DAY INSEMINATIONS TO EVER BE SUCCESSFUL.

8 SO I THINK IN THINKING ABOUT UNFERTILIZED 9 OOCYTES AS A POSSIBLE SOURCE, I THINK THAT MOST IVF 10 PRACTICES WOULD FEEL THAT IF THERE'S A FAILURE TO 11 FERTILIZE IN THE FIRST DAY, THAT THOSE OOCYTES ARE VERY 12 UNLIKELY TO FERTILIZE NATURALLY OR WITH ICSI DIRECT 13 SPERM INJECTION AND THAT THOSE POTENTIALLY COULD BE SET 14 SIDE FOR THIS TYPE OF RESEARCH.

I THINK IF THEIR CLINICAL PRACTICE IS TO GO 15 TWO DAYS, THOSE OOCYTES BECOME -- THEY' VE BEEN IN 16 CULTURE FOR AN EXTENDED PERIOD OF TIME, AND WHETHER 17 18 THEY WOULD REALLY BE PARTICULARLY USEFUL EVEN FOR THE 19 RESEARCH PROTOCOLS I THINK BECOMES A LITTLE BIT QUESTIONABLE. THAT WAS ONE OF THE CONCERNS THAT WE HAD 20 21 IN SAN FRANCISCO USING THIS FAILED TO FERTILIZE OOCYTE MODEL WAS THAT WE KNEW WE'D BE KIND OF WORKING WITH 22 MATERIALS THAT PROBABLY WERE LESS LIKELY TO SUCCEED, 23 24 AND THAT BECOMES EVEN MORE PROBLEMATIC IF YOU EXTEND THE LENGTH OF TIME IN CULTURE. SO THAT WAS THE 25

THINKING, AND THAT WAS KIND OF THE PRACTICE AT THE
 TIME.

3 IF ONE WERE TO DECIDE AT THE END OF THE FIRST 4 DAY THAT FAILED TO FERTILIZE OOCYTES MIGHT BE ELIGIBLE THEN FOR EXPERIMENTATION, AND THAT WOULD HAVE TO DE 5 FACTO MEAN THAT NOBODY WANTED TO DO ANYTHING MORE WITH 6 THEM IN THE CLINICAL LABORATORY, IT WOULD BE A SOURCE 7 OF MATERIAL THAT, BUT I WOULD SUSPECT, GIVEN THE 8 9 RELATIVELY LOW RATES OF SUCCESS WITH NUCLEAR TRANSFER, 10 ETC., NOW, I THINK IT WOULD BE EVEN WORSE PROBABLY IN THIS SETTING, BUT IT'S SOMETHING TO BE CONSIDERED. IT 11 12 GETS AROUND A LOT OF THE ETHICAL ISSUES.

DR. EGGAN: AS I SEE IT, THAT IS THE ONE 13 PRIMARY ETHICAL ISSUE WITH FAILED TO FERTILIZE OOCYTES 14 15 IS THE DIFFICULT POSITION IT PUTS THE IVF CLINICIAN IN IF THERE'S A CONFLICT OF INTEREST. SO IF THERE IS SOME 16 REASONABLY PRESCRIBED MECHANISM WHICH CAN TAKE THAT OUT 17 OF EQUATION, AS YOU JUST SAID, YOU ONLY KNOW AFTER THE 18 19 DI SPOSAL WHETHER OR NOT THEY' RE GOI NG TO GO FOR RESEARCH, THEN IN MY OPINION THAT'S DISCARDED MEDICAL 20 21 WASTE, AND IT'S SOMETHING THAT OBVIOUSLY CAN BE USED 22 FOR RESEARCH.

SO I GUESS IT WOULD BE INTERESTING TO KNOW
MORE ABOUT WHAT THAT MECHANISM WOULD BE LIKE
SPECIFICALLY. BUT THEN, OF COURSE, I ALSO ECHO THESE

CONCERNS, THAT THAT MAY BE A SCIENTIFICALLY -- SO IT 1 COULD A SITUATION WHERE DO THE SCIENTIFIC BENEFITS 2 3 OUTWEIGH THE ETHICAL CHALLENGES TO THE MATERIAL? BUT I 4 THINK IF YOU CAN TAKE CARE OF THAT ONE CENTRAL ISSUE, AND IF YOU'RE REALLY CERTAIN ABOUT THE TIMING IN YOUR 5 CLINIC WHEN YOU'RE GOING TO MAKE THAT DECISION ABOUT 6 FAILED TO FERTILIZE IN THE ABSOLUTE SENSE, THEN TO ME 7 THAT SEEMS REASONABLE. 8

9 DR. KIESSLING: I SORT OF AGREE WITH ROB. I 10 DON'T THINK THIS POSES A PROBLEM FOR THE CLINICAL LAB. 11 I THINK IVF LABS HAVE PRETTY CUT AND DRIED ROUTINES 12 ABOUT WHEN THEY DECIDE SOMETHING IS GOING TO GO 13 FORWARD.

I THINK THE SINGLE PROBLEM WITH FAILED TO 14 FERTILIZE EGGS IS WHERE DID THE SPERM GO? AND IF THE 15 EGG WAS FERTILIZED NATURALLY, IF IT WAS FERTILIZED, 16 INSEMINATED IN A DISH, THAT EGG IS ABSOLUTELY COVERED 17 18 WITH SPERM PROBABLY. THEY DIDN'T GET IN AND SOMETHING 19 DIDN'T HAPPEN, BUT THEY'RE STILL THERE. IF THAT FAILED TO FERTILIZE EGG HAD UNDERGONE THIS INTROCYTOPLASMIC 20 21 SPERM INJECTION AND IT DIDN'T FERTILIZE, WHERE IS THE SPERM? SO IF YOU ACTIVATE THAT EGG, WHAT'S HAPPENED? 22 HAVE YOU, IN FACT -- YOU ACTIVATED IT AND IT REALLY IS 23 24 FERTILIZED AND IT JUST DIDN'T LOOK FERTILIZED IN THE IVF SETTING, OR DOES THAT MATTER? IN CALIFORNIA IT 25

OBVIOUSLY DOESN'T MATTER BECAUSE YOU CAN FERTILIZE EGGS
 IN CALIFORNIA TO DERIVE STEM CELLS. IN MASSACHUSETTS
 YOU CANNOT.

4 SO WE SPECIFICALLY ARE BLOCKED FROM USING ANY 5 KIND OF FERTILIZATION PROCEDURES. SO MASSACHUSETTS, SOMEHOW YOU WOULD HAVE TO ASCERTAIN WHERE THE SPERM ARE 6 AND WHAT HAPPENED TO THE SPERM THAT FAILED TO FERTILIZE 7 EGG SO YOU WOULD NOT RUN THE RISK OF ACTUALLY 8 9 ACTIVATING A QUIESCENT SPERM AND, IN FACT, FERTILIZING IT BY MISTAKE. MAYBE ROB HAS GOT A FEW MORE THINGS TO 10 11 SAY ABOUT THAT, BESIDES THE FACT THAT THE BIOLOGY MAY 12 BE WEAK, BUT THAT MIGHT VERY INTERESTING TO WORK OUT. I THINK THE SINGLE BIGGEST ISSUE FROM THE BIOLOGY 13 STANDPOINT IS WHAT HAPPENED TO THE SPERM. 14

DR. TAYLOR: THERE'S SOME VERY INTERESTING 15 SCIENTIFIC QUESTIONS THAT COME UP. IT MIGHT BE THAT 16 INTRODUCING ANOTHER NUCLEUS, YOU COULD REACTIVATE AND 17 18 END UP WITH TRIPLOID CELLS, AND IT COULD GET REALLY 19 KIND OF CURIOUS AND COMPLICATED AS YOU THINK ABOUT IT. BUT I DO THINK THAT ONE OF THE KIND OF UNDERLYING 20 21 PRINCIPLES IS THAT A FAILED TO FERTILIZE EGG PRESUMABLY HAS SOME INTRINSIC OR THE SPERM, BUT THE EGG MAY WELL 22 HAVE SOME INTRINSIC ABNORMALITIES WITHIN IT THAT MIGHT 23 24 NOT MAKE IT THE WORLD'S GREATEST CANDIDATE THERAPEUTIC 25 STEM CELL RESEARCH.

1 I DON'T THINK WE SHOULD DISCOUNT THE IMPORTANCE OF KARYOTYPICALLY, CHROMOSOMALLY ABNORMAL 2 3 EGGS AND EMBRYOS THAT COULD BE REALLY WONDERFUL 4 RESEARCH TOOLS TO UNDERSTAND BETTER DOWN SYNDROME AND TURNER'S SYNDROME AND OTHER DISEASES THAT WE WOULD WANT 5 6 TO STUDY AND UNDERSTAND BETTER IN THE LABORATORY, AND I THINK THOSE ARE THINGS THAT SHOULD COME FROM CIRM, SO 7 WE MAY REALLY WANT TO HAVE -- BE ABLE TO PROPAGATE 8 9 CELLS FROM ABNORMAL EGGS AND ABNORMAL SPERM AND ABNORMAL EMBRYOS, BUT FOR THE THERAPEUTIC PURPOSE OF 10 11 GENERATING STEM CELLS FOR TREATING PATIENTS, I THINK 12 THAT WE MIGHT NOT WANT TO START WITH KIND OF A LOW COMMON DENOMINATOR THAT YOU MIGHT GET WITH AN 13 14 UNFERTILIZED EGG.

15 VICE CHAIR LO: SO I GUESS WHAT I'M HEARING IS THAT IF THE VARIOUS CONCERNS THAT HAVE BEEN RAISED, 16 PARTICULARLY THE CONFLICT OF INTEREST CONCERN, COULD BE 17 18 WORKED OUT, THIS COULD BE ANOTHER ACCEPTABLE APPROACH, 19 BUT WE WANT TO SPECIFY PRETTY CAREFULLY HOW WE MAKE THAT DETERMINATION OF FAILED TO FERTILIZE IN AN 20 21 OBJECTIVE AND UNBLASED MANNER, AND WE NEED TO TRY TO DRAFT SOME LANGUAGE. 22 23 DR. TAYLOR: WHAT SOME OF THE POTENTIAL

24 CONSEQUENCES MIGHT BE IN TERMS OF OUTCOME.

25 VICE CHAIR LO: RIGHT. RIGHT. OKAY. HOW

ABOUT A HARD TASK BEFORE A BREAK? EMBRYONIC STEM CELL LINES THAT CIRM DOESN'T FUND, WHAT SHOULD BE THE RESTRICTIONS WE PLACE ON HOW THOSE LINES ARE DERIVED AND THE CONSENT FOR THEM?

5 DR. EGGAN: DO WE, BEFORE WE EVEN DO THAT, 6 WANT TO TALK ABOUT DONATED EMBRYOS?

7 VICE CHAIR LO: WE COULD. I FIGURED WE COULD
8 DO THAT WHEN WE'RE A LITTLE MORE TIRED BECAUSE THAT MAY
9 BE A LITTLE SIMPLER.

10 DR. EGGAN: WE COULD SAY THAT -- WE MAY 11 IMAGINE HAVING MORE SPECIFIC REQUIREMENTS FOR WHAT CAN 12 BE DERIVED UNDER CIRM FUNDING THAN WHAT WE ALLOW IN, 13 AND SO I'M WONDERING IF WE CAST THE LARGER NET. THAT'S 14 JUST A SUGGESTION.

15 VICE CHAIR LO: LET'S TALK ABOUT PRIMARILY
16 DONATION OF FROZEN OOCYTES THAT HAVE BEEN --

17 DR. EGGAN: FROZEN EMBRYOS.

18 VICE CHAIR LO: -- FROZEN EMBRYOS THAT WERE
19 ORIGINALLY INTENDED FOR IVF, AND NOW THE COUPLE IN IVF
20 HAS MADE THE DECISION RATHER THAN DISCARD OR GIVE TO
21 ANOTHER COUPLE FOR THEIR FERTILITY TREATMENT, TO DONATE
22 THEM FOR RESEARCH.

23 DR. EGGAN: I CAN TAKE A CRACK AT IT. THE 24 NAS GUIDELINES SPEAK VERY CLEARLY TO THIS ISSUE, AND 25 THEY SAY THAT THESE EMBRYOS SHOULD BE FROZEN TO

DISSOCIATE THE DECISION TO DONATE FROM THE REPRODUCTIVE 1 EFFORT. THIS SEEMS, IN THE CASE OF THESE EMBRYOS, A 2 3 VERY REASONABLE THING TO DO. HOWEVER, I THINK THERE 4 ARE CERTAIN EXCEPTIONS TO THIS RULE THAT SHOULD BE ALLOWED. IN FACT, THAT I THINK ARE EXPLICIT IN THE WAY 5 THE GUIDELINES ARE STATED. AND THERE ARE CERTAIN TYPES 6 OF EMBRYOS, SUCH AS PGD EMBRYOS, WHICH SHOULD BE 7 ALLOWED TO BE DONATED IN AN UNFROZEN STATE. 8

9 I THINK REALLY WHAT'S HAPPENING IS, AGAIN, THERE ARE CERTAIN TYPES OF EMBRYOS WHICH WILL ALWAYS BE 10 DISCARDED AND WILL NEVER BE USED FOR REPRODUCTION OF 11 12 THAT WOMAN. IN THE CASE OF THE COUPLE UNDERGOING PREIMPLANTATION GENETIC DIAGNOSIS, THOSE ARE THE 13 EMBRYOS WHICH ARE AFFECTED BY THE DISEASE AS DETERMINED 14 15 BY GENOTYPE. THOSE ARE ALWAYS GOING TO BE THROWN AWAY AND NEVER TRANSFERRED INTO THE WOMAN'S UTERUS. 16

THEREFORE, IT SEEMS TO ME THERE SHOULD BE NO 17 REQUIREMENT TO FREEZE SOME EMBRYOS BEFORE THEY'RE 18 19 DONATED FOR RESEARCH. IN FACT, THESE, FOR SCIENTISTS, A VERY IMPORTANT SOURCE OF MATERIAL BECAUSE THEY WOULD 20 21 ALLOW RESEARCHERS TO DERIVE EMBRYONIC STEM CELL LINES WHICH CARRY DISEASE GENES. SO I THINK THAT SHOULD 22 CERTAINLY BE ONE EXCEPTION TO THIS RULE. IN NO 23 24 CIRCUMSTANCES WOULD BE THAT BE A DIVERSION OF MATERIAL 25 AWAY FROM THE WOMAN'S REPRODUCTIVE EFFORTS. LIKEWISE,

THERE MAY BE OTHER TYPES OF EMBRYOS THAT BY ABSOLUTELY 1 OBJECTIVE CRITERION WOULD BE OKAY. FOR INSTANCE, I 2 3 KNOW IN SOME -- I'VE HEARD IN SOME PRACTICES THAT 4 MULTINUCLEATE CELLULAR EMBRYOS ARE NEVER TRANSFERRED. AGAIN, I THINK THIS IS WHERE YOU HAVE -- IT IS TRUE 5 THAT AFFECTED EMBRYOS AFTER PGD ARE NEVER TRANSFERRED, 6 BUT IT MAY BE THAT IN SOME CIRCUMSTANCES THESE OTHER 7 TYPES OF EMBRYOS THAT ONE MIGHT CONSIDER AS NEVER 8 TRANSFERRED AND OTHER CLINICS ARE TRANSFERRED. 9

10 I THINK CERTAINLY THERE ARE CERTAIN TYPES OF 11 EMBRYOS WHICH WE COULD ABSOLUTELY NEVER NEED TO BE 12 FROZEN, OTHERS THERE'S ROOM FOR EXPANSION, I THINK YOU 13 CAN MOVE INTO A GRAY AREA. THAT'S CERTAINLY ONE THING 14 THAT I, AS A SCIENTIST, WOULD LIKE TO MAKE SURE IS 15 CLEARLY STATED.

16 DR. CIBELLI: IS YOUR QUESTION RELATED TO THE 17 CONSENT FORM RIGHT NOW? HOW THE CONSENT FORM SHOULD BE 18 CRAFTED FOR THE EMBRYOS?

VICE CHAIR LO: I THINK THAT'S WHERE WE
PRIMARILY SHOULD BE TALK ABOUT. AS WITH THE FRESH
OOCYTES, IT'S ALSO AN ISSUE SHOULD WE ALLOW IT AT ALL.
WE DON'T ALLOW IF -- WE DON'T ALLOW CERTAIN THINGS,
THEN WE DON'T HAVE TO WORRY ABOUT IT.
DR. EGGAN: THIS IS IMPORTANT WITH RESPECT TO
CONSENT BECAUSE ALLOWING DONATION OF THESE TYPES OF

1 EMBRYOS REQUIRES A TOTALLY DIFFERENT CONSENT STRUCTURE. 2 DR. CIBELLI: I AGREE WITH EVERYTHING YOU 3 SAY, BUT I JUST WANT TO KNOW HOW WE MOVE FROM HERE NOW 4 UNLESS SOMEONE DOESN'T WANT TO DO THAT. I AGREE WITH 5 KEVIN, THAT WE SHOULD DO THE FROZEN AND THE FRESH THAT 6 HAVE SOME MUTATIONS. THEY'RE GOING TO BE THROWN AWAY 7 ANYWAY.

DR. TAYLOR: THE TIMING OF THE CONSENTING 8 PROCESS, THOUGH, MIGHT BE DIFFERENT, I THINK, ON THESE 9 10 TWO. YOU CAN SEE CERTAINLY HAVE A LONG TIME-OUT PERIOD 11 WHEN YOUR EXCESS EMBRYOS HAVE BEEN FROZEN. YOU' VE GOT 12 QUITE A SHORT TIME-OUT PERIOD IF THERE ARE FRESH EMBRYOS IN THE LABORATORY THAT HAVE SELECTED NEITHER TO 13 FREEZE THEM NOR TO TRANSFER THEM BACK INTO THE UTERUS. 14 THOSE EMBRYOS HAVE A SHORT PERIOD OF TIME IN WHICH SOME 15 DISPOSITION WOULD NEED TO BE MADE. 16

17 DR. KIESSLING: IT'S TRUE. SOMETHING LIKE 10 PERCENT OF EGGS ARE TRIPLOID WITHIN THE FIRST 24 HOURS, 18 19 8 TO 10 PERCENT, AND THAT SEEMS TO BE UNIVERSAL. THE PROBLEM IS EXACTLY WHAT ROB SAYS. YOU'D HAVE EVERY IVF 20 21 CLINIC, IN ORDER TO MAKE THOSE AVAILABLE FRESH FOR PURPOSES, EVERY IVF CLINIC WOULD HAVE TO HAVE THAT 22 CAVEAT IN THEIR CONSENT FORM. IT WOULD HAVE TO BE 23 24 AHEAD OF TIME. YOU HAVE A 10 PERCENT -- 8 TO 10 25 PERCENT CHANCE OF HAVING THIS. THIS MIGHT HAPPEN, AND

WE'D LIKE TO GIVE THAT FOR RESEARCH, THAT JUST SEEMS - KEVIN IS TALKING ABOUT THE TRIPLOID.

3 DR. EGGAN: PRIMARILY, ANN, I'M TALKING ABOUT 4 PGD.

5 DR. KIESSLING: THE PGD EMBRYOS IS A VERY,
6 VERY LONG TIME-OUT. AND I CAN SEE WORKING OUT A
7 CONSENT FORM FOR THAT REALLY EASILY.

DR. EGGAN: FOR PGD THE TIME-OUT WOULD BE AT 8 9 THE TIME THE COUPLE PRESENTS TO UNDERGO PGD AND SAYS THAT WE'RE GOING TO SIGN A CLINICAL CONSENT TO UNDERGO 10 11 PGD, THERE MIGHT ALSO BE A CHECK BOX IN THAT CONSENT 12 FOR WHICH WOULD SAY IF WE HAVE AFFECTED EMBRYOS, NOT CARRIERS, NOT NORMAL EMBRYOS THAT MIGHT BE USED FOR OUR 13 OWN REPRODUCTION, BUT IF WE HAVE AFFECTED EMBRYOS THAT 14 15 WOULD BE DISCARDED, THEN WE WILL GIVE THEM UP. SO THEN THEY ESSENTIALLY HAVE -- THEY WOULD HAVE TO PRESUMABLY 16 RECONSENT AT THE EXACT TIME WHEN THOSE EMBRYOS ARE 17 DONATED. SO THEY ESSENTIALLY THE ENTIRE COURSE OF 18 19 THEIR CARE AS A TIME-OUT.

20

DR. KIESSLING: RIGHT.

21 DR. EGGAN: I SUPPOSE ONE COULD DO THE SAME 22 SORT OF THING WITH TRIPLOID EMBRYOS, BUT THAT SEEMS A 23 LITTLE BIT RISKIER BECAUSE I UNDERSTAND SOMETIMES NOT 24 ALL THE CELLS MIGHT BE TRIPLOID, AND SOMETIMES THEY'RE 25 TRANSFERRED JUST AS A LAST RESORT.

1 DR. TAYLOR: AND THEY TEND TO BE SORT OF LATE SWITZERLAND, WHICH ISN'T MAYBE A VERY 2 OBSERVATIONS. 3 RELEVANT EXAMPLE FOR US, BUT THERE I THINK YOU CAN ONLY 4 TRANSFER TWO EMBRYOS. SO WHAT THEIR PRACTICE THERE IS TO MAYBE HAVE FOUR EMBRYOS GROWING IN THE DISH, YOU 5 SELECT THE TWO VERY BEST EMBRYOS THAT TRANSFER BACK TO 6 THE RECIPIENT, AND THEY'RE FORCED TO DESTROY THE OTHER 7 TWO EMBRYOS. IF WE WERE IN A SETTING LIKE THAT, THAT 8 9 WOULD BE ANOTHER SITUATION, BUT I DON'T KNOW IF WE'RE GOING TO BE GETTING CIRM-APPROVED EMBRYOS FROM 10 11 SWITZERLAND, BUT I CAN'T THINK OF TOO MANY OTHER 12 SCENARI OS. 13 DR. CIBELLI: THEY USE THE FRESH. DR. TAYLOR: THEY USE THE FRESH. 14 15 MS. FEIT: AREN'T WE GETTING BACK TO YOUR IDEA OF RIGHT FROM THE BEGINNING IN THESE CASES IT'S 16 WELL-KNOWN THAT THAT'S GOING TO HAPPEN SO THAT THE 17 18 COUPLE GOES INTO IT REALLY UNDERSTANDING WHAT'S GOING 19 TO HAPPEN. DR. KIESSLING: I CAN SEE THE ENTIRE 20 21 INFERTILITY COMMUNITY BEING WILLING TO PUT OUT SOME KIND OF BLANKET POLICY THAT AFFECTED EMBRYOS ARE 22 AVAILABLE FOR RESEARCH. I DON'T THINK ANYBODY WOULD 23 24 OBJECT TO THAT. I THINK THAT COULD BE SOMETHING THAT'S 25 ROUTI NE.

DR. TAYLOR: AFFECTED SOMETIMES, ALTHOUGH 1 2 DEGRANULATING OR DEGENERATING CELLS WITHIN AN EMBRYO, 3 WE' VE CERTAINLY SEEN GOOD PREGNANCY OUTCOMES. 4 DR. KIESSLING: NO. NO. I MEAN THE ONES 5 THAT ARE GOING TO GO THROUGH PGD. DR. TAYLOR: I GO THAT. BUT I THINK IF YOU 6 GET A LITTLE BIT SOFTER THAN A REAL GENETIC DIAGNOSIS, 7 DETERMINING JUST ON VISUAL CRITERIA ALONE, IT MAY BE 8 9 HARD FOR EVERYONE WAY OF ASSESSING GOOD VERSUS BAD 10 EMBRYO. 11 DR. EGGAN: AS ANOTHER, I THINK, IMPORTANT 12 CRITERION, IF A COUPLE UNDERGOES PGD AND THEY HAVE THREE EMBRYOS FROM THE PROCEDURE, AND ALL THREE OF 13 THOSE EMBRYOS ARE AFFECTED BY THE DISEASE, THEY 14

15 TRANSFER ZERO EMBRYOS. I THINK THAT SHOULD BE THE CUTOFF. BECAUSE IF A COUPLE UNDERGOES IVF AND THEY 16 HAVE THREE EMBRYOS AND ALL THREE EMBRYOS ARE 17 18 POTENTIALLY TRIPLOID OR HAVE ABNORMAL MORPHOLOGY, IT 19 PROBABLY IS TRUE THAT ALL THREE OF THOSE EMBRYOS ARE TRANSFERRED ROUTINELY. I THINK THAT'S A VERY IMPORTANT 20 21 DISTINCTION THAT WE NEED TO TAKE INTO ACCOUNT BECAUSE, 22 AGAIN, THAT SPEAKS TO DIVERSION OF THE MATERIAL FROM 23 ONE PURPOSE TO ANOTHER.

24DR. PRIETO: EVEN WITH PGD, THIS NEEDS TO BE25A PART OF THE CONSENT PROCESS UP FRONT, THAT THOSE

WOMEN ARE AWARE OF THIS POSSIBILITY. I CAN'T IMAGINE
 THERE BEING MANY DISAGREEMENTS.

3 VICE CHAIR LO: I THINK THAT'S UNDERSTOOD, 4 BUT NEEDS TO BE EXPLICIT. DO WE NEED TO SAY ANYTHING 5 ABOUT EMBRYO DONATION WHEN THE EMBRYOS ARE FROZEN AND 6 THE COUPLE COMPLETES THEIR REPRODUCTIVE GOALS IN TERMS 7 OF THE KINDS OF PROTECTIONS.

8 DR. EGGAN: I THINK THERE ARE SOME 9 INTERESTING ISSUES TO CONSIDER WITH RESPECT TO RECONTACTING PEOPLE AFTER PGD TOO. I CAN TELL YOU, AS 10 A SCIENTIST, WHEN YOU HAVE A COUPLE THAT UNDERGOES PGD 11 12 AND YOU WISH TO OBTAIN THE AFFECTED EMBRYOS WHICH WOULD MANIFEST THE PHENOTYPE OF THE DISEASE, PRESUMABLY IN 13 TISSUE CULTURE AFTER DERIVATION OF STEM CELL LINES, AS 14 15 A CONTROL, IT WOULD BE VERY USEFUL AND INTERESTING TO HAVE ES CELLS DERIVED FROM THE CARRIER EMBRYOS AS WELL 16 AS THE UNAFFECTED EMBRYOS FROM THAT SAME COUPLE. IT 17 MAY BE THAT IF THEY'RE VERY SUCCESSFUL IN THEIR 18 19 ATTEMPTS, THAT THEY'LL HAVE OTHER LEFT-OVER EMBRYOS WITH THE SAME SORTS OF GENOTYPES IN THE FREEZER ONCE 20 21 THEY'VE COMPLETED THEIR FAMILY. IT WOULD BE VERY USEFUL TO BE ABLE TO RECONTACT THOSE FAMILIES AND HAVE 22 THEM DONATE THOSE EMBRYOS JUST AS OTHER COUPLES WHO 23 24 HAVE FINISHED THEIR FAMILY DONATE EMBRYOS. SO I THINK 25 THAT'S SOMETHING THAT WE SHOULD ENCOURAGE OR FIGURE OUT

HOW TO WORK INTO THIS PGD CONSENT, WHICH IS A DIFFERENT
 TYPE OF THING. SO THIS MIGHT BE ONE RARE EXAMPLE WHERE
 IT MAY BE WORTHWHILE TO RECONTACT THE FAMILY.

4 ALSO, THE FAMILY MAY NOT -- THERE MAY NOT BE THE SAME STIGMA TO RECONTACTING THESE PEOPLE BECAUSE 5 THEY' RE PRESUMABLY UNDERGOING IVF, NOT BECAUSE THEY' RE 6 INFERTILE, BUT BECAUSE THEY HAVE THESE OTHER CONCERNS 7 OF OVERT DISEASE IN THEIR FAMILY. SO THE NEED TO 8 CONTACT THEM TO STUDY THEIR DISEASE THAT RUNS IN THEIR 9 FAMILY MAY FAR OUTWEIGH THE NEGATIVE CONNOTATION OF 10 11 RECONTACT.

12 DR. CIBELLI: THAT'S DIFFERENT FROM WHAT KEVIN WAS SAYING. IS THERE ANY NEED TO TELL A TIME, 13 NOT A COOLING OFF PERIOD, BUT CERTAIN PERIOD OF TIME 14 15 THAT HAS TO PASS TO MAKE SURE THE COUPLE IS REALLY DONE WITH FAMILY PLANNING TO SAY, OKAY, NOW YOU CAN'T 16 DONATE. LET'S SAY THEY'RE IN THEIR TWENTIES. THEY'RE 17 DONE, THEY THINK THEY'RE DONE, AND THEY WANT TO DONATE 18 19 EVERYTHING, AND THEN LATER ON SOMETHING HAPPENS, YOU CAN'T HAVE ANY MORE CHILDREN? 20

21 DR. TAYLOR: THAT'S A CHALLENGE. WE'RE 22 GETTING EMBARRASSINGLY GOOD AT GETTING 50-YEAR-OLD 23 WOMEN PREGNANT WITH DONATED EMBRYOS. SO IT CAN BE A 24 LITTLE BIT HARD TO KNOW WHEN TO DRAW THE LINE. I THINK 25 THERE ARE SOME SORT OF OTHER EVOLVING ISSUES IN

SOCIETY, AND ONE IS LATER PREGNANCIES AS A RESULT OF
 POSTPONING PREGNANCY AND DEVELOPING CAREERS AND THEN
 COMING BACK LATER. SO KNOWING EXACTLY WHEN, BUT I
 THINK THE COUPLES THAT HAVE DONATED AND FROZEN EMBRYOS
 WILL ALWAYS HAVE THE RIGHT TO MAINTAIN THOSE EMBRYOS IN
 A FROZEN STATE AND BE ABLE TO USE THEM AND RELEASE THEM
 AT A TIME THAT THEY MAKE THAT DECISION.

8 SO I DON'T THINK THAT'S SOMETHING THAT WE'RE 9 GOING TO USURP FROM THEM, BUT TRYING TO DECIDE WHEN IS 10 AN APPROPRIATE TIME TO CONTACT THEM OR HOW LONG IS TOO 11 LONG, I DON'T KNOW THAT WE'RE GOING TO BE ABLE TO 12 RESOLVE THAT QUESTION VERY EASILY.

THE OTHER IS THAT THERE'S KIND OF A RECENT 13 DEVELOPMENT OF EMBRYO ADOPTION PROGRAMS THAT HAVE COME 14 15 UP AS A REALLY RESPONSE TO THE LARGE NUMBER OF FROZEN AND UNUSED EMBRYOS THAT CURRENTLY EXIST AROUND THE 16 COUNTRY NOW IN IVF PROGRAM FREEZERS. MANY INFERTILE 17 COUPLES NOW ARE BEGINNING TO GO TO SOME OF THESE 18 19 PROGRAMS TO ACTUALLY ADOPT THESE HEALTHY -- THEY' RE TYPICALLY HEALTHY EMBRYOS BECAUSE THE REASONS THAT 20 21 NOBODY TOOK THEM OUT OF THE FREEZER IS BECAUSE THEY GOT PREGNANT WITH THEIR FIRST TWO EMBRYO TRANSFERS AND HAVE 22 23 THE FAMILY THAT THEY WANT, AND THESE ARE REALLY INDEED 24 EXCESS EMBRYOS. SO THOSE SHOULD HEALTHY, VIABLE 25 EMBRYOS. NOW THEY'RE BEING DONATED TO OTHER COUPLES

1 FOR FERTILITY PURPOSES.

DR. CIBELLI: THIS IS WAY I SEE IT RIGHT NOW. 2 3 SO WE HAVE ALL THESE TRAINING GRANTS GOING OUT, SO 4 THERE WILL BE A LOT OF PEOPLE REQUESTING FROZEN EMBRYOS TO START PRODUCING MORE CELL LINES AND SO FORTH. 5 AND SO HERE WE ARE VERY HUNGRY FOR EMBRYOS. AND IT'S TRUE 6 THERE ARE MANY THAT ARE FROZEN, BUT ARE WE JUST BEING 7 TOO AGGRESSIVE ON THAT ON END? HOW ABOUT THE COUPLE 8 9 THAT HAVE DIFFERENT PLANS? THEY DIDN'T THINK IT THROUGH VERY WELL. DO WE HAVE TO GIVE THEM SIX MONTHS 10 11 TO THINK ABOUT IT? WHAT WOULD BE THE APPROACH? HOW 12 WOULD YOU DO THIS? DR. KIESSLING: FREQUENTLY THE PRESSURE IS 13 PUT ON THESE COUPLES BY THE CLINIC. THE CLINICS HAVE A 14 15 TIMELINE THAT THEY WANT TO STORE THESE EMBRYOS. AND THE COUPLE HAS TO MAKE A DECISION, OR THEY HAVE TO 16 START PAYING IN SOME CIRCUMSTANCES SUBSTANTIAL AMOUNTS 17 OF MONEY TO MAINTAIN THEIR EMBRYOS THERE. SO THE 18 19 PRESSURE IS NOT BEING PUT BY THE RESEARCH COMMUNITY. THE PRESSURE IS PUT ON THESE COUPLES BY THE CLINICS. 20 21 DR. CIBELLI: WE DON'T KNOW. 22 DR. KIESSLING: I KNOW. THE CLINICS THEMSELVES ALL HAVE GUIDELINES IN TERMS OF HOW LONG 23 THEY WANT TO STORE CRYO PRESERVED EMBRYOS. AND THOSE 24 25 GUIDELINES ARE PROBABLY MOSTLY DRIVEN BY A NEED TO KEEP

CONTACT WITH THESE PEOPLE BECAUSE IF THEY WANDER OFF 1 AND YOU' VE LOST CONTACT WITH THEM AND YOU DON' T HAVE A 2 3 DEFAULT MECHANISM FOR DOING SOMETHING WITH THEIR 4 EMBRYOS, YOU' RE STUCK WITH A HUGE POPULATION. AND THERE'S A LOT OF CLINICS WITH THAT PROBLEM NOW. 5 THE COUPLES HAVE JUST WANDERED OFF, AND WE CAN'T FIND THEM 6 ANYMORE, SO THEY'RE LEFT WITH THESE EMBRYOS. 7 THAT' S NOT A TRIVIAL PROBLEM. SO CLINICS HAVE GOTTEN A LOT 8 9 MORE AGGRESSIVE ABOUT FORCING PEOPLE TO MAKE DECISIONS ABOUT WHAT THEY HAVE IN THE CRYO BANK. 10

VICE CHAIR LO: MY UNDERSTANDING IS THAT 11 12 TYPICALLY WHAT HAPPENS IS IF YOU HAVE EMBRYOS FROZEN IN AN IVF CLINIC, EVERY YEAR THEY SEND YOU -- THEY CONTACT 13 YOU AND YOU' VE AGREED TO THIS UP FRONT, AND YOU' RE 14 15 ASKED WOULD YOU LIKE TO PAY YOUR NEXT MONTH'S FREEZER STORAGE TO KEEP THEM IN THE FREEZER? OPTION B IS WOULD 16 YOU LIKE TO DONATE TO ANOTHER COUPLE FOR REPRODUCTIVE 17 PURPOSES. THIRD OPTION IS WOULD YOU LIKE TO JUST 18 19 DESTROY THEM? AND FOURTH OPTION WOULD YOU LIKE TO, INSTEAD OF DESTROYING THEM, DONATE THEM TO A RESEARCHER 20 21 FOR RESEARCH PURPOSES? SO IT REALLY COMES AS SORT OF AN ANNUAL TIME 22

TO RENEW YOUR SORT OF LITTLE PARKING PERMIT AT THE
STORAGE FREEZER.

DR. TAYLOR: UNFORTUNATELY A LOT OF PEOPLE

25

CHOOSE THE FIFTH OPTION. WHEN YOU'RE RUNNING AN IVF
 PROGRAM, THERE ARE A LOT OF PEOPLE WHO ACTUALLY DON'T
 GET BACK TO YOU. AND WE'RE VERY RELUCTANT TO DO
 ANYTHING OTHER THAN JUST KEEP THE EMBRYOS IN STORAGE,
 BUT IT DOES BECOME AN ECONOMICS ISSUE AT SOME LEVEL
 TOO.

7 VICE CHAIR LO: CONTACT IS NEVER, AS I 8 UNDERSTAND IT, INITIATED BY A RESEARCHER. THE COUPLE 9 NEEDS TO MAKE, THE WOMAN OR COUPLE NEEDS TO MAKE SOME 10 INDICATION THAT THEY'RE WILLING TO CONSIDER RESEARCH, AND THEN THEY'RE PUT IN CONTACT WITH THE RESEARCHER. 11 12 DR. CIBELLI: WHAT YOU' RE SAYING IS THAT WE'RE GOING TO HAVE TO WORRY THAT THERE ARE SO MANY 13 EMBRYOS STORED, AND WE'RE NOT GOING TO DRAIN THE BANKS, 14 15 AND WE'RE NOT GOING TO BE COMPETING WITH COUPLES THAT MAY CHANGE THEIR MIND IN THE FUTURE. 16

VICE CHAIR LO: THERE'S SO MANY IN THE BANK. 17 YOU RAISE THE IMPORTANT POINT, JOSE, THAT THERE'S 18 19 ALWAYS SOMEONE WHO CAN DONATE AND A COUPLE YEARS LATER SOME TRAGEDY OCCURS AND THEIR KIDS ARE IN A CAR 20 21 ACCIDENT, AND SAY, WELL, MY GOSH, NOW I WISH WE HAD THOSE FROZEN EMBRYOS AND HADN' T GIVEN THEM FOR 22 23 RESEARCH. THERE'S ALWAYS THAT KIND OF UNFORESEEN 24 CALAMITY. OTHERWISE, I THINK MOST COUPLES, IF THEY CAN 25 AFFORD IT, JUST KEEP STORING THESE FROZEN EMBRYOS FOR

LONG PERIODS OF TIME IF THEY'RE NOT REALLY SURE THEY
 WANT TO GIVE THEM UP FOR RESEARCH PURPOSES.

3 DR. HALL: PERHAPS KNOWS MORE ABOUT THIS AND 4 CAN GIVE A MORE AUTHORITATIVE ANSWER THAN I CAN. BUT I UNDERSTAND THERE'S A MAN IN FLORIDA WHO HAS MADE AN 5 ESTIMATE OF THE NUMBER OF EMBRYOS IN STORAGE AND HOW 6 MANY OF THOSE HAVE ALREADY BEEN CONSENTED FOR RESEARCH 7 PURPOSES. AND THE CLAIM IS THAT SOMETHING ON THE ORDER 8 9 OF 10,000 EMBRYOS COULD BE USED FOR RESEARCH IF THERE 10 WERE FUNDS AVAILABLE TO STUDY THEM.

SO IF THAT IS CORRECT, AND AS I SAY, SOMEBODY 11 12 ELSE HAS BETTER KNOWLEDGE OF THAT OR BETTER FIGURES, I ADVANCE THAT VERY TENTATIVELY, BUT THAT'S MY 13 UNDERSTANDING THAT THERE'S QUITE A LARGE NUMBER OF 14 15 THESE EMBRYOS THAT ALREADY HAVE BEEN CONSENTED FOR RESEARCH, BUT THERE IS NO OUTLET FOR THEIR USE RIGHT 16 NOW, NO RESEARCH OUTLET. IS THAT CONSISTENT WITH WHAT 17 YOU KNOW, ROB? 18

19DR. TAYLOR: IT SOUNDS VERY REASONABLE.I20DON'T KNOW THE STATISTICS ANY BETTER THAN THAT, BUT21THERE ARE A LOT OF EMBRYOS THAT HAVE BEEN COMPLETED22FAMILIES, EMBRYOS HAVE BEEN ASSIGNED OVER FOR RESEARCH23PROTOCOLS, AND KIND OF ARE WAITING TO BE USED.24DR. HALL: THE ESTIMATE IS ABOUT 5 PERCENT OF

25 THOSE -- 4 TO 5 PERCENT OF THOSE THAT HAD BEEN STORED

1 HAD BEEN CONSENTED FOR RESEARCH PURPOSES.

2 DR. ROWLEY: IT'S MY IMPRESSION, AND KEVIN 3 CAN CERTAINLY CORRECT ME, BUT, IN FACT, FOR 4 INDIVIDUALS, FOR SCIENTISTS WHO ARE REALLY SERIOUSLY INTO THE DEVELOPING STEM CELL LINES, AND I THINK I 5 HEARD THIS FROM THE PRACTICE OF DOUG MELTON'S 6 LABORATORY. HE WORKS WITH ONE IVF CLINIC THAT HE KNOWS 7 HAS VERY GOOD PRACTICES OF BOTH FERTILIZATION AND 8 9 CULTURING, MAINTAINING THE EMBRYOS SUCH THAT EMBRYOS OBTAINED FROM THAT PARTICULAR PRACTICE HAVE A HIGHER 10 LIKELIHOOD OF SUCCESS THAN JUST GOING OFF TO CLINIC A 11 12 THAT YOU' VE NEVER HAD EXPERIENCE WITH AND GETTING THESE 13 EMBRYOS.

I REALIZE THAT'S A PRACTICAL PROBLEM, NOT AN 14 15 ETHICAL ISSUE, BUT I THINK ONE HAS TO SORT OUT WHAT ARE REALLY ACCEPTABLE FROZEN EMBRYOS AS COMPARED WITH 16 600,000 IN PEOPLE'S FREEZERS THAT INDIVIDUALS WOULDN'T 17 REALLY GO TO BECAUSE YOU ARE GOING TO GET ONE OR TWO 18 19 FROM THIS CLINIC AND TWO OR THREE FROM THAT CLINIC. DR. EGGAN: I CAN SPEAK TO THAT, BEING 20 21 CLOSELY RELATED IN THE SAME COLLABORATION. THE REAL DIFFICULTY IS THAT THESE EXPERIMENTS HAVE SO MANY 22 MOVING PARTS AND THEY'RE REGULATED AT SUCH A HIGH 23 24 LEVEL, THAT YOU WANT TO HAVE A HIGH LEVEL OF CONFIDENCE AND TRUST WITH THE IVF COLLABORATOR, AND YOU WANT TO 25

UNDERSTAND VERY CAREFULLY WHAT THEY'RE DOING AT EVERY 1 LEVEL. I THINK THAT THE INCONSISTENCIES AND THE 2 3 REPORTS COMING OUT OF KOREA AND WHAT IS APPARENTLY A 4 LACK OF COMMUNICATION BETWEEN THE TWO HANDS AND THE SAME EXPERIMENT THERE LEAD US TO NOTE HOW IMPORTANT IT 5 IS TO HAVE A CLOSE RELATIONSHIP, A SPECIFIC 6 RELATIONSHIP, A COLLABORATIVE OPEN RELATIONSHIP WITH 7 THE GROUP WHICH IS DOING THIS CLINICAL PRACTICE. 8

9 I THINK IT'S CRITICAL. I THINK NOT JUST FOR
10 SCIENTIFIC REASONS, BUT TO ASSURE THE ETHICAL STANDARDS
11 OF THE EXPERIMENTS WHICH ARE BEING DONE.

12 DR. TAYLOR: I THINK THOSE ARE ALL EXTREMELY IMPORTANT POINTS, AND IN PARTICULAR THE ETHICAL ASPECTS 13 OF IT. IT'S PUBLISHED ACTUALLY. IVF PROGRAMS AROUND 14 THE U.S. ARE MANDATED TO REPORT THEIR STATISTICS TO THE 15 CDC, AND THOSE STATISTICS ARE ACTUALLY AUDITED. SO ONE 16 CAN GO THROUGH AND FIND OUT WHAT THE SUCCESS RATE IS OF 17 ONE PROGRAM VERSUS ANOTHER. THEY' RE QUI TE VARI ABLE 18 19 ACROSS THE COUNTRY. BUT I SAY THAT THE PRACTICE OF EMBRYO FREEZING IS A FAIRLY SELECTIVE PRACTICE. 20 21 BECAUSE OF THE COSTS INVOLVED WITH EMBRYO FREEZING, YOU DON'T JUST FREEZE EVERY EMBRYO THAT YOU'VE CREATED. 22 S0 BY THE TIME THE DECISION IS MADE IN THE EMBRYOLOGY 23 LABORATORY, THAT AN EMBRYO THAT HASN'T BEEN TRANSFERRED 24 25 BACK INTO THE PATIENT IS GOING TO BE FROZEN, THOSE

EMBRYOS, AT LEAST MORPHOLOGICALLY, HAVE THE APPEARANCE
 THAT THEY' RE GOING TO BE VIABLE, HEALTHY EMBRYOS.

3 SO I WOULD ARGUE THAT THE EMBRYOS THAT ARE 4 FROZEN ARE KIND OF THE BEST, WE'VE SORT OF CULLED OUT, AT LEAST THAT WE CAN GROSSLY APPRECIATE, THE EMBRYOS 5 WITH THE GREATEST LIKELIHOOD OF SUCCESS OF DEVELOPING 6 INTO BABIES OR INTO STEM CELL LINES AS FAR AS WE 7 UNDERSTAND IT. SO I THINK THAT WE DO HAVE SOME 8 9 REASONABLY GOOD MATERIAL TO WORK WITH IF WE CAN GET TO 10 IT.

DR. KIESSLING: THIS IS SORT OF A COROLLARY QUESTION, AND I DON'T KNOW IF WE WANT TO DISCUSS IT OR NOT. BUT THERE ARE A COUPLE OF RECENT REPORTS THAT YOU CAN DERIVE STEM CELL LINES FROM BIOPSIED EMBRYOS, FRESH EMBRYOS WITH ONE CELL. IS THAT ANYTHING THAT WE NEED TO DISCUSS?

DR. EGGAN: I THINK WE PROBABLY SHOULD SPEAK. 17 THIS IS SOMETHING THAT WE PROBABLY SHOULD SPEAK TO. 18 19 THIS IS THE PAPER FROM ACT ABOUT BOB LANSA'S REPORT ABOUT DERIVATION, AT LEAST WORK CARRIED OUT IN MOUSE 20 21 WHICH REPORTED ESSENTIALLY THAT COULD YOU TAKE A SINGLE BLASTOMERE FROM A PREIMPLANTATION MOUSE EMBRYO AT THE 22 23 EIGHT-CELL STAGE, CO-CULTURE THAT WITH AN EXISTING 24 EMBRYONIC STEM CELL LINE, AND DERIVE A NEW EMBRYONIC 25 STEM CELL LINE FROM THAT BLASTOMERE. ESSENTIALLY THIS

WAS BASED ON THE PREMISE THAT YOU COULDN'T DESTROY THE
 EMBRYO IN THE COURSE OF DERIVING THE STEM CELL LINE IN
 THAT WAY.

4 THERE'S TWO PRIMARY THINGS TO SAY ABOUT THAT, IN MY OPINION. ONE IS THAT'S NOT AN ISSUE FOR US TO 5 REALLY CONSIDER AS A GROUP BECAUSE THE CALIFORNIA 6 LEGISLATION HAS ALREADY SAID THAT DESTROYING AN EMBRYO 7 IS OKAY. ESSENTIALLY THERE'S NO NEED, IN MY OPINION, 8 9 TO DO THAT TYPE OF EXPERIMENT BECAUSE ESSENTIALLY CALIFORNIA LEGISLATION SAYS IT'S OKAY TO DESTROY THE 10 11 BLASTOCYST TO DERIVE EMBRYONIC STEM CELL LINES. THAT 12 WAS THE PURPOSE OF THE EXPERIMENT.

AND THEN I WOULD FURTHER GO TO SAY THAT IF 13 YOU ARE SOMEONE WHO FEELS THAT THESE EMBRYOS MUST BE 14 15 PROTECTED AND YOU TAKE THAT POSITION, THEN I THINK THE EXPERIMENT IS TROUBLING IN THAT SENSE BECAUSE I THINK 16 YOU WOULD NEVER EXPOSE A PERSON TO SUCH A POTENTIALLY 17 18 DANGEROUS PROCEDURE FOR NO PARTICULAR GAIN OF THEIR 19 OWN. AND SO BASED -- ALTHOUGH I THINK THIS IS SCIENTIFICALLY A VERY INTERESTING EXPERIMENT AND IT'S 20 21 INTERESTING THAT IT DEMONSTRATES THAT ONE CAN DERIVE THESE TYPES OF CELL LINES, AND I THINK THAT THESE TYPES 22 OF EXPERIMENTS ARE INTERESTING FROM A HUMAN 23 24 EMBRYOLOGICAL AND PEOPLE IN CALIFORNIA MIGHT WANT TO DO 25 THEM AND WE SHOULD ENCOURAGE THEM TO DO THEM FROM THAT

PERSPECTIVE. WE CERTAINLY SHOULDN'T ENCOURAGE THEM TO
 DO THAT TYPE OF EXPERIMENT BECAUSE IT PROTECTS THE
 STAGE OF HUMAN EMBRYO.

4 DR. CIBELLI: I KIND OF DISAGREE WITH THAT. I THINK THERE ARE SO MANY OTHER BETTER EXPERIMENTS TO 5 DO AND BETTER WAYS TO SPEND THE MONEY. BUT IF YOU GET 6 AN IDEA AND YOU SEND A PROPOSAL TO SEE -- YOU ARE GOING 7 TO SOME PROPOSALS FROM PEOPLE MAYBE PERHAPS FROM ACT 8 9 SENDING IN A PROPOSAL AND TELL YOU I WANT TO DO IT IN HUMAN. WOULD CIRM PAY FOR IT OR NOT? THEY'VE DONE IT 10 IN THE MOUSE. SOONER OR LATER IN HUMAN. 11 THE 12 EFFICIENCY WAS VERY LOW. IT WAS ABOUT 10 PERCENT. S0 FOR EVERY TEN BLASTOMERES, ONE PRODUCED A CELL LINE. 13 BUT IF YOU ARE GOING TO HAVE A CHILD AND IF YOU ARE 14 15 WILLING TO DO PGD, YOU ARE REALLY RISKING THE EMBRYO TO TAKE ONE BLASTOMERE OUT, I WOULD ARGUE THAT, GEE, JUST 16 HAVING YOUR CUSTOM MADE EMBRYONIC STEM CELLS MAYBE 17 CHEAPER THAN SOMATIC CELL NUCLEAR TRANSFER. YOU DON'T 18 19 HAVE TO WAIT FOR THE DONATION YOU EGGS. WHY NOT? DR. EGGAN: THIS IS A VERY SPECIFIC AND 20 21 DIFFERENT CASE THOUGH, RIGHT. SO IT CERTAINLY -- SO PGD IS OKAY PRESUMABLY BECAUSE YOU' RE ENSURING THE 22 23 HEALTH OF A FUTURE CHILD AND THE TREATMENT. SO, AGAIN, I DO NOT HOLD THIS PERSPECTIVE, SO I AM MERELY ARGUING 24 25 FROM THE PERSPECTIVE OF ONE THAT WOULD SAY THAT WE

SHOULD NOT AS A SOCIETY DESTROY THESE EMBRYOS. THAT'S
 A POINT OF VIEW I DO NOT HOLD.

3 I THINK ONE FIRST HAS TO BE AT THAT 4 PARTICULAR POINT OF VIEW TO SAY THAT. SO THEN I AGREE. THIS IS A DIFFERENT SITUATION. NOW IF AS A COURSE OF 5 TREATMENT YOU THOUGHT IT WOULD BE WORTH -- IF ONE WAS 6 UNDERGOING IVF AND ONE WANTED TO MAKE A GENETICALLY 7 TAILORED STEM CELL LINE FOR THEIR OWN CHILD, AND ONE 8 9 THOUGHT THAT THIS -- I THINK ONE WOULD HAVE TO ASK WE UNDERSTAND THAT THERE'S A SUBSTANTIAL RISK TO THE 10 FUTURE CHILD, WHICH IS ESSENTIALLY OUTWEIGHED BY THE 11 12 FEAR THAT THEY WILL HAVE THIS GENETIC DISORDER, RIGHT, SO IS THE BENEFIT THAT ONE WOULD HAVE BY DERIVING THAT 13 PATIENT-SPECIFIC STEM CELL LINE OUTWEIGH THE RISK TO 14 15 THAT FUTURE CHILD TOO. WHEN YOU'RE TALKING, IF THAT'S THE CLINICAL EQUATION, THEN I THINK THAT'S THE ONE WE 16 HAVE TO MEET. I THINK THAT'S A GOOD IDEA. IF ONE 17 WEIGH THAT EQUATION AND FIND THE ANSWER IS YES, THEN I 18 19 THINK ABSOLUTELY.

AGAIN, TO SAY VERY CLEARLY, FROM THE SCIENTIFIC POINT OF VIEW, I THINK THESE TYPES OF EXPERIMENTS ARE VERY INTERESTING. SINCE WE HOLD THAT THESE THINGS ARE HUMAN EMBRYOS, BUT ARE NOT PEOPLE, IT IS PERFECTLY UNDERSTANDABLE THAT WE WOULD SUBJECT THEM TO THESE TYPES OF EXPERIMENTS. IT'S PERFECTLY

1 REASONABLE.

DR. CIBELLI: CIRM AS AN ENTITY WILL GET 2 3 PROPOSALS. WHAT HAPPENS IF YOU GET A VERY GOOD 4 PROPOSAL THAT WANTS TO DO THIS, THAT WANTS TO DERIVE HUMAN ES CELLS FOR EIGHT-CELL EMBRYOS? 5 DR. EGGAN: WHAT I'M SAYING IS THAT I THINK 6 THAT'S SOMETHING WE SHOULD FUND BECAUSE IT'S A TYPE OF 7 EMBRYOLOGY THAT WE SHOULD UNDERSTAND, BUT I THINK 8 9 THAT --DR. HALL: I THINK THE QUESTION THAT WE'RE 10 11 CONCERNED WITH HERE IS WHAT ARE THE ISSUES FOR THE 12 DONOR AND THE CONSENT FOR THAT; I SN' T THAT CORRECT? OUR ISSUE IS NOT SHOULD WE FUND THAT RESEARCH HERE. I 13 THINK, UNLESS YOU WANT TO CONSIDER THAT IT SHOULD BE 14 15 PROHIBITED, BUT I THINK THE ISSUE HERE IS THAT A DONOR CLASS WE WANT TO ADDRESS AS WE WORK OUR WAY THROUGH 16 THESE ISSUES. ISN'T THAT RIGHT? 17 18 DR. EGGAN: I GUESS THAT'S RIGHT. 19 DR. KIESSLING: I JUST ASKED IF WE NEEDED TO TALK ABOUT THIS AS A NEW REPORT. 20 21 DR. TAYLOR: I ACTUALLY THINK IT FALLS INTO 22 WHAT WE'RE ALREADY DISCUSSING. I DON'T SEE IT AS AN OUTLIER PARTICULARLY. AS FAR AS I KNOW, BLASTOMERE 23 24 BIOPSY FROM HUMAN EMBRYOS, I DON'T KNOW HOW 25 SUCCESSFULLY IT'S BEEN FROM THAWED EMBRYOS. SO IT

1 MA -- TYPICALLY IT'S DONE IN A FRESH EMBRYO SETTING, SO IT MAY BE ONE OF THESE SITUATIONS. AND WE DON'T HAVE 2 3 TOO MANY FRESH HUMAN EMBRYOS THAT ARE GOING TO BE 4 DONATED TO SCIENCE, BUT THIS MIGHT BE ONE OF THE INTERESTING WAYS TO GO. I COMPLETELY AGREE WITH JOSE 5 THAT THESE ARE EXTREMELY IMPORTANT EXPERIMENTS TO DO 6 BECAUSE ULTIMATELY YOU WANT TO HAVE -- EVERY EMBRYO, 7 EVERY FETUS, EVERY BABY WOULD HAVE ITS OWN EMBRYONIC 8 9 STEM CELL LINE POTENTIALLY. IT WOULD A LOT BETTER THAN CORD BLOOD STUFF THAT WE'RE DOING IN SOME SETTINGS. 10 IF THAT'S REALLY THE END POINT THAT YOU WANT 11 12 TO GET TO, THE TIME TO DO IT WOULD BE IF YOU COULD DEMONSTRATE THAT IT'S SAFE TO BIOPSY A SINGLE CELL 13 BLASTOMERE FROM AN EMBRYO AT THE EIGHT-CELL STAGE AND 14 GO ON, WHICH I EXPECT WE'RE GOING TO BE TECHNOLOGICALLY 15

ABLE TO DO THAT PRETTY WELL. SO I THINK THAT IT WOULDBE AN APPROPRIATE THING TO FUND.

DR. CIBELLI: THIS WOULD BE A CASE WHERE WE
HAD TO OBTAIN A CONSENT FORM OF HEALTHY, OTHERWISE
HEALTHY FRESH HUMAN EMBRYO.

21 DR. TAYLOR: I THINK YOU WOULDN' T KNOW THE 22 HEALTH NECESSARILY.

23 DR. EGGAN: CORRECT ME IF I'M WRONG, BUT 24 EMBRYOS ARE OFTEN FROZEN AT THE FOUR OR THE EIGHT-CELL 25 STAGE; ISN'T THAT CORRECT? SO SINCE THIS IS AN

EXPERIMENTAL TECHNIQUE, THIS WOULD HAVE NOT TO BE ANY 1 DIFFERENT FROM THE NORMAL -- IN PRINCIPLE THE NORMAL 2 3 CONSENT THAT WE DO FOR STEM CELL DERIVATION. IT'S JUST 4 THAT THE CONSENT WOULD BE SPECIFIC TO THIS EXPERIMENT. IT WOULD BE A SITUATION WHERE, OF COURSE, PEOPLE WHO 5 HAVE SOME BLASTOCYSTS CAN' T CONTRIBUTE OR CAN' T 6 PARTICIPATE, BUT THOSE WHO HAVE FROZEN FOUR-CELL OR 7 EIGHT-CELL EMBRYOS, THEY COULD DONATE THEIR EMBRYOS, 8 9 WHICH WOULD THEN BE THAWED AND EACH OF THE BLASTOMERES OR ONE INDIVIDUAL BLASTOMERE WOULD BE BIOPSIED OUT AND 10 11 USED FOR THIS EXPERIMENTAL APPROACH TO SEE IF THE SAME 12 THING THAT WAS TRUE IN MOUSE WAS POSSIBLE IN HUMAN. THIS SEEMS LIKE A VERY REASONABLE THING. 13 DR. TAYLOR: I'VE SEEN FROZEN THAWED GROWN 14 EMBRYOS BI OPSI ED. 15 DR. EGGAN: THAT MIGHT BE A WORTHWHILE 16 17 RESEARCH GOAL. 18 VICE CHAIR LO: LET ME SUGGEST THAT WE SORT 19 OF SEPARATE OUT WHERE THE STANDS ON THE LIST OF RESEARCH PRIORITIES FROM OTHER DISTINCT CONSENT ISSUES. 20 21 AFTER WE WRITE UP WHAT WE'VE DISCUSSED TODAY, THERE'S A

22 LOT OF GROUND WE COVERED ON SORT OF ALL THE OTHER

23 CATEGORIES, TO THEN ASK ANN, JOSE, AND KEVIN TO COME

24 BACK TO THIS AS A SPECIAL CASE AND SEE IF THERE ARE

25 SPECIAL CONSENT ISSUES IN THIS SITUATION THAT WOULD

NEED SOME ADDITIONAL GUIDELINES, BUT NOT TO TRY DO IT
 TILL WE'VE ACTUALLY SEEN HOW WE'RE GOING TO HANDLE OUR
 SORT OF MORE COMMON PARADIGMATIC CASES.

4 I ACTUALLY THINK WE'VE DONE A LOT SO FAR, AND I WANT TO KEEP US FRESH, SO I WAS GOING TO SUGGEST THAT 5 WE ACTUALLY TAKE A BREAK NOW IF THAT'S OKAY WITH PEOPLE 6 UNLESS YOU WANT TO KEEP WORKING. WE WILL REWARD 7 OURSELVES WITH A 15-MINUTE BREAK, AND THEN COME BACK 8 9 AND BOTH HEAR ABOUT THE GRANTS ADMINISTRATION GROUP AND THEN SOME OTHER ISSUES WE NEED TO ADDRESS. SO LET'S 10 TAKE A 15-MINUTE BREAK AND COME BACK. 11

12

(A RECESS WAS TAKEN.)

VICE CHAIR LO: WE'RE GOING TO START WITH A 13 14 REPORT FROM THE GRANTS ADMINISTRATION WORKING GROUP, 15 AND ARLENE CHIU FROM CIRM, WHO IS DIRECTING THE GRANTS ADMINISTRATION EFFORT, HAS VERY KINDLY AGREED TO COME 16 AND GIVE US AN UPDATE ON THE GRANTS ADMINISTRATION 17 POLICY WHICH, AGAIN, I WOULD REMIND US ALL IS A WORK IN 18 19 PROGRESS, BUT WE CERTAINLY ARE INTERESTED IN HEARING WHAT THAT GROUP IS THINKING. AND THERE'S PARTICULAR 20 21 QUESTIONS, ARLENE, THAT I THINK WE'LL PROBABLY WANT TO DISCUSS WITH YOU WHERE THERE'S A LOT OF OVERLAP. 22 THANKS VERY MUCH AND WELCOME. 23

24DR. CHIU: GOOD AFTERNOON.LET ME MAKE A25CORRECTION.I'M THE STAFF MEMBER, CIRM STAFF MEMBER

ASSIGNED TO THE GRANTS WORKING GROUP. I'M CERTAINLY
 NOT ANYWHERE IN THE LEADERSHIP OF THAT GROUP, AND I
 WANT TO REPORT TO YOU WHAT HAS BEEN TAKING PLACE.

4 SO CIRM STAFF HAS BEEN WORKING ON A GUIDANCE STATEMENT FOR GRANTEES, AND THAT MEANS INDIVIDUALS AND 5 INSTITUTIONS THAT WILL BE RECEIVING CIRM AWARDS. AND 6 THE GOAL IS TO HAVE A COMPREHENSIVE CIRM GRANTS 7 ADMINISTRATION POLICY FOR THIS PURPOSE. SO TODAY WHAT 8 9 I'D LIKE TO PROVIDE THIS WORKING GROUP WITH IS AN UPDATE ON OUR PROGRESS IN CRAFTING SUCH A DOCUMENT. 10 AND WHAT I PLAN TO DO IS TO REVIEW BRIEFLY 11

12 THE BACKGROUND AND THE PURPOSE FOR SUCH A POLICY 13 STATEMENT, PRESENT FOR YOU A BRIEF SYNOPSIS ON ITS 14 CONTENTS, AND THEN END WITH A CURRENT STATUS OF 15 DIFFERENT DRAFTS OF THIS DOCUMENT.

16 FIRST A BRIEF BACKGROUND. IN MAY OF THIS 17 YEAR, THE CIRM ISSUED A REQUEST FOR APPLICATIONS TO 18 SUPPORT TRAINING GRANTS THAT WILL TRAIN AT RESEARCH AND 19 ACADEMIC INSTITUTIONS IN CALIFORNIA THE NEXT GENERATION 20 OF STEM CELL SCIENTISTS AND CLINICIANS.

21 TWENTY-SIX APPLICATIONS WERE RECEIVED AND 22 SUBSEQUENTLY REVIEWED BY OUR SCIENTIFIC AND MEDICAL 23 RESEARCH FUNDING WORKING GROUP. THEIR EVALUATIONS AND 24 RECOMMENDATIONS WERE THEN PRESENTED TO THE ICOC AT 25 THEIR SEPTEMBER MEETING, AND THE BOARD APPROVED 16 OF

1 THESE TRAINING GRANTS FOR -- THESE TRAINING

2 APPLICATIONS FOR FUNDING.

3 SO NOW IN ORDER TO FOR CIRM TO IMPLEMENT 4 THESE AWARDS ONCE BRIDGE FUNDING BECOMES AVAILABLE, WE HAVE TO SET UP THE NECESSARY INFRASTRUCTURE TO DO SO. 5 AND THAT MEANS THAT BEFORE FUNDING CAN TAKE PLACE, WE 6 7 HAVE TO COMPLETE THREE TASKS. THE FIRST, IF YOU CAN SEE IT AGAINST THE PALE BACKGROUND, IS THAT WE HAVE TO 8 REVIEW THE BUDGETS OF EACH APPROVED APPLICATION FOR ANY 9 CHANGES THAT WERE APPROVED, FOR ARITHMETIC ERRORS, AND 10 11 TO SCREEN UNALLOWABLE CHARGES AS DEFINED IN THE 12 ORIGINAL RFA. WE NOW HAVE COMPLETED THIS TASK AND HAVE PRECISE FINAL BUDGETS FOR EACH APPROVED APPLICATION. 13 THE SECOND TASK, WE NEED TO FIND A WAY TO 14 15 MAKE THE APPROVED PAYMENTS. AND AT PRESENT WE'RE DEVELOPING A PROCEDURE WITH THE STATE CONTROLLER'S 16 OFFICE SO THAT THE STATE CAN TRANSFER THE APPROPRIATE 17 FUNDS TO EACH GRANTEE IN A RESPONSIBLE AND IN A 18 19 TRACEABLE AND TRACKABLE MANNER. AND THIRD, WE HAVE TO MAKE SURE THAT EACH 20 21 GRANTEE OR RECIPIENT UNDERSTANDS OUR, THE CIRM, THE

22 PRINCIPLES OF OPERATION AS WELL AS THEIR ROLES AND
23 RESPONSIBILITIES WHEN THEY CHOOSE TO ACCEPT AN AWARD
24 FROM THE CIRM.

25

AND THAT LEADS US TO THE PURPOSE OF A GRANTS

ADMINISTRATION POLICY OR A GAP, G-A-P IN SHORT. THE 1 POLICY STATEMENT WILL SET OUT TERMS AND CONDITIONS OF 2 3 GRANT AWARDS FROM THE CIRM. IT WILL TELL RECIPIENTS 4 WHAT ARE THEIR RESPONSIBILITIES AS GRANTEES. AND THIS INFORMATION WILL BE DIRECTED AT RECIPIENT INSTITUTIONS; 5 THAT IS, OFFICIALS AUTHORIZED TO REPRESENT THE 6 INSTITUTIONS AS WELL AS THE PRINCIPAL INVESTIGATORS OR 7 PI'S. 8

9 AND FINALLY, RECIPIENT INSTITUTIONS AND PI'S MUST THEN AGREE TO COMPLY WITH THESE CONDITIONS AND 10 PROCEDURES BEFORE THEY CAN RECEIVE FUNDS FROM CIRM. 11 12 SO WHAT'S COVERED IN SUCH A POLICY STATEMENT? THE CONTENTS WILL INCLUDE INFORMATION THAT WILL BE 13 USEFUL TO GRANTEES AND APPLICATIONS, SUCH AS WHO ARE 14 15 THE CIRM STAFF MEMBERS THAT THE GRANTEES ARE LIKELY TO INTERACT WITH AND WHAT ARE THEIR FUNCTIONS? WHAT ARE 16 THE ELIGIBILITY REQUIREMENTS FOR INSTITUTIONS AND PI'S? 17 I WILL PROVIDE GENERAL INFORMATION ON SUBMITTING AN 18 19 APPLICATION, HOW APPLICATIONS ARE REVIEWED, AND HOW ARE THEY APPROVED FOR FUNDING. 20

THE GRANTS ADMINISTRATION POLICY WILL SPELL OUT TERMS AND CONDITIONS OF THE AWARD, INCLUDING HOW PAYMENT IS MADE, WHAT COSTS ARE ALLOWED, AND WHAT ARE NOT. WHAT TO DO IF CHANGES NEED TO BE MADE ONCE A GRANT HAS BEEN AWARDED, ISSUES OF REBUDGETING. WHAT IF

THE PI MOVES TO ANOTHER INSTITUTION OR EVEN OUT OF 1 STATE? THE CIRM POLICY ON INTELLECTUAL PROPERTY THAT 2 3 YOU HEARD THAT'S CURRENTLY BEING DEVELOPED BY THE IP 4 TASK FORCE WILL BE INCLUDED. POLICIES ON SHARING RESEARCH DATA, TECHNOLOGIES, AND MATERIALS POLICIES 5 THAT WOULD BE APPROVED EVENTUALLY BY THE I COC WILL ALSO 6 BE INCLUDED. PROCEDURES FOR ANNUAL REPORTS ON 7 SCIENTIFIC PROGRESS AND BUDGETS SO THAT WE CAN FOLLOW 8 WHAT'S GOING ON, HOW THE GRANTEES SPENT THE MONEY. 9 THE POLICY STATEMENT WILL INCLUDE CIRM 10 REQUIREMENTS -- I HAVE TO GO BACK -- WILL INCLUDE CIRM 11 12 REQUIREMENTS AND STANDARDS ON MATTERS SUCH AS USE OF HUMAN STEM CELLS, USE OF VERTEBRATE ANIMALS, USE OF 13 BI OHAZARDOUS MATERIALS AND HUMAN SUBJECTS. 14

15 DR. HALL: ARLENE, COULD YOU JUST BACK UP 16 SLIDE BEFORE. THIS WENT BY VERY QUICKLY JUST SO WE ALL 17 SEE.

DR. CHIU: THIS IS THE INTELLECTUAL PROPERTY 18 19 SHARING REQUIREMENTS AND REPORTING REQUIREMENTS. AND THEN WE WILL BE STATING IN THE POLICY STATEMENT CIRM 20 21 REQUIREMENTS AND STANDARDS THAT YOU PROVIDE FOR US AND THAT WILL EVENTUALLY BE APPROVED BY THE ICOC. 22 THESE 23 INCLUDE USE OF HUMAN STEM CELLS, VERTEBRATE ANIMALS, BI OHAZARDOUS MATERIALS, AND HUMAN SUBJECTS. 24

25 OKAY. SO HOW DID WE DEVELOP SUCH A POLICY?

WHAT'S GOING ON? EARLIER IN THE YEAR CIRM CONTRACTED
 THE FIRM LMI TO IDENTIFY AND COMPARE POLICIES USED BY A
 NUMBER OF PUBLIC AND PRIVATE GRANT-MAKING AGENCIES,
 INCLUDING THE AMERICAN CANCER SOCIETY, JUVENILE
 DIABETES RESEARCH FOUNDATION, THE CALIFORNIA SPECIAL
 RESEARCH PROGRAMS FOR BREAST CANCER, TOBACCO, AND AIDS,
 AMERICAN HEART ASSOCIATION, AND THE NIH.

LMI'S COMPREHENSIVE REPORT COVERED A VERY 8 9 LONG LIST OF TOPICS INCLUDING TYPES OF SUPPORT, ROLES AND RESPONSIBILITIES OF ORGANIZATIONAL STAFF, PUBLIC 10 11 POLICY REQUIREMENTS, AND INTELLECTUAL PROPERTY. THEY 12 ALSO PROVIDED US WITH INFORMATION ON PROCEDURES SUCH AS HOW DIFFERENT AGENCIES NOTIFIED THE SUCCESSFUL 13 APPLICANTS AND THEIR PARTICULAR REPORTING REQUIREMENTS. 14 WE THEN HAD A CIRM TEAM THAT HAS BEEN MEETING 15 REGULARLY TO DEVELOP A FIRST DRAFT OF AN INTERIM GRANTS 16 17 ADMINISTRATION POLICY STATEMENT. NOW, OUR TEAM CONSISTS OF ZACH HALL, MARY MAXON, WALTER BARNES, GIL 18 19 SAMBRANO, AND MYSELF, AND MORE RECENTLY WE WERE JOINED BY DAN BEDFORD, WHO'S HERE TODAY, A LAWYER FROM ORRICK, 20 21 HERRINGTON & SUTCLIFFE, WHO IS PROVIDING HIS LEGAL EYE 22 AND HIS SERVICES PRO BONO.

SO AS A RESULT OF THIS GROUP ACTIVITY, WE
DEVELOPED A DRAFT OF THE INTERIM CIRM GRANTS
ADMINISTRATION POLICY FOR TRAINING GRANTS. NOW, THE

TRAINING GRANTS WAS A PRIORITY BECAUSE WITH THE BOARD'S
 APPROVAL, WE NEEDED TO BE TO READY TO AWARD THESE
 APPLICATIONS AS SOON AS POSSIBLE.

4 THIS FIRST DRAFT OF THE TRAINING GRANTS ADMINISTRATION POLICY WAS POSTED ON THE CIRM WEBSITE, 5 PRESENTED TO THE I COC ON NOVEMBER 2D SO THAT THE BOARD 6 IS AWARE OF THE PROGRESS OF THIS DOCUMENT. 7 THE SCIENTIFIC AND MEDICAL RESEARCH FUNDING WORKING GROUP, 8 9 WHO REVIEWED GRANTS, ALSO MET BY TELECONFERENCE ON 10 NOVEMBER 28TH TO REVIEW THIS DRAFT. THEY RECOMMENDED APPROVAL OF THIS DOCUMENT WITH TWO AMENDMENTS, AND THE 11 12 VOTE WAS UNANIMOUS IN FAVOR OF IT. SO WE HAD A QUORUM AND A VOTE. AND THE TWO AMENDMENTS ARE THE LENGTH OF 13 TIME THAT MEDICAL STUDENTS COULD SPEND IN ORDER TO 14 15 FULFILL CLINICAL DUTIES THAT ARE OUTSIDE OF THE SCOPE OF RESEARCH. THEY ARE ARGUED FOR A 25-PERCENT CAP, AND 16 THAT'S BEEN ADDED TO THE AMENDED DOCUMENT. AND ALSO 17 STANDARDS FOR REPORTING IRB, ESCRO, ETC., THAT'S 18 19 NEEDED, AND THAT'S THE LAST SECTION IN THE REPORT. SO THIS AMENDED DRAFT OF THE INTERIM CIRM 20 21 GRANT ADMINISTRATION POLICY FOR TRAINING GRANTS IS NOW PROVIDED FOR YOUR INFORMATION IN TAB 5 IN YOUR BINDERS. 22

AND WE INTEND TO PRESENT THIS AMENDED DOCUMENT TO THE
ICOC ON DECEMBER 6TH FOR THEIR DISCUSSION AND APPROVAL
SO THAT THE TRAINING GRANTS CAN BE AWARDED IN A TIMELY

1 FASHION WHEN FUNDS BECOME AVAILABLE.

COMING BACK TO A SLIDE THAT YOU HAVE SEEN 2 3 EARLIER TODAY WITH THE IP PRESENTATION, YOU CAN SEE 4 THAT THERE ARE MULTIPLE INPUTS THAT COME TOGETHER IN ORDER TO FORM A POLICY TO ENABLE US TO FUND THE 5 TRAINING GRANTS. THE MULTIPLE INPUTS ARE THE INTERIM 6 IP POLICY FOR TRAINING GRANTS, THIS PARTICULAR TRAINING 7 GRANT ADMINISTRATION POLICY, AS WELL AS THE INTERIM 8 9 ETHICAL STANDARDS THAT THIS WORKING GROUP HAS COME UP SO YOU CAN SEE THAT IT'S IMPORTANT TO HAVE GOOD 10 WITH. COMMUNICATIONS BETWEEN THE WORKING GROUPS AND THE TASK 11 12 FORCE OVER ISSUES OF SHARED INTEREST.

THIS PROCESS IS JUST THE FIRST IN A SERIES OF 13 STEPS IN ORDER TO GET A FINAL PRODUCT WHICH IS A 14 COMPREHENSIVE GRANTS ADMINISTRATION POLICY AND 15 REGULATIONS FOR ALL RESEARCH AWARDS IN GENERAL. AND SO 16 17 IN THAT PIECE THAT YOU SEE BELOW, THE GENERAL IP POLICY, WHICH IS GOING TO BE HAMMERED OUT, LOOKS LIKE 18 19 IN THE SPRING, PLUS THE ETHICAL STANDARDS COMING FROM THIS WORKING GROUP WILL ALL COME TOGETHER FOR THE FINAL 20 21 COMPREHENSIVE POLICY.

22 SO IN SUMMARY, I'D LIKE TO JUST POINT OUT THE 23 DEVELOPMENT THUS FAR. YOU HAVE SEEN THE DRAFT. YOU 24 HAVE IN YOUR BINDERS A DRAFT OF THE INTERIM GRANTS 25 ADMINISTRATION POLICY FOR TRAINING GRANTS. YOU'VE

HEARD THAT WE'RE IN THE PROCESS OF DEVELOPING A DRAFT
 OF AN INTERIM GRANTS ADMINISTRATION POLICY FOR ALL
 AWARDS IN GENERAL. AND FROM THIS WE WILL CRAFT AN
 INTERIM GRANTS ADMINISTRATION REGULATION PURSUANT TO
 THE CALIFORNIA ADMINISTRATIVE PROCEDURES ACT.

THANK YOU AND I'D BE HAPPY TO TAKE QUESTIONS. 6 VICE CHAIR LO: ARLENE, THANKS VERY MUCH. 7 COULD I START BY ASKING YOU TO COMMENT ON TWO ISSUES 8 9 THAT WE HAVE THOUGHT ABOUT AND WHICH WE THINK THERE'S A CLEAR OVERLAP WITH THE GRANTS ADMINISTRATION WORKING 10 11 GROUP. THE FIRST IS THE TIMING OF ESCRO REVIEW BY THE 12 INSTITUTION THAT'S APPLYING FOR FUNDING AND THE TIMING OF GRANT REVIEW BY CIRM? WE'VE SORT OF THOUGHT ABOUT 13 BOTH OPTIONS, FIRST REQUIRING THAT THE ESCRO APPROVE A 14 15 PROPOSAL BEFORE IT'S SUBMITTED TO CIRM VERSUS THE OBVERSE, WHICH IS THE NIH SYSTEM OF ONCE YOU GET 16 FUNDING, THEN YOU NEED TO HAVE I RB -- ONLY THEN ARE YOU 17 REQUIRED TO GO GET IRB APPROVAL. SO THAT'S THE FIRST 18 19 ISSUE OF TIMING OF IN-HOUSE ESCRO REVIEWS VERSUS CIRM GRANT REVIEW. 20

21 SECOND IS THE ISSUE IS OF ENFORCEMENT THAT 22 WE'VE SORT --

23 DR. CHIU: SO LET ME ADDRESS THE FIRST ONE 24 FIRST BEFORE I FORGET THE QUESTION. I'M SURE YOU'VE 25 GONE THROUGH BOTH ARGUMENTS IN FAVOR OF PRE AND POST.

THE ARGUMENT FOR PRE IS THAT YOU WEED OUT GRANTS THAT 1 ESCRO HAS DEEMED UNETHICAL OR NOT APPROPRIATE 2 3 STANDARDS. AND THEN THERE WILL BE LESS GRANTS FOR THE 4 GRANT REVIEW GROUP TO HAVE TO GO THROUGH. THE GRANT REVIEW GROUP'S TASK IS TO ASSESS BOTH SCIENTIFIC AND 5 PROGRAMMATIC EXCELLENCE, AND THEY DEPEND ON LOCAL IRB, 6 7 ESCRO, ETC., TO DETERMINE WHETHER ETHICAL STANDARDS AND LOCAL STANDARDS HAVE BEEN ADHERED TO. 8

9 THE ARGUMENT FOR HAVING IT DONE AFTERWARD IS THAT IT DOESN'T STOP RESEARCHERS FROM SUBMITTING A VERY 10 EXCITING APPLICATION. AND IF THE RFA DOESN'T GIVE THEM 11 12 AMPLE TIME TO NOT ONLY CRAFT THE APPLICATION, BUT ALSO TO GET ALL THEIR DUCKS IN ORDER IN TERMS OF ALL 13 APPROVALS, THEY CANNOT SUBMIT AN APPLICATION IN TIME BY 14 15 THE DUE DATE, RIGHT. SO THERE ARE ON THE TWO TENSIONS. IF YOU WANT TO THE RFA'S TO MOVE IN AN EXPEDITIOUS 16 MANNER AND GET EVERYTHING REVIEWED AND FUNDED, THEN TO 17 KNOW THAT YOU' RE GOING TO GET FUNDED, YOU WOULD WANT TO 18 19 HAVE A FAST TRACK AFTER THE FACT. ONLY APPROVED APPLICATIONS WILL TO BE ASKED TO HAVE WHAT'S KNOWN AS 20 21 CLOSING PACKAGE, WHICH IS TO HAVE ALL YOUR DUCKS LINED 22 UP BEFORE YOU ACTUALLY TRIGGER THE FUNDING, THE AWARD 23 PROCESS.

24THE PREPROCESS, RESEARCHERS WOULD ARGUE THAT25IT TAKES THEM A LONG TIME, IT MIGHT EVEN PREVENT THEM

FROM REVIEWING. SO WE HAVE NOT GOING TO THE WORKING 1 GROUP TO IRON OUT THIS PARTICULAR ISSUE. 2 WE WILL BE 3 PRESENTING IT TO THEM AS TWO OPTIONS. THE THOUGHT IS 4 THAT IF WE OFFER THE CLOSING PACKAGE OPTION, IT WOULD BE A BURDEN ON THE REVIEWING GROUP TO REVIEW ALL GRANTS 5 WHETHER THEY HAVE ESCRO APPROVAL OR NOT. ON THE OTHER 6 7 HAND, IT WILL ALLOW RESEARCHERS TO BE ABLE TO SUBMIT GRANTS QUICKLY AND WOULD NOT HOLD UP THE WHOLE BATCH. 8 9 AND NOT EVERY APPLICATION MAY HAVE SUCH ONEROUS -- SUCH EXTENSIVE ESCRO REVIEW. ALSO, IT HOLDS THE 10 APPLICATIONS HOSTAGE BY THE ESCRO AND THE IRB REVIEWS. 11 12 MONEY WILL NOT GO OUT UNLESS THOSE ARE APPROVED, AND THAT WOULD DELAY FUNDING. AT LEAST ONLY THOSE 13 APPLICATIONS THAT ARE DEEMED SCIENTIFICALLY AND 14 15 PROGRAMMATICALLY MERITORIOUS WILL HAVE TO GO THROUGH 16 THEIR INTERNAL REVIEW.

A FINAL THOUGHT WAS THAT SOMETIMES DURING 17 REVIEW, THE REVIEWERS PUT IN COMMENTS AND 18 19 RECOMMENDATIONS SUCH AS WE WOULD LIKE TO SEE THIS ELIMINATED AND THAT ELEMENT ADDED. THAT MIGHT CHANGE 20 21 THE ESCRO REVIEW PROCESS OR CONSIDERATIONS FOR ESCRO. AND THAT COULD BE INCLUDED IF IT'S A POST ACTIVITY. 22 S0 23 TO CUT A LONG STORY SHORT, IT MAY BE THAT WE WOULD ASK IN GENERAL FOR THIS INFORMATION, THE APPROVALS TO BE 24 25 PROVIDED, AFTER AN APPLICATION HAS BEEN APPROVED FOR --

DEEMED APPROPRIATE FOR FUNDING, BUT THAT UNDER CERTAIN
 SPECIAL CIRCUMSTANCES PARTICULAR RFA'S WE MAY REQUEST
 IT BEFOREHAND AS SPECIAL CONDITIONS. DOES THAT - VICE CHAIR LO: I THINK THAT'S VERY HELPFUL.
 IT'S IMPORTANT FOR US TO KNOW HOW THE GRANTS WORKING
 GROUP IS THINKING ON THIS ISSUE. WE CERTAINLY DON'T

7 WANT TO DO ANYTHING THAT RUNS COUNTER TO WHAT YOU' RE8 THINKING.

SECOND QUESTION FOR YOU HAD TO DO WITH 9 VIOLATIONS OF CIRM POLICIES AND ENFORCEMENT MECHANISMS. 10 11 AS WE WERE THINKING ABOUT WHAT MIGHT HAPPEN OR WHAT 12 OUGHT TO HAPPEN IF A CIRM-FUNDED INSTITUTION OR RESEARCHER DOESN'T COMPLY WITH CERTAIN THINGS. HAS THE 13 GRANTS ADMINISTRATION WORKING GROUP THOUGHT ABOUT THIS? 14 15 AND DO YOU HAVE THOUGHTS AS TO WHETHER PENALTIES MIGHT GO BEYOND JUST SUSPENDING OR WITHHOLDING THE REMAINDER 16 OF THE GRANT TO DISQUALIFICATION FROM APPLYING FOR 17 FUTURE FUNDING, FOR EXAMPLE? 18

19DR. CHIU:SO THIS ELEMENT OF IMPLEMENTATION20AND CHECKING FOR VIOLATIONS AND CONSEQUENCES WE HAVE21NOT BROUGHT IN FRONT OF THE WORKING GROUP. BUT ALL I22CAN DO IS ADDRESS SOME WAYS OF DEALING WITH IT THAT23I'VE SEEN FROM OTHER AGENCIES. AND AS YOU SAID,24WITHHOLDING OF FUNDS IS THE EASIEST AND THE MOST25DIRECTLY FELT WAY AND MOST TARGETED TO THE INDIVIDUAL

THAT VIOLATED THE PROGRAM, BUT THAT'S AFTER THE FACT. 1 USUALLY AT ABOUT THE TIME OF THE PROGRESS REPORT WHEN 2 3 YOU REVIEW AND FOR PROGRAM DIRECTORS TO GO IN AND CALL 4 ABOUT SPECIFIC ACTIVITIES OR IF YOU HEAR ABOUT SPECIFIC 5 VIOLATIONS FROM PEOPLE REPORTING ON IT, A BROADER CONSEQUENCE MAY BE, AND I'M JUST SAYING MAY BE, HAS NOT 6 BEEN DISCUSSED -- IT'S JUST BRINGING IT TO YOUR 7 ATTENTION -- MIGHT BE SOME PERIOD OF PROHIBITION FOR 8 9 THAT INDIVIDUAL TO APPLY FOR CIRM APPLICATIONS. AND A MUCH MORE SEVERE ONE THAT THE NIH THREATENS AND WITH 10 11 GREAT EFFECT IS TO WITHHOLD ALL FUNDING FROM A 12 PARTICULAR INSTITUTION UNTIL A CERTAIN VIOLATION HAS 13 BEEN CORRECTED. THIS WILL HAPPEN, SAY, IF THE ANIMAL QUARTERS ARE FOUND TO BE IN COMPLETE VIOLATION SO THAT 14 15 ALL GRANTS ARE AFFECTED, FOR EXAMPLE.

BUT WE HAVE NOT DISCUSSED THIS PARTICULAR
ISSUE OF IMPLEMENTATION AND SEVERE CONSEQUENCES YET.
VICE CHAIR LO: ANY OTHER QUESTIONS,
COMMENTS?

20 DR. CIBELLI: I HAVE A QUESTION. ARLENE IS 21 GOING TO GIVE US AN UPDATE OR MAYBE ZACH. I AM VERY 22 CURIOUS ABOUT THE FUNDING SITUATION AT THE INSTITUTE. 23 WE HAVEN'T -- I HAVEN'T RECEIVED ANY UPDATE. I WOULD 24 LIKE TO AN UPDATE FROM ZACH OR ARLENE AS TO WHEN THE 25 FUNDS WILL BE AVAILABLE FOR RELEASE. WHAT'S THE LEGAL

1 SITUATION AT THE MOMENT?

DR. HALL: I LOOKED AT JAMES TO OFFER ANY 2 3 COMMENT OR CORRECTION ON THE LEGAL SITUATION. LET ME 4 GIVE YOU THE LAYMAN'S TAKE-HOME MESSAGE, WHICH IS WHAT I'M INTERESTED IN. I PRESUME YOU ARE AS WELL. 5 THERE WAS A HEARING ON THE 17TH OF NOVEMBER OF THE TWO SUITS 6 THAT HAVE NOW BEEN COMBINED, WHICH CHALLENGE OUR 7 ABILITY TO -- OUR CONSTITUTIONALITY. BASICALLY THEY 8 9 SAY WE ARE GIVING OUT THE STATE'S MONEY, BUT WE'RE NOT 10 A STATE AGENCY. AND SO THAT PREVENTS US FROM RAISING 11 MONEY IN THE BOND MARKET.

AND WE JUST HEARD YESTERDAY THAT ALL EXCEPT A SMALL PORTION OF THOSE SUITS HAVE BEEN DISMISSED. THERE WILL BE A MEETING NEXT WEEK TO DISCUSS THE SCHEDULE AND THEN A TRIAL, WE SUSPECT, SOMETIME IN THE SPRING TO DISCUSS THOSE ISSUES. JAMES, MAYBE YOU WANT TO COMMENT ON THAT LITTLE MORE EXPERTLY THAN I JUST BID.

MR. HARRISON: THAT'S A PRETTY GOOD LAY
SUMMARY. IN ESSENCE, THOUGH THE COURT FOUND IN THE
CIRM'S FAVOR ON SEVERAL OF THE DIFFERENT LEGAL THEORIES
THE PLAINTIFFS HAVE ADVANCED IN SUPPORT OF THEIR
ARGUMENT, THAT PROPOSITION 71 IS UNCONSTITUTIONAL, SHE
CONCLUDED THAT SHE COULDN'T GRANT JUDGMENT IN OUR FAVOR
AT THIS TIME BECAUSE, IN HER VIEW, SEVERAL OF THE

CLAIMS, THREE OF THEM, REQUIRE FURTHER DEVELOPMENT 1 BEFORE WE SHE CAN REACH A CONCLUSION AS TO THOSE 2 3 CLAIMS. AND WHAT THAT MEANS AS A PRACTICAL MATTER IS 4 AT THE CASE MANAGEMENT CONFERENCE THAT SHE SCHEDULED FOR NEXT TUESDAY, WE'LL HAVE AN OPPORTUNITY TO TALK 5 ABOUT THE SCOPE OF THE ISSUES THAT REMAINS, WHAT 6 DISCOVERY, IF ANY, IS NECESSARY IN ORDER TO RESOLVE 7 THOSE ISSUES, AND WHEN WE CAN SET A HEARING DATE TO 8 9 BRING IT TO CLOSURE.

10 THE ONE ADDITIONAL POSITIVE ASPECT ABOUT THE 11 COURT'S RULING IS THAT SHE RECOGNIZED THAT THIS ACTION 12 IS ENTITLED TO PREFERENCE ON THE COURT'S CALENDAR, AND 13 SHE EXPRESSED A DESIRE TO BRING IT TO THAT HEARING AND 14 TO A CONCLUSION PROMPTLY. SO WE'RE HOPEFUL THAT WE CAN 15 CONTINUE TO PUSH THIS FORWARD AS QUICKLY AS POSSIBLE TO 16 GET TO A RESOLUTION IN THE TRIAL COURT.

DR. CIBELLI: IF IT WERE THE CASE -- I'M ASSUMING THIS IS GOING TO GO BACK AND FORTH SEVERAL TIMES. SO THAT MEANS THAT THE FUNDS WILL BE STRANDED UNTIL WHEN? WHEN ARE YOU GOING TO BE --

21 MR. HARRISON: WELL, YOU'RE CORRECT, THAT 22 THERE ARE DIFFERENT STAGES IN THE LITIGATION. WE'RE 23 HOPEFUL TO GET THROUGH THIS FIRST STAGE IN THE TRIAL 24 COURT SOMETIME IN THE SPRING, AND THE EARLIER, THE 25 BETTER; BUT OBVIOUSLY IF WE'RE SUCCESSFUL, THE

PLAINTIFFS WILL HAVE AN OPPORTUNITY TO APPEAL. 1 AND THAT WILL CONTINUE TO HAVE AN EFFECT ON THE STATE'S 2 3 ABILITY TO MARKET THE BONDS. A POSITIVE RULING AND, IN 4 FACT, EVEN THE RULING THAT THE COURT ISSUED THIS WEEK, WHICH DOES INDICATE THAT THE COURT FEELS THAT SEVERAL 5 6 OF THE PLAINTIFF'S CLAIMS LACK MERIT, DOES HELP US IN TERMS OF CONVINCING POTENTIAL PURCHASERS OF BOND 7 ANTICIPATION NOTES THAT THEIR OF RISK NOT BEING REPAID 8 9 IS MINIMAL.

SO I THINK WE HAVE MADE SOME PROGRESS.
UNFORTUNATELY WE STILL HAVE A WAYS TO GO UNTIL WE CAN
ULTIMATELY REACH THE END OF THE ROAD, WHICH IS A FINAL
JUDGMENT WITH ALL APPEALS EXHAUSTED.

DR. HALL: WE ARE TRYING RAISE BRIDGE 14 FUNDING; AND WHILE I THINK WE HAVE POSITIVE RESULTS IN 15 THAT AREA, WE HAVE NOT REACHED CONCLUSION, AND WE ARE 16 HOPEFUL THAT SHORTLY AFTER THE FIRST OF THE YEAR, WE 17 18 WILL HAVE SOME MONEY THAT WILL ALLOW US TO AT LEAST TO 19 FUND THE TRAINING GRANTS. DR. ROWLEY: HOW MUCH IS THE TOTAL FOR THE 16 20 21 TRAINING GRANTS APPROVED?

22 DR. CHIU: \$12.1 MILLION FOR THE FIRST YEAR 23 OF TRAINING, AND A TOTAL OF ALMOST \$38 MILLION TO FULLY 24 FUND THE THREE YEARS.

25 DR. TAYLOR: I THINK I'M IN AGREEMENT, BUT

I'M JUST SORT OF CURIOUS AS TO A PRIORI, THE TRAINING
 GRANT, WAS THAT COMPONENT SET OUT AS THE MOST IMPORTANT
 FIRST STEP WITH OBVIOUSLY THE FIRST 12 MILLION THAT YOU
 CAN RAISE, NOT THAT I -- I WAS JUST SORT OF CURIOUS AS
 TO WHAT THE THINKING WAS.

DR. HALL: THERE ARE TWO REASONS FOR THAT. 6 7 WE DECIDED TO ISSUE THAT RFA EARLY ON. ONE WAS THAT WE SAW THE TRAINING OF STEM CELL RESEARCHERS AS A CLEAR 8 9 AND URGENT NEED FOR THE ENTIRE PROJECT AND ONE THAT WAS 10 A SORT OF LONG-TERM INVESTMENT. THERE WILL BE AN ENORMOUS EXPANSION OF STEM CELL RESEARCH IN THE STATE 11 12 AS A RESULT OF THIS. THAT WILL TAKE A LARGE INCREASE IN MANPOWER. AND SO ALSO OUR SENSE HAD BEEN THAT 13 BECAUSE OF FEDERAL POLICY, A LOT OF YOUNG PEOPLE WERE 14 15 AVOIDING THIS AREA BECAUSE OF THE UNCERTAINTY IN FUNDING DOWN THE LINE, SO WE WANTED TO SEND A LOUD AND 16 17 CLEAR SIGNAL.

AND THE OTHER IS A MORE PRACTICAL MATTER, AND 18 19 THAT IS THAT WE WANTED TO GET OUR GRANT-MAKING ACTIVITY STARTED AS QUICKLY AS POSSIBLE. IT WAS AT A TIME WHEN 20 21 OUR STAFF WAS VERY LIMITED. WE WERE JUST PUTTING TOGETHER OUR GRANTS WORKING GROUP, OUR PROCEDURES WERE 22 23 UNCLEAR, WE'RE STILL WORKING THESE THINGS OUT, AND WE 24 THOUGHT THAT IF WE PUT OUT A CALL FOR RESEARCH GRANTS, 25 WE WOULD GET PROBABLY HUNDREDS OF APPLICATIONS AND

WOULD BE OVERWHELMED. BUT WE RECEIVED, I THINK, IN THE
 END 26 APPLICATIONS, IF I'M NOT MISTAKEN. THIS IS A
 MANAGEABLE NUMBER. ACTUALLY IT WORKED OUT VERY WELL,
 SO WE WERE ABLE TO WALK THROUGH THE PROCEDURES, AND WE
 WERE VERY PLEASED WITH THE WAY THAT CAME OUT. WE HAVE,
 WE THINK, AN EXCELLENT TRAINING PROGRAM ONCE WE HAVE
 THE FUNDS.

AND I WILL SAY THAT THE PROCEDURES ALSO 8 9 PRESENT SOME CHALLENGES FOR US. THE FINAL DECISION IS MADE IN A PUBLIC MEETING, FOR EXAMPLE, BY OUR BOARD, 10 11 WHICH IS UNUSUAL FOR THE KINDS OF PROCESS THAT WE'RE 12 USED TO RATHER THAN WITH THE NIH. AND SO TO MANAGE THE DIFFERENT STEPS OF THE PROCESS AND TO DO IT IN 13 ACCORDANCE WITH BOTH STATE LAW AND TO HAVE A MAXIMUM 14 15 POSSIBLE TRANSPARENCY WHILE MAINTAINING CONFIDENTIALITY WAS A BIT OF A CHALLENGE FOR US. WE WERE ABLE TO WORK 16 THROUGH HOW WE DID THAT ON A RELATIVELY SMALL SCALE, AS 17 I SAY, WITHOUT HAVING TO HANDLE EXTREMELY LARGE NUMBERS 18 19 OF GRANTS. SO IT WAS A VERY GOOD WAY FOR US TO GET GOING. WE HAVE THE TRAINING PROGRAM IN PLACE. 20

ALSO, I THINK IT'S, IN RETROSPECT, A MODEST AMOUNT OF MONEY GIVEN OUR DIFFICULTIES. IF WE HAD TO RAISE 200 MILLION, LET'S SAY, TO FUND A BROAD RESEARCH PROGRAM, I THINK THAT'S MUCH MORE DIFFICULT THAN THIS. SO IT WAS BOTH A SUBSTANTIVE AND SCIENTIFIC RATIONALE

AND A PRACTICAL RATIONALE FOR DOING IT IN THAT WAY.
 DR. TAYLOR: IT'S HARD TO KNOW WHETHER YOU
 SHOULD BUILD AUTOMOBILES FIRST OR PETROLEUM PROCESSING
 PLANT, BUT I THINK IT WAS A GOOD DECISION.

5 DR. HALL: MODERN VERSION OF THE CHICKEN OR 6 THE EGG.

VICE CHAIR LO: ANY OTHER QUESTIONS FOR
ARLENE? THANKS VERY MUCH. WE'LL LOOK FORWARD TO
HEARING FROM YOU AGAIN IN THE FUTURE.

I WANT TO SORT OF SHIFT GEARS A LITTLE BIT 10 11 AND MOVE ON TO SOME ISSUES THAT ARE DIFFERENT THAN THE 12 CONSENT ISSUES WE'VE BEEN DISCUSSING, OR SOMEWHAT DIFFERENT AT LEAST. I THINK WE'VE HAD A VERY RICH AND 13 VERY PRODUCTIVE AND VERY USEFUL DISCUSSION. GIVEN WE 14 15 HAVE A LOT OF THINGS FOR STAFF TO KIND OF TRANSLATE INTO REGULATORY LANGUAGE, WHICH I THINK WE'LL TRY AND 16 DO BEFORE OUR NEXT MEETING, THERE'S ANOTHER SET OF 17 18 ISSUES THAT REALLY HAVE TO DO WITH THREE DIFFERENT 19 CATEGORIES OF RESEARCH YOU MIGHT FUND.

HERE, LET ME JUST DIRECT YOUR ATTENTION TO TAB 6, PAGE 4 OF THE DRAFT CIRM REGULATIONS. IT'S A PAGE THAT LOOKS LIKE THIS. IT'S GOT A RED LINE TOWARDS THE BOTTOM. AND WHAT WE'VE DONE -- LET ME JUST GIVE YOU A SECOND. IT'S SECTION 100006.

25

WE SET OUT HERE THREE DIFFERENT BROAD

CATEGORIES OF RESEARCH. ONE IS STEM CELLS DERIVED WITH 1 CIRM FUNDING AFTER THIS POLICY GOES INTO EFFECT. B IS 2 3 STEM CELLS DERIVED WITHOUT CIRM FUNDING, BUT AFTER THE 4 EFFECTIVE DAY OF THIS POLICY. AND THE CONTEXT IS A CIRM-FUNDED RESEARCHER WANTS TO WORK WITH A STEM CELL 5 LINE DERIVED WITHOUT CIRM FUNDING. SO YOU MIGHT THINK 6 OF SOMEONE WANTING TO USE LINES THAT DOUG MELTON MIGHT 7 DERIVE AFTER THESE GUIDELINES GO INTO EFFECT OR 8 9 DR. HWANG'S GROUP MIGHT HAVE DERIVED. AND A THIRD CATEGORY IS STEM CELL LINES DERIVED BEFORE THE 10 11 EFFECTIVE DATE OF THE FUNDING. SO THINK OF SOMETHING 12 SITTING IN KEVIN'S LAB OR DOUG MELTON'S LAB OR DR. 13 HWANG'S LAB.

OBVIOUSLY FOR THE FIRST CATEGORY, IT'S DONE 14 15 WITH CIRM FUNDING AFTER THE IMPACT OF THE POLICY. ALL THE OTHER THINGS THAT WE'RE TALKING ABOUT HAVE TO --16 ALL THESE CRITERIA HAVE TO BE MET. AND THERE'S A 17 COUPLE OF EXTRAS THAT ARE LISTED UNDER 1, 2, 3, 4. 18 19 B RAISES THE QUESTION OF IF WE'RE NOT FUNDING THE RESEARCH, BUT OUR SCIENTISTS ARE GETTING FUNDS TO 20 21 WORK WITH A CELL LINE, WHAT ARE THE MINIMAL REQUIREMENTS THAT WE WANT TO HAVE FOR THOSE CELL LINES, 22 TAKING INTO ACCOUNT ALL THE PRACTICAL DIFFICULTIES OF 23 24 FINDING OUT A LOT OF THE DETAILS IF THEY'RE DERIVED UNDER SOMEBODY ELSE'S AUSPICES. 25

1 SO THE CHALLENGE HERE IS TO FIND WHAT ARE THE 2 THINGS THAT WE WOULD WANT AS SORT OF MINIMAL 3 REQUIREMENTS SO THAT IF THEY WEREN'T -- IF THERE WAS 4 NONCOMPLIANCE, WE WOULD NOT ALLOW CIRM FUNDS TO BE USED 5 FOR RESEARCH WITH THOSE LINES.

AND THE THIRD CATEGORY IS GOING BACKWARDS 6 EVEN MORE IN TIME, SORT OF THE GRANDPARENTING ISSUE. 7 THIS WOULD INVOLVE NIH STEM CELL LINES, FOR EXAMPLE, 8 9 WHERE THEY MAY NOT MEET THE CRITERIA THAT ARE SET OUT IN A OR B. THEY WERE DERIVED SOME TIME AGO, BUT 10 11 THEY' RE SCIENTIFICALLY IMPORTANT. AND SINCE THEY' RE 12 ALREADY IN EXISTENCE, SHOULD WE ALLOW CIRM FUNDS TO BE 13 USED FOR RESEARCH WITH THEM?

JEFF AND STAFF HAVE FORMATTED THIS AS SORT OF 14 15 ONE WAY OF LOOKING AT IT IS THE EQUIVALENT PROTECTION INCLUDED IN OUR BRIEFING WERE SOME 16 STANDARDS. MATERIALS FROM THE DEPARTMENT OF HEALTH AND HUMAN 17 SERVICES, WHICH ARE THE FEDERAL KIND OF GUIDELINES FOR 18 19 IF SOMETHING IS DERIVED WITHOUT FEDERAL FUNDING AND DOESN'T NEED TO FALL UNDER FEDERAL REGULATIONS, WHAT 20 21 ARE THE SORT OF EQUIVALENT PROTECTIONS YOU WOULD WANT TO HAVE IN PLACE TO DEEM THEM ACCEPTABLE FOR FUNDING? 22 23 SO WITH THAT FRAMEWORK IN MIND, I WAS GOING TO ASK US TO TURN OUR ATTENTION TO -- MAYBE WE COULD 24 25 START WITH B FOR STEM CELL LINES DERIVED WITHOUT OUR

1 FUNDING, WHAT ARE THE MINIMAL STANDARDS WE WOULD WANT TO SEE APPLIED TO THOSE STEM CELL LINES? 2 3 AND SOME OF THE THINGS THAT HAVE BEEN 4 SUGGESTED WERE THAT IT HAVE SOME SORT OF IRB AND/OR ESCRO APPROVAL. IT STRIKES ME SOMETHING ABOUT CONSENT, 5 WHICH ACTUALLY ISN'T UNDER B(1) HERE, BUT FREE AND 6 7 VOLUNTARY CONSENT, I THINK WE'D WANT THIS PERHAPS. 8 WITHOUT PAYMENT BEYOND REIMBURSEMENT, AGAIN TO BE 9 CONSISTENT WITH PROP 71, AND I GUESS GIVEN OUR DI SCUSSI ON TODAY, WOULD WE WANT TO SAY WITHOUT ANY 10 11 RESTRICTIONS PLACED ON FUTURE DOWNSTREAM SCIENTIFIC 12 USES? BUT I THINK THIS IS A CHANCE FOR US TO THINK 13 ABOUT WHAT WE WOULD WANT TO SEE IN THIS CONTEXT. 14 15 DR. EGGAN: WHAT YOU JUST SAID, CAN WE SEE THAT LANGUAGE FROM THE CIRM LEGISLATION AGAIN, OR CAN 16 THAT BE READ AGAIN BECAUSE DOES THE CIRM LEGISLATION 17 18 SPEAK ABOUT -- IT CERTAINLY SAYS THAT CIRM RESEARCH 19 DOLLARS CAN'T BE USED FOR RESEARCH INVOLVING DERIVATION, WHICH INCLUDES COMPENSATION, BUT DOES IT 20 21 SPEAK TO OUTSIDE CELL LINES SPECIFICALLY? 22 MR. HARRISON: IT DOES NOT SPECIFICALLY SPEAK TO THAT. THE LANGUAGE, AS I READ IT, IT SIMPLY SAYS 23 24 STANDARDS PROHIBITING COMPENSATION TO RESEARCH DONORS 25 OR PARTICIPANTS WHILE PERMITTING REIMBURSEMENT OF

EXPENSES. IT'S NOT SPECIFICALLY ADDRESSED. I THINK
 THERE IS A QUESTION REGARDING THE INTENT THAT WE WOULD
 HAVE TO EVALUATE.

4 DR. EGGAN: I THINK THIS IS A BIG DEAL. I THINK THERE MAY BE OTHER GROUPS WHICH DECIDE IT'S 5 REASONABLE TO, SAY, COMPENSATE FOR LOST TIME AND MAY 6 MAKE VERY VALUABLE REAGENTS THAT CIRM RESEARCHERS MAY 7 WANT TO USE. AND THIS IS A SITUATION -- I DON'T SEE 8 THIS AS A LOOPHOLE. I SEE THIS AS A DIFFERENCE IN 9 OPINION. AND CERTAINLY I DON'T THINK THAT WE SHOULD --10 I DON'T THINK -- I'M NOT SURE THAT WE THIS AS WRITTEN 11 12 HERE AT THIS TIME.

DR. HALL: I'D JUST LIKE TO ECHO WHAT KEVIN 13 SAID. I THINK IT WAS STATED BEFORE THAT THIS IS AN 14 15 ISSUE IN WHICH A VERY THOUGHTFUL AND CONSIDERED CASE CAN BE MADE ON BOTH SIDES OF THIS ISSUE. IT'S NOT SO 16 SIMPLE. AND ALTHOUGH WE MAY AGREE THAT OUR OWN 17 STANDARD IS FOR DERIVING CELL LINES, WE CHOOSE ONE, I 18 19 WOULD LIKE TO ASK THE WORKING GROUP TO AT LEAST CONSIDER THE POSSIBILITY OF WHETHER IT MIGHT NOT 20 21 ACKNOWLEDGE THAT THERE MAY BE AN HONEST DIFFERENCE OF OPINION BY OTHER GROUPS ON THIS ISSUE, AND THAT TO 22 CATEGORICALLY RULE OUT THE USE OF THOSE CELL LINES BY 23 24 CALIFORNIA RESEARCHERS MIGHT NOT BE A MISTAKE. SO JUST 25 TO CONSIDERATION AND DISCUSSION OF THAT ISSUE, I JUST

ECHO KEVIN, I THINK WOULD BE VERY USEFUL AND HELPFUL TO
 US.

3 DR. KIESSLING: AGAIN, I WOULD LIKE TO HAVE 4 WHETHER OR NOT THE DONORS ARE COMPENSATED BE NOT THE MOST IMPORTANT CONSIDERATION. THE MOST IMPORTANT 5 CONSIDERATION IS WHETHER THEY HAD FULLY INFORMED 6 CONSENT AND THAT THEY KNEW EXACTLY WHAT THEY WERE 7 DOING. I THINK THE ISSUE OF COMPENSATION SHOULD BE --8 9 DR. HALL: INFORMED AND VOLUNTARY. RIGHT. I THINK HOW THE 10 DR. KIESSLING: 11 DONORS WERE RECRUITED AND HOW THEY WERE TREATED DURING 12 AND AFTER, I THINK THAT IS A FAR BIGGER ISSUE AND FAR MORE IMPORTANT THAN WHETHER OR NOT THEY WERE 13 14 COMPENSATED. 15 SECONDLY, I THINK IT'S REALLY IMPORTANT TO NOT SUBSTITUTE THE TERM "OUT OF POCKET." I THINK THAT 16 SHOULD NOT APPEAR BECAUSE THAT'S NOT WHAT THE STATUTE 17 18 SAYS. 19 VICE CHAIR LO: COMMENTS, THOUGHTS? DR. PRIETO: I AGREE THAT THAT SEEMS TO 20 21 RESTRICT US UNNECESSARILY AND RATHER JUST GO BACK TO 22 THE ORIGINAL LANGUAGE OF REIMBURSEMENT OF EXPENSES. 23 DR. EGGAN: AGAIN, THIS IS MAYBE EVEN MORE 24 LIMITING THAN WE NEED TO BE BECAUSE THE LEGISLATION MAY SAY THAT WE CANNOT DERIVE CELL LINES EXCEPT UNDER THESE 25

CONDITIONS, BUT IT DOESN'T SPEAK TO CELL LINES DERIVED
 OUTSIDE. AGAIN, IS THAT THE LANGUAGE THAT WE WANT TO
 HAVE IN PART B?

4 DR. PRIETO: JAMES, DOES THE INITIATIVE ACTUALLY SPECIFICALLY REFER TO DERIVATION? 5 MR. HARRISON: NO. WHAT THE ACT PROHIBITS IS 6 CIRM COMPENSATION OF DONORS FOR ANYTHING OTHER THAN 7 REIMBURSEMENT OF EXPENSES. SO WE'RE REALLY TALKING 8 ABOUT CIRM FUNDING TO THE DONORS AS THE LIMITATION. 9 DR. EGGAN: ACTUALLY THIS IS EVEN A MUCH 10 BROADER ISSUE BECAUSE ONE CAN CONSIDER A SITUATION 11 12 WHERE CIRM FUNDS DERIVATION, BUT FROM OTHER FUNDS FROM THAT RESEARCH GROUP COME THE FUNDS FOR COMPENSATION. 13 DR. HALL: LET'S LEAVE THAT TECHNICALITY 14 ASIDE FOR THE MOMENT AND JUST CONSIDER THE ISSUE OF THE 15 USE OF LINES DERIVED ELSEWHERE WHERE COMPENSATION IS 16 PERMITTED. I THINK THAT'S THE FIRST ISSUE TO REALLY 17 HAVE A CLEAR, WHATEVER IT IS, CLEAR POLICY ON WHETHER 18 TO SAY WE WANT TO APPLY THIS STANDARD TO ALL OR TO SAY 19 THAT WE RECOGNIZE THERE MAY BE A DIFFERENCE. 20

21 DR. EGGAN: I THINK THE FIRST IS A LOOPHOLE 22 WE WANT TO CLOSE, AND THE SECOND ONE IS A LOOPHOLE THAT 23 WE PROBABLY WANT TO LEAVE OPEN, AT LEAST IN MY OPINION. 24 DR. HALL: IT'S FINE. JUST TAKE THEM IN ONE 25 ORDER OR THE OTHER.

DR. TAYLOR: FOR THIS ONE IT SEEMS THAT THE 1 VOLUNTARY INFORMED CONSENT SHOULD BE ENOUGH. 2 AND 3 WITHOUT A DISCUSSION, I AGREE WITH ANN, WITHOUT A 4 DISCUSSION, NOT ONLY MAKE IT A LOWER PRIORITY. IT DOESN'T SEEM TO ME IT NEEDS TO BE A PRIORITY LISTED IN 5 6 OUR CRITERIA FOR ACCEPTANCE. I THINK THAT PREVIOUS CELL LINES, IF THEY WERE DERIVED UNDER APPROPRIATE 7 INFORMED CONSENT, COULD BE ELIGIBLE AND WITH NO 8 DISCUSSION OF COMPENSATION. 9 10 DR. ROWLEY: I WOULD SUPPORT ROB'S POINT OF 11 VIEW. 12 DR. HALL: TECHNI CALLY CONSI DERI NG ONES THAT ARE DERIVED AFTER THIS AND AS IT'S WRITTEN HERE. 13 VICE CHAIR LO: WE'VE SEPARATED OUT BEFORE 14 AND AFTER. 15 DR. HALL: IN THE FUTURE WILL WE TAKE CELL 16 LINES, AND THEN WE'LL DEAL WITH THE OTHERS LATER. 17 18 VICE CHAIR LO: THAT'S A SEPARATE ISSUE. 19 MS. FEIT: FOR THOSE OF YOU HAVE -- ARE WITH WORKING STEM CELL LINES, OBVIOUSLY YOU WORKED WITH THEM 20 21 BEFORE THIS POINT IN TIME THAT PROP 71 CAME ALONG. S0 22 I'M ASSUMING, OR MAYBE THAT'S A WRONG ASSUMPTION, THAT 23 YOU APPLIED MAYBE THE ACADEMY GUIDELINES TO YOUR CELL 24 LINES, OR IS THAT A WRONG ASSUMPTION, OR YOU HAD 25 STANDARDS THAT YOU USED?

1 DR. EGGAN: I THINK THE DIFFICULT ISSUE HERE IS THAT THIS SITUATION IS DYNAMIC. AND I CAN CERTAINLY 2 3 TELL YOU THAT IN MY CLOSE COLLEAGUE'S LABORATORY, DOUG 4 MELTON' S LABORATORY, THERE HAVE BEEN ISSUES, JUST HOW BROAD IS BROAD ENOUGH WITH RESPECT TO INFORMED CONSENT? 5 THIS IS VERY MUCH A MOVING TARGET, AND SCIENTISTS ARE 6 DOING THE BEST THAT THEY CAN, BUT THEY'RE STILL 7 LEARNING A LOT ABOUT WHAT'S BEST. AND SO CERTAINLY, 8 9 YOU KNOW, FOR INSTANCE, FOR SOME OF THE ORIGINAL LINES DERIVED IN THE MELTON LABORATORY, THE CONSENT WAS NOT 10 11 AS BROAD AS ONE MIGHT HAVE LIKED TO HAVE SEEN, BUT 12 THERE ARE CERTAINLY DECISIONS BY GROUPS LIKE THE CANADIAN GOVERNMENT THAT THE INTENT DONORS WAS BROAD 13 EVEN THOUGH THE LANGUAGE MAY NOT HAVE BEEN THE LANGUAGE 14 15 YOU MIGHT HAVE LIKED TO HAVE SEEN IN THE MOST SPECIFIC 16 CASE.

17 THIS IS A LONG WAY OF SAYING THAT THERE -- I 18 THINK THERE NEEDS TO BE SOME SORT OF UNDERSTANDING, 19 THAT THERE ARE DIFFERENCES OF OPINIONS. AS LONG AS 20 THERE WAS FREE AND INFORMED CONSENT, THEN I THINK THAT 21 WE MAY WANT TO LET SOME THINGS GO BY IN ORDER TO ENABLE 22 THE SCIENCE. I'M NOT SURE.

23 VICE CHAIR LO: LET'S DISTINGUISH LINES THAT
24 ARE GOING TO BE DERIVED AFTER OUR REGULATIONS GO IN
25 EFFECT, WHICH IS WHAT I'D LIKE TO TALK ABOUT FIRST.

1 THEN THE HARDER SITUATION IS THESE GRANTS --

2 DR. EGGAN: THAT'S WHAT I'M SAYING. I'M 3 SAYING THE THINGS MAY CONTINUE -- IT'S GOING TO 4 CONTINUE TO BE A MOVING TARGET EVEN AFTER. WE'RE GOING 5 TO SAY WHAT IT'S GOING TO BE, BUT THEN THINGS ARE GOING 6 TO CONTINUE TO CHANGE.

7 DR. KIESSLING: I THINK THE ANSWER TO MARCY'S 8 QUESTION IS THAT THE TECHNOLOGY FOR DERIVING STEM CELLS 9 FROM EGG DONORS IS NEW. WHAT KEVIN IS TALKING ABOUT 10 ARE CELLS THAT ARE DERIVED FROM FROZEN EMBRYOS. SO THE 11 EGG DONOR ISSUES ARE BRAND NEW.

12 DR. HALL: LET ME JUST ADD TO THAT. IN ACTUALLY HISTORICAL FACT, PROPOSITION 71 INCLUDED THE 13 NO COMPENSATION. THE NATIONAL ACADEMY GUIDELINES 14 APPEARED ONLY LAST APRIL, AND THEY ADOPTED A STANDARD 15 THAT WAS IN PROPOSITION 71. THEY MADE CONSCIOUS 16 REFERENCE TO THE FACT THAT IT HAD BEEN FIRST IN 17 18 PROPOSITION 71. AND SO JUST TO UNDERSTAND THE HISTORY 19 OF THAT.

20 SECONDLY, THE NATIONAL ACADEMY GUIDELINES 21 HAVE ONLY BEEN IN EFFECT SINCE APRIL. SO AS KEVIN 22 SAYS, IT'S VERY MUCH A CHANGING STANDARD AND A MOVING 23 TARGET. BUT I THINK RIGHT NOW, JUST TO EMPHASIZE THE 24 POINT, WE'RE TALKING ABOUT ONES THAT MIGHT BE DERIVED 25 IN THE FUTURE. THAT'S THE REAL ISSUE.

1 DR. CIBELLI: I WONDER IF -- SO THERE ARE TWO 2 THINGS HERE. ONE IS ASK THE QUESTION WHETHER THIS 3 RESEARCH -- THIS CELL LINES WERE DERIVED AFTER IRB 4 APPROVAL, INDEPENDENT IRB APPROVAL. I THINK WE ALL 5 AGREE WITH THAT.

THE THING THAT IS A LITTLE BIT MORE DIFFICULT 6 IS TO JUDGE HOW WAS THE CONSENT FORM MADE. AND I 7 WONDER FOR US IT WOULD BE TOO HARD TO JUDGE THAT 8 BECAUSE THERE ARE NOT TOO MANY CELL LINES DERIVED BY IN 9 THIS CASE SOMATIC CELL NUCLEAR TRANSFER THAT WILL COME 10 11 TO CALIFORNIA. SO IT WOULDN'T BE TOO HARD FOR THIS 12 COMMITTEE TO SAY, OKAY, IF WE JUDGE THE CONSENT FORMS ARE ETHICALLY -- THE WORD HERE IS ETHICALLY DERIVED 13 MATERIALS. SO IF WE CAN LOOK AT THE CONSENT FORM AND 14 DECIDE THAT IT'S NOT A CONSENT FORM, IT'S JUST A JOKE, 15 WE SHOULDN' T ALLOW THOSE CELL LINES TO BE SPONSORED BY 16 AND IF WE THINK THAT THOSE CONSENT FOR ARE 17 CIRM. APPROPRIATE, WE SHOULD GO FORWARD. 18

I DON'T THINK IT'S AN ENORMOUS TASK BECAUSE I
DON'T THINK THERE ARE TOO MANY CELL LINES. HONESTLY, I
DON'T THINK THERE ARE TOO MANY.

22 DR. HALL: IT'S NOT JUST EGG DONORS AS WE'RE 23 TALKING HERE. THAT'S CERTAINLY THE ONE ISSUE, BUT ALSO 24 EMBRYO DONORS.

25

DR. CIBELLI: SO YOU HAVE A HANDFUL OF

1 CLINICS AROUND THE WORLD. WE HAVE A COUPLE IN ISRAEL, WE HAVE SPAIN, AUSTRALIA, YOU MAY HAVE SINGAPORE, THE 2 3 UK, SO THERE ARE NOT TOO MANY. AND WE COULD GO -- I 4 THINK THIS IS GOING TO BE OUR ROLE JUST TO MAKE SURE 5 THAT IF YOU ARE GOING TO APPROVE THAT, IF YOU ARE GOING -- THIS WILL BE A NICE PLACE WHERE WE CAN BE 6 VERY, VERY VULNERABLE. IF WE JUST LET THEM -- IF WE 7 ALLOW FUNDS TO BE USED AND THE CELL LINES WERE DERIVED 8 9 IN A WAY THAT WE NEVER APPROVED, BUT, OOPS, WE FORGOT TO LOOK AT THE CONSENT FORM, WE NEVER ASKED FOR IT. 10 THIS SHOULD BE OUR ROLE. WE SHOULD BE THE ONES LOOKING 11 12 FOR THE CONSENT FORM.

13 DR. HALL: THERE IS A PROBLEM, HOWEVER, LET ME JUST POINT OUT. THAT IS, THAT WHATEVER WE PUT HERE 14 15 WILL BECOME A CALIFORNIA REGULATION, AND IT WILL BE VERY, VERY DIFFICULT TO CHANGE. SO WHAT WE WANT TO DO 16 17 IS SET OUT PROCEDURES THAT WILL, I THINK, GUIDE WHATEVER DECISIONS ARE MADE. THAT IS, I'M NOT SURE 18 19 WHAT YOU ARE SAYING HERE, BUT I THINK WHAT WE DON'T WANT TO DO IS TO HAVE SPECIFIC APPROVALS HERE. 20

21 DR. CIBELLI: WHAT I'M SAYING IS LET'S SAY 22 THERE ARE 30 DIFFERENT LABORATORIES AROUND THE WORLD 23 AND THEY HAVE CELL LINES ALREADY CIRCULATING AROUND, 24 AND PEOPLE FROM CALIFORNIA WANTS TO USE THOSE CELL 25 LINES. ALL WE HAVE TO DO IS SEND US THE CONSENT FORMS.

1 IF THEY ARE OKAY --

DR. HALL: I DON'T THINK WE WANT TO DO THAT. 2 3 WHAT WE WANT TO DO IS TO SAY TO THE ESCRO'S THAT THEY 4 MUST BE ASSURED THAT THE FOLLOWING PRINCIPLES HAVE BEEN FOLLOWED. THAT'S WHAT I THINK THIS -- TO PUT INTO THIS 5 REGULATION, THAT'S WHAT WE NEED TO DO. 6 DR. CIBELLI: YOU REALIZE THAT EVERY SINGLE 7 COUNTRY WILL HAVE A DIFFERENT WAY OF DOING THINGS. 8 9 DR. HALL: I KNOW, BUT WE CAN'T EXAMINE THOSE AND PUT IT IN THE REGULATION TO SAY -- SO THAT'S MY 10 11 ONLY POINT, THAT WE NEED TO ESTABLISH THE PRINCIPLES 12 AND TO SAY WHAT IT IS WE'LL ACCEPT, AND THEN THE ESCRO'S WILL HAVE TO ENFORCE THAT. 13 DR. EGGAN: UNLESS WE TOOK AN ENTIRELY 14 DIFFERENT TACT, AND THAT ENTIRELY DIFFERENT TACT COULD 15 BE TO SAY THAT CIRM-FUNDED RESEARCH CAN ONLY BE 16 CONDUCTED ON EMBRYONIC STEM CELL LINES WHICH ARE 17 18 DEPOSITED IN THE CIRM STEM CELL BANK. AND ONLY CIRM 19 BANK LINES WILL HAVE BEEN APPROVED BY THIS OR SOME OTHER GROUP THAT WE APPROVE OF, RIGHT, SO THAT WOULD BE 20 21 ANOTHER -- THAT WOULD CERTAINLY LIVE UP TO THE MODEL THAT JOSE WAS JUST SAYING. SO IT WOULD BE A TOTALLY 22 DIFFERENT TACK -- I'M NOT SAYING THAT'S ONE WE SHOULD 23 24 TAKE, BUT THAT COULD BE DONE. 25 DR. HALL: YES. THAT NEEDS TO BE BROUGHT

INTO, AND THE PROBLEM IS THAT'S ALSO A MOVING TARGET. 1 WE WILL HAVE TO HAVE PLANS FOR THE BANK, SET IT UP, AND 2 3 BE SURE THAT IT'S IN EXISTENCE. OTHERWISE, YOU MAY 4 RESTRICT -- NOBODY CAN USE THESE THINGS UNTIL WE SET THE BANK UP. THAT'S NOT WHAT WE WANT. THAT MAY TAKE 5 AWHILE, PARTICULARLY GIVEN OUR FUNDING SITUATION. 6 S0 I THINK WE NEED TO HAVE SOMETHING, IN MY VIEW --7 DR. EGGAN: IN THE MEANTIME. 8 9 DR. KIESSLING: ARE WE DISCUSSING SECTION 6 AS THIS IS A DRAFT THAT YOU WANT TO US TO DISCUSS, 10 SECTION 6, IS THAT WHAT WE'RE DOING? COULD I SUGGEST, 11 12 BERNIE, THAT YOU JUST TAKE US THROUGH THAT POINT BY POINT AND WE CAN TALK ABOUT EACH POINT AND WE CAN GET 13 THROUGH THIS FOR YOU PRETTY QUICKLY? 14 DR. TAYLOR: THE FACT THAT WE HAVEN' T BEEN 15 ABLE TO GET THROUGH ONE POINT. 16 DR. KIESSLING: SOME OF THESE THINGS WE'RE 17 GOING TO REALLY AGREE WITH, AND OTHERS ARE GOING TO 18 19 CHANGE BECAUSE OF OUR DISCUSSION TODAY. I THINK IF YOU 20 TOOK US THROUGH SECTION 6(A)(1), (2), (3), (4). 21 DR. EGGAN: MAYBE SOME OF THESE THINGS AREN'T 22 A PROBLEM. VICE CHAIR LO: SECTION A, I THINK THAT'S NOT 23 24 GOING TO BE AS CONTROVERSIAL BECAUSE WE GET TO CALL THE

25 SHOTS WITH THINGS WE FUND.

1DR. KIESSLING:NO. 4 HAS CHANGED NOW,2(A) (4).

3 VICE CHAIR LO: LET'S GO THROUGH GO. OKAY.
4 SO (A) IS STEM CELLS DERIVED WITH CIRM FUNDING AFTER
5 THE EFFECTIVE DAY OF THIS POLICY.

6 DR. HALL: LET ME JUST ASK ISN'T (A) WHAT 7 WE'VE BEEN TALKING ABOUT MOST OF THE DAY? AND THAT 8 WILL BE REDONE IN ACCORDANCE WITH -- THAT WILL BE 9 REDONE IN ACCORDANCE WITH ALL THE DISCUSSION WE'VE HAD 10 UP TO NOW, SO WE DON'T NEED TO DO THAT.

VICE CHAIR LO: (B) AND (C) WE HAVEN'T TALKED
ABOUT TODAY, AND I THINK I'D LIKE TO HAVE THAT
DISCUSSION.

DR. LOMAX: JUST SO FOLKS ARE CLEAR ON THE 14 ORIGINS OF WHAT WE ARE WORKING OFF OF, (A) IS 15 ESSENTIALLY TAKING WHAT WAS IN THE NATIONAL ACADEMIES 16 GUIDELINES, AND THOSE SETS OF CONDITIONS THAT WERE 17 APPROPRIATE FOR THE REVISED FRAMEWORK WERE DROPPED IN. 18 19 SO (2), (3), AND (4) ARE ESSENTIALLY THE RAW MATERIAL FROM THE NATIONAL ACADEMIES' GUIDELINES. AND CORRECT, 20 21 WE NOW NEED TO UPDATE THIS SECTION BASED ON TODAY'S 22 DELI BERATI ONS.

23DR. KLESSLING:SO NOW WE'RE JUST TALKING24ABOUT (B).

25 VICE CHAIR LO: LET'S TALK ABOUT (B) FOR A

MINUTE. FIRST WOULD BE IRB OVERSIGHT OR FROM AN 1 EQUIVALENT BODY TO AN IRB. ANY DISAGREEMENT ON THAT? 2 3 DR. KIESSLING: I WOULD REALLY LIKE TO JUST DI SREGARD THE WHOLE PAYMENT I SSUE. I THINK THAT JUST 4 REALLY CLOUDS THIS DISCUSSION. 5 VICE CHAIR LO: LET'S GO THROUGH EVERYTHING 6 BUT PAYMENT, BUT LET'S SEE IF WE CAN AT LEAST AGREE ON 7 THE OTHER ONES. SO I RB OVERSIGHT, ANY CONCERNS 8 9 ABOUT -- ANYONE NOT WANT TO HAVE THAT AS ONE OF OUR CORE CRITERIA? I THINK WE HAVE TO. 10 11 SECOND, WHICH ISN'T IN HERE, AND I THINK 12 PROBABLY SHOULD BE IS FREE AND VOLUNTARY CONSENT FROM 13 THE DONORS. DR. PRIETO: AND THE WORDING THAT ANN 14 15 MENTIONED, FULLY INFORMED, FREE, VOLUNTARY, AND FULLY INFORMED CONSENT. 16 DR. EGGAN: THAT'S RIGHT. 17 DR. CIBELLI: YOU CONSIDER THAT THE CONSENT 18 19 FORM SHOULD BE -- YOU CONSIDER THE CONSENT FIRM SHOULD BE MADE AVAILABLE UPON CIRM REQUEST OR SOMETHING OF 20 21 THAT NATURE. 22 DR. HALL: I THINK ANN'S POINT WAS THAT IT'S NOT JUST THE FORM. IT'S THE WHOLE PROCESS THAT NEEDS 23 24 TO BE ACCEPTABLE. AND SO WE NEED TO WRITE IT TO REFLECT THAT, THAT THE FORM AND THE PROCESS SHOULD BE 25

1 SOMEHOW --

VICE CHAIR LO: IF WE GET THE CONCEPT THAT
INFORMED AND FREE OR VOLUNTARY CONSENT ARE ESSENTIAL,
AND THEN CRAFT THE LANGUAGE, LET US HAVE STAFF WORK ON
THAT AND COME BACK TO US. JOSE'S POINT IS WE HAVE TO
HAVE ACCESS TO INFORMATION.
DR. CIBELLI: YOU DON'T WANT TO FIND OUT A

8 YEAR LATER YOU WERE PAYING FOR SOMETHING THAT WAS -- I
9 DON'T KNOW -- TAKEN UNETHICALLY.

10 VICE CHAIR LO: DIDN'T REALLY HAVE CONSENT.11 I THINK YOU'RE RIGHT. OKAY.

12 AND THEN LET'S SKIP OVER THE PAYMENT ISSUE 13 FOR A MINUTE. AND SHOULD WE REQUIRE THAT IF CIRM 14 RESEARCHERS ARE GOING TO BE FUNDED TO WORK WITH, THERE 15 SHOULD BE NO RESTRICTIONS ON THE DOWNSTREAM USE OF THE 16 CELLS? NO.

DR. EGGAN: NO, I DON'T THINK SO. I DON'T 17 18 THINK SO. AND ALSO I THINK THE POINT WAS MADE THAT, 19 SORT OF I THINK THE LANGUAGE EXPLICITLY WAS USED TO TRY TO PRECLUDE FUTURE ANONYMOUS GAMETE DONORS, WHICH IS 20 21 ONE OF THE PROBLEMS IN THE PAST. ALMOST CERTAINLY 22 WE'RE ENDING UP GRANDFATHERING IN CELL LINES THAT WERE PROBABLY DERIVED USING SOME ANONYMOUS GAMETE DONORS. 23 24 IN MY OPINION I THINK WE WANT TO MOVE TO PREVENTING THE USE OF THOSE TYPES OF CELL LINES IN THE FUTURE. SO 25

THAT SHOULD BE -- I THINK, MY OPINION IS THAT SHOULD BE 1 2 EXPLICITLY STATED. 3 DR. KIESSLING: SO COMES UNDER THE FULLY 4 INFORMED CONSENT. VICE CHAIR LO: ALL GAMETE DONORS. 5 DR. EGGAN: I JUST WOULD BE MORE COMFORTABLE 6 7 IF IT ABSOLUTELY SAID THAT. 8 VICE CHAIR LO: I THINK THAT'S A GOOD 9 SUGGESTI ON. DR. CIBELLI: I FORGOT. WHAT WAS YOUR POINT? 10 VICE CHAIR LO: I GUESS THE CONCERN IS -11 REMEMBER, WE TALKED EARLIER THIS MORNING, I THINK IT 12 WAS, ABOUT HOW IF WE'RE DERIVING UNDER CIRM FUNDING, 13 WE'D LIKE THE LINES TO BE AVAILABLE FOR ALL KINDS OF 14 15 USES THAT WE MAY NOT ANTICIPATE. SO WE WOULD NOT WANT CIRM FUNDING TO BE USED TO DERIVE LINES OR THE DONOR 16 PUT RESTRICTIONS ON FUTURE USES THAT YOU CAN'T USE THEM 17 18 FOR ANIMAL TRANSFER EXPERIMENTS OR --19 DR. EGGAN: I THINK THERE MIGHT HAVE BEEN A MISUNDERSTANDING. I THINK WHAT WE WANT TO AVOID IS IN 20 21 A SINGLE STUDY TO HAVE CERTAIN DONORS LINE ITEM VETOING 22 CERTAIN THINGS THAT COULD BE DONE. I THINK THAT'S VERY IMPORTANT SO THAT WITHIN A PARTICULAR STUDY WHICH WAS 23 24 PRESCRIBED FOR A PARTICULAR PURPOSE, THAT YOU HAVE 25 DIFFERENT CLASSES OF EMBRYOS WITHIN THAT ONE PARTICULAR

STUDY. I THINK THAT MAKES FOR AN IMPOSSIBLE SITUATION. 1 BUT THERE MAY BE CASES WHERE ONE DERIVES A 2 3 LINE OR ONE HAS EMBRYOS DONATED FOR SPECIFIC THINGS 4 WHICH ARE PRESCRIBED. THERE MAY BE A DIFFERENCE OF OPINION ON THAT, BUT THAT'S WHAT I WAS -- I THINK THERE 5 WAS LANGUAGE WHICH SAID THAT THE DONOR SHOULD HAVE THE 6 ABILITY TO BE ABLE TO RULE OUT ANY PARTICULAR USE OF A 7 PARTICULAR CELL LINE THAT'S DERIVED WITHIN A STUDY. I 8 9 GUESS I'M A LITTLE MORE -- THAT GETS TO BE MORE --BECAUSE THEN WITHIN ONE RUBRIC OF A STUDY WHERE YOU 10 11 HAVE ALL OF THESE -- BECAUSE THEN YOU DON'T HAVE TO 12 TRACK THE PARTICULAR DOCUMENTS THAT WERE USED IN THAT STUDY. YOU HAVE TO TRACK EVERY SINGLE DOCUMENT THAT 13 WAS USED FOR THAT STUDY, AND THAT'S WHERE THINGS BECOME 14 15 I MPOSSI BLE.

16 DR. HALL: THAT'S AN NOT ISSUE, IS IT, FOR 17 LINES DERIVED ELSEWHERE? THAT IS, IF SOMEBODY SAYS 18 THEY WANT TO DO SOME EXPERIMENTS ON A LINE THAT 19 SOMEBODY HAS DERIVED AND THAT LINE HAS RESTRICTIONS ON 20 IT, THEN DO WE -- WE'RE NOT GOING TO SAY YOU CAN'T USE 21 THAT.

22 DR. EGGAN: NO. NO. NO. BUT THE LANGUAGE, 23 AS STATED, SAID THAT BEFORE. THAT'S WHERE I WAS 24 RAISING THE OBJECTION.

25 DR. HALL: IN THIS PART WE DON'T NEED TO DEAL

1 WITH THAT.

DR. EGGAN: I WAS SPECIFICALLY SPEAKING TO 2 3 THI S. 4 VICE CHAIR LO: SO I HEAR THAT WE WANT NOT HAVE -- WE WANT TO REMOVE THAT SUGGESTION. 5 DR. KIESSLING: I'M NOT SURE EVERYBODY 6 UNDERSTANDS. I THINK THAT CIRM FUNDING SHOULD NOT BE 7 USED FOR LINES THAT HAVE RESTRICTIONS. I THINK THAT'S 8 TOO COMPLICATED. I DON'T KNOW HOW YOU'RE GOING TO 9 TRACK IT, AND I THINK IT'S A HUGE PROBLEM --10 11 DR. HALL: WAIT. WAIT. LINES THAT WE DERIVE 12 OR SOMEBODY ELSE DERIVES? DR. KIESSLING: SOMEBODY ELSE DERIVES. I 13 DON'T KNOW THAT YOU WANT TO SPEND MONEY ON A LINE THAT 14 15 CAN ONLY BE USED FOR TYPE 1 DIABETES RESEARCH. DR. HALL: SUPPOSING AN INVESTIGATOR COMES UP 16 AND THEY HAVE SOME VERY SPECIFIC QUESTION THEY WANT TO 17 18 ANSWER? THAT'S A SCIENTIFIC QUESTION AND IT'S WITHIN 19 THE -- IT'S NOT DEALING WITH A PARTICULAR RESTRICTED USE. SHOULD WE SAY YOU CAN' T DO THAT BECAUSE THEY ARE 20 21 USES THAT ARE RESTRICTED? 22 DR. KIESSLING: I SEE WHAT YOU ARE SAYING. DR. TAYLOR: I GUESS I WOULD SAY THAT, AND 23 24 THIS MAY BE TOO ONEROUS, BUT IT ALMOST SEEMS TO ME, I KNOW YOU DON'T WANT TO GET INTO THE CIRM BANK RIGHT 25

NOW, BUT I THINK THAT ALL THE LINES SHOULD BE IN CIRM 1 BANK. I THINK THAT LINES THAT CIRM INVESTIGATORS HAVE 2 3 ACCESS TO WITHIN CIRM FUNDING SHOULD BE DONE UNDER SORT OF THE CIRM UMBRELLA. AND I ACTUALLY THINK THAT IT'S A 4 NICE IDEA TO HAVE THOSE BE CARTE BLANCHE LINES WHERE 5 6 THERE'S NOT A LOT OF CRAP THAT YOU'VE GOT TO TRACK. NOW, THAT'S GOING TO LIMIT THE NUMBER, BUT I STILL 7 THINK THAT PRAGMATICALLY IT'S GOING TO BE EASIER GOING 8 FORWARD WITH THAT. 9

10 I THINK THAT IF YOU FUND ONE CIRM 11 INVESTIGATOR TO DO ONE SET OF EXPERIMENTS IN A LINE 12 THAT CAN'T BE USED IN OTHER WAYS, IT DOESN'T MAKE MUCH 13 SENSE TO HAVE THAT LINE IN THE CIRM BANK BECAUSE IT'S 14 GOT --

DR. HALL: I'M JUST RELUCTANT TO PUT THAT RESTRICTION ON NOT KNOWING. I THINK IF AT THE TIME IT COMES UP AND IS REVIEWED, IF SOMEBODY HAS A GRANT, I THINK YOU NEED TO LOOK AT IT ON ITS OWN MERITS. I WOULD BE VERY RELUCTANT TO PUT A BLANKET RESTRICTION ON THAT.

I THINK THE OTHER POINT IS STEM CELL BANK, IF
WE HAVE TO HAVE ALL LINES THAT ARE USED BY CIRM
INVESTIGATORS FOR WHATEVER PURPOSES BE IN OUR BANK,
THIS IS GOING TO BE A BIG REQUIREMENT. IT'S GOING TO
TAKE TIME TO GET THAT BANK GOING. I THINK IT'S GOING

TO BE A BIG ISSUE HOW WE DO IT, AND I THINK THAT, 1 AGAIN, IS UNNECESSARILY RESTRICTIVE. I WOULD LIKE TO 2 3 LEAVE THAT OPEN. OTHER CRITERIA FOR WHAT WE USE. 4 DR. PRIETO: WHEN YOU HAVE VERY WELL CHARACTERIZED ETHICALLY DERIVED LINES FROM THE UK STEM 5 CELL BANK, FOR EXAMPLE, AND I THINK WE WOULD WANT TO 6 FUND RESEARCH ON THOSE LINES, AND THEY MAY NOT WANT TO 7 PUT TO CELL LINES --8 DR. HALL: WE PROBABLY WOULD END UP WITH A 9 RECIPROCAL RELATIONSHIP WITH THEM IN SOME WAYS THAT WE 10 11 WOULD SHARE BETWEEN OUR BANKS, BUT WE WOULDN'T 12 NECESSARILY BANK AND CHARACTERIZE EVERY LINE. SOMETHING LIKE THAT. 13 MS. FEIT: DIDN'T YOU SAY EARLIER THAT THE 14 ESCRO WOULD BE RESPONSIBLE FOR COMPLYING WITH ANY 15 RESTRICTIONS ON THE STEM CELL LINE? IS THAT WHAT I 16 HEARD EARLIER? 17 18 DR. HALL: YES. I THINK IF SOMEBODY WERE TO 19 APPLY FOR A GRANT, THEN IT WOULD BE TO USE A STEM CELL LINE IN A CERTAIN WAY, THEN IT WOULD BE UP TO THEIR 20 21 ESCRO COMMITTEE TO BE SURE THAT THEY WEREN'T VIOLATING A RESTRICTION ON THAT LINE. WE COULD NOT BE 22 23 RESPONSIBLE FOR THAT. 24 MS. FEIT: ISN'T THAT WHAT WE, IN FACT, 25 SHOULD PUT IN THERE, SO THAT LEAVES IT BROAD, THAT WE

LEAVE UP TO THAT BODY OF PEOPLE TO FOLLOW ANY 1 RESTRICTION THAT MAY BE ATTACHED TO A STEM CELL LINE? 2 3 DR. HALL: YES. THAT GOES WITHOUT SAYING. 4 WHAT I'M OBJECTING TO IS TO SAY THAT IF A LINE HAS ANY RESTRICTIONS ON IT ALL, IT CAN'T USED FOR ANYTHING, 5 WHICH IS WHAT -- WE'RE LOOKING AT THE LINES, IT'S 6 MINIMUM REQUIREMENTS TO HAVE LINES USED OR APPROVED. 7 VICE CHAIR LO: AS I UNDERSTAND IT, THE POINT 8 9 IS THAT YOU DON'T WANT TO PUT THAT AS A BLANK PROHIBITION BECAUSE SOMEONE MAY SUBMIT A VERY 10 11 MERITORIOUS GRANT THAT USES A VERY RESTRICTED LINE TO 12 ANSWER AN IMPORTANT QUESTION. YOU DON'T WANT THAT PRECLUDED AUTOMATICALLY BY THIS RESTRICTION, BUT 13 THERE'S NOTHING TO PREVENT A GRANTS REVIEW TEAM FROM 14 SAYING, GIVEN EVERYTHING ELSE, WHY AREN'T THEY USING A 15 STEM CELL LINE THAT DOESN'T HAVE RESTRICTIONS. 16 17 DR. PRIETO: I THINK THAT THINGS WILL COME TO THE GRANTS WORKING GROUP, GRANT PROPOSALS WITH LINES 18 19 THAT HAVE LOTS OF RESTRICTIONS, AND THEY MAY GET TURNED DOWN FOR THAT REASON. 20 21 DR. EGGAN: I THINK IT'S A VERY DIFFERENT THING ALTOGETHER TO ACTIVELY ENCOURAGE OR TO FORCE 22 PEOPLE WITH CIRM FUNDING WHEN THEY DERIVE NEW LINES, 23 24 EXCEPT FOR SOME EXTENUATING CIRCUMSTANCES, TO REQUIRE 25 THAT THEY DO SO UNDER INFORMED CONSENT THAT WOULD ALLOW

1 GENERAL USE OF THOSE LINES.

2 VICE CHAIR LO: WHICH IS WHAT WE TALKED ABOUT 3 THIS MORNING.

4 SO LET ME NOW RAISE THE -- WE'LL COME BACK AGAIN TO THIS DOLLARS ISSUE. I HEARD BEFORE A LOT OF 5 PEOPLE SAYING THAT THEY DON'T WANT TO APPLY TO LINES 6 DERIVED WITH OTHER FUNDING TO CIRM RESTRICTIONS ON 7 PAYMENT FOR TIME BEYOND OUT-OF-POCKET EXPENSES. IT'S 8 VERY HARD TO KNOW SORT OF WHAT YOU' RE PAYING FOR WHEN 9 YOU SORT OF WRITE A CHECK TO SOMEONE WHO DONATES 10 11 OOCYTES. I MEAN PAYING FOR TIME SOMEHOW SEEMS 12 DIFFERENT FROM SAYING WE'RE BUYING THE OOCYTES. LET ME JUST PUT THIS IN CONTEXT. THE FIRST 13 ORTIZ BILL, WHICH IS SEVERAL YEARS OLD, HAD A 14 15 PROHIBITION ON PURCHASING OR SELLING EMBRYONIC CADAVERIC OR FETAL TISSUE FOR RESEARCH PURPOSES. 16 NOW, WE' RE TECHNICALLY EXEMPT FROM THAT BECAUSE OF PROP 71. 17 I THINK THERE'S A LOT OF SENTIMENT TO SORT OF BUYING 18 19 AND SELLING OOCYTES, WHICH IT'S HARD SOMETIMES TO DRAW THE LINE BETWEEN PAYING FOR PEOPLE FOR THEIR TIME IT 20 21 TAKES TO GO THROUGH AN EXTENSIVE COUNSELING, EDUCATION, AND MANIPULATION PROCESS. BUT DO WE WANT TO SAY IF 22 WE'RE NOT -- AND I DIDN'T HEAR A LOT OF SUPPORT FOR 23 24 PROHIBITING PAYMENT FOR TIME. DO WE WANT TO SAY THAT 25 PAYING FOR TIME MAY BE PERMISSIBLE, BUT PAYING FOR

OOCYTES OUTRIGHT IS NOT, TO THE EXTENT THAT THAT LINE
 CAN BE DRAWN? SO WE DRAW THE LINE ELSEWHERE IN
 RESEARCH OR AT LEAST TRY TO.

4 DR. CIBELLI: I ALWAYS THINK -- I ALWAYS SAID THIS IS SOMETHING THAT WE ARE GOING TO HAVE TO LIVE 5 6 WITH. UNFORTUNATELY PROPOSITION 71 HAD THAT CLAUSE IN, BUT I THOUGHT ACTUALLY THAT WHEN THE KOREANS ANNOUNCED 7 THAT THEY HAVE DONE ALL THIS NUCLEAR TRANSFER 8 EXPERIMENT WITH DONATED EGGS, I THOUGHT THAT MAYBE WE 9 COULD LEARN SOMETHING FROM KOREAN WOMEN. BUT THE TRUTH 10 11 IS THAT THOSE WERE COMPENSATED. 12 DR. HALL: ONLY IN THE FIRST PAPER, AS I UNDERSTAND IT. THERE'S ACTUALLY --13 DR. CIBELLI: NOBODY REALLY KNOWS WHAT'S 14 15 GOING ON RIGHT NOW. 16 DR. HALL: THERE WAS A RECENT PAPER IN THE AMERICAN BIOETHICS JOURNAL. 17 18 VICE CHAIR LO: AMERICAN JOURNAL OF 19 BIOETHICS, BUT THAT WAS BEFORE -- THAT WAS ACCEPTED BEFORE THE REVELATIONS DURING THE PAST WEEK AND A HALF. 20 21 DR. HALL: I THOUGHT THAT HAD A SERIES OF 22 PROCEDURES THAT HAD BEEN PUT IN PLACE AFTER THE FIRST PAPER AND BEFORE THE SECOND, AND THEY HAD QUITE AN 23 24 EXTENSIVE PROCEDURE, WHICH, AS I RECALL, HAD SEVERAL LAYERS OF COUNSELING. IT WAS, I THOUGHT, IN MANY WAYS 25

AN ADMIRABLE PROCEDURE. I CAN'T SAY THAT THAT'S WHAT
 THEY FOLLOWED, BUT MY UNDERSTANDING IS ALL THE
 CONTROVERSY HAS BEEN ABOUT PROCEDURES THAT WERE DONE
 FOR THE 2004 PAPER THAT INVOLVES ONE CELL LINE. AS FAR
 AS I KNOW, THERE'S BEEN NO CONTROVERSY OVER THE 2005
 PAPER. THAT'S NOT TO SAY THERE MAY NOT BE, BUT I JUST
 WANT TO MAKE THAT RECORD, MAKE THAT POINT CLEARLY.

8 AND, KEVIN, YOU MAY HAVE MORE UP-TO-DATE 9 INFORMATION THAN I DO, BUT THAT'S -- AT THE PRESENT 10 THAT'S MY UNDERSTANDING OF THE MATTER.

DR. EGGAN: AGAIN, I WOULD SAY, YES, THAT'S MY UNDERSTANDING AS WELL, BUT WOULD ECHO WHAT JOSE SAID. AND WE'LL WONDER AND SEE. AND I THINK THAT THIS IS PROBABLY SOMETHING THAT WE SHOULD MAKE A STATEMENT ON.

16 DR. CIBELLI: I WOULD ARGUE THAT WE HAVE TO 17 COMPENSATE, WE HAVE TO FIND A WAY TO COMPENSATE, AND 18 YOU CAN VERY EASILY PUT A CAP ON IT AND JUST SAY THIS 19 IS THE AMOUNT OF EXPENSES THAT GOING TO BE REIMBURSED, 20 PERIOD. OTHERWISE, YOU ARE GOING TO HAVE A VERY HARD 21 TIME FINDING WOMEN WILLING TO HELP OUT.

DR. PRIETO: WE CAN'T CALL IT COMPENSATION. WE MAY HAVE A LITTLE BIT OF LATITUDE IN TERMS OF HOW DEFINE EXPENSES, BUT THAT'S ALL THE LATITUDE WE HAVE. BUT THIS IS TALKING ABOUT OUTSIDE LINES, AND THE

1 QUESTION IS DO WE ACCEPT OTHER PEOPLE'S COMPENSATION,

2 MONEY THAT WE DID NOT PROVIDE?

3 DR. HALL: IT'S AN INTERESTING QUESTION. ANN 4 RAISED THE POINT OF THE VERY WELL-ESTABLISHED CLINIC IN BRITAIN THAT REQUIRES THAT ANYBODY WHO GOES THROUGH 5 6 FERTILITY TREATMENT THERE DONATE A CERTAIN NUMBER OF EGGS. IS THAT PAYMENT OR WOULD WE REFUSE LINES? 7 DR. PRIETO: ARE ANY CELL LINES DERIVED FROM 8 9 THAT IN THE UK BANK? DR. HALL: I DON'T KNOW. 10 DR. KIESSLING: I WOULD GUESS YES. 11 12 DR. HALL: WE DON'T KNOW. 13 DR. PRIETO: DO WE CONSIDER THOSE TO BE ETHICALLY DERIVED AND CELLS THAT WE WOULD FUND RESEARCH 14 15 ON? DR. HALL: SO THE ISSUE -- I GUESS WHAT I 16 WOULD ARGUE FOR IS TO SOMEHOW HAVE A MORE NUANCED 17 18 CONSIDERATION OF THE CONDITIONS UNDER WHICH A CONSENT 19 WAS GIVEN THAN SIMPLY -- THIS IS WHAT ANN WAS SAYING BEFORE -- THAN SIMPLY TO HAVE SORT OF FIXED -- TRY TO 20 21 GET TO THE CORE ISSUES HERE. WHAT DO WE REALLY CARE ABOUT, AND MAYBE COMPENSATION ISN'T THE MOST IMPORTANT 22 ISSUE, BUT IT'S A NUMBER OF OTHER ISSUES THAT WE 23 24 SPECI FY. 25 DR. KIESSLING: I THINK IT WOULD BE VALUABLE

1 TO THIS CONVERSATION TO GO THROUGH A LIKE A BRIEFING I DID TO THE MASSACHUSETTS LEGISLATURE WHEN THEY WERE 2 3 LOOKING AT THEIR DERIVING THEIR STEM CELL LAW. AND THE 4 WOMEN LEGISLATORS HAD A CAUCUS, AND THIS CAUCUS HAD RECEIVED INFORMATION FROM SOME WOMEN'S GROUPS THAT WERE 5 VERY CONCERNED ABOUT THE EXPLOITATION OF WOMEN WITH 6 RESPECT TO THIS DONOR EGG ISSUE. AND I UNDERSTAND 7 THOSE CONCERNS. I ALSO HAVE A VERY STRONG FEELING THAT 8 WOMEN REALLY HAVE THE ABILITY TO MAKE DECISIONS. 9

10 BUT THE WOMEN'S CAUCUS IN THIS GROUP, THEIR 11 CONCERNS ABOUT COMPENSATION WERE TWOFOLD. AND I THINK 12 THAT'S WHY THERE'S INFORMATION IN PROPOSITION 71 ABOUT 13 THIS. YOU DON'T WANT TO EXPLOIT ANYONE. THE IDEA IS 14 THAT SOMEHOW YOU MUST PROTECT WOMEN FROM PUTTING 15 THEMSELVES AT RISK TO MAKE MONEY.

NOW, THERE'S LOTS OF WAYS TO DO THAT BESIDES 16 TALKING ABOUT SIMPLY NOT PAYING THEM AT ALL. AND AS I 17 EXPLAINED TO THIS GROUP OF WOMEN LEGISLATORS, THEIR 18 19 CONCERNS WERE SEVERALFOLD. THEY WERE MOSTLY BLACK. AND THEIR CONCERNS WERE SEVERALFOLD, THAT WOMEN FROM 20 21 THEIR COMMUNITIES WOULD BE RECRUITED TO DONATE EGGS FOR LARGE SUMS OF MONEY, AND THAT THE STEM CELLS DERIVED 22 FROM THOSE EGGS WOULD NOT GO BACK INTO THEIR 23 COMMUNITIES. SO THEY COULD SEE THEMSELVES BEING 24 25 EXPLOITED TO THE EXPENSE OF WEALTHY PEOPLE.

1 WHEN I SORT WENT THROUGH WHAT THE CONSENTING PROCESS IS ABOUT, WHAT YOU DO TO EDUCATE SOMEBODY ABOUT 2 3 WHAT THE EGGS ARE GOING TO BE USED FOR, HOW THIS IS 4 GOING TO WORK, WITHIN ABOUT AN HOUR THAT SAME GROUP OF WOMEN FROM THE BLACK COMMUNITY DECIDED WHY SHOULD WE 5 LIMIT THE ABILITY OF WOMEN WHO WANT TO BE EGG DONORS TO 6 7 MAKE SOME MONEY. SO THEY WENT FROM NOT BEING WORRIED ABOUT COMPENSATING WOMEN TO BE WORRIED ABOUT 8 9 RESTRICTING THE RIGHTS OF WOMEN TO ACTUALLY RECEIVE 10 COMPENSATION FOR THIS EFFORT.

SO I REALLY THINK THE IDEA BEHIND 11 12 COMPENSATING EGG DONORS FOR THIS RESEARCH NEEDS TO BE LEFT ALONE FOR A WHILE BECAUSE I THINK THE MORE PEOPLE 13 THINK ABOUT IT, THE MORE THEY REALIZE THAT'S NOT THE 14 IMPORTANT POINT. THE IMPORTANT POINT IS WHETHER SHE'S 15 COMPENSATED OR NOT. THE IMPORTANT POINT IS THAT SHE 16 REALLY UNDERSTANDS WHAT SHE'S DOING, THAT SHE FULLY 17 UNDERSTANDS THE RISKS TO HER, HOW LONG IT'S GOING TO 18 19 TAKE HER, THE SHORT-TERM RISKS, THE LONG-TERM RISKS, AND WHAT'S GOING TO HAPPEN TO THE CELL LINES. 20 AND 21 WHETHER SHE IS COMPENSATED FOR THE TIME IT TAKES HER TO DO THAT OR NOT IS IRRELEVANT. 22

SO I THINK THAT IN THE CONSENTING PROCESS
ITSELF, YOU CANNOT ESTABLISH GUIDELINES FOR PEOPLE IN
SINGAPORE OR OTHER PARTS OF THE WORLD WHO MAY ACTUALLY

VIEW THIS AS A WAY FOR WOMEN TO GET TOGETHER AND
 ACTUALLY CREATE A SMALL BUSINESS TO DONATE EGGS. I
 DON'T THINK THAT SHOULD BE ABSOLUTELY PREVENTED. WHAT
 YOU WANT TO PREVENT IS HAVING SOMEBODY GO THROUGH THIS
 PROCEDURE WHO WAS NOT FULLY INFORMED AND NOT DOING IT
 OF THEIR OWN FREE WILL.

DR. PETERS: WHAT IS -- I'M TRYING TO RESPOND 7 TO THE QUESTION ABOUT WHAT'S THE CORE MATTER. SO WHAT 8 IS THE PHILOSOPHICAL PRINCIPLE THAT WE'RE TRYING TO 9 HONOR HERE AS WE FORMULATE OUR ETHICAL MANDATE? IS 10 11 THAT IT THAT WE SHOULDN'T TREAT SOMETHING THAT IS 12 DISTINCTIVELY HUMAN AS MERCHANDISE THAT CAN BE BOUGHT OR SOLD? IS THAT WHAT IT IS? IF SO, THEN WE COULD 13 MINIMALLY SAY THAT YOU CAN'T PURCHASE OOCYTES AND THEY 14 15 CANNOT BE SOLD.

16 IS IT TO AVOID THE EXPLOITATION OF WOMEN?
17 THEN GIVEN THE COMPLEXITIES THAT ANN JUST ANNOUNCED,
18 THEN WE WOULD GET IN THE BUSINESS OF DECIDING WHAT A
19 FAIR PRICE IS. I'M NOT SURE WE WANT TO DO THAT.

20 OR IS IT A THIRD CORE ISSUE? SO WHAT IT IS 21 THAT WE'RE TRYING TO RESPOND TO THAT THIS POLICY SHOULD 22 BE FORMULATED TO HONOR AND RESPECT?

DR. HALL: I THINK ANN BROUGHT UP AN
INTERESTING POINT, BUT I JUST WANT TO UNDERLINE. AND
THAT IS, THAT BY TAKING THE COMPENSATION STAND THAT'S

IN HERE, ONE COULD ARGUE THAT IT MAKES IT MUCH MORE
 DIFFICULT FOR POOR WOMEN TO BE INVOLVED IN THESE
 ACTIVITIES THAN WOULD OTHERWISE BE THE CASE. I THINK
 THAT'S SOMETHING THAT DESERVES REAL CONSIDERATION. AND
 I THINK AS WE DO THIS, WE NEED TO BEAR THAT IN MIND.
 THAT'S ALL.

DR. CIBELLI: I THINK WE HAVE TO REMEMBER -I THINK OUR MANDATE IS TO MOVE THIS RESEARCH AS FAST AS
POSSIBLE WITHOUT PUTTING ANYBODY AT RISK.

DR. TAYLOR: I GUESS I FEEL -- MAYBE I FEEL 10 THAT THE LAW AS IT'S WRITTEN IN PROP 71 AT THIS POINT 11 12 IS RELATIVELY IMMUTABLE, WHICH MAKES ME BELIEVE, AND THIS ISN'T TO CAST ANY ASPERSION, BUT I THINK WHEN 13 KEVIN SAID THIS ISN'T A LOOPHOLE, I THINK IT'S AN 14 ABSOLUTE LOOPHOLE. I THINK THAT WHAT WE'RE DISCUSSING 15 NOW COULD EASILY BE INTERPRETED AS A COMPLETE LOOPHOLE 16 TO MOVE STEM CELL DERIVATION OUT OF CIRM INTO AN 17 ORGANIZATION NEXT DOOR THAT WOULD THEN JUST FEED STEM 18 19 CELLS INTO CIRM. IF THAT'S WHAT WE WANT TO DO, THEN THIS SEEMS TO BE THE WAY TO GO TO DO THAT. THAT'S SORT 20 21 OF A DARK INTERPRETATION, BUT WHAT'S TO SAY, THEN, IF WE SAY THAT WE WILL ACCEPT STEM CELLS DERIVED AFTER THE 22 23 PROP 71, INDEPENDENT OF COMPENSATION, COMING INTO CIRM, 24 THEN WHAT IT MEANS IS THAT INVESTIGATORS WITHIN CIRM 25 WON'T BE ABLE TO COMPENSATE DONORS FOR STEM CELL

1 DERIVATION.

2 YOU CAN END UP IN THE SAME PLACE. IT'S JUST 3 THAT YOU WILL HAVE CREATED ANOTHER SERVICE OUTSIDE OF 4 CIRM THAT WILL COMPENSATE THEIR DONORS, WHICH I THINK 5 MOST OF US BELIEVE SHOULD OCCUR, AND THEN THE STEM 6 CELLS WOULD END UP BACK IN CIRM THROUGH THE BACK DOOR. 7 IS THAT --

DR. HALL: WELL, I DON'T THINK WE WOULD -- WE 8 CERTAINLY WOULD NOT DO. THAT COULD BE ARGUABLY AN 9 INDIRECT CONSEQUENCE OF THIS, BUT I DON'T THINK PEOPLE 10 11 ARE GOING TO SET UP TO SUPPLY CIRM WITH CELL LINES 12 THROUGH SOME CIRCUITOUS THING. WE ALMOST CERTAINLY WILL PUT MONEY IN CALIFORNIA INTO THE DERIVATION OF 13 CELL LINES, WITHOUT QUESTION, AND WE'LL PUT -- MY GUESS 14 IS WE'LL PUT SUBSTANTIAL SUM INTO THAT. AND --15

16 DR. TAYLOR: IF THERE'S NOT MONEY FOR THE 17 DONORS, AND I THINK MOST OF US BELIEVE THAT THEY'RE NOT 18 GOING TO BE --

19DR. HALL: YOU THINK THERE WON'T BE DONORS20WITHOUT MONEY? I THINK PEOPLE ARE GOING TO DO THIS21ACCORDING TO A VARIETY OF WAYS. ALREADY WE'VE HEARD A22NUMBER OF DIFFERENT WAYS PEOPLE ARE GOING TO BE DOING23IT ANYHOW, AND THEY'RE NOT GOING TO BE DOING IT WITH AN24EYE TO THE CALIFORNIA MARKET. I THINK THEY'RE JUST25GOING TO BE DOING IT. IF IT TURNS OUT TO BE REALLY

DIFFICULT TO GET PEOPLE TO DO THIS, OR MAYBE PEOPLE 1 WILL HAVE OVERRIDING CONCERNS ABOUT WHO CAN AFFORD TO 2 3 DO THIS, THIS DEMOGRAPHICS OF THE DONORS UNDER THESE 4 CONDITIONS, AND THEY MAY COME TO THE CONCLUSION THAT THEY WANT TO DO IT A DIFFERENT WAY. I THINK THAT'S 5 WHAT'S GOING TO HAPPEN. I JUST -- SO THE QUESTION IS 6 7 DO WE WANT TO EXCLUDE CELL LINES THAT ARE MADE BY WELL-MEANING, THOUGHTFUL, RESPONSIBLE PEOPLE WHO HAPPEN 8 9 TO COME TO A DIFFERENT CONCLUSION FOR WHATEVER REASONS 10 THAN WE DO ON THIS PARTICULAR ISSUE? THAT'S WHY I WAS PUSHING FOR THE CORE ISSUE. AND I THINK TED OUTLINED A 11 12 NUMBER OF WAYS THAT ONE CAN DEFINE THAT, BUT THAT 13 WAS --

DR. KIESSLING: I DON'T THINK THERE'S GOING 14 15 TO BE -- WHETHER OR NOT YOU PAY WOMEN TO DO THIS IS GOING TO BE IRRELEVANT TO HOW MANY VOLUNTEER. YOU' RE 16 NOT GOING TO HAVE TO COMPENSATE WOMEN IN CALIFORNIA OR 17 THEY WON'T COME FORWARD. THAT'S NOT TRUE. LOTS AND 18 19 LOTS OF WOMEN ARE GOING TO BE WILLING TO DO THIS BECAUSE THEY'RE GOING TO BE WILLING TO DO IT. IT'S 20 21 GOING TO BE A SELECT GROUP. YOU ARE NOT GOING TO RECRUIT PEOPLE WHO CAN'T AFFORD TO TAKE OFF TWO WEEKS 22 23 TO DO IT. SO ALL YOU ARE DOING IS SHIFTING THE 24 POPULATION OF WOMEN WHO ARE GOING TO BE ABLE TO PARTICIPATE. YOU' RE NOT GOING TO RESTRICT IT. THERE'S 25

GOING TO BE PLENTY OF WOMEN WHO ARE GOING TO VOLUNTEER
 TO DONATE EGGS BECAUSE WOMEN DO THINGS LIKE THAT.
 THAT'S NOT THE ISSUE.

4 THE PROBLEM IS WHETHER YOU OUGHT TO ACCEPT 5 LINES FROM OTHER PARTS OF THE WORLD OR OTHER PARTS OF 6 THE COUNTRY THAT HAVE DIFFERENT GUIDELINES. SO THIS IS 7 NOT GOING TO BE A RESTRICTION IN CALIFORNIA. AND I 8 DON'T SEE YOU SETTING UP AN OUTSIDE MACHINE IN ARIZONA 9 TO DO THIS EITHER. I DON'T THINK THAT'S GOING TO BE 10 THE ISSUE.

MS. FEIT: I THINK MY CONCERN WOULD BE YOU 11 12 SAID THERE'S A CELL BANK IN SINGAPORE. WHAT ASSURANCES DO WE HAVE THAT EVEN IF WE GET PAPERWORK THAT SAYS 13 INFORMED CONSENT WAS GIVEN, HOW DO WE VALIDATE THE 14 15 PROCESS OF INFORMED CONSENT? MANY TIMES CULTURES WORK UNDER DIFFERENT UNDERSTANDINGS OF PROCESSES THAN WE DO. 16 AND SO I THINK WE HAVE TO GIVE REALLY CAREFUL 17 18 CONSIDERATION TO LINES THAT WERE DERIVED BEFORE OUR 19 STANDARDS WERE SET IN. AND I'M NOT SAYING I HAVE THE ANSWER OF HOW WE'RE GOING TO GO ABOUT THAT BECAUSE I 20 21 HEAR THE PLEA FROM THE SCIENTISTS THAT YOU REALLY WANT TO INCLUDE AS MANY LINES AS POSSIBLE THAT ARE USABLE 22 23 FOR RESEARCH. BUT GIVEN THAT, THE ATTACK ON CIRM WOULD 24 BE VICIOUS INTERNATIONALLY IF WE ACCEPTED ONE CELL LINE 25 THAT WASN' T PROPERLY HANDLED IN ANOTHER COUNTRY.

SO TO VALIDATE THAT PROCESS, TO REALLY 1 UNDERSTAND, AS MUCH DISCUSSION AS WE HAD THIS MORNING 2 3 REGARDING PROTECTING WOMEN, AND WE KNOW WHAT WE WANT, 4 HOW DO WE VALIDATE THAT WITH CELL LINES THAT WERE CREATED PRIOR TO THIS UNDERSTANDING THIS MORNING? 5 VICE CHAIR LO: LET ME JUST DISTINGUISH. 6 7 WE'RE RIGHT NOW TALKING ABOUT CELL LINES CREATED AFTERWARDS, THE GRANDFATHERING, THE SECTION WE HAVEN'T 8 GONE TO YET. 9

DR. HALL: I THINK WE SHOULD ALL UNDERSTAND 10 THERE'S A TREMENDOUS INTERNATIONAL EFFORT TO MAKE SURE 11 12 THAT ALL THIS IS DONE ETHICALLY, AND THERE ARE GROUPS COOPERATING IN BRITAIN, IN SWEDEN AND ISRAEL. 13 THERE' S AN INTERNATIONAL STEM CELL FORUM. I THINK THE EXAMPLE 14 15 OF THE KOREANS IS GOING TO BE A VERY SALUTORY ONE FOR ANYBODY IN THIS AREA. SO I THINK THERE WILL BE INTENSE 16 PRESSURE WITHIN THE COMMUNITY TO HAVE STEM CELL LINES 17 18 DERIVED ACCORDING TO A HIGH ETHICAL STANDARD AND TO 19 COOPERATE SO THAT WE WILL END UP KNOWING QUITE A BIT ACTUALLY ABOUT WHAT GOES ON IN OTHER COUNTRIES, AND 20 21 THERE MAY BE ODD PLACES THAT SPRING UP HERE AND THERE. I THINK WE WILL NEED TO TAKE THE KIND OF CARE THAT YOU 22 23 DESCRI BED, MARCY.

I THINK THE REAL ISSUE, AND I THINK THIS IS
IN A WAY THAT ISSUE WITH THE KOREANS, I THINK YOU

CAN'T -- IT'S NOT OUR BUSINESS IN A WAY TO GO IN AND 1 EXAMINE SPECIFIC CASES. IF A CELL LINE COMES UP, WHO 2 3 GAVE THE OOCYTES AND WHO THEY WERE, ALL OF THAT WE DO 4 NOT WANT TO GET INTO. WHAT WE WANT TO BE SURE IS THAT THERE IS A GOOD REGULATORY PROCESS COMPARABLE TO OUR 5 OWN, AT LEAST IN BROAD OUTLINE, THAT OVERSAW THAT 6 PROCESS AND THAT CHECKED IT OUT. IF WE CAN'T VALIDATE 7 THAT, THEN I THINK WE CAN'T ACCEPT LINES FROM THAT 8 SYSTEM. I THINK THAT'S THE WAY WE HAVE TO OPERATE AND 9 TO FIGURE OUT A WAY TO INCORPORATE INTO WHAT WE DO. 10 DR. PRIETO: I THINK ZACH IS RIGHT, THAT 11 12 THERE IS A LOT OF OVERSIGHT AND SCRUTINY OF THIS, AND IT IS AROUND THE WORLD, NOT JUST IN CALIFORNIA. AND 13 THE EXAMPLE OF KOREA IS A GOOD ONE. NO ONE WILL BE 14 ABLE TO KEEP SECRETS. IF PEOPLE ARE DOING THINGS IN A 15 WAY THAT WOULD NOT PASS MUSTER, THAT'S GOING TO COME 16 OUT. 17

VICE CHAIR LO: LET ME COME BACK TO A POINT 18 19 FROM THE DISCUSSION THAT ANN RAISED AND TED PICKED UP A LITTLE BIT. I WANT TO SORT OF HAVE US THINK THROUGH A 20 21 LITTLE BIT SORT OF WHAT THE CONCERNS ARE ABOUT PAYMENT. ANN VERY ELOQUENTLY, I THOUGHT, SORT OF EXPLAINED ONE 22 23 CONCERN, WHICH IS THAT IF YOU HAVE PAYMENT THAT'S AN UNDUE INDUCEMENT AND WOMEN REALLY HAVEN'T GONE THROUGH 24 25 A FULL INFORMED AND VOLUNTARY CONSENT PROCESS, THERE'S

THE RISK OF EXPLOITATION, AND PEOPLE ARE DOING THINGS 1 AND NOT REALIZING WHAT THE RISKS AND CONSEQUENCES ARE. 2 3 THERE ARE OTHER CONCERNS ABOUT PAYMENT IN 4 RESEARCH, AND TED ALLUDED TO ONE WHICH I THINK IS REALLY QUITE SALIENT IN THE MINDS OF SOME PEOPLE ON 5 THIS TOPIC. THAT'S THE ISSUE OF SORT OF PUTTING A 6 7 DOLLAR SIGN ON THINGS THAT SOME PEOPLE BELIEVE SHOULDN' T HAVE A DOLLAR SIGN, SHOULD BE BOUGHT AND 8 9 SOLD. JUST AS WE DO NOT ALLOW SOLID ORGANS TO BE BOUGHT AND SOLD OVERTLY, THERE ARE SOME PEOPLE WHO 10 THINK THAT CERTAIN THINGS SHOULD BE BEYOND PURCHASE. 11 12 NOW, HOW DO WE DRAW THE LINE BETWEEN PAYING FOR THE OOCYTES AS OPPOSED TO PAYING THE WOMAN FOR THE 13 TIME SHE PUT IN? AND PAYING HER FOR OUT-OF-POCKET 14 15 EXPENSES IS AN IFFY LINE. BUT AS AN EXAMPLE, WHEN ANN CALCULATES OUT THE TOTAL AMOUNT OF DOLLARS THAT AN 16 OOCYTE DONOR GETS IN HER PROGRAM FOR GOING THROUGH THIS 17 VERY DETAILED PROCESS, IT'S 10, \$20,000 PROBABLY, BUT 18 19 THE GOING RATE FOR OOCYTES ON THE OPEN MARKET IS A LOT 20 DI FFERENT.

21 SUPPOSE A RESEARCHER IS SAYING I'M GOING TO 22 PAY \$50,000 BECAUSE I KNOW I WILL GET OOCYTES AND A LOT 23 OF PEOPLE STEP FORWARD. IS THERE SOME CONCERN THAT 24 THAT'S BEYOND PAYING FOR TIME, AND IT'S REALLY SOMEHOW 25 PAYING FOR THE OOCYTES? AND IS THAT A CONCERN THAT

SOMEHOW PUTTING THAT AMOUNT OF DOLLAR ON THE OOCYTE 1 SOMEHOW VIOLATES PEOPLE'S CONCERNS ABOUT SOME THINGS 2 3 OUGHT TO BE NONCOMMODIFIABLE? 4 DR. HALL: POINT OF INFORMATION. WAS THE 20, \$25,000 FIGURE THAT YOU USED, WHAT WAS THAT? 5 DR. CIBELLI: TOTAL CYCLE. 6 7 DR. KIESSLING: AN EGG DONOR CYCLES IS LIKE AN IVF CYCLE, ALTHOUGH IT'S A LITTLE MORE EXPENSIVE. 8 9 ABOUT \$20,000 A CYCLE. DR. HALL: THAT'S NOT WHAT THE DONOR GETS. 10 DR. KIESSLING: NO, THE COMPENSATION TO THE 11 12 DONOR IS VERY SMALL. 13 VICE CHAIR LO: THE COMPENSATION TO THE 14 DONOR --DR. KIESSLING: IS TINY. IT DEPENDS ON HOW 15 MUCH THEY DO. 16 IF THEY GO THROUGH A FULL CYCLE, THEY SPEND 17 ABOUT A HUNDRED HOURS AND WE COVER CHILD CARE TOO, SO 18 19 IT COMES OUT TO ABOUT \$4,000. VICE CHAIR LO: THAT'S CALCULATED ON THE 20 21 BASIS OF EXPENSES. BUT THERE ARE OTHER PEOPLE WHO MIGHT SAY WHY STOP AT FOUR. YOU CAN GET MORE DONORS 22 FOR 10 OR 20. AT THAT POINT ARE YOU REALLY PAYING FOR 23 24 THE OOCYTE? DR. CIBELLI: I KNOW WE WOULD LIKE TO DEBATE 25

1 THIS FOR HOURS.

VICE CHAIR LO: I DON'T WANT TO DEBATE FOR 2 3 HOURS. I JUST WANT TO MAKE SURE WE DON'T --4 DR. CIBELLI: I THINK OUR MANDATE IS TO MOVE THE RESEARCH FORWARD FAST WITHOUT PUTTING ANYBODY AT 5 SO IF THE CONSENT FORM EXPLAINED THE RISKS AND 6 RI SK. THE WOMEN ARE FREE WILL OF WHAT THEY'RE GETTING INTO, 7 DOESN' T MATTER HOW MUCH YOU PAY THEM. 8 9 DR. PETERS: BERNIE, I THINK THAT WHAT YOU' RE FORMULATING RIGHT NOW IS THE CENTER OF THE ISSUE. 10 AND IT APPLIES BOTH TO WHAT WE'RE GOING TO FUND AND WHAT 11 12 WE'RE GOING TO ACCEPT. AND I JUST ONE MORE NUANCE TO

IT. IS THAT THE PUBLIC IS OUTRAGED AT THESE ADS IN 13 COLLEGE NEWSPAPERS FOR WOMEN TO DONATE THESE EGGS AND 14 15 TO GET LOTS OF MONEY. AND PART OF BEING ETHICAL, WHETHER WE LIKE IT OR NOT, IS REALLY TO BE RESPONSIVE 16 TO THE CULTURE AROUND US. AND I THINK PEOPLE WOULD 17 18 EXPECT FROM PROP 71 TO REDUCE THE OUTRAGE SO THAT 19 SOMEHOW OR OTHER THE STANDARDS THAT WE SET SHOULD NOT ENCOURAGE THIS KIND OF USE OF MONEY FOR THE BUYING OF 20 21 PARTS OF HUMAN BODIES AND STUFF LIKE THAT.

I CALL IT YUCK. OR LEON KASS CALLS IT THE
WISDOM OF REPUGNANCE. THERE IS SOMETHING HERE TO THIS.
NOW, ONE OF THE THINGS WE CAN'T DO FROM OUR VANTAGE
POINT IN PROPOSITION 71 IS REGULATE ALL THIS. WE CAN'T

1 DO THAT.

COULD WE MAYBE DO A MINIMALIST KIND OF THING, 2 3 SIMPLY ARTICULATE A PRINCIPLE THAT SAYS YOU DO NOT BUY 4 OOCYTES OR EMBRYOS OR SOMETHING LIKE THAT, AND THEN JUST LEAVE IT AT THAT? THE WAY THAT'S GOING TO GET 5 INTERPRETED WILL BE IN MULTIPLE WAYS, BUT I THINK THAT 6 AT LEAST WE WILL HAVE SPOKEN TO THE QUESTION OF YUCK OR 7 THE WISDOM OF REPUGNANCE OR THE PROTECTION OF HUMAN 8 9 DIGNITY, WHICH IS REALLY WHAT'S AT STAKE.

10 DR. EGGAN: WE NEED TO PROTECT HUMAN DIGNITY. I COULDN'T AGREE MORE. BUT I FIND THE WISDOM OF 11 12 REPUGNANCE NOT TERRIBLY WISE BECAUSE THERE ARE MANY THINGS WHICH WE AS A SOCIETY ONCE FOUND REPUGNANT, BUT 13 NOW WIDELY ACCEPT. THIS IS ONE AREA WHERE, AT LEAST 14 PERSONALLY, I HAVE A GREAT DEPARTURE FROM THAT POINT OF 15 SOCIETY IS DYNAMIC AND IS EVER CHANGING, SO I 16 VIEW. DON'T THINK THAT -- I THINK THAT WE SHOULD TRY TO 17 INTUIT OUR WAY THROUGH THE YUCK FACTOR AND FIGURE OUT 18 19 WHAT IT IS ABOUT THESE THINGS THAT MAKE US UNCOMFORTABLE AND IS OR IS NOT RIGHT. 20

21 SO BUT THEN AGAIN, I ALSO THINK THAT BERNIE'S 22 STATEMENT IS TAKEN IN GOOD SPIRIT. THERE ARE CERTAIN 23 EXPECTATIONS IN SOCIETY THAT WE COULDN'T COMMODIFY 24 CERTAIN PARTS OF OUR BODY. THE PROBLEM HERE IS THAT, 25 AGAIN, AS A I SAID EARLIER, THAT EGGS SOMEHOW LIE

SOMEWHERE BETWEEN BLOOD AND SPERM AND A KIDNEY. AND SO 1 I THINK THIS IS A DIFFICULT THING. THERE'S NOT -- I 2 3 THINK IT'S FAIRLY CLEAR THAT WE SHOULD NOT IN ANY WAY 4 ENCOURAGE PEOPLE TO BE PAID FOR SOMETHING WHICH THEY CAN NEVER GET BACK, LIKE A KIDNEY. SO TO DISSOCIATE 5 THAT SORT OF DONATION FROM MONETARY REIMBURSEMENT IS 6 IMPORTANT. I THINK THE RISKS ARE LESS CLEAR HERE THAN 7 THEY ARE IN THAT SORT OF SITUATION. 8

9 DR. CIBELLI: ARE WE GOING TO VOTE ON THIS? 10 VICE CHAIR LO: I'M NOT SURE. AGAIN, WE 11 CAN'T VOTE BECAUSE WE DON'T HAVE A QUORUM, BUT I'M 12 HEARING A LOT OF DIFFERENT VIEWS. I'VE BEEN IGNORING 13 JEFF BECAUSE I'VE BEEN LOOKING THAT WAY, BUT I WANT TO 14 MAKE SURE I GET HIM.

MR. SHEEHY: JUST A COUPLE OF POINTS. FIRST 15 OF ALL, PEOPLE ARE SELLING EGGS INTO IVF CLINICS. 16 AND I HAVEN'T HEARD THE OUTRAGE. I THINK IF YOU TALK TO A 17 PARENT WHO HAS A CHILD FROM THAT, I THINK THAT YOU HAVE 18 19 A COMPLETELY OPPOSITE REACTION FROM OUTRAGE. I THINK THAT'S ONE WHERE -- I DON'T SEE THAT THAT PRACTICE WILL 20 21 STOP AS LONG AS PEOPLE ARE ABLE TO HAVE KIDS THROUGH THAT METHOD. AND I THINK THAT'S WHERE A CERTAIN 22 BALANCE HAS BEEN ACHIEVED WHERE PEOPLE SAY LOOK AT THIS 23 24 KID. I DON'T OBJECT TO THE FACT THAT SOMEONE PAID A 25 WOMAN TO MAKE A DONATION SO THAT THIS KID COULD EXIST.

1 THE OTHER POINT IS I'D BE VERY CAREFUL ABOUT 2 TED'S POINT ABOUT NOT BUYING EMBRYOS. IT'S ONE THING 3 TO BE TALKING ABOUT WHETHER OR NOT YOU'RE COMPENSATING 4 A DONOR, BUT ACTUALLY THERE IS GOING TO BE A MARKET IN 5 THIS, BUT IT'S GOING TO BE THIRD PARTY. A FERTILITY 6 CLINIC IS NOT GIVE THIS AWAY.

7 THERE ARE COSTS ASSOCIATED WITH STORING, MOVING, DISTRIBUTING. WE WANT TO PRETEND LIKE THAT 8 9 THERE'S NOT ALREADY A MARKET IN THESE THINGS. ONLY THING IS WHAT WE'RE ARGUING ABOUT IS WHETHER OR NOT THE 10 11 PERSON WHO ACTUALLY GIVES THE VERY FIRST PRODUCT GETS 12 ANYTHING. BUT EVERYBODY ELSE UP AND DOWN THE LINE IS GETTING SOMETHING. SO YOU CAN SAY THAT EMBRYOS WON'T 13 BE FOR SALE; BUT WHEN SOMEONE GETS AN LEFT-OVER EMBRYO, 14 15 THEY'RE NOT GIVEN AWAY BY THE FERTILITY CLINIC. THEY DON'T SAY, OH, HERE TAKE IT. THERE'S SOME COST, AND 16 THAT COST INCLUDES SOMETHING THAT -- I DON'T THINK IT'S 17 STRICT -- EVEN WITHIN A STRICT COST WHEN THEY MAKE A 18 19 STRICT COST. THERE'S SOME ELEMENT OF THAT THAT'S PROFIT FOR SOMEBODY, SO I THINK WE HAVE TO BE VERY 20 21 CAREFUL ABOUT THIS.

DR. PETERS: TWO POINTS. I THINK YOU'RE RIGHT, THAT THIS PROLIFERATION OF ACTIVITY AND PEOPLE GETTING A CUT OF THE PROFIT, THAT'S GOING TO GO ON. I DON'T THINK WE COULD CONTROL THAT. WE PROBABLY CAN'T

EVEN GUIDE IT. SO THAT'S WHY I'M FLOATING THIS IDEA OF
 JUST A MINIMALIST STATEMENT THAT THESE PARTS OF THE
 HUMAN BODY CANNOT BE BOUGHT OR SOLD.

4 AND I THINK KEVIN IS RIGHT IN RAISING THE QUESTION: WHAT IS THIS -- WHERE IS THE CLOSEST ANALOG? 5 IS IT LIKE A LIVER, OR IS IT LIKE HAIR AND FINGERNAILS 6 OR SOMETHING LIKE THAT? I THINK IT'S LIKE -- IT'S LIKE 7 A HUMAN ORGAN. WHY? WELL, BECAUSE OF THE RISKS TO THE 8 9 HEALTH OF THE WOMAN IN THE PROCESS. SO THAT WAS WHAT TIPS ME ON THE SIDE OF WANTING TO TREAT IT MORE LIKE AN 10 11 ORGAN RATHER THAN TREATING IT AS SOMETHING THAT IS 12 EASILY EXPENDABLE. I THINK KEVIN IS RIGHT IN THE SENSE OF LAYING DOWN THE CHALLENGE. WE OUGHT TO DECIDE WHAT 13 ARE THESE OOCYTES LIKE? ARE THEY LIKE ORGANS OR 14 THEY'RE REALLY LIKE GETTING A HAIRCUT? 15 MR. SHEEHY: WHY DO YOU MAKE A DISTINCTION 16 BETWEEN AN EGG AND SPERM? 17 DR. PETERS: BECAUSE I THINK THERE'S A LARGE 18 19 RISK TO EGG DONATION THAT ISN'T THERE FOR A SPERM. MR. SHEEHY: NOT IF IT'S A BY-PRODUCT OF IVF, 20 21 THAT THE RISK WAS TAKEN -- IF YOU ARE TALKING ABOUT, WHICH WE TALKED ABOUT EARLIER, THAT SOMEONE IS GOING IN 22 FOR IVF AND THEY'RE GOING TO GIVE AWAY A COUPLE OF EGGS 23 TO BE USED FOR RESEARCH WHILE THEY'RE HAVING A CHILD, 24 25 THEY' RE NOT TAKING THAT RISK FOR THE PURPOSE OF

RESEARCH. THEY'RE TAKING THAT RISK FOR THE PURPOSE OF
 HAVING A CHILD, SO THAT RISK IS NOT THERE FOR THE
 RESEARCH PURPOSE.

DR. EGGAN: THAT'S NOT CORRECT BECAUSE IF 4 THEY'RE TAKING THAT RISK FOR THEIR OWN FERTILITY SAKE, 5 THEN THEY SHOULDN'T BE TAKING IT FOR RESEARCH. 6 THOSE TWO THINGS WE'VE ALREADY ARGUED AND DISCUSSED TO BE 7 DISSOCIATED FROM ONE ANOTHER. THAT'S ONE OF THE --8 9 DR. TAYLOR: IN TERMS OF THESE ANALOGIES, RISK IS INVERSELY PROPORTIONAL TO COST. SO I'M HAVING 10 TROUBLE FOLLOWING THIS ARGUMENT. SO THE LIVER DONOR 11 12 GETS NOTHING. THE KIDNEY DONOR GETS NOTHING. THE SPERM DONOR GET \$75 OR SOMETHING LIKE THAT. THE BLOOD 13 DONOR WHO HAS PROBABLY A SLIGHTLY HIGHER RISK OF INJURY 14 15 THAN THE SPERM DONOR, WHICH I WOULD SAY IS PROBABLY RELATIVELY MINIMAL RISK LAST TIME I THOUGHT ABOUT IT, 16 GETS COMPENSATED TO THE TUNE OF \$30. I'M JUST -- I'M 17 STARTING TO -- SO COST AND RISK CLEARLY ARE EITHER 18 19 DI SSOCI ATED OR INVERSELY RELATED. I CAN' T FI GURE THIS. VICE CHAIR LO: LET ME LET MARCY GET IN, THEN 20 21 LET ME OFFER A PROCEDURE HERE. MS. FEIT: I AGREE WITH ANN. I JUST DON'T 22 THINK WE SHOULD MAKE THIS THE ISSUE. I THINK PROP 71 23

24 IS WRITTEN AND EXPLAINS WHAT CIRM IS GOING TO PAY.

25 IT'S GOING TO PAY EXPENSES, AND WE CAN DEFINE WHAT

1 THOSE ARE. THEY WON'T BE UNUSUAL OR INCREDIBLE, LIKE I 2 WILL TO GO THROUGH PARIS TO GET HERE OR WHATEVER THAT 3 WAS. I THINK IF WE JUST STAY WITH THAT. I DON'T THINK 4 WE'RE GOING TO SOLVE IT. I THINK IF YOU GO AROUND THE 5 ROOM, EACH OF US HAVE A MORAL, ETHICAL ATTITUDE TOWARD 6 WHAT WE'RE TALKING ABOUT. I DON'T THINK YOU'RE REALLY 7 GOING TO FIND A GENERAL CONSENSUS ON THIS.

8 BUT I THINK OUR CHARGE IS WRITTEN OUT ALREADY 9 IN PROP 71 IN TERMS OF THE REIMBURSEMENT. AND I DON'T 10 THINK WE CAN CHANGE THAT. I THINK THAT BY JUST 11 STICKING TO THAT, WE ARE MAKING A STATEMENT THAT WE'RE 12 NOT GOING TO BE BUYING THESE THINGS ON THE MARKET. 13 WE'RE NOT GOING TO PUT OUT AN RFA TO BUY AS MANY IN THE 14 WORLD MARKET AS WE CAN.

SO I THINK MOVING FORWARD, THERE ARE PLENTY 15 OF STEPS THAT ARE BEING PUT IN PLACE, BOTH IN THE 16 17 GRANTS PROCEDURES THAT WE'RE SETTING FORWARD, BOTH IN 18 THE REGULATIONS THAT WE'RE SETTING FORWARD AND OTHER 19 WORKING GROUPS TO PROTECT THE PROCESS OF WHAT WE'RE TRYING TO DO. AND I THINK WE'VE SPOKEN FOR HOURS ABOUT 20 21 PROTECTING THE DONORS, AND WE KNOW WHAT WE WANT TO DO IS WE WANT TO PROTECT THE INDIVIDUALS AND MOVE THE 22 23 RESEARCH AHEAD.

24VICE CHAIR LO:ABSOLUTELY LAST COMMENT, AND25THEN I WANT TO TRY AND TIE THIS TOGETHER AND OPEN TO

1 PUBLIC COMMENTS.

DR. PETERS: LET ME JUST FOLLOW THAT UP BY 2 3 SAYING I THINK WE CAN OFFER A DISTINCTION. I'M 4 SYMPATHETIC TO KEVIN'S CASE EARLIER. WHAT HAPPENS IF SOMEONE OFF-SITE HAS A STEM CELL LINE AVAILABLE AND 5 THOSE PEOPLE COMPENSATED THE WOMEN AND THAT WE CAN 6 CONSIDER THAT TO BE A CREDIBLE, ETHICAL ARGUMENT THAT 7 THEY EMPLOYED, AND WE COULD PERMIT THAT TO BE USED BY 8 9 CIRM RESEARCHERS.

HOW CAN WE MAKE THAT, THEN, CONSISTENT WITH 10 11 WHAT WE'RE REQUIRING OF OUR OWN RESEARCHERS? MY 12 SUGGESTION IS TO SAY THAT WE CANNOT USE STEM CELL LINES IN WHICH EGGS OR EMBRYOS WERE PURCHASED, PERIOD. THAT 13 WOULD PERMIT, THEN, COMPENSATION FOR THE WOMEN DONOR. 14 THOSE STEM CELL LINES WOULD BE PERMITTED. IT'S REALLY 15 A LINGUISTIC KIND OF THING, BUT I THINK IT PRESERVES 16 WHAT I THINK IS THE UNDERLYING PHILOSOPHICAL CONCERN 17 THAT LED PROP 71 TO WHAT IT IS. I HAVEN'T TALKED WITH 18 19 BOB KLEIN ABOUT THIS, BUT THAT'S THE WAY I READ IT. MR. SHEEHY: IF A FERTILITY CLINIC SUPPLIES 20 21 AN EMBRYO A RESEARCHER, WHAT IS THAT TRANSACTION? DR. TAYLOR: IT THE COSTS THE IVF CLINIC 22 WHATEVER THE SHIPPING CHARGE IS. 23 MR. SHEEHY: SO THERE'S NEVER AN EXCHANGE ON 24 ANY OF THESE. 25

VICE CHAIR LO: ONLY FOR EXPENSES. THEY CAN
 ASK THEM TO COMPENSATE FOR THE FED EX CHARGE OR
 WHATEVER, BUT THEY CAN'T SAY BEYOND THAT WE WON'T,
 \$500.
 MR. SHEEHY: I'M JUST CURIOUS.

6 DR. TAYLOR: I THINK THAT'S TRUE, JEFF. IT'S 7 NOT REALLY BUILT INTO THE PAYMENT SCHEDULE EITHER. 8 WHEN THESE EMBRYOS WERE COLLECTED, NOBODY REALLY WAS 9 USING THEM FOR THIS PURPOSE. GOING INTO THE FUTURE, 10 MAYBE THAT WILL BE CALCULATED INTO THE COST OF THE 11 CYCLE.

12 DR. CIBELLI: YOU'RE MAKING THEM A FAVOR OF 13 JUST GETTING RID OF THOSE EMBRYOS.

14 VICE CHAIR LO: YOU SHOULD PAY US IN15 ADDITION.

16 LET ME SUGGEST THAT WE, FIRST OF ALL, THERE 17 ARE A MEMBERS OF THE COMMITTEE THAT NEED TO BE PART OF 18 THIS DISCUSSION. MAYBE WHAT WE CAN DO IS TRY AND HAVE 19 A BRIEFING THAT SORT OF WITH LAYS OUT THE DISCUSSION WE 20 HAVE AND SUGGEST SOME OPTIONS FOR WHAT WE MIGHT WANT TO 21 SAY IN REGULATIONS.

22 WHAT I'M HEARING CLEARLY IS THAT WE THINK 23 CONSENT IS THE KEY ISSUE, AND THAT THAT PROBABLY SHOULD 24 COME FOREMOST, THAT THERE'S A LOT OF SENTIMENT HERE FOR 25 ALLOWING PAYMENT FOR EXPENSES OF THE WOMAN OR GAMETE

DONOR, AND THAT WE THINK THAT SHOULD BE PERMISSIBLE FOR 1 NON-CIRM FUNDED DERIVATIONS, BUT THAT THERE'S SOME 2 3 DI SEASE ABOUT HAVING IT TOTALLY OPEN-ENDED PAYMENT. 4 AND TED HAS SUGGESTED LANGUAGE SAYING NO BUYING OR SELLING OR PAYMENT, BUT EXPENSES ARE ALLOWED. 5 SOMETIMES IT'S PUT IN AS REASONABLE EXPENSES. I THINK 6 IF THAT IS SOMETHING THAT SEEMS TO WORK, WE MIGHT TRY 7 8 THAT.

9 I WANT TO ASK FOR PUBLIC COMMENTS BECAUSE
10 THIS STRIKES ME AS A VERY IMPORTANT AND VERY
11 CONTROVERSIAL ISSUE. AND, AGAIN, I KNOW THERE ARE
12 OTHER PUBLIC PERSPECTIVES THAT ARE OBVIOUSLY HERE IN
13 THE ROOM THAT WE NEED TO HEAR FROM AS WELL.

MR. REED: TWO THINGS COME TO MIND. 14 NO. 1, THERE ARE ISSUES OF SOVEREIGN NATIONS. I DON'T THINK 15 WE CAN IMPOSE OUR STANDARDS ON ANOTHER COUNTRY WHICH 16 HAS DIFFERENT ETHICAL AND RELIGIOUS BACKGROUNDS. I'M 17 TRYING TO LEARN CHINESE RIGHT NOW, WHICH VERY HARD, 18 19 TAKES ABOUT AN HOUR A DAY, AND IT WILL PROBABLY TAKE THREE OR FOUR YEARS, BUT I WANT TO BE ABLE TO TALK TO 20 21 THE CHINESE SCIENTISTS. I FEEL THEY'RE GOING TO MAKE HUGE BREAKTHROUGHS, AND PART OF THE REASON IS THAT 22 THEY'RE NOT BOUND UP BY A LOT OF THINGS WE'RE HAVING 23 24 TREMENDOUS BATTLES WITH.

25

I THINK ONE OF THE REASONS THAT WE PUT THE NO

1 COMPENSATION IN PROP 71 WAS IN A HOPEFUL ATTEMPT TO 2 EASE OFF SOME OF THE ENEMIES OF THE RESEARCH. DIDN'T 3 WORK. IT WILL NOT WORK. THEY'RE AGAINST IT, THEY'RE 4 GOING TO STAY AGAINST IT UNTIL SOMEONE IN THEIR FAMILY 5 GETS SICK AND THEY GET BETTER BECAUSE OF THE RESEARCH 6 AFTER WHICH THEY WILL BECOME OUR BIGGEST SUPPORTERS.

THE SECOND THING IS THERE IS A SECOND KIND OF 7 EXPLOITATION OF WOMEN. MY SISTER HAS BREAST CANCER. 8 SHE'S GONE THROUGH THE MASS MASTECTOMIES, SHE'S GONE 9 THROUGH THE CHEMO. NOW SHE'S OUT OF REMISSION. 10 SHE' S GOING INTO ARSENIC, THEN SHE'S GOING TO GO INTO CHEMO 11 12 AGAIN. I GAVE BLOOD DAY BEFORE YESTERDAY TO TRY AND SEE IF I CAN A BONE MARROW TRANSFER. I DON'T KNOW 13 WHAT'S GOING TO HAPPEN, BUT I DO KNOW THAT THERE ARE 14 15 CHARITABLE ORGANIZATIONS WHICH HAVE BACKED OFF FROM SUPPORTING STEM CELL RESEARCH BECAUSE OF RELIGIOUS 16 PRESSURES. SO THAT'S ANOTHER KIND OF EXPLOITATION. 17 I DON'T WANT TO SEE US CUT OFF FROM THE REST 18

OF THE WORLD BECAUSE OF THE FEAR OF SOMEONE ELSE'S BAD
OPINION OF US. THOSE WHO DO NOT SUPPORT US DO NOT
SUPPORT US, AND THE ONLY THING THAT'S GOING TO CHANGE
THEIR MINDS IS CURE IN THEIR FAMILY. I REALLY WANT US
TO BE A PART OF THE WORLD COMMUNITY AND NOT LET
ANYTHING BLOCK THAT. THANK YOU.

25

MR. REYNOLDS: THANKS FOR THE OPPORTUNITY TO

1 SPEAK. TWO REGULATORY REGIMES, I CALL THEM, ARE ON MY MIND. AND THE FIRST ONE IS, OF COURSE, PROPOSITION 71, 2 3 AND IT'S ALWAYS A LITTLE TRICKY TO TRY TO INTERPRET THE 4 WILL OF THE VOTERS. BUT NOT ONLY IS THE LANGUAGE 5 PROHIBITING COMPENSATION BEYOND REIMBURSEMENT WRITTEN INTO PROPOSITION 71 IN A FAIRLY CLEAR WAY, ALTHOUGH NOT 6 ENTIRELY CLEAR. THAT WAS AMONG THE ETHICAL LIMITATIONS 7 WRITTEN INTO PROPOSITION 71 THAT WERE PART OF THE 8 9 ADVERTISING CAMPAIGN. AND THAT'S CERTAINLY CONTRIBUTED TO THE VOTERS, WHO I WOULD CONSIDER THAT PART OF YOUR 10 MANDATE HERE. THAT'S NOT SOMETHING TO BE REVISITED. 11 12 I WOULD TEND TO AGREE WITH DR. TAYLOR, THAT THIS WOULD BE SEEN BY THE PUBLIC, INCLUDING YOUR 13 SUPPORTERS, AS A LOOPHOLE THAT YOU' RE CAPITALIZING ON. 14 15 A SIMILAR THING CAME UP A LITTLE BIT IN TERMS OF RETURNS TO THE STATE. IT'S IN THE LAW. IT WAS PART OF 16 THE ADVERTISING THAT HELPED IT PASS, AND I DON'T THINK 17

18 THAT THAT'S NECESSARILY ON THE TABLE.

19 THE OTHER REGIME THAT'S ON MY MIND IS THE 20 NATIONAL ACADEMIES' RECOMMENDATIONS. AND I SUPPOSE I'M 21 A LITTLE BIT CONCERNED THAT IN A COUPLE OF WAYS YOU'RE 22 OPENING THE DOOR FOR LOWERING THE FLOOR A LITTLE BIT 23 BELOW THE NATIONAL ACADEMIES' RECOMMENDATIONS. ONE WAY 24 IS THE COMPENSATION ISSUE. BUT GOING BACK EARLIER 25 TODAY, MY INTERPRETATION OF WHAT'S IN THE NATIONAL

ACADEMIES IS THIS THING ABOUT NO LIMITATIONS ON
 DOWNSTREAM USES OF THE CELLS DERIVED FROM THE DONORS,
 THAT THE NATIONAL ACADEMIES RECOMMENDED GUIDELINES
 EXPLICITLY RECOMMEND THAT THAT OPTION BE GIVEN TO
 GAMETE DONORS, SO I'D BE A LITTLE CONCERNED ABOUT
 CREATING MULTIPLE REGULATORY REGIMES THAT OVERLAP IN
 SOME WAYS, BUT NOT IN ALL WAYS.

8 VICE CHAIR LO: THANKS VERY MUCH FOR YOUR TWO9 IMPORTANT POINTS.

DR. EGGAN: I'D LIKE TO RESPOND TO BOTH THOSE 10 11 POINTS. THOSE ARE, FIRST OF ALL, THAT THE NATIONAL 12 ACADEMY OF SCIENCE GUIDELINES ARE JUST THAT, AND THAT THEY' RE WORKING GUIDELINES. I THINK THERE NEEDS TO BE 13 A RECOGNITION THAT THEY' RE WORKS IN PROGRESS, AND THAT 14 15 THIS IS A RAPIDLY EMERGING FIELD. AND THAT I THINK IT'S -- ESPECIALLY WITH THIS POINT HAVING TO DO WITH 16 INFORMED CONSENT AND DOWNSTREAM USE, JUST AS IS 17 18 REASONABLE FOR -- I THINK IT'S VERY IMPORTANT THAT A 19 GAMETE DONOR BE ABLE TO SAY I'M NOT COMFORTABLE WITH THIS DOWNSTREAM USE OF THE CELL LINE, AND I THINK IT'S 20 21 ALSO IMPORTANT TO SAY THAT IT'S JUST AS REASONABLE FOR THE SCIENTISTS TO TURN AROUND AND SAY THEN I'M NOT 22 23 COMFORTABLE WITH YOU PARTICIPATING IN THIS RESEARCH 24 STUDY.

25

BUT I THINK THERE NEEDS THAT SORT OF FRANK

AND OPEN CONVERSATION BETWEEN BOTH THE SCIENTISTS AND
 THE DONOR, AND THAT'S WHAT'S GOING TO PREVENT
 MISUNDERSTANDING, AND THAT'S CRITICAL.

4 I HAVE TO SAY, AS I READ THE NATIONAL ACADEMY OF SCIENCE GUIDELINES WITH RESPECT TO COMPENSATION, I 5 BELIEVE THAT IT'S WORDED JUST THAT. AND I THINK IT'S 6 ACTUALLY, IF ANYTHING, PROBABLY LEFT RATHER AMBIGUOUS 7 WITH RESPECT TO WHAT COMPENSATION MEANS. I CAN'T 8 REMEMBER WHAT THE EXACT WORDS ARE, BUT MY UNDERSTANDING 9 IS THAT IT'S ACTUALLY LESS RESTRICTIVE IN ITS CHOICE OF 10 11 WORDS THAN PROP 71 IS.

12 VICE CHAIR LO: ONE OF THE THINGS WE'LL ASK 13 STAFF TO DO IN THE INTERIM BEFORE NEXT MEETING IS TO 14 LOOK VERY CLOSELY AT THE LANGUAGE OF PROP 71, THE NAS 15 GUIDELINES, AND OTHER COMPARABLE STATEMENTS ABOUT 16 PAYMENT FOR RESEARCH AND PROVIDE SOME BACKGROUND.

17 I WANT TO SORT SWITCH GEARS AND START
18 THINKING TOWARDS THE FUTURE. I THINK THIS WAS A VERY
19 USEFUL MEETING. A LOT OF THE GOOD IDEAS. I THINK WE
20 REACHED SOME IMPORTANT IDEAS ABOUT CONSENT.

IF I COULD ASK YOU TO TURN TO TAB 8, WHICH IS
FUTURE PLANS. FIRST, THERE'S THIS COLOR-CODED CALENDAR
ON THE SECOND PAGE. JEFF, MAYBE YOU COULD HELP US IF I
DON'T GET THIS RIGHT JUST TO SORT OF KEEP OUR MINDS ON
SORT OF THE BIG PICTURE. WE JUST HAD OUR 12/1 MEETING.

THERE'S A MEETING WE HAVE SCHEDULED, IT'S ACTUALLY
 GOING TO BE A TWO-DAY MEETING AT THE END OF JANUARY
 WHERE OUR GOAL IS TO ACTUALLY COME UP WITH
 RECOMMENDATIONS THAT GO BACK TO THE ICOC FOR FINAL
 REGULATIONS. SO THAT'S THE PRODUCT THAT WE WOULD LIKE
 TO PROPOSE TO THE ICOC.

THAT THEN GOES TO THE ICOC MEETING ON 7 FEBRUARY 10TH, ABOUT TEN DAYS, ELEVEN DAYS LATER. 8 AND 9 IF THEY APPROVE, THEN THAT TRIGGERS THE APA PROCESS, THE 45-DAY PUBLIC COMMENT PERIOD, OUR REQUIREMENT TO 10 11 RESPOND TO COMMENTS. AND THEN AFTER THAT, IF THERE ARE 12 CHANGES, THOSE NEED TO BE MADE WITH AN ADDITIONAL COMMENT PERIOD, AND THEN IT GOES TO THE OFFICE OF 13 ADMINISTRATIVE LAW REVIEW. AND THAT'S THE TIMETABLE 14 15 THAT WILL ALLOW US TO HAVE REGULATIONS, FINAL REGULATIONS, IN EFFECT BY THE JULY 30TH, 2006, 16 GUIDELINE, WHICH IS WHEN THE EXPIRATION OF THE INTERIM 17 18 GUI DELINES THAT WERE APPROVED 11/2/05. 19 SO I JUST WANT TO SAY THAT THE NEXT MEETING OUR GOAL IS REALLY TO APPROVE LANGUAGE ON THESE 20 21 PROPOSED GUIDELINES, FINAL GUIDELINES. AND SO BEFORE THEN, STAFF IS GOING TO HAVE A LOT OF WORK TO DO 22 23 ACTUALLY WRITING THIS OUT, TRANSLATING IT INTO 24 REGULATORY LANGUAGE. I WOULD SUSPECT I WOULD LIKE TO 25 SORT OF BE ABLE TO CALL ON YOU EITHER ELECTRONICALLY OR

1 BY TELEPHONE TO TRY AND PUSH AHEAD ON SOME OF THE 2 ISSUES THAT WE HAVEN'T QUITE RESOLVED, EITHER TO CHECK 3 AND MAKE SURE THE LANGUAGE SEEMS RIGHT, BUT ALSO 4 THERE'S SOME OUTSTANDING ISSUES THAT, IF WE THOUGHT A 5 LITTLE BIT ABOUT AHEAD OF TIME, IT MAY FACILITATE OUR 6 DELIBERATIONS NEXT MEETING.

I KNOW THAT THE HOLIDAY SEASON IS COMING UP,
AND WE'RE ACTUALLY GOING TO NEED TO RESPECT THAT, BUT
BETWEEN NOW AND JANUARY, WE'D LIKE TO CONTACT YOU
EITHER ELECTRONICALLY AND MAYBE BY PHONE AND TO TRY AND
GET SOME FEEDBACK FROM YOU AS WE SORT OF GO ABOUT
PUTTING THE IDEAS FROM THE DAY INTO REGULATORY
LANGUAGE.

ON THE FIRST PAGE UNDER THAT BINDER, WHICH IS 14 THIS BIG BLACK CHART, SORT OF THE ISSUES THAT WE HAVE 15 TO DEAL WITH, I THINK IF WE CAN GET THE INFORMED 16 17 CONSENT SECTION WRITTEN UP IN REGULATORY LANGUAGE, THE 18 THINGS THAT WE NEED TO REVISIT IN JANUARY, THE ESCRO 19 REVIEW, CHARACTERIZATION OF ACTIVITIES NOT ELIGIBLE FOR FUNDING, ASSURANCES OF COMPLIANCE, I THINK ARE LESS 20 21 FRAUGHT WITH KIND OF ETHICAL CONTROVERSY. IT'S MORE A MATTER OF GETTING THE LANGUAGE RIGHT AND MAKING SURE WE 22 HAVEN' T LEFT OUT ANY KEY CONSIDERATIONS. 23

24SO I THINK WE'RE IN PRETTY GOOD SHAPE, BUT25STILL A LOT OF WORK LEFT TO DO.I'M GOING TO CALL ON

STAFF TO DO A LOT OF WORK AS THEY HAVE BEEN DOING,
 THANKS TO JEFF. AND THEN TO ACTUALLY GIVE YOU NOTICE
 THAT WE'LL BE SORT OF CALLING ON YOU IN THE INTERIM TO
 TRY AND CONTINUE TO GET YOUR IDEAS.

DR. EGGAN: MAYBE IT'S TOO LATE TO CHANGE IT, 5 BUT IS TEN DAYS A REALISTIC AMOUNT OF TIME FOR THE 6 STAFF TO TURN AROUND EVERYTHING WE DO IN OUR MEETING AT 7 THE END OF THE MONTH AND GET IT TO THE HANDS OF THE 8 9 ICOC FOR A REASONABLE REVIEW? WE HAVE A BIG JOB FOR THOSE TWO DAYS, AND IN TURN, IT WILL BE A VERY BIG JOB 10 11 TO PUT THE FINAL REGULATIONS IN THE HANDS OF THE ICOC 12 AND FOR THEM TO ACTUALLY READ IT BEFORE THEY DECIDE WHETHER OR NOT TO APPROVE IT. I'M SORT OF SITTING HERE 13 WONDERING IF THAT PASSES THE RED FACE TEST 14 15 ADMI NI STRATI VELY.

16 DR. HALL: THE HOPE IS THAT YOU WOULD, IN FACT, ARE CONVERGING ON THESE ISSUES TOWARDS SOLUTION. 17 THAT IS, THAT I THINK WHAT HAPPENED TODAY IS 18 19 ILLUSTRATIVE; THAT IS, WE TALKED ABOUT A LOT OF PRINCIPLES, YOU DID, AND THEN THE STAFF WILL TRY TO 20 21 REDUCE THOSE TO LANGUAGE. AND THE QUESTION IS WHETHER 22 WE ARE GOING TO MAKE WHOLESALE CHANGES AFTER THAT OR 23 MY GUESS IS THERE WILL BE INTENSE DISCUSSIONS NOT. OVER A FEW WORDS AND A FEW PHRASE. BUT IF YOU ACTUALLY 24 LOOK AT THE GUIDELINES, WHICH ARE UNDER -- DRAFT 25

GUIDELINES UNDER TAB 6, THEN STARTING IN, THEN I THINK 1 THERE ARE MANY AREAS IN HERE, THE HIGHLIGHTED AREAS 2 3 INDICATE SOME OF THE RECENT CHANGES. YOU CAN LOOK 4 THROUGH. THESE ARE ISSUES THAT WE'VE TALKED ABOUT A MY GUESS IS THAT THE CHANGES WILL BE 5 LOT BEFORE. 6 RELATIVELY SMALL. I COULD BE WRONG. IF WE'RE REQUIRED TO GO BACK AND COMPLETELY REWRITE SOMETHING, AND THEN 7 BRING IT TO YOU YET AGAIN, I THINK THAT'S A DIFFICULTY. 8 9 BUT MY HOPE IS THAT, YOU KNOW, WE GO FROM WHOLE SECTIONS TO PARAGRAPHS TO SENTENCES TO WORDS TO COMMAS, 10 11 AND THAT EACH ITERATION WILL GET US CLOSER AND CLOSER 12 TO WHERE WE ARE. DR. KIESSLING: IS THERE A REASON IT'S NOT 13 BEING HELD A WEEK BEFORE? 14 15 DR. LOMAX: UNFORTUNATELY THAT WAS SIMPLY SCHEDULING DIFFICULTY. I KNOW JENNIFER REALLY TRIED TO 16 SHOOT FOR MUCH EARLIER IN JANUARY, BUT IT WAS JUST VERY 17 18 DIFFICULT TO GET EVERYONE TOGETHER OTHER THAN THAT 19 WEEK. VICE CHAIR LO: WE CAN TRY AGAIN, BUT THIS IS 20

A VERY GOOD GROUP, BUT IT'S A VERY BUSY GROUP, AND IT'S REALLY HARD TO GET A QUORUM TOGETHER, ESPECIALLY FOR A TWO-DAY MEETING. WE THOUGHT IT WAS IMPORTANT TO HAVE THE OPTION OF THAT SECOND DAY IF WE REALLY NEEDED IT. DR. EGGAN: MAYBE I WOULD JUST SAY TO

ENCOURAGE STAFF TO POINT OUT THIS TIME LIMITATION THAT 1 WE HAVE AND TO ENCOURAGE PEOPLE TO COME FORWARD WITH 2 3 LARGER PROBLEMS THAT THEY HAVE IN THE INTERIM TIME TO 4 MAKE SURE THAT WE CAN DO OUR BEST TO DEAL WITH THEM BEFOREHAND, SO THERE AREN' T ANY ENORMOUS SURPRISES. 5 MEETING WILL BE WHAT THE MEETING IS AND I DON'T WANT TO 6 STIFLE THAT IN ANY WAY, BUT IF PEOPLE HAVE SUBSTANTIVE 7 DI SAGREEMENTS WITH HOW THINGS ARE SHAPING UP, THEN WE'D 8 9 HOPE THEY'D COME FORWARD BEFORE THAT DATE.

10 DR. HALL: ALSO ENCOURAGE A SENSE OF CONTINUITY, THAT WE REALLY DO BUILD EACH TIME ON WHAT 11 12 WE' VE DONE BEFORE AND DON' T HAVE TO GO BACK AND HAVE THE SAME DISCUSSIONS OVER AGAIN. PART OF IT -- THAT'S 13 DIFFICULT BECAUSE WE DON'T ALWAYS HAVE THE SAME PEOPLE. 14 15 SO ONE NEW PERSON COMES IN AND SAYS WAIT A MINUTE. I DON'T AGREE WITH ANY OF THIS, AND THEN IT'S DIFFICULT. 16 I THINK WE JUST HAVE TO DO THE BEST WE CAN. 17

18 WE DID TRY TO SCHEDULE IT DIFFERENTLY, BUT IT19 IS A VERY HARD GROUP TO GET TOGETHER.

VICE CHAIR LO: LET ME JUST UNDERLINE KEVIN'S
POINT. I THINK AS WE SEND THINGS OUT, WE WILL TRY AND
BE VERY SELECTIVE WITH WHAT WE SEND OUT. BUT IF WE
SEND SOMETHING OUT AND YOU LOOK AT IT AND SAY, GOSH, I
CAN'T LIVE WITH THIS, THEY'VE TOTALLY MISSED THE BOAT,
PLEASE LET US KNOW AS QUICKLY AS POSSIBLE SO WE CAN

TAKE INTO ACCOUNT YOUR CONCERNS, OBJECTIONS, AND TRY
 AND FIGURE OUT HOW TO --

3 DR. HALL: FIRST OF ALL, WE URGE PEOPLE TO 4 READ THEM BEFORE THEY GET ON THE PLANE TO COME OUT 5 HERE.

DR. LOMAX: IF I COULD ADD ONE OTHER COMMENT 6 THERE AS WELL. I THINK WE ARE, AT LEAST IN TERMS OF 7 THE PROCESS, WE'VE REALLY HIT A CRITICAL STAGE WHERE 8 9 WE'VE BEEN TRYING TO DO TWO THINGS AT ONCE, WHICH IS PROVIDE SYNTHESIZED BACKGROUND MATERIAL AND PUT A LOT 10 11 EFFORT INTO GETTING MATERIAL AND THE SUPPORTING 12 RESEARCH IN REALLY LEADING UP TO THIS MEETING. I WOULD SUGGEST THAT THE SECTIONS WE DEALT WITH TODAY ARE 13 REALLY THE CORE OF THE ETHICAL HEART OF THIS DOCUMENT, 14 AND A LOT OF THE ISSUES, PARTICULARLY IN JANUARY, ARE 15 MORE TECHNICAL IN NATURE, AND WE WON'T NEED TO SPEND 16 LOTS OF TIME ON THEM. SO THE FUTURE MATERIALS YOU'LL 17 BE GETTING FROM US WOULD BE STRICTLY FOCUSED ON THIS 18 19 CORE PART OF THE REGULATIONS AND DIRECT YOU INTO SORT OF REVIEWING LANGUAGE INSTEAD OF HAVING HAVE TO REVIEW 20 21 BACKGROUND MATERIAL AND REVIEW DOCUMENTS.

22 SO WE'LL HOPEFULLY USE THAT TIME TO REALLY 23 WORK THROUGH THE LANGUAGE OF THE REGULATIONS WITH YOU 24 AND NOT ALL THE RELATED MATERIAL THAT GOES INTO THAT. 25 DR. EGGAN: PRESUMABLY THAT MEANS THAT ALL

THE SUGGESTIONS THAT WE MADE AS A NONQUORUM GROUP TODAY 1 CAN BE ENTERED INTO THE SUGGESTED INTERIM GUIDELINES. 2 3 THERE WILL BE NO NEED -- IS IT TRUE THAT THERE WILL BE 4 NO NEED TO VOTE ON THOSE CHANGES INDIVIDUALLY, BUT THAT THERE CAN BE SORT OF A VOTE BY PRESUMABLY WHAT WOULD BE 5 THE QUORUM GROUP ON THE ENTIRE GUIDELINES AT THE END OF 6 THE DAY; IS THAT TRUE, OR WILL WE NEED TO REVISIT THESE 7 8 **ISSUES WITH THEM?**

9 VICE CHAIR LO: AGAIN, WE DIDN'T APPROVE
10 ANYTHING TODAY BECAUSE WE DIDN'T HAVE A QUORUM, BUT WE
11 NEED TO HAVE YOUR APPROVAL OF FINAL LANGUAGE AT THE
12 JANUARY MEETING. SO WE NEED SORT OF HAVE YOU APPROVE
13 BEFORE WE LEAVE IF WE'RE GOING TO PRESENT IT TO THE
14 ICOC IN FEBRUARY.

DR. PRIETO: I JUST WANT TO REMIND PEOPLE THAT THESE WILL STILL BE INTERIM REGULATIONS, AND THERE'S A LONG PUBLIC COMMENT PERIOD BEFORE THESE ARE CAST IN STONE.

19 DR. HALL: JUST TO KEEP OUR TERMINOLOGY 20 STRAIGHT, WE NOW HAVE INTERIM REGULATIONS IN PLACE. 21 THESE ARE DRAFT REGULATIONS WHICH WE WILL, IF APPROVED 22 BY THE ICOC, WILL THEN BE SUBMITTED TO OR NOTICED WITH 23 OAL AND THEN GO OUT FOR PUBLIC COMMENT. 24 DR DRIETO: DUT WILL NOT DE FINAL UNTER

24DR. PRIETO:BUT WILL NOT BE FINAL UNTIL --25DR. HALL:AND THEN WE WILL GIVE WRITTEN

RESPONSES TO THE PUBLIC COMMENT. BUT IT'S NOT THAT WE
 WILL ABLE TO CHANGE IT MIDSTREAM AS IT GOES ALONG.
 DR. PRIETO: FOLLOWING PUBLIC COMMENT,
 HOWEVER, IT CAN BE CHANGED AT THIS LEVEL OR THE ICOC
 LEVEL.

DR. HALL: CORRECT ME IF I'M WRONG HERE, BUT 6 7 FOLLOWING PUBLIC COMMENT AND OUR WRITTEN RESPONSE, THEN OAL DECIDES WHETHER WE'VE MADE A MAJOR MODIFICATION OR 8 9 A MINOR MODIFICATION. IF WE MADE MINOR MODIFICATIONS, THEN THEY ASK FOR 15 DAYS OF PUBLIC RESPONSE TO 10 11 REITERATE. IF THEY BELIEVE THAT WE MADE A MAJOR 12 CHANGE, THEN WE HAVE TO GO THROUGH ONCE AGAIN THE 45-DAY PROCESS OF HAVING PUBLIC COMMENT, WRITTEN 13 RESPONSES, AND THEN WE KEEP ON THAT CYCLE TILL WE GET 14 15 HOME. BUT IF WE WERE TO MAKE A MAJOR MODIFICATION DURING THAT PERIOD, THEN WE WOULD BE THRUST BACK INTO 16 STARTING OVER AGAIN. IT IS NOT THE CASE THAT THIS WILL 17 BE A LIVING DOCUMENT THAT WE CAN CONTINUE TO WORK ON 18 19 THROUGH THIS PROCESS. ONCE WE SUBMIT IT IN FEBRUARY AND IT GOES TO OAL, THEN THAT'S WHAT -- THAT'S OUR WORD 20 21 ON IT.

22 DR. KIESSLING: BECAUSE THERE WERE SOME 23 PROBLEMS WITH ELECTRONIC INFORMATION THIS TIME AROUND, 24 IS IT POSSIBLE THAT WHEN YOU SEND SOMETHING TO US, THAT 25 YOU ASK US TO REPLY AND MAKE SURE WE GOT IT BECAUSE IT

DIDN'T HAPPEN FOR A NUMBER OF THINGS THIS TIME. IF YOU
 DON'T HEAR BACK FROM US, I THINK YOU SHOULD TRIGGER IT
 AGAIN.

4 VICE CHAIR LO: THAT'S A GOOD SUGGESTION. 5 DR. LOMAX: ABSOLUTELY. AS A RESULT, THE PAST FEW WEEKS, WE'VE HAD SOME CONCERNS WITH E-MAIL, 6 AND WE'LL BUILD A CONTINGENCY IN TO MAKE SURE THAT 7 I SN' T DI SRUPTI VE TO THE PROCESS. 8 9 DR. HALL: WE'LL SEND IT EVERY DAY UNTIL YOU 10 SAY STOP. 11 DR. KIESSLING: DO THAT. SOMETHING LIKE THAT 12 WORKS. VICE CHAIR LO: AND THEN ANY COMMENTS, 13 QUESTIONS ABOUT THE PROCEDURES? I JUST WANT A POINT OF 14 INFORMATION. A WEEK FROM TOMORROW THE UNIVERSITY OF 15 CALIFORNIA OFFICE OF THE PRESIDENT AND CIRM ARE 16 COHOSTING A MEETING FOR REPRESENTATIVES OF THE 17 18 INSTITUTIONS THAT APPLIED FOR CIRM TRAINING GRANTS TO 19 SEND SEVERAL REPRESENTATIVES SO WE CAN GIVE THEM SORT OF OUR THINKING ON OUR GUIDELINES AND SO OBTAIN THEIR 20 21 FEEDBACK, COMMENTS, AND THOUGHTS. AND AMONG THE TYPES OF PEOPLE WHO WILL BE THERE WILL BE MEMBERS AND CHAIRS 22 OF ESCRO'S OR IRB'S, PEOPLE RESPONSIBLE FOR 23 24 INSTITUTIONAL COMPLIANCE, RESEARCHERS. SO WE HOPE TO GET SORT OF A REPRESENTATIVE SAMPLE OF PEOPLE WHO WILL 25

BE LIVING WITH AND REGULATED BY THESE REGULATIONS.
 AND, AGAIN, THE POINT OF THIS IS TO MAKE SURE WE'RE NOT
 PROPOSING SOMETHING THAT'S GOING TO TRIGGER A VERY
 STRONG RESPONSE THAT'S GOING TO REQUIRE US TO TOTALLY
 REWORK THINGS. WE WANT TO FIND THAT OUT BEFORE WE
 ISSUE OUR RECOMMENDATIONS TO ICOC.

I WANT TO THANK ARLENE AND UCOP FOR TAKING 7 THE LEAD ON THIS. I THINK IT'S GOING TO BE A VERY 8 USEFUL MEETING. ALREADY SOME OF THE FEEDBACK WE'VE 9 GOTTEN IS THAT A LOT OF THESE INSTITUTIONS REALLY ARE 10 11 EAGER TO SORT OF HEAR WHAT WE'RE THINKING. A LOT OF 12 WHAT WE'RE GOING TO SAY IS REASSURING AND THAT WE'RE NOT GOING TO BE MINUTELY PRESCRIBING WHAT WE'RE GOING 13 14 TO DO.

DR. HALL: IT'S OUR USER GROUP BASICALLY.
WE' RE CHECKING WITH OUR USER GROUP.

DR. PETERS: BERNIE, DID YOU WANT TO
ENCOURAGE MEMBERS OF OUR WORKING GROUP TO SHOW UP, OR
IS THAT ALREADY A SET?

VICE CHAIR LO: WELL, I THINK WE'RE ALWAYS
EAGER. IT'S ACTUALLY IN THIS SIDE OF THE BAY.
GLADSTONE. IT'S DOWN IN MISSION BAY. YES, I THINK
ANYONE ON THE COMMITTEE IS CERTAINLY WELCOME TO COME.
AND I THINK IT SHOULD BE INTERESTING AND EDUCATIONAL
BECAUSE IT IS GOING TO GIVE US A WAY OF UNDERSTANDING

HOW THE PEOPLE WHO ARE SUBJECT TO OUR REGULATIONS ARE
 REACTING TO IT. ABSOLUTELY, I THINK WE'RE CERTAINLY
 WELCOME. WE'LL GET THE SAME LUNCH AS EVERYONE ELSE
 GETS.

WITH THAT, IF THERE IF THERE IS NO ADDITIONAL BUSINESS -- WE'RE NOT ALLOWED TO HAVE MOVEMENTS TO ADJOURN, SO I CAN JUST UNILATERALLY SAY I HOPE IT'S NOT RAINING. AND FOR THOSE WHO ARE TRAVELING, GOD SPEED AND SAFE TRAVELS AND HOPE THAT THE PLANES ARE FLYING ON TIME. FOR THOSE OF YOU ON DELTA, MY COMMISERATIONS. THANKS VERY MUCH. I THOUGHT THIS WAS A VERY USEFUL MEETING. (THE MEETING WAS THEN ADJOURNED AT 05:34 P.M.)

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5	REPORTER' S CERTIFICATE
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8	
9	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 ** WORKING GROUP OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD AT THE LOCATION INDICATED BELOW
10	
11	
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14	{LOCATION} {ADDRESS LINE 2}
15	***, CALI FORNI A ON
16	THURSDAY, DECEMBER 1, 2005
17	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.
18	
19	
20	RECORD OF THE PROCEEDING.
21	BETH C. DRAIN, CSR 7152 BARRISTER'S REPORTING SERVICE 1072 S.E. BRISTOL STREET SUITE 100 SANTA ANA HEIGHTS, CALIFORNIA (714) 444-4100
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