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

REGULAR MEETING

LOCATION: AS INDICATED ON THE AGENDA

DATE: TUESDAY, OCTOBER 1, 2013
9 A.M.

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

BRS FILE NO.: 95127

I N D E X

TUESDAY, OCTOBER 1, 2013

9 A.M.

DR. LOMAX: THIS IS GEOFF LOMAX. I'D JUST REMIND FOLKS FOR THE SAKE OF THE RECORDER IF YOU COULD MENTION YOUR NAME. I'M SURE SHE RECOGNIZES A LOT OF YOU, BUT IT'S HELPFUL.

FOR ROLL, SHERRY LANSING.

MS. LANSING: HERE.

DR. LOMAX: BERNARD LO.

CHAIRMAN LO: HERE.

DR. LOMAX: JEFFREY BOTKIN.

DR. BOTKIN: HERE.

DR. LOMAX: MARCY FEIT. TIMOTHY KAMP.

DR. KAMP: HERE.

DR. LOMAX: FRANCISCO PRIETO. TED PETERS.

DR. PETERS: HERE.

DR. LOMAX: DOROTHY ROBERTS.

DR. ROBERTS: HERE.

DR. LOMAX: JEFF SHEEHY.

MR. SHEEHY: HERE.

DR. LOMAX: PAT TAYLOR. JONATHAN THOMAS.

CHAIRMAN THOMAS: HERE.

DR. LOMAX: JOHN WAGNER. ROBERT TAYLOR. SOUNDS LIKE ROBERT TAYLOR HASN'T JOINED US YET, BUT

HE MAY BE JOINING THE CALL. VERY GOOD.

BERNIE, DID YOU HAVE COMMENTS, REMARKS YOU'D LIKE TO MAKE TO OPEN THE MEETING?

CHAIRMAN LO: I JUST WANTED TO FIRST START BY THANKING EVERYBODY FOR COMING. GEOFF AND HIS COLLEAGUES AT CIRM HAVE PUT TOGETHER AN INTERESTING AGENDA AND SEVERAL ITEMS WHERE THEY WANT NOT ONLY OUR FEEDBACK, BUT ACTUALLY FOR US TO TAKE ACTION. WE'LL TRY AND HIGHLIGHT THAT.

THERE'S A LOT OF EXCITING THINGS GOING ON IN THE STEM CELL WORLD AND AT CIRM. GEOFF AND OTHERS WILL BE TELLING US ABOUT SOME OF THE NEW THINGS IN CIRM PARTICULARLY WITH REGARD TO BOTH THE ALPHA CLINICS INITIATIVE AND THE STEM CELL BANKING FOR INDUCED PLURIPOTENT STEM CELLS.

I WANT TO SAY I'M GOING TO HAVE TO LEAVE A LITTLE BIT EARLY TO MAKE A DASH TO THE AIRPORT HERE IN DC. IF I NEED TO DO THAT, WE'RE GOING TO DO A SEAMLESS -- A BLIND, UNSEAMLESS PATH TO JEFF BOTKIN, WHO WILL CONTINUE TO CHAIR THE MEETING.

SHERRY, DO YOU WANT TO ALSO --

MS. LANSING: I DON'T HAVE MUCH TO ADD. AS ALWAYS, BERNIE, YOU DID A GREAT JOB. I JUST AGAIN WANT TO THANK ALL OF YOU, SOME OF YOU HAVE BEEN HERE SINCE THE BEGINNING, AND WELCOME OUR NEW

MEMBERS FOR THE EXTRAORDINARY AMOUNT OF TIME THAT YOU ARE DEDICATING TO CIRM AND ALSO EVEN MORE IMPORTANT THE EXTRAORDINARY WISDOM.

THIS IS REALLY A VERY EXCITING TIME FOR CIRM BECAUSE, AS WE ENTER CLINICAL TRIALS, THIS IS WHAT THOSE OF US WHO ARE PATIENT ADVOCATES HAVE ALWAYS DREAMED ABOUT, THAT THERE WOULD BE THESE CLINICAL TRIALS. AND THEN, OF COURSE, THAT PUTS AN INCREDIBLE BURDEN ON THE STANDARDS GROUP. SO I THINK TODAY IS AN EXCITING DAY AS WE LOOK AT THE PROPOSAL FOR THE ALPHA CLINICS AS WELL AS THE OTHER PROPOSALS THAT WE'RE TALKING ABOUT.

DR. LOMAX: THANK YOU, BERNIE. THANK YOU, SHERRY. GEOFF LOMAX AGAIN. I WANTED TO JUST GIVE A LITTLE BIT OF INTRODUCTION AND CONTEXT TO THE PRESENTATION WHICH, BY THE WAY, SHOULD NOW BE AVAILABLE TO YOU IF YOU ARE TAKING ADVANTAGE OF THE WEBEX SERVICE.

SO THIS IS A SUMMARY OF WHAT WAS PRESENTED TO THE ICOC AND APPROVED. AND WHAT WE'VE DONE IS WE BEGIN TO SORT OF LOOK AT SORT OF A REEVALUATION OF OUR REGULATIONS IN ADVANCE OF THIS INITIATIVE AND IS PART OF THE BRIEFING MATERIALS, SO THE PRESENTATION WILL BE AN OVERVIEW OF THE SUBSTANCE. AS PART OF THE BRIEFING MATERIALS, YOU HAVE A SUMMARY OF SOME

OF THE WORK WE'VE BEEN DOING TO EVALUATE OUR REGULATORY FRAMEWORK AS WE MOVE INTO THE ALPHA CLINICS INITIATIVE.

WHAT I'D FIRST LIKE TO DO IS INTRODUCE THE TWO SCIENCE OFFICERS WHO ARE LEADING THE DEVELOPMENT OF THE RFA. AND THEY HAVE BEEN RECEIVING INPUTS ALL ALONG THE PROCESS TO ENSURE THAT THE RFA REFLECTS BOTH THE SCIENTIFIC EXCELLENCE AND THE POLICY CONSIDERATIONS THAT CIRM SHOULD BE PUTTING FORWARD. SO THAT'S MARIA MILLAN AND NATALIE DEWITT, WHO ARE GOING TO LEAD YOU THROUGH AN INTRODUCTION TO THE PROGRAM. AND IN PARTICULAR I'VE ASKED THEM TO HIGHLIGHT ASPECTS OF THE PROGRAM WHICH ARE REALLY A DIRECT RESPONSE TO PREVIOUS POLICY CONSIDERATIONS THAT THE STANDARDS WORKING GROUP HAS RAISED IN TERMS OF CLINICAL READINESS FOR STEM CELL THERAPIES. SO IF I CAN TURN THAT OVER TO MY COLLEAGUES. AND I THINK THE FORMAT WOULD BE TRY TO MOVE THROUGH THE PRESENTATIONS FAIRLY QUICKLY, AND THEN WE'LL HAVE A STOPPING POINT WHERE FOLKS CAN ASK QUESTIONS AND WE CAN HAVE SOME DISCUSSIONS ABOUT THE PROGRAM ITSELF.

DR. DEWITT: GOOD MORNING, EVERYBODY. THIS IS NATALIE DEWITT, SO I'M GOING TO START OFF THE PRESENTATION AND THEN HAND IT OVER TO MARIA MILLAN.

SO THE GOAL OF THE ALPHA CLINICS INITIATIVE IS TO ADDRESS UNMET NEEDS IN THE CLINICAL INFRASTRUCTURE FOR STEM CELL THERAPIES, BOTH FOR CLINICAL TESTING AND FOR THE EVENTUAL DELIVERY OF THESE NOVEL KINDS OF MEDICINE. THIS IS AN OPPORTUNE TIME TO BEGIN ANTICIPATING WHAT IS GOING TO BE NEEDED AND TO START PUTTING THIS INFRASTRUCTURE IN PLACE SO THAT THIS CLINICAL RESEARCH CAN TAKE PLACE WITH THE MAXIMUM EFFICIENCY AND SAFETY.

AS YOU ALL ARE WELL AWARE, CIRM IS FUNDING A ROBUST PIPELINE OF PROJECTS THAT ARE HEADED TO THE CLINICS IN THE NEXT FEW YEARS FOR CLINICAL TESTING. THE CHALLENGES OF TESTING THESE THERAPIES IS COMPOUNDED BY THE FACT THAT STEM CELL-BASED PRODUCTS PRESENT UNIQUE CHALLENGES IN THEIR DEVELOPMENT, TESTING, AND DELIVERY TO PATIENTS. SO THIS IS GOING TO REQUIRE SPECIALIZED EXPERTISE WHICH THE ALPHA CLINICS NETWORK IS BEING DESIGNED TO PROVIDE.

SO THE MAIN GOALS OF THE ALPHA STEM CELL CLINICS NETWORK IS SUMMARIZED ON THIS SLIDE. THE FIRST IS TO DELIVER CLINICAL TRIALS. AND THIS IS TO DEVELOP RESOURCES THAT WILL BE DEFINED FOR EFFECTIVE AND EFFICIENT DESIGN AND EXECUTION OF CLINICAL TRIALS FOR INVESTIGATIVE STEM CELL PRODUCTS.

AS THE CLINICAL TRIALS ARE MOVED FORWARD,

THE ALPHA CLINICS WILL ALSO BE POSITIONED TO BECOME THE GO-TO PLACE FOR THE DELIVERY OF THESE THERAPIES. THEY'LL BECOME THE CENTER OF EXCELLENCE FOR DELIVERY OF STEM CELL-BASED THERAPIES THAT HAVE BEEN PROVEN SAFE AND EFFECTIVE.

THIS WILL ALSO BECOME -- THE NETWORK WILL BECOME A SOURCE OF DATA AND INFORMATION, A MECHANISM FOR COMPILING INFORMATION ABOUT CLINICAL TRIAL EXPERIENCE AND OUTCOMES AND COLLECTING DATA TO INFORM RESEARCH, CLINICAL, REGULATORY, AND REIMBURSEMENT DECISIONS.

ANOTHER IMPORTANT ASPECT OF THE NETWORK WILL BE INFORMING THE PUBLIC ABOUT STEM CELL THERAPIES. THIS WILL INCLUDE EDUCATION, OUTREACH, AND TRAINING ABOUT CLINICAL TRIALS AND AVAILABLE THERAPIES, AND THE POTENTIAL DANGERS OF UNPROVEN PROCEDURES.

AND FINALLY, ALL OF THESE ACTIVITIES WILL INFORM HEALTHCARE ECONOMICS. AND THE NETWORK WILL SERVE AS THE PROVING GROUND TO DEVELOP BUSINESS MODELS AND TO DEVELOP EVIDENCE-BASED AND STRATEGIES FOR REIMBURSEMENT.

TO REALLY FOCUS ON THE AREAS OF UNMET NEED, THE FOCUS OF ALPHA STEM CELL CLINICS NETWORK WILL BE AROUND STEM CELL-DERIVED PRODUCTS THAT ARE

NOVEL AS OPPOSED TO MODIFICATIONS OF THERAPIES THAT ARE CURRENTLY IN MEDICAL PRACTICE. IN ADDITION, THE FOCUS WILL BE ON PROCEDURES THAT REQUIRE TRANSPLANTATION OR INFUSION OF CELLS AS OPPOSED TO SMALL MOLECULES OR BIOLOGICS.

SO THE ALPHA CLINICS NETWORKS WILL BE COMPRISED OF FIVE CLINICAL SITES THAT WILL BE DISTRIBUTED THROUGHOUT CALIFORNIA. AT THESE CLINICAL SITES, WHICH WILL BE LOCATED IN ACADEMIC MEDICAL CENTERS, THE SITES WILL CONDUCT CLINICAL TRIALS. THEY'LL PROVIDE COUNSELORS FOR PATIENT EDUCATION AND COUNSELING. AND AS THESE THERAPIES BECOME APPROVED, THEY'LL BECOME A SITE FOR DELIVERY OF APPROVED THERAPIES.

THERE WILL ALSO TO BE A COORDINATING AND INFORMATION MANAGEMENT CENTER THAT WILL HAVE A STAFF OF FIVE TO TEN PEOPLE WHO WILL BE CHARGED WITH THE OUTREACH, EDUCATION, AND TRAINING ASPECTS. THEY'LL PROVIDE CONSULTING SERVICES ON THE CLINICAL, REGULATORY, AND BIOSTATISTICS, AS WELL AS ANY OTHER SPECIFIC EXPERTISE AROUND STEM CELL THERAPIES, BUT IT'S RELATIVELY DIFFICULT TO COME BY THESE DAYS.

THERE WILL ALSO BE A PATIENT REGISTRY AND DATABASE OF THE CLINICAL TRIAL DATA AND INFORMATION. AND THERE'LL BE STAFF WHO WILL BE KNOWLEDGEABLE

ABOUT HEALTHCARE ECONOMICS AND BUSINESS DEVELOPMENT.

SO THE LONG-TERM VISION IS TO ESTABLISH A ROBUST NETWORK FOR TESTING AND DELIVERY OF STEM CELL-BASED THERAPIES. IN THIS DIAGRAM YOU CAN SEE THE CLINICS WHICH WILL BE CONNECTED BY THIS COORDINATING AND INFORMATION MANAGEMENT CENTER. AND THE SQUARES DEPICT CLINICAL TRIALS THAT WILL COME IN THROUGH BOTH ACADEMIC AND INDUSTRIAL CLINICAL TRIAL SPONSORS WHO WILL RUN THEIR CLINICAL TRIALS AT THE CLINICAL SITE AND WHO WILL ENGAGE WITH THE COORDINATION AND INFORMATION MANAGEMENT CENTER TO GAIN EXPERTISE IN SERVICES.

NOW I'M GOING TO PASS THE PRESENTATION OVER TO MARIA WHO CAN TALK A LITTLE BIT MORE SPECIFICALLY ABOUT WHAT THESE SITES WILL LOOK LIKE.

DR. MILLAN: GOOD MORNING. SO IN THE NEXT FEW SLIDES, WHAT WE'D LIKE TO DO IS JUST GIVE AN OVERVIEW OF HOW THIS CIRM-FUNDED ALPHA STEM CELL CLINIC NETWORK WOULD SERVE THE COMMUNITY AND PATIENTS AND THE RESEARCH AND MEDICAL AND CLINICAL COMMUNITY.

CURRENTLY WHEN PATIENTS WITH DEBILITATING DISORDERS OR DISEASES ARE SEEKING INFORMATION ON WHICH TO LOOK INTO POTENTIAL STEM CELL TREATMENT, THEY DON'T HAVE ANY RELIABLE PLACE TO GO. THEY MAY

SEARCH THE INTERNET. THEY MAY TRY TO GET INFORMATION FROM THEIR HEALTHCARE PROVIDERS OR THEIR DOCTORS, BUT OFTEN THAT INFORMATION IS NOT AVAILABLE EVEN TO THEM. SO WITH ALPHA CLINICS RESIDENT WITHIN MAJOR MEDICAL CENTERS AND REPUTABLE CENTERS THROUGHOUT CALIFORNIA, THESE PATIENTS AND THEIR FAMILIES WOULD NOW HAVE SOMEWHERE TO GO.

THEY WOULD HAVE ACCESS TO HIGH QUALITY UPDATED INFORMATION VIA THE COUNSELORS WHO WOULD BE ARMED WITH THIS INFORMATION THAT'S BEEN VETTED AND COORDINATED OR COMPILED THROUGH THE COORDINATION AND INFORMATION MANAGEMENT CENTER AND BE ABLE TO HELP SORT THROUGH THIS INFORMATION AND INFORM THE PATIENT. THE PATIENTS, WHETHER THEY END UP ENROLLING IN A TRIAL IN THAT CLINIC, RECEIVING TREATMENT THERE OR ELSEWHERE OR NOT, WOULD BE BETTER INFORMED ABOUT WHAT CONSTITUTES LEGITIMATE TRIALS AND WOULD NOT -- IN THIS WAY HOPEFULLY, WE'LL BE ABLE TO PREVENT SOME OF THE UNFORTUNATE CIRCUMSTANCES WHERE PATIENTS MAY PURSUE STEM CELL TOURISM WITH UNPROVEN TREATMENTS THAT ARE OFFERED OUT THERE FOR PAYMENT IN THE UNREGULATED SPACE.

SO IF THESE PATIENTS UNDERGO TREATMENT AT THE CLINICS OR ENROLL IN CLINICAL TRIALS AT THAT CENTER, THEY WOULD THEN BE TREATED AND CARED FOR BY

AN EXPERIENCED AND FOCUSED CLINICAL TRIAL TEAM THAT WOULD BE SPECIALIZED AND HAVE THE EXPERIENCE IN STEM CELL TREATMENTS AND TRIALS. AND THAT ALPHA CLINIC WHERE THEY WOULD BE RECEIVING THIS SERVICE WOULD BE SUPPORTED BY THE QUALITY AND STANDARDS AND RESOURCES AT THE CIMC. AND THESE CLINICS WOULD BE FULLY INTEGRATED WITHIN THAT MEDICAL CENTER AS WELL AS THE HEALTHCARE NETWORK, SO THE PATIENTS WOULD BE ENSURED CONTINUITY OF CARE AND THE APPROPRIATE MEDICAL TREATMENTS AND REFERRALS THAT ARE ASSOCIATED WITH THEIR GENERAL CARE.

AND THE NEXT SLIDE JUST GIVES A DIFFERENT PERSPECTIVE FROM THE PERSPECTIVE OF THE CLINICAL TRIAL SPONSORS OR THOSE WHO WOULD BE INITIATING TRIALS OR DELIVERING NOVEL STEM CELL TREATMENTS. THESE SPONSORS WOULD NOW HAVE ACCESS TO A TEAM AT THE ALPHA CLINICS WITH A TRACK RECORD AND EXPERIENCE AND BACKING FOR STANDARDS AND RESOURCES FROM THE CIMC. ADDITIONALLY, AND WHAT'S VERY RELEVANT TO THIS MEETING TODAY, THEY WOULD HAVE ACCESS TO EFFICIENCIES WHICH WOULD BE BUILT IN IN THE SHARED KNOWLEDGE, ACCELERATED LEARNING THAT NATALIE HAD DESCRIBED EARLIER, WHICH IS A MAJOR GOAL OF SUCH A NETWORK.

SO ONE WOULD ENVISION HOW EFFICIENCIES

COULD BE CREATED WITH MODEL FORMS, STANDARD CONTRACTS, STANDARDS THAT WOULD GUIDE JUST THE OPERATIONAL ASPECTS OF THINGS AS WELL AS VERY IMPORTANT DISCUSSIONS THAT WOULD OCCUR AT THE IRB AND ALSO PROVISION OF SUPPORT FOR THE VARIOUS IRB'S REGARDING THE SPECIAL NATURE OF THESE CLINICAL TRIALS.

AND SO WITH THAT, I'D LIKE TO OPEN IT UP FOR ANY QUESTIONS AND HAND IT BACK TO GEOFF FOR MORE DISCUSSION.

CHAIRMAN LO: FIRST, LET ME JUST THANK YOU BOTH FOR A VERY LUCID AND HELPFUL OVERVIEW. AND AS SHERRY MENTIONED, IT'S REALLY EXCITING TO SEE THIS REAL STEP INTO THE CLINICAL RESEARCH REALM TO DEVELOP NEW THERAPIES FOR PATIENTS.

DR. LOMAX: SO THIS IS GEOFF LOMAX. PAT TAYLOR, I BELIEVE YOU'VE JOINED THE CALL; IS THAT CORRECT?

DR. TAYLOR: YES.

DR. LOMAX: THANKS FOR THE WONDERS OF TECHNOLOGY.

SO WE DID HAVE SOME -- AGAIN, I MENTIONED THIS EARLIER. WE HAVE SORT OF SOME POLICY CONSIDERATIONS WE'D LIKE TO MOVE TO. AGAIN, I THINK PRIOR TO LAUNCHING INTO A FAIRLY DETAILED DISCUSSION

OF POLICY, WE DID THINK IT WOULD BE VALUABLE JUST TO GET ANY ADDITIONAL QUESTIONS OR FEEDBACK OR THOUGHTS OR EVEN PERSPECTIVES FROM THE WORKING GROUP IN PART BECAUSE THIS MEETING ACTUALLY, WHEN THE RFA GOES OUT AND PEOPLE HAVE AN OPPORTUNITY TO LOOK AT THE RFA, MEETINGS LIKE THIS ACTUALLY PROVIDE A RECORD OF SOME OF THE THOUGHT PROCESSES BEHIND THE RFA.

SO, AGAIN, I KNOW THAT WAS A LOT OF INFORMATION IN A SHORT PERIOD OF TIME; BUT BEFORE MOVING INTO SORT OF POLICY NUANCE, I THOUGHT AGAIN SEE IF THERE WERE QUESTIONS OR EVEN REACTIONS FROM ANY MEMBERS OF THE WORKING GROUP.

DR. PETERS: IS THERE ANY DIRECT ACTION TO BE TAKEN REGARDING STEM CELL TOURISM, OR WILL THE ACTIVITIES OF THE ALPHA CLINICS DEAL SOLELY WITH THEIR OWN PATIENTS?

DR. DEWITT: ONE ACTIVITY OF THE COORDINATING CENTER WILL BE TO COMPILE INFORMATION ABOUT CLINICAL TRIALS THAT ARE GOING ON WORLDWIDE AND TO PROVIDE THAT AS A RESOURCE TO COUNSELORS WHO CAN THEN PASS THAT INFORMATION ON TO PATIENTS. SO IT WON'T BE -- I WOULD IMAGINE THE COORDINATING CENTER WOULD ALSO MAKE THESE RESOURCES AVAILABLE TO ANYBODY WHO WANTED TO FIND OUT MORE INFORMATION ABOUT STEM CELL TOURISM. SO THAT'S ACTUALLY

SOMETHING THAT IS A HIGH PRIORITY FOR THIS.

DR. TROUNSON: I THINK IT'S REALLY IMPORTANT THAT WE ESTABLISH THE WHOLE IDEA BEHIND THE ALPHA CLINICS WAS TO REALLY HAVE INDEPENDENT COUNSELORS THAT PEOPLE COULD GO TO TO REALLY FIND OUT ABOUT WHAT'S AVAILABLE FOR THEM. AND FREQUENTLY THERE ARE NOT CLINICAL TRIALS AT THIS STAGE FOR EVERYBODY OR THEY'VE HAD TREATMENTS WHICH ARE NOT SATISFYING TO THEM. AND PEOPLE WILL TEND TO GO TO THESE PLACES WHERE THEY'RE NOT GETTING GOOD TREATMENT.

I THINK ONE OF THE VERY POSITIVE ELEMENTS HERE IS THAT IF YOU SEE THE CIRM ALPHA CLINICS AS A REPOSITORY OF INFORMATION YOU CAN RELY ON AND THAT YOU CAN SPEAK TO AN INDEPENDENT COUNSELOR WHO'S INDEPENDENT FROM THE CLINICIAN ACTUALLY WANTING TO PROVIDE THE TREATMENT OR THE CLINICAL TRIAL FOR YOU, AND WE NEED TO TRAIN THESE PEOPLE APPROPRIATELY, THEN I THINK THIS WOULD BE A VERY POSITIVE ELEMENT TO REALLY GET PEOPLE TO SEE THAT, A, THERE MIGHT BE TRIALS THAT THEY CAN GET INTO EITHER IN THIS NETWORK OR ELSEWHERE, AND WE MAY BE ABLE TO HELP THEM IDENTIFY AND SEE WHETHER THEY FIT THE REQUIREMENTS FOR THAT, OR THAT IF THEY REMAIN IN CONTACT WITH THE NETWORK, THERE MAY IN THE FUTURE BE STUDIES WHICH

THEY COULD ENTER. BUT RATHER THAT THAN GOING INTO PLACES WHERE THERE WOULD NOT BE APPROPRIATE TREATMENT.

SO I THINK THERE IS AN IMPORTANT PLACE FOR THE UNIVERSITIES TO TRAIN THESE COUNSELORS, IF YOU LIKE, IN THE SAME WAY GENETIC COUNSELORS REALLY HAVE BEEN DEVELOPED IN THE AREAS OF PEOPLE WHO ARE INTERESTED IN ACCESSING TREATMENTS FOR GENETIC DISEASES.

CHAIRMAN LO: THANKS. ANY OTHER QUESTIONS?

DR. BOTKIN: I HAVE TWO QUICK QUESTIONS, I THINK. WOULD YOU ANTICIPATE THAT THE COORDINATING CENTER MIGHT BE ONE OF THE CLINICAL CENTERS, OR IS THIS LIKELY TO BE OR IS THIS ANTICIPATED TO BE A COMPLETELY INDEPENDENT ENTITY?

DR. DEWITT: IT COULD BE EITHER. SO THE PROGRAM DIRECTOR OF A CLINICAL SITE WOULD NOT BE ABLE TO BE THE PROGRAM DIRECTOR FOR THE COORDINATING CENTER, BUT THEY COULD BE BOTH LOCATED AT THE SAME INSTITUTION. ALTERNATIVELY, THE COORDINATING CENTER COULD BE A SEPARATE ENTITY LIKE A CRO-TYPE ENTITY.

DR. BOTKIN: SECOND QUESTION IS WHETHER, I'M LOOKING AT THE DIAGRAM NOW ABOUT THE SPONSOR RELATIONSHIP WITH THE NETWORK, AND WOULD YOU

ANTICIPATE THAT SPONSORS WOULD ALWAYS BE WORKING THROUGH THE NETWORK, OR MIGHT A SPONSOR DECIDE TO WORK INDEPENDENTLY WITH ONE OF THE CLINICS FOR A PARTICULAR PROTOCOL?

DR. DEWITT: WHEN THE PROGRAM -- WHEN IT'S FIRST INITIATED, THE IDEA IS THAT THE LEAD ACTIVITIES WOULD BE WITH SPONSORS WHO WOULD WORK THROUGH THE CLINICS AND THERE WOULD BE THIS INTEGRATED ACTIVITY AND COORDINATION THROUGH THE COORDINATING CENTER. EVENTUALLY THE CLINICS WILL EXPAND THE TYPES OF ACTIVITIES THAT THEY WOULD BE INVOLVED WITH; HOWEVER, THERE WILL BE SOME REQUIREMENT IN TERMS OF DATA AND KNOWLEDGE SHARING THAT WOULD BE IN PLACE SO THAT THOSE ENTERING THE CLINICS WOULD ALSO BE ABLE TO PARTICIPATE AND DEPOSIT SOME OF THE VALUABLE KNOWLEDGE AND EXPERIENCES AND WHATEVER DATA COULD BE MADE AVAILABLE VIA THE COORDINATING CENTER.

SO THE RELATIONSHIP WOULD STILL THE BE, THE SHORT ANSWER, IS DIRECTLY WITH THE CLINICS, NOT NECESSARILY DIRECTLY WITH THE CIMC. BUT THE NATURE OF THE WAY THAT THE TRIAL IS CONDUCTED WILL BE DETERMINED BY THE SPONSOR WITH THE CLINIC. AND THE DEPOSITION OF INFORMATION OR PARTICIPATION IN THAT KNOWLEDGE SHARING WILL BE, AGAIN, VIA THE CLINIC,

BUT COMPONENTS FROM THE SPONSORS WILL LIKELY BE INCLUDED IN THOSE ACTIVITIES.

DR. BOTKIN: I GUESS THE QUESTION WOULD BE WHETHER ALL THE RESEARCH IN THIS DOMAIN AT THOSE INSTITUTIONS THAT HAVE CLINICS WOULD BE GOVERNED BY THE SAME STANDARDS THAT ARE SET UP BY THE NETWORK, OR IF I AS A SPONSOR COULD DECIDE JUST TO WORK WITH ONE OF THE CLINICS AND NOT NECESSARILY BE HELD TO WHATEVER NETWORK STANDARDS HAD BEEN ESTABLISHED.

DR. DEWITT: THERE WOULD BE A MINIMUM SET OF STANDARDS WHICH WOULD NOT BE INVASIVE BY ANY MEANS. THEY WOULD BE THINGS LIKE SIMILAR TO CAPTURING INFORMATION THAT ONE WOULD HAVE AT CLINTRIALS.GOV, FOR INSTANCE, SO THAT THERE'S THAT MINIMUM INFORMATION THAT WOULD BE DEPOSITED INTO THE CENTER, BUT THEY WOULD NOT BY ANY MEANS BE OBLIGATED TO USE ALL THE SERVICES THAT ARE PROVIDED BY THE CIMC, FOR INSTANCE, BECAUSE THOSE RESOURCES ARE MEANT TO BE SUPPORT RESOURCES TO ACCELERATE AND TO HELP RATHER THAN NECESSARILY MAJOR OVERSIGHT.

BUT ELLEN FEIGAL IS ALSO HERE, AND SHE MAY HAVE SOME ADDITIONAL.

DR. FEIGAL: IF THAT ANSWERED YOUR QUESTION, I DON'T NEED TO ADDRESS IT ANY FURTHER. BUT IF YOUR POINT WAS IS IT MANDATORY THAT SOMEBODY

ENTERS THIS NETWORK TOGETHER, I THINK THE WAY MARIA DESCRIBED IT IS THAT WE'RE NOT MANDATING HOW THAT UNIVERSITY OR MEDICAL CENTER WOULD WORK IN ALL OF ITS VARIOUS ACTIVITIES. OUR EXPECTATION IS THAT IF IT INVOLVES STEM CELL CLINICAL TRIALS, THAT THERE WOULD BE THE EXPECTATION THAT THERE'S SOME CONNECTION WITH THE NETWORKS ABOUT THE TYPES OF QUALITY MEASURES COULD BE INCORPORATED INTO A NETWORK-TYPE TRIAL. WHETHER OR NOT THEY NEED THAT IS SOMETHING THAT THE SPONSOR AND THE CLINICAL SITE TALKING WITH THE CIMC MIGHT BE ABLE TO FIGURE OUT.

BASICALLY WHAT IT'S PROVIDING IS A ONE-STOP SHOP FOR A SPONSOR, WHETHER THEY'RE FROM ACADEMIC OR INDUSTRY AREAS, BE ABLE TO ACCESS RESOURCE AND EXPERTISE SHOULD THEY NEED IT.

DR. TROUNSON: IN ADDITION, IT MAY BE THAT IT'S INAPPROPRIATE FOR THE TRIAL TO GO ON AT EVERY SITE BECAUSE SOME OF THOSE CENTERS MIGHT BE, FOR EXAMPLE, SPECIFIED ON EYE DISEASE. SO, YOU KNOW, IT KIND OF DEPENDS ON WHAT HAPPENS IN THE SELECTION PROCESS WHETHER THERE'S MORE SPECIFIC TYPE CLINICS IN THE NETWORK OR THEY'RE MORE GENERAL.

DR. MILLAN: ON THAT SAME TOPIC, I SHOULD MENTION, AND WE HADN'T MENTIONED IT IN THIS PRESENTATION, THAT THERE WILL BE A STEERING

COMMITTEE THAT WILL BECOME PART OF THE ALPHA CLINICS THEMSELVES AS WELL AS THE CIMC AND REPRESENTATION FROM CIRM THAT WILL HELP TO GUIDE THE CLINICS IN TERMS OF THE CHOICE OF CLINICAL TRIALS ENTERING, GUIDING SOME OF THE INITIATIVES, SUCH AS FORMATION OF STANDARDS, HOW TO CRAFT THE MANAGEMENT OF THE EDUCATIONAL PIECE AND THE DATABASE AND THOSE RESOURCES THAT ARE TO BE PROVIDED TO THE NETWORK.

SO JUST WANTED TO MAKE SURE THAT THAT WAS OUT THERE BECAUSE THE STEERING COMMITTEE IS SOMETHING THAT WILL BE IN PLACE THAT THE NETWORK PARTICIPANTS WILL BE REQUIRED TO BE INVOLVED IN ACTIVELY AND WILL HAVE GREAT INPUT INTO AND WILL UTILIZE TO HELP THEM ALONG.

DR. BOTKIN: VERY GOOD. THANKS.

DR. LOMAX: LET'S JUST WAIT ON PUBLIC COMMENT ONE MINUTE. I JUST WANT TO GET THROUGH THE DISCUSSION. WE WILL GO TO PUBLIC COMMENT, AND THEN WE CAN MOVE TO THE ACTION ITEM IN TERMS OF POLICY.

SO ARE THERE ANY ADDITIONAL QUESTIONS OR COMMENTS?

MS. FEIT: THIS IS MARCY FEIT. I JUST WANTED TO LET YOU KNOW I JOINED THE CALL.

CHAIRMAN LO: WELCOME, MARCY.

MS. FEIT: THANK YOU.

CHAIRMAN LO: OKAY. ANY FURTHER QUESTIONS FROM THE COMMITTEE? ANY PUBLIC COMMENTS OR QUESTIONS?

MR. REED: THIS IS DON REED. FROM THE PATIENT ADVOCATE PERSPECTIVE, WHAT IT FEELS LIKE IS THAT THIS IS WHERE EVERYTHING, ALL THE YEARS OF WORK CIRM HAS DONE COMES TOGETHER. IS THAT AN ACCURATE ASSESSMENT, THAT THIS IS WHERE ALL THE -- IS THIS THE PINNACLE THAT WE'VE BEEN STRIVING FOR?

MS. LANSING: I CAN ANSWER THAT. IT CERTAINLY -- DON, THIS IS SHERRY. AS A PATIENT ADVOCATE, I CAN SAY THIS IS CERTAINLY ONE OF THE PINNACLES BECAUSE THOSE OF US WHO ARE PATIENT ADVOCATES HAVE BEEN DREAMING OF A DAY THAT ALL OF THIS WONDERFUL, WONDERFUL, EXTRAORDINARY RESEARCH WOULD REACH THE PATIENTS. SO THIS IS THE BEGINNING, AND IT CERTAINLY IS A DAY OF PINNACLE, A DAY OF ACHIEVEMENT, BUT THE REAL PINNACLE WILL BE WHEN WE FIND CURES FOR THESE DISEASES OR MAKE THEM AT LEAST CHRONIC DISEASES.

MR. REED: I WANT TO KNOW HOW TO SELL THIS BASICALLY. I WRITE ABOUT CIRM CONSTANTLY, AND I WANT TO KNOW HOW THIS SHOULD BE CHARACTERIZED. IT SEEMS TO ME LIKE THAT ALL OF THE CHANGES AND THE CURES, THEY'LL BE TRIED HERE, THEY'LL BE DONE HERE;

IS THAT CORRECT?

DR. TROUNSON: LET ME JUST ANSWER SOME OF THAT, DON. YES, IT PROVIDES A FOCAL POINT PARTICULARLY FOR THE TREATMENT OF CELL-BASED THERAPIES. AND YOU NEED A LOT OF VERY SPECIFIC CAPACITY TO DELIVER CELL THERAPIES, DIFFERENT TO SURGERY AND DIFFERENT TO THE SMALL MOLECULES AND MONOCLONAL ANTIBODIES, ETC. CELL THERAPY REQUIRES THAT YOU EITHER TAKE A CELL FROM A PATIENT, MODIFY IT, GIVE IT BACK TO THEM, OR PROVIDE CELLS THAT HAVE BEEN DEVELOPED IN THE APPROPRIATE WAY AND UNDER CLINICAL TRIAL OR EVENTUALLY REGISTRATION, AND THEY ARE PROVIDED TO THE PATIENT FROM A SOURCE. THAT MIGHT BE AN ALLOGENEIC SOURCE FROM SOMEPLACE THAT'S NOT SPECIFIC TO THE PATIENT'S OWN CELLS.

SO YOU ARE GOING TO HAVE TO HAVE THE CAPACITIES TO TREAT AND MANAGE AND DEVELOP AND GIVE THOSE CELLS TO THE PATIENTS, TO ACTUALLY PUT THEM IN WHEREVER, THE BRAIN, THE SPINAL COLUMN, WHEREVER THOSE CELLS NEED TO GO. SO THAT'S ANOTHER VERY IMPORTANT COMPONENT PART, MANAGING THE CELLS, MANAGING THE DELIVERY, AND PROVIDING THIS INFRASTRUCTURE THAT CAN HELP BE A RECORD OF WHAT'S HAPPENING AND HELP OTHERS WHO ARE INTERESTED IN THIS MOVING FORWARD.

IT'S VERY CLEAR TO US THAT MANY OTHER PLACES ARE INTERESTED IN HOW THIS IS GOING TO WORK BECAUSE THEY SEE THIS AS A POSSIBLE MODEL TO ADOPT NATIONALLY OR INTERNATIONALLY. SO WE HAVE HAD A LOT OF INPUT FROM OTHER PLACES SAYING OF INTEREST TO SEE HOW THIS IS GOING TO WORK, CAN IT BE SUSTAINABLE IN THE LONGER TERM, OF COURSE. WE'RE ACTUALLY NOT PAYING FOR THE ACTUAL CLINICAL TRIALS BECAUSE WE CAN'T DO THAT WITH THE AMOUNT OF MONEY THAT WE HAVE, BUT WE CAN PROVIDE THE INFRASTRUCTURE FOR THIS TO HAPPEN.

WE CALL IT ALPHA BECAUSE IT'S IN THE PRIMARY RESEARCH INSTITUTIONS, THEY BEING THE MOST APPROPRIATE PLACE TO START THIS KIND OF NETWORK. LATER ON IT MAY GO OUT TO BETA SITES OR DELTA SITES AS IS APPROPRIATE AS HAS HAD IN CANCER AND IN OTHER TREATMENTS. SO I THINK THIS IS VERY INTERESTING AND VERY VISUAL FOR PEOPLE TO TRY AND SEE HOW IT'S GOING TO FUNCTION, AND PARTICULARLY THINGS LIKE HOW DO YOU KEEP THIS FUNCTIONING, HOW DOES IT WORK IN THE LONGER TERM, AND WILL PATIENTS FEEL REALLY COMFORTABLE GOING TO THESE PLACES. I THINK THEY WILL BECAUSE THEY'LL HAVE REAL EXPERTS HELPING THEM.

AND IF YOU HAVE A DISEASE WHICH IS REALLY NOT VERY COMMON, THIS MIGHT BE A PLACE WHERE YOU CAN

GET HELP TO FIND WHERE THERE MIGHT BE SOMETHING HAPPENING, NOT NECESSARILY IN THE NETWORK, BUT IN SOME OTHER PLACE THAT YOU WOULD FEEL THAT WOULD BE REASONABLE TO CONTACT THEM TO GET A REGISTERED CLINICAL TREATMENT.

DR. FEIGAL: I JUST WANT TO ADD WELL-DESIGNED CLINICAL TRIALS ARE THE ONLY WAY THAT WE CAN ADVANCE AND TRANSFORM MEDICINE. SO THIS IS PUTTING INTO PLACE AN INFRASTRUCTURE TO MAKE SURE THOSE WELL-DESIGNED EXPERIMENTS OF THESE NOVEL AND VERY PROMISING THERAPIES CAN TAKE PLACE. SO I JUST WANTED TO MAKE THAT CLEAR. WE DO FUND IN OTHER INITIATIVES CLINICAL TRIALS, BUT THIS IS REALLY SUPPLYING A WAY TO DO IT IN A HIGH QUALITY AND HOPEFULLY OUR INTENT IS IN A VERY EFFICIENT MANNER SO THAT WE CAN ALSO IMPACT ON HOW CLINICAL TRIALS ARE DONE AND DO IT IN A MORE CREATIVE AND INNOVATIVE WAY SO THAT WE CAN BE COGNIZANT OF THE HEALTH ECONOMICS OF HOW THESE NEW THERAPIES WILL BE ABLE TO COME INTO THE COMMERCIAL MARKET.

DR. LOMAX: SO AT THIS STAGE, BERNIE, SHOULD WE MOVE FORWARD TO THE POLICY? CAN YOU MOVE TWO SLIDES FORWARD. THERE'S A TIMELINE SLIDE. IF FOLKS ARE INTERESTED, WE CAN MOVE THROUGH THAT. AND WANTED TO MOVE TO ISSUES FOR CONSIDERATION BY THE

WORKING GROUP.

CHAIRMAN LO: SO IT'S THE -- GEOFF JUST READ THE TITLE OF THE SLIDE. IT'S IN BLUE.

DR. LOMAX: SLIDE 11.

CHAIRMAN LO: GO, GEOFF.

DR. LOMAX: SO AS A LEAD-UP TO THIS POINT IN TIME, WE DID HOLD MULTIPLE WORKSHOPS AND MEETINGS TO CONSIDER OVERSIGHT ASPECTS OF CLINICAL TRIALS. AND NOTABLY THERE WAS A LARGE ALPHA CLINICS WORKSHOP NOVEMBER OF LAST YEAR. AND JOHN WAGNER, JEFF SHEEHY, FRANCISCO PRIETO, AND, MARCY, I DON'T RECALL IF YOU ATTENDED THAT, BUT WE DID HAVE A SIZABLE REPRESENTATION BY WORKING GROUP MEMBERS. AND A SUBSTANTIAL FOCUS OF THAT WORKSHOP WAS OVERSIGHT ISSUES IN CLINICAL TRIALS.

IN ADDITION, WE THEN CONVENED A WORKSHOP OF CIRM GRANTEES TO REALLY HEAR ABOUT SORT OF THE CURRENT STATE OF THE ART IN TERMS OF THE DEVELOPMENT OF THE ESCRO OR STEM CELL RESEARCH OVERSIGHT COMMITTEES. AND THAT WORKSHOP WAS IN JUNE. AND IN EACH OF THOSE EVENTS, THERE WAS A MAJOR -- WELL, THE ALPHA CLINICS WORKSHOP WAS FOCUSED SPECIFICALLY ON ALPHA CLINICS. THE ESCRO WORKSHOP, A MAJOR SEGMENT OF THAT WORKSHOP WAS HAVING THE PARTICIPANTS HEAR BASICALLY THE SAME PRESENTATION YOU JUST HEARD AND

THEN GO INTO AN IN-DEPTH DISCUSSION ABOUT SORT OF OPERATIONALLY HOW BEST TO ENSURE THE OVERSIGHT REVIEW OF CLINICAL TRIALS.

AND WHAT EMERGED FROM THOSE DISCUSSIONS, AND PARTICULARLY THE SECOND DISCUSSION, IS THAT IN TERMS OF APPLIED CLINICAL RESEARCH AS OPPOSED TO BASIC RESEARCH, OUR GRANTEES HAVE REALLY MOVED TO WHAT I'M NICKNAMING AN IRB-CENTRIC APPROACH WHERE THE DECISIONS ABOUT RISK, BENEFIT, SAFETY, EVALUATION OF CELL-BASED THERAPIES IS GOING ON IN AN IRB SETTING WITH TECHNICAL SUPPORT FROM EITHER THE SCRO'S, SO IT WOULD BE A JOINT IRB-ESCRO MEETING, OR MEMBERS FROM THE ESCRO ARE PARTICIPATING IN THOSE DISCUSSIONS, BUT THE DELIBERATIONS ARE REALLY FOCUSED IN THE IRB SETTING.

AND WHAT OUR GRANTEES HAVE REALLY EMPHASIZED IS THAT THE INSTITUTIONAL REVIEW BOARD ALWAYS HAS THE RESPONSIBILITY FOR THE REVIEW AND OVERSIGHT OF CLINICAL TRIALS. THAT'S KIND OF A UNIVERSAL TRUTH. AND WHAT THEY RECOMMENDED OR SUGGESTED WOULD BE IMPORTANT FOR REALLY MAKING THE REGULATORY GLIDEPATH SORT OF CLEAR AND EFFICIENT IS THAT IF THE CIRM REGULATIONS REALLY MADE CLEAR THAT THE REVIEW AND OVERSIGHT OF CELL-BASED TRIALS WAS SORT OF THAT THE LEAD BODY, IF YOU WILL, IS THE IRB

AND THAT THE REGULATIONS REFLECT THAT POSITION.

AND SO WHAT WE'VE DONE IS WE'VE PROVIDED SOME -- GIVEN YOU A SENSE OF SORT OF HOW THE CURRENT REGULATIONS HAVE A LITTLE BIT OF A TWIST TO IT, AND I THINK THE HISTORY OF THIS IS THAT WHEN WE ORIGINALLY PUT THE CIRM REGULATIONS TOGETHER, I THINK WE WERE FOCUSED ALMOST ENTIRELY ON THE BASIC RESEARCH ENVIRONMENT, BUT WE THOUGHT WE SHOULD INCLUDE SOMETHING ON CLINICAL TRIALS. AND I KNOW THERE'S A NUMBER OF MEMBERS THAT WERE THERE AT THAT TIME; SO IF I'M MISSTATING THAT, PLEASE CORRECT ME. BUT WE KIND OF LEFT THAT TO SOMETHING THAT -- THE IMPERATIVE SIX YEARS AGO WAS TO REALLY HAVE REGULATIONS IN PLACE OR SEVEN YEARS AGO THAT ENABLED THE BASIC RESEARCH TO MOVE FORWARD, AND WE ALWAYS KNEW THERE WOULD BE A POINT IN TIME WHERE WE'D WANT TO COME BACK AND THINK THROUGH THE CLINICAL SETTING IN MORE DETAIL.

AND BASED ON THAT FEEDBACK, WE IDENTIFIED A COUPLE OF THINGS THAT ARE IN THE REGULATIONS THAT WE THINK COULD BE IMPROVED TO REALLY REFLECT THE CURRENT STANDARD OF CARE, STATE OF THE ART IN RESEARCH OVERSIGHT IN THE CLINICAL SETTING. IF YOU NOTICE, WE CIRCULATED SOME OPTIONS LANGUAGE. WE DON'T HAVE A SLIDE ON THAT, BUT IT WAS CIRCULATED TO

YOU ALL. THE HEADING IS SECTION 170, CIRM MEDICAL AND ETHICAL STANDARDS REGULATIONS.

THERE'S A SORT OF A STRIKE-THROUGH OF SECTION F, WHICH IS THIS IS THE SECTION THAT SORT OF DISCUSSES THE RESEARCH -- THE REVIEW AND OVERSIGHT OBLIGATIONS. AND AT THE MOMENT IT SAYS THE ESCRO SHALL REQUIRE THE INVESTIGATOR TO PROVIDE A CERTAIN SET OF INFORMATION TO THE ESCRO. AND THE WAY THAT IS WORDED, THERE WERE, AGAIN, A NUMBER OF PROBLEMS IDENTIFIED WITH THAT WORDING IN TERMS OF KIND OF CREATING CONFUSION AND, MORE SPECIFICALLY, CREATING OVERLAP IN TERMS OF IRB RESPONSIBILITIES.

AND, AGAIN, THIS IS TOUCHED ON IN THE BACKGROUND MEMO. SO WHAT WE'VE PROVIDED TO YOU ALL IS LANGUAGE THAT WE THINK WOULD CREATE GREATER FLEXIBILITY IN TERMS OF ALLOWING -- FIRST OF ALL, ALLOWING OVERSIGHT TO REALLY GO -- THE POINT OF RESPONSIBILITY BEING WITH THE IRB CONSISTENT WITH NATIONAL REGULATIONS. AND FURTHERMORE, WE STILL SEE A ROLE FOR THE OVERSIGHT COMMITTEE IN TERMS OF DOING THE THINGS THAT IT TRADITIONALLY DOES IN TERMS OF CHECKING CELL LINES AND REVIEWING DOCUMENTATION. THEN RATHER THAN HAVING IT PLAY A -- SORT OF MANDATING IT TO PERFORM CERTAIN ACTIONS, WE TALK ABOUT CONFIRMING CERTAIN THINGS ARE IN PLACE,

PARTICULARLY THERE'S AN ACCEPTABLE SCIENTIFIC RATIONALE FOR INTRODUCING CELLS TO PATIENTS AND THAT THERE'S BEEN AN IN-DEPTH EVALUATION OF THE EFFECTS OF CELL TRANSPLANTATION.

AND, AGAIN, WE THINK THIS IS AN APPROACH THAT THE IRB WOULD BE DOING THIS WORK ANYWAY, AND IT ALLOWS SORT OF A CLEARER REGULATORY PATHWAY THAT REALLY REFLECTS WHAT'S ALREADY GOING ON IN THE INSTITUTIONS AT THIS TIME.

SO CAN I TURN IT OVER TO YOU, BERNIE?

CHAIRMAN LO: THANKS. IF I CAN JUST SORT OF MAKE A FRAMING COMMENT HERE. FIRST, I JUST WANT TO EMPHASIZE THAT CIRM IS COMMITTED AND THE ALPHA CLINICS PROGRAM WILL BE COMMITTED TO PROVIDING NOT ONLY CUTTING-EDGE SCIENCE, BUT RIGOROUS, HIGH STANDARDS, ETHICAL STANDARDS, FOR THE CONDUCT OF THOSE STEM CELL CLINICAL TRIALS. AND ON THE ONE HAND THERE ARE SOME TECHNICAL MODIFICATIONS TO OUR EXISTING REGULATION. IF YOU TAKE AWAY THE STRIKEOUT AT THE TOP OF THE PAGE, THE CURRENT REGULATION IS THAT THE SCRO SHALL REQUIRE INVESTIGATORS TO PROVIDE INFORMATION.

SO ONE THING WE THOUGHT IS IT WOULD BE DESIRABLE TO TIGHTEN THE LANGUAGE TO SAY SOMEONE HAS TO CONFIRM THAT THERE IS AN ACCEPTABLE SCIENTIFIC

RATIONALE, THAT THE LINES HAVE BEEN ACCEPTABLY DERIVED, AND THAT THE PATTERNS OF DIFFERENTIATION AND INTEGRATION HAVE BEEN EVALUATED, AND ALSO OTHER COMPLIANCE REVIEWS IN PLACE. BUT IN ADDITION -- SO WE'RE REALLY MAKING SURE THAT CERTAIN THINGS ARE REVIEWED AND JUDGED TO BE ADEQUATE, ACCEPTABLE.

BEYOND THAT WE THOUGHT THAT THE RATIONALE FOR HAVING A SEPARATE SCRO WAS MUCH STRONGER FOR BASIC RESEARCH CARRIED OUT SEVEN YEARS AGO AND THAT NOW WITH THE EVALUATION OF OVERSIGHT OF CLINICAL TRIALS, WE WERE CONCERNED ABOUT A DUPLICATION OF EFFORT BETWEEN A SCRO AND AN IRB AND BASICALLY WANTED TO GIVE INSTITUTIONS CARRYING OUT CIRM-FUNDED CLINICAL TRIALS, THIS WOULD INCLUDE THE ALPHA CLINIC PROGRAM GRANTS, TO HAVE FLEXIBILITY AS TO HOW THIS OVERSIGHT IS DONE.

ULTIMATELY, AS GEOFF SAID, THE IRB HAS TO APPROVE A CLINICAL TRIAL, AND WE'RE GIVING THE IRB THE OPTION OF DOING ALL THIS REVIEW ITSELF BY EITHER HAVING MEMBERS OF THE COMMITTEE WHO HAVE THE SCIENTIFIC STEM CELL CLINICAL EXPERTS AND CLINICAL EXPERTISE, PERHAPS APPOINTING AD HOC MEMBERS. IF THEY WANT, THEY COULD STILL CONTINUE TO HAVE A SEPARATE SCRO COMMITTEE REVIEW ON THESE POINTS AND REPORT BACK TO IT, BUT WE'RE CLARIFYING THAT THE IRB

IS THE SORT OF FINAL COMMON PATHWAY, IF YOU WILL, FOR APPROVAL. AND WE'RE GIVING THE INSTITUTION FLEXIBILITY AS TO HOW THE IRB GOES ABOUT MAKING SURE SCIENTIFIC, IMPORTANT SCIENTIFIC ISSUES ARE REVIEWED AND APPROVED OF.

SO THE GOAL IS CLEAR, AND WE'RE GIVING FLEXIBILITY AS TO HOW DIFFERENT INSTITUTIONS MAY CHOOSE TO GO ABOUT FULFILLING THAT GOAL.

SO AT THIS POINT LET ME SORT OF INVITE SWG MEMBERS TO COMMENT AND SHARE THEIR THOUGHTS.

DR. BOTKIN: THANKS FOR THAT CLARIFICATION. THAT'S HELPFUL. JUST A COUPLE OF QUICK COMMENTS. I THINK THAT ONE OF THE THINGS THIS DOES BETWEEN THE TWO ALTERNATIVES IS REMOVES SOME OF THE WEIGHT OF RESPONSIBILITY FROM THE INVESTIGATOR AND PUTS IT ON THE INSTITUTION IN THE FORM OF THE IRB. I THINK THAT MAKES SENSE, AND I THINK I VERY MUCH SUPPORT THE GENERAL THEME HERE OF DESIGNATING THE IRB AS THE APPROPRIATE REVIEW BODY. BUT SAY I THINK THERE'S SOME DISCUSSION AT THE NATIONAL LEVEL ABOUT TRYING TO HAVE THE CURRENT REGULATIONS PROVIDE A LITTLE BIT MORE FOCUS ON THE INVESTIGATOR AS A PERSON WHO HAS TO TAKE RESPONSIBILITY FOR MAINTAINING SOME OF THE STANDARDS. I DON'T HAVE ANYTHING SPECIFIC TO SUGGEST THERE, BUT JUST TO

THROW THAT OUT.

THE OTHER MORE SPECIFIC POINT UNDER THE ALTERNATIVE, WHICH I THINK IN GENERAL IS GOOD, IS THAT THE LANGUAGE DOESN'T WORK VERY WELL. THE SECOND SENTENCE SAYS THE IRB MUST ASSURE THAT IT HAS ADEQUATE EXPERTISE TO, AND IF YOU DROP DOWN TO FOUR, PROVIDE DOCUMENTATION OF COMPLIANCE WITH, ETC. SO THAT'S NOT REALLY AN EXPERTISE ISSUE. SO WONDER WHETHER YOU REALLY WANT TO JUST SAY THE IRB MUST, COLON, ONE, CONFIRM THERE'S AN ACCEPTABLE SCIENTIFIC RATIONALE. AND IMPLICIT IN THAT CONFIRMATION WOULD BE THAT THERE IS ADEQUATE EXPERTISE TO FULFILL THAT FUNCTION.

SO BASICALLY THE SUGGESTION IS GET RID OF THE EXPERTISE COMPONENT HERE AND JUST SAY THE IRB HAS TO DO THESE FOUR THINGS OR CONFIRM THESE FOUR THINGS.

CHAIRMAN LO: OKAY. THANK YOU. OTHER COMMENTS, SUGGESTIONS?

DR. LOMAX: SHALL I TAKE THAT AS A NO?

CHAIRMAN LO: NO COMMENTS. JUST WANT TO MAKE SURE WE'RE NOT MISSING ANYONE.

DR. LOMAX: ONE POINT OF PROCESS, BERNIE. JUST TO LET FOLKS KNOW, WHAT WE CONTEMPLATED -- AND THANK YOU, DR. BOTKIN. WE WILL TIDY THIS UP A BIT.

WE PROBABLY DIDN'T GIVE THIS THE LEVEL OF HARD REVIEW WE SHOULD HAVE, BUT WE WERE TRYING TO GET YOU SOMETHING SPECIFIC TO REACT TO. AND WE APPRECIATE THOSE REACTIONS BECAUSE THEY'RE VERY SENSIBLE.

WHAT WE ANTICIPATED WAS THAT WE WOULD, PENDING YOUR APPROVAL, PUT FORWARD BOTH OPTIONS REALLY AND IT WOULD GO THROUGH THE STANDARD PROCESS THROUGH WHICH WE WOULD THEN GET FEEDBACK FROM THE REGULATED COMMUNITY AND BE ABLE TO ALLOW THE PROCESS TO DECIDE WHAT THE MOST EFFECTIVE FORMULATION OF THIS REGULATION WOULD BE. IT'S NOT NECESSARILY AN EITHER/OR. WE CAN ENTERTAIN BOTH OPTIONS AND THE EVIDENCE CAN SPEAK FOR ITSELF AS THE PROCESS MOVES FORWARD.

CHAIRMAN LO: I JUST WANT TO MAKE SURE. JEFF BOTKIN MADE A SUGGESTION FOR AMENDING THE WORDING OF THE ALTERNATIVE. ANY COMMENTS FROM ANY OF THE SWG MEMBERS ON JEFF'S SUGGESTION TO MAKE IT MORE CLEAR AND LOGICAL?

GEOFF LOMAX -- SORRY. THERE'S TOO MANY JEFFS TO KEEP STRAIGHT OVER THE PHONE -- SINCE I DON'T HEAR ANY COMMENT FROM THE SWG, SHOULD WE THROW THIS OPEN TO PUBLIC COMMENT ON THIS PARTICULAR ISSUE OF THE 100070?

DR. LOMAX: I THINK THAT WOULD BE -- WE

HAVE SOME MEMBERS OF THE PUBLIC IN THE ROOM.

CHAIRMAN LO: IF ANYONE WANTS TO COMMENT ON THIS SPECIFIC ISSUE, WE WOULD WELCOME THAT.

DR. LOMAX: OKAY. NONE HERE.

WHAT WE WOULD ASK YOU, THEN, IS WE WOULD NEED TO PROPOSE A MOTION AND HAVE A SECOND, THE MOTION BEING THAT STAFF COULD MOVE FORWARD WITH THE PROCESS. JAMES, CAN YOU HELP ME WITH THE LANGUAGE HERE?

MR. HARRISON: THE MOTION WOULD BE THAT THE STANDARDS WORKING GROUP WOULD RECOMMEND TO THE BOARD INITIATING THE PROCESS WITH THE OFFICE OF ADMINISTRATIVE LAW TO AMEND 100.070 BASED ON THE INPUT FROM THE STANDARDS WORKING GROUP AND THE PUBLIC.

CHAIRMAN LO: WITH THE UNDERSTANDING THAT IT'S, I THINK, TO PRESENT THE TWO OPTIONS -- FOR THE BOARD TO CONSIDER THOSE TWO OPTIONS AND TO POSSIBLY GET FEEDBACK FROM THE PUBLIC ON BOTH, OR DO WE HAVE TO CHOOSE ONE?

MR. HARRISON: BOTH OPTIONS WOULD BE PRESENTED.

CHAIRMAN LO: OKAY. HAVE WE WRITTEN DOWN THE MOTION? AND DO YOU WANT TO REPEAT THAT, SOMEBODY?

MR. HARRISON: SURE. I'LL REPEAT IT. THE MOTION IS TO RECOMMEND THAT CIRM'S BOARD APPROVE INITIATING A RULEMAKING PROCESS WITH THE TWO OPTIONS SET FORTH TO AMEND REGULATION 100070.

CHAIRMAN LO: OKAY. WOULD SOMEONE LIKE TO MOVE THAT?

MS. LANSING: I'LL MOVE IT.

DR. PETERS: SECOND.

CHAIRMAN LO: ANY DISCUSSION? OKAY. LET'S DO A ROLL CALL. DID SOMEONE WANT TO MAKE A COMMENT? GEOFF LOMAX, DO YOU WANT TO DO A ROLL CALL FOR THIS THEN?

DR. LOMAX: SURE. THIS ONE LAST CHANCE. NO PUBLIC COMMENT?

SHERRY LANSING.

MS. LANSING: YES.

DR. LOMAX: BERNARD LO.

CHAIRMAN LO: YES.

DR. LOMAX: JEFFREY BOTKIN.

DR. BOTKIN: YES.

DR. LOMAX: MARCY FEIT.

MS. FEIT: YES.

DR. LOMAX: TIMOTHY KAMP.

DR. KAMP: YES.

DR. LOMAX: FRANCISCO PRIETO. TED PETERS.

DR. PETERS: YES.
DR. LOMAX: DOROTHY ROBERTS.
DR. ROBERTS: YES.
DR. LOMAX: JEFF SHEEHY.
MR. SHEEHY: YES.
DR. LOMAX: PATRICK TAYLOR.
DR. TAYLOR: YES.
DR. LOMAX: ROBERT TAYLOR, ARE YOU ON THE CALL? JONATHAN THOMAS.
CHAIRMAN THOMAS: YES.
DR. LOMAX: JOHN WAGNER.
DR. WAGNER: YES.
CHAIRMAN LO: WELCOME, JOHN. THANKS VERY MUCH.
SO LET'S MOVE ON TO THE NEXT ITEM ON OUR AGENDA, WHICH IS NO. 4 IN THE OFFICIAL MEETING NOTICE AND AGENDA, REVIEW THE DISCUSS PROJECT, DRAFT RECOMMENDATIONS, RECEIVE COMMENTS FROM SWG, AND CONSIDER AN ENDORSEMENT OF THE PROJECT. AND BY THIS WE ACTUALLY MEAN THE RECOMMENDATIONS IN THE PUBLICATION.
SO JUST AS BACKGROUND, THIS PAPER THAT WAS GIVEN TO US REALLY GOES BACK TO A PREVIOUS SWG MEETING WHERE WE DISCUSSED THIS ISSUE OF CONSENT FOR THE DONATION OF MATERIALS TO DERIVE INDUCED

PLURIPOTENT STEM CELL LINES.

SO FROM A DISCUSSION AT THE SWG, GEOFF AND STAFF SORT OF TOOK THAT, MADE LINKAGES PARTICULARLY WITH OTHERS WORKING IN THIS AREA, PARTICULARLY WITH FOLKS AT NIH, TO COME UP WITH GUIDING PRINCIPLES THAT WOULD SORT OF HOPE TO BE THE STANDARDS IN THE FIELD OF REALLY REPRESENTING THE THINKING OF BOTH CIRM AND NIH AS WELL AS OTHERS. AND THEY'VE REALLY TAKEN THIS TO THE PUBLICATION STAGE, WHICH WAS DISTRIBUTED TO US, AND THAT PUBLICATION ACTUALLY CONTAINS SOME SPECIFIC RECOMMENDATIONS. AND THIS IS REALLY SORT OF AN INTERIM STEP, THAT THIS IS A STAGE THAT IS NOT FINAL, BUT IT'S SOMETHING THAT THE AUTHORS OF THE DISCUSS PROJECT WOULD LIKE TO GET FEEDBACK ON TO REFINE, MODIFY, ETC.

SO WHAT WE WOULD LIKE IS, FIRST OF ALL, TO ACKNOWLEDGE THE ORIGINS OR THE EARLY IMPORTANT INPUT OF SWG INTO THIS. SECONDLY, TO INVITE COMMENT ON THE PAPER, BUT PARTICULARLY THE NINE STATEMENTS THAT ARE KIND OF OVERARCHING GUIDANCE. AND THEN I SUPPOSE AFTER THAT TO CONSIDER WHETHER THE SWG WANTS TO FORMALLY ENDORSE IN SOME WAY THE NINE STATEMENTS.

BUT LET ME FIRST JUST ASK GEOFF TO PROVIDE ANY FURTHER SORT OF BACKGROUND OR CONTEXT. AND AFTER THAT, TO REALLY OPEN IT UP TO SWG DISCUSSION.

DR. LOMAX: THANK YOU FOR THE INTRODUCTION, BERNIE. AND YOU SUMMED IT UP QUITE NICELY, SO I WON'T GO THROUGH ALL THE DETAILS HERE. LIKE I SAID, JUST TO MAKE THE DISTINCTION IS THAT THE WORK WE SPENT ALMOST TWO YEARS ON WAS A CONSENT TEMPLATE THAT WOULD BE APPLIED IN THE CONTEXT OF A NEW DONOR COMING IN SPECIFICALLY WHAT WE ANTICIPATE IN THE IPS STEM CELL BANK. AND WE'VE HAD THE SUCCESSFUL UPTAKE OF THAT MODEL, AND WE'RE VERY PLEASED WITH THAT.

BUT THE GENESIS OF THIS PROJECT WAS WE WERE ENCOUNTERING, AND WE IN THIS CASE, WE WERE GETTING INTERESTING QUESTIONS COMING IN AT CIRM AND WE WERE LEARNING OF CHALLENGES PEOPLE WERE HAVING IN TERMS OF DEPOSITING IPS LINES TO NATIONAL BANKS. AND THEN IN DISCUSSIONS WITH NIH, WE LEARNED THAT THEY WERE ENCOUNTERING SIMILAR QUESTIONS. SO WE THOUGHT WE KNOW THAT INVESTIGATORS ARE WORKING WITH BIOLOGICAL SPECIMENS THAT HAVE BEEN COLLECTED FOR RESEARCH. SO WE'RE TRYING TO DEAL WITH BIOSPECIMENS THAT HAVE BEEN COLLECTED UNDER SOME SORT OF RESEARCH PROTOCOL. AND WE THEN TRIED TO TAKE BOTH SORT OF WHAT NIH WOULD RECOMMEND, WHAT CIRM RECOMMENDS THROUGH REGULATIONS AND TRIED TO PULL THAT TOGETHER INTO SOME SORT OF EXPANDED SORT OF WHAT WE'RE

CALLING A POINTS TO CONSIDER BECAUSE THIS IS A NONREGULATORY EFFORT, BUT IT'S SOMETHING TO GIVE PEOPLE A LITTLE MORE TO USE IN TERMS OF MAKING DECISIONS ABOUT WHETHER OR NOT A PARTICULAR CELL LINE WOULD, IN FACT, BE ELIGIBLE FOR DEPOSIT IN SOME SORT OF A REPOSITORY WHERE THAT CELL LINE WOULD BE SHARED AND DISTRIBUTED.

AND, AGAIN, I THINK THE TWO POINTS TO EMPHASIZE HERE IS WE'RE TALKING ABOUT A VERY SPECIFIC UNIVERSE, WHICH IS EXISTING RESEARCH SPECIMENS OR EXISTING RESEARCH PROTOCOLS THAT STILL MAY BE COLLECTING SPECIMENS, BUT THEY'RE NOT SPECIFICALLY INTENDED FOR IPS DERIVATION AND BANKING, AND THEN THE DEPOSIT OF ANY DERIVED LINE TO A REPOSITORY WHERE IT WOULD BE SUBSEQUENTLY USED BY OTHER RESEARCHERS AND DISTRIBUTED.

SO WE BELIEVE, BASED ON THE SORT OF FEEDBACK AND QUESTIONS WE'RE RECEIVING, THAT'S THE IMPORTANT UNIVERSE OF MATERIALS. WE'VE INITIATED THIS PROJECT. I DON'T THINK I'LL GO THROUGH THE SLIDE. I'D LIKE TO TURN IT OVER TO DOROTHY ROBERTS, WHO'S KINDLY AGREED TO LEAD THE DISCUSSION. WE'VE ALSO HIGHLIGHTED THAT THIS IS ONE STEP IN A SIX- OR SEVEN-STEP PROCESS WHERE WE'RE TRYING TO WORK WITH STAKEHOLDER COMMUNITIES TO DEVELOP CONSENSUS HERE ON

A NONREGULATORY APPROACH, BUT SOMETHING THAT WILL HELP GUIDE THE DECISION-MAKING IN THIS AREA.

CHAIRMAN LO: OKAY. GREAT. SO, DOROTHY ROBERTS, THANK YOU VERY MUCH FOR SORT OF AGREEING TO SORT OF TAKE THE LEAD AND SORT OF STIMULATING THE DISCUSSION HERE ON THESE TOPICS. I'LL LET YOU SORT OF GET US STARTED ON OUR DISCUSSION.

DR. ROBERTS: OKAY. THANK YOU. AND I THOUGHT WHAT I WOULD DO IS JUST GO THROUGH EACH STATEMENT AND TRY TO GENERATE SOME DISCUSSION ABOUT EACH ONE. DOES THAT SOUND OKAY?

CHAIRMAN LO: SOUNDS GREAT. THANK YOU.

DR. ROBERTS: AND I WOULD JUST START BY SAYING THAT ONE OF THE WAYS OF THINKING ABOUT THIS THAT I FOUND HELPFUL WAS THE STATEMENT IN THE PAPER, THAT WHAT THIS IS ABOUT IS REPURPOSING PREVIOUSLY COLLECTED RESEARCH BIOSPECIMENS AND HOW TO ADDRESS INFORMED CONSENT ISSUES RELATING TO REPURPOSING THESE SPECIMENS. I JUST THOUGHT IT WAS AN INTERESTING WAY OF STATING IT, AND THAT HELPED ME FOCUS ON WHAT THE QUESTION IS HERE.

SO HOW CAN WE RESPONSIBLY, THAT IS, ETHICALLY AND SCIENTIFICALLY, USE COLLECTIONS THAT WERE PREVIOUSLY OBTAINED UNDER BIOMEDICAL RESEARCH PROTOCOLS AND NOW FOR IPSC DERIVATION AND

DISTRIBUTION? AND ONE OF THE QUESTIONS IS TO WHAT EXTENT ARE THESE SPECIMENS THAT ARE GOING TO BE REPURPOSED COVERED BY THE PREVIOUS CONSENT PROCESS? IS THERE ANY ADDITIONAL GUIDELINES, REQUIREMENTS THAT WOULD BE REQUIRED? AND THIS *DISCUSS* PAPER SUGGESTS SEVERAL CONSIDERATIONS THAT WOULD BE IMPORTANT IN ENSURING THAT THERE IS -- THAT THE REPURPOSING IS ETHICAL AND SCIENTIFICALLY APPROPRIATE.

DID I STATE THAT ALL RIGHT, GEOFF AND BERNIE?

CHAIRMAN LO: THAT'S VERY HELPFUL. THANK YOU.

DR. ROBERTS: OKAY. SO ANOTHER THING THAT'S IMPORTANT TO TAKE INTO ACCOUNT IS THAT THERE'S AN ASSUMPTION HERE THAT THE ORIGINAL COLLECTION WAS DONE UNDER THE MINIMUM CORE ETHICAL STANDARDS THAT ARE REQUIRED FOR THE COLLECTION OF BIOSPECIMENS. SO THEY WOULD HAVE MET THE COMMON RULE REQUIREMENTS, THE NIH GUIDELINES, AND CIRM REGULATIONS. AND NOW THE QUESTION IS WHAT ADDITIONAL CONSIDERATIONS SHOULD CIRM LOOK TO AND, WELL, NIH, AND THIS IS A COLLABORATION, SHOULD RESEARCHERS LOOK TO IN REPURPOSING THESE SPECIMENS.

SO INITIALLY ONE QUESTION I HAD WAS

WHETHER IT CAN BE ASSUMED IN ALL CASES THAT ANY BIOSPECIMENS THAT WERE GOING TO BE REPURPOSED IN THIS WAY WOULD HAVE BEEN COLLECTED UNDER THESE MINIMAL CORE ETHICAL STANDARDS. IN OTHER WORDS, CAN WE ASSUME THAT VOLUNTARY AND INFORMED CONSENT WAS GIVEN BY THE ORIGINAL DONORS AND THAT IT WAS GIVEN UNDER THE OVERSIGHT OF AN IRB IN EVERY CASE? IS THAT THE CASE?

DR. LOMAX: THE BASELINE ASSUMPTION WOULD BE IT WOULD MEET THE COMMON RULE REQUIREMENTS FOR REVIEW AND CONSENT, ONLY BECAUSE YOU MENTIONED CIRM AND NIH, BUT CIRM ACTUALLY DOES CITE BACK TO THE COMMON RULE. SO IN REALITY WE DON'T PROVIDE A VALUE ADD THERE. IT'S SIMPLY THE COMMON RULE.

DR. ROBERTS: THE COMMON RULE WOULD HAVE BEEN FOLLOWED, AND THERE WOULD BE OVERSIGHT BY AN IRB?

DR. LOMAX: EXCEPT IN THE CASE IF IT WERE THE -- IF THE SPECIMEN -- JUST TO POINT OUT, WE WILL ALSO ENGAGE INTERNATIONAL STAKEHOLDERS, SO THERE MAY BE CONSIDERATIONS. TYPICALLY THERE IS REFERENCE TO AN OVERSIGHT BODY THAT WOULDN'T NECESSARILY BE CALLED AN IRB IF IT WERE AN INTERNATIONAL SITUATION.

DR. ROBERTS: RIGHT. SO THAT WAS A QUESTION I HAD BECAUSE ON PAGE 2 UNDER BASELINE

POLICY REQUIREMENTS, IT SAYS, "THESE CORE STANDARDS GENERALLY INCLUDE VOLUNTARY AND INFORMED CONSENT AND OVERSIGHT BY AN IRB OR EQUIVALENT." I GUESS WOULD THE GUIDELINES THAT WE ARE BEING ASKED TO ACHIEVE CONSENSUS ON TODAY, WOULD THEY SPECIFY ALL OF THIS, THAT THESE MINIMUM CORE ETHICAL STANDARDS MUST HAVE BEEN MET?

DR. LOMAX: YES. WE CAN MAKE THAT MORE EXPLICIT IF THERE'S A SENSE THAT THAT'S NOT CLEAR.

DR. ROBERTS: MY SENSE READING THIS WAS THAT IT WAS ASSUMED THAT THEY WOULD HAVE BEEN MET, BUT I WONDERED IF THAT SHOULD BE STATED AS A REQUIREMENT. I WAS THINKING ABOUT THE SITUATION OF BIOMEDICAL SPECIMENS THAT WERE COLLECTED INTERNATIONALLY, THAT WAS EXACTLY THE SITUATION, OR A NONUNIVERSITY CONTEXT WHERE I DON'T KNOW IF WE CAN ASSUME THAT AN IRB EQUIVALENT AGENCY WAS SUPERVISING OR WHAT THE INFORMED CONSENT REQUIREMENTS ARE. AND THAT WAS THE QUESTION THAT CAME UP RIGHT AWAY FOR ME.

DR. LOMAX: THIS IS SOMETHING -- ONE OF THE THINGS WE INTEND TO DO IS CONVENE A WORKSHOP, AND WE HAVE INVITED A NUMBER OF INTERNATIONAL STAKEHOLDERS. AND I WOULD SUGGEST THAT WE COME BACK TO YOU WITH SOME TYPE -- THIS IS NOT A NEW ISSUE, I

KNOW, CERTAINLY BECAUSE OF CLINICAL TRIALS AND RESEARCH ISSUES -- WHAT THE COMMON FORMULATION IS OF THAT REQUIREMENT. AND, ROSIE, I DON'T KNOW IF YOU HAVE A QUICK COMMENT THERE. ROSIE IS WORKING, SHE'S COLLABORATING AND SHE'S LISTENING TO THIS AS WELL. BUT I THINK WHAT I'M HEARING IS THERE NEEDS TO BE PROBABLY A STRONGER, A MORE DEFINITIVE CHARACTERIZATION OF WHAT THAT OVERSIGHT REQUIREMENT IS.

MS. ISASI: YES. HELLO, EVERYBODY. THIS IS ROSARIO ISASI. I'M FROM THE INTERNATIONAL STEM CELL FORUM. WE ARE PARTNERS IN THIS PROJECT WITH CIRM AND NIH.

YES, IT'S A VERY VALID COMMENT TO MAINLY STATE THIS PROVISION IN A MORE AUTHORITATIVE WAY. JUST FROM OUR EXPERIENCE WITH INTERNATIONAL PARTNERSHIP AND INTERNATIONAL ETHICS AND POLICY COMPARATIVE WORK, WE CAN SEE THAT THERE'S ALWAYS ETHICS REVIEW EQUIVALENT. THE OVERSIGHT MECHANISM GOES ACROSS INTERNATIONAL JURISDICTIONS AS WELL AS THE FUNDAMENTAL ESSENTIAL REQUIREMENTS FOR INFORMED CONSENT.

I KNOW THAT SOMEBODY WILL SAY THE TRICK IS IN DETAILS, AND THE ISSUE BECOMES HOW TO JUDGE OVERSIGHT, PARTICULARLY ETHICS REVIEW PERFORMED IN

OTHER JURISDICTIONS, BUT THAT'S A SEPARATE ISSUE. BUT, AGAIN, I THINK THIS IS VERY STANDARD ACROSS MOST INTERNATIONAL PARTNERSHIPS AND COLLABORATIONS AND ACROSS THE COUNTRIES IN ALL THE POLICIES, BUT IT COULD BENEFIT THIS TEXT FOR IMPROVING THE LANGUAGE.

DR. ROBERTS: YEAH. I GUESS FOR ME IT'S, INSTEAD OF ASSUMING IT'S THE BASELINE, IT WOULD BE A REQUIRED BASELINE.

MS. ISASI: YES.

DR. ROBERTS: THAT'S HOW I WOULD LOOK AT IT. I DON'T KNOW IF ANY OF THE OTHER STANDARD WORKING GROUP MEMBERS WANT TO COMMENT ON THIS BASELINE QUESTION BEFORE WE MOVE ON TO THE STATEMENT.

DR. PETERS: I'M JUST WONDERING WITH REGARD TO THE ETHICAL STANDARDS IN WHICH THE BIOSPECIMENS WERE ORIGINALLY DRAWN, DOES THIS INCLUDE THE DISCUSSION ABOUT COMPENSATION, OR IS THIS A DIFFERENT MATTER?

DR. ROBERTS: WELL, I THINK THAT'S AN INTERESTING QUESTION BECAUSE I THINK GEOFF, AND YOU CAN SPEAK FOR YOURSELF, GEOFF, I THINK GEOFF WAS THINKING OF THIS AS A SEPARATE MATTER; IS THAT CORRECT, GEOFF? I THINK THAT'S PART OF -- THE SCOPE OF THE STATEMENT IS THAT THESE WERE COLLECTED

SPECIFICALLY FOR RESEARCH PURPOSES. BUT, AGAIN, YOU READ THAT AND THERE'S KIND OF AN ASSUMPTION THAT IT'S NOT FOR COMPENSATION, BUT I DON'T KNOW THAT THAT'S NECESSARILY THE CASE. HOW WOULD YOU ANSWER THAT?

DR. LOMAX: I THINK THAT'S AN AREA WHERE -- SO THIS COMES UP ALL THE TIME WITH CIRM GRANTEES, AND THEY'RE ADVISED TO HAVE NO COMPENSATION FOR EVEN -- PEOPLE TYPICALLY WANT TO DO THINGS LIKE EVEN, THIS IN THE CASE OF BLOOD OR SKIN, DO THEY GIVE EVERYONE LIKE A GIFT CERTIFICATE OR SOMETHING. IF YOU RECALL, WE ACTUALLY HAD A STANDARDS WORKING GROUP MEETING WHERE WE CONSIDERED THAT AND DECIDED, OUT OF CONCERN FOR LANGUAGE IN PROP 71, THAT IT SHOULD JUST BE STRAIGHT NO COMPENSATION. AND WE'VE ADVISED OUR GRANTEES REPEATEDLY ON THAT SITUATION, AND THEY CAN MAKE THAT WORK.

SO IN A CIRM SETTING THAT'S ABSOLUTELY CORRECT, BUT INTERNATIONALLY AND NATIONALLY THAT'S A LEVEL THAT JUST VARIES. THERE ARE OFTEN, IF YOU THINK OF COMPENSATION AS SOMEONE MIGHT GET A STIPEND OR SOME AMOUNT OF REIMBURSEMENT FOR GIVING A BLOOD SAMPLE OR SOMETHING, THAT CERTAINLY CAN HAPPEN. WE DIDN'T DISCUSS -- THAT ISSUE DID NOT COME UP OR WAS

NOT INCORPORATED INTO THE THINKING IN THIS DOCUMENT. SO I DON'T KNOW IF THAT ANSWERS YOUR QUESTION, BUT THAT'S ONE THAT WOULD ADD ANOTHER LAYER. YOU'D HAVE TO SORT OF LOOK BACK TO THE PROTOCOL AND MAKE THAT DETERMINATION, BUT WE HAVEN'T ADDRESSED IT HERE.

DR. PETERS: THANK YOU VERY MUCH.

CHAIRMAN LO: DOROTHY, CAN I MAKE A COMMENT HERE ABOUT YOUR EARLIER COMMENT ABOUT THE ASSUMPTION THAT THE COMMON RULE REQUIREMENTS ARE MET?

DR. ROBERTS: RIGHT.

CHAIRMAN LO: AS I REREAD THIS SECTION, AND I'M TRYING TO SEE, PAGE 2, RIGHT-HAND COLUMN, SECOND PARAGRAPH, IT STRIKES ME THAT, AS YOU SO NICELY PUT IT, IT'S ASSUMED, BUT NOT EXPLICITLY STATED THAT THE COMMON IRB INTERPRETATION OF NOT NEEDING EXPLICIT CONSENT TO USE MATERIALS IN RESEARCH IF THE MATERIALS WERE ORIGINALLY COLLECTED FOR CLINICAL CARE AND NOW NO LONGER ARE NEEDED FOR CARE AND DEIDENTIFIED. AS YOU KNOW, THAT IS CONSIDERED UNDER THE COMMON RULE TO BE NONHUMAN SUBJECTS RESEARCH ONCE IT'S DEIDENTIFIED.

AND WE HAD SAID PREVIOUSLY THAT WE WOULD WANT -- WE WOULD HAVE A HIGHER STANDARD, THAT WE WOULD WANT EXPLICIT CONSENT TO DONATE FOR RESEARCH.

SO IT WOULDN'T BE A DOUBLE REPURPOSING FROM CLINICAL COLLECTION TO RESEARCH TO IPSC DERIVATION. AND FOLLOWING YOUR LINE OF MAKING EXPLICIT WHAT'S IMPLICIT, THAT WOULD BE SOMETHING WE MIGHT WANT TO DO. AGAIN, THAT WOULD HAVE THE EFFECT OF PERHAPS EXCLUDING UNDER THESE STATEMENTS IPS LINES THAT ARE DERIVED ELSEWHERE WITH THE LEFT-OVER CLINICAL RESEARCH AND NOW DEIDENTIFIED -- LEFT OVER FROM CLINICAL CARE AND NOW DEIDENTIFIED, OKAY TO USE FOR RESEARCH WITHOUT FURTHER CONSENT.

DR. LOMAX: BERNIE, IF I CAN JUST ADD ON THAT. WHEN WE ORIGINALLY TRIED TO STATE THE SCOPE OF THIS PROJECT, WE DELIBERATELY AVOIDED DEALING WITH THOSE MATERIALS. AGAIN, I WANT TO REMIND YOU THAT THE UNIVERSE OF MATERIALS HERE WE'RE TALKING ABOUT ARE MATERIALS THAT HAVE BEEN CONSENTED FOR RESEARCH. AND THE REASON WE DIDN'T WANT TO DEAL WITH THAT WAS BASED ON THE DISCUSSIONS YOU ALLUDED TO PREVIOUSLY, THAT I INDICATED THAT CIRM -- WE COULD NOT TAKE A POSITION THERE BECAUSE OF THE PREVIOUS VIEWS OF THE STANDARDS WORKING GROUP.

CHAIRMAN LO: AGAIN, MY SUGGESTION, FOLLOWING DOROTHY'S, IS TO JUST MAKE THAT A LITTLE MORE EXPLICIT THAN THE LANGUAGE THAT'S ON PAGE 2 NOW.

DR. LOMAX: ABSOLUTELY. THAT'S A FINE COMMENT.

CHAIRMAN LO: DOROTHY, I LIKE YOUR IDEA -- FIRST I WANT TO ASK IF THERE ARE OTHER PEOPLE WHO WANT TO COMMENT, BUT I LIKE YOUR IDEA OF COMMENTING ON EACH STATEMENT AND MAYBE PAUSING FOR COMMENTS. I THINK THAT'S VERY USEFUL.

DR. ROBERTS: SO I'LL MOVE ON, THEN, TO STATEMENT 1, WHICH IS THAT A REVIEW HAS TO BE PERFORMED TO ENSURE THAT THE IPSC DERIVATION AND DISTRIBUTION ARE NOT SPECIFICALLY PRECLUDED BY OR OTHERWISE IN CONFLICT WITH THE ORIGINAL INFORMED CONSENT. IN OTHER WORDS, BEFORE THESE BIOSPECIMENS COULD BE REPURPOSED, THERE WOULD HAVE TO BE A REVIEW TO MAKE SURE THAT THERE'S NO CONFLICT IN THE REPURPOSING WITH WHAT THE DONOR ORIGINALLY CONSENTED TO, ESPECIALLY IF THERE'S SOME LIMITATION IN THE ORIGINAL CONSENT THAT WOULD THEN NOT PERMIT THE INTENDED REPURPOSING.

SO, FOR EXAMPLE, IF THE DONOR DONATED HER CELLS TO STUDY A PARTICULAR DISEASE AND THE IPSC-DERIVED LINES WERE GOING TO BE USED TO STUDY A DIFFERENT DISEASE, THEN THERE WOULD BE A CONFLICT, AND THAT WOULD PRECLUDE THE USE FOR THIS DIFFERENT DISEASE.

ALSO, STATEMENT NO. 5 GETS INTO MORE DETAIL ABOUT COMMERCIAL PURPOSES; BUT IF THE ORIGINAL DONOR DID NOT CONSENT TO THE USE OF THE RESEARCH FOR COMMERCIAL PRODUCTS, THEN THE REPURPOSING COULDN'T BE USED FOR COMMERCIAL PRODUCTS. THOSE ARE JUST TWO EXAMPLES OF WHAT STATEMENT 1 IS GETTING AT, BASICALLY TO AVOID VIOLATING THE ORIGINAL CONSENT. THAT'S HOW I WOULD PUT IT PLAINLY. IF THE ORIGINAL CONSENT WAS FOR A PARTICULAR PURPOSE AND THE REPURPOSING IS GOING TO VIOLATE THAT, THEN IT WOULD NOT BE ALLOWED. BUT THE POINT OF STATEMENT 1 IS THAT THERE HAS TO BE SOME REVIEW OF THE ORIGINAL INFORMED CONSENT TO SEE WHAT THE REQUIREMENTS ARE.

SO ANY COMMENTS ON THAT STATEMENT?

DR. TAYLOR: I HAVE ONE. OBVIOUSLY I'M NEW TO (INAUDIBLE) CONSEQUENCE OF DONOR'S INTENTIONS. (INAUDIBLE) FUNDAMENTAL IMPORTANCE.

I'M CURIOUS HERE. OBVIOUSLY THERE ARE TWO SITUATIONS WHERE, BOTH IN THE CONTEXT OF PRIVACY AND IN THE CONTEXT OF RESEARCH GENERALLY, IT IS POSSIBLE TO MODIFY PURPOSES THE DONOR'S CONSENT WHERE THE CIRCUMSTANCES ARE FOR VARYING CRITERIA. I'M NOT AN ADVOCATE ONE WAY OR ANOTHER. THOSE ARE NOT HERE. I'M JUST NOTICING THE CONTEXT OF, SAY, (INAUDIBLE).

THERE'S TWO OTHER IMPORTANT CONTEXTS. IT IS POSSIBLE TO FIND THAT A PROPOSED PURPOSE IS IN DIRECT CONFLICT AND STILL TO SEEK A REVIEW BOARD'S POWER, REVIEW, FOR PURPOSES OF REPURPOSING (INAUDIBLE) COMPELLED (INAUDIBLE) POSSIBLE. THAT'S ONE CONTEXT.

THE OTHER, OF COURSE, IS THE DEIDENTIFICATION. ALTHOUGH IT'S MUCH DISPUTED, RIGHTLY SO, OF WHETHER OR NOT THE SUBSEQUENT IDENTIFICATION OF CELLS ALLOWS THEM TO BE USED FOR THIS PURPOSE ON THE GROUND THAT THEY'RE NOT HUMAN SUBJECTS RESEARCH. PERSONALLY I THINK I SIDE WITH THE PEOPLE WHO THINK (INAUDIBLE). WHY THE RULE MUST BE MORE STRINGENT FOR IPS CELLS HERE IN THIS CONTEXT.

DR. ROBERTS: WELL, UNDER THE DISCUSSION SECTION ON PAGES 3 AND 4, THERE IS AN EXCEPTION NO. 2 FOR THERE IS A PARTICULARLY COMPELLING SCIENTIFIC REASON TO USE A PARTICULAR COLLECTION OF SPECIMENS. IT'S NOT FEASIBLE TO RECONTACT PARTICIPANTS TO GET THEIR SPECIFIC CONSENT AND THE REQUIRED IRB WAIVER IS OBTAINED. SO IT DOES ALLOW FOR THAT. I WAS HOPING TO GET INTO SOME DISCUSSION ABOUT THAT AFTER WE FINISH THE STATEMENTS, BUT THERE IS THAT.

AS BERNIE AND GEOFF WERE JUST DISCUSSING,

THERE WAS A DECISION MADE TO BE MORE RESTRICTIVE THAN THE COMMON RULE WOULD ALLOW AND NOT CONSIDER -- OH, THAT WAS FOR CLINICAL PURPOSES. SO YOU'RE RAISING THE QUESTION FOR REPURPOSING NOT FROM CLINICAL TO RESEARCH, BUT DEIDENTIFYING AS A WAY --

DR. TAYLOR: IN THIS CONTEXT. (INAUDIBLE). WHERE IS THE GENERAL STATEMENT FOR THE EXCEPTION, LOOKING FOR EXCEPTIONS GIVEN THE FACT THEY'RE BASICALLY, FROM SOME PEOPLE'S PERSPECTIVE, NOT SIMPLY RESEARCH TISSUES, BUT ONE COULD (INAUDIBLE) THEY'RE TRADING USE LIKE BASEBALL CARDS IN THE SENSE THAT THEIR DEVICES. THEY'RE NOT ENTERING TRIALS, FOR EXAMPLE, CREATING HUMAN BEINGS.

DR. LOMAX: PAT, CAN I GIVE YOU KIND OF SOMETHING WE'VE GLEANED. ONE OF THE GROUPS THAT WE'VE SORT OF TALKED TO AND WE'VE ASKED TO SORT OF LOOK AT THIS ARE SOME OF THE BANKS THEMSELVES. SO THE SCENARIO YOU'RE DESCRIBING MAY WELL OCCUR WITHIN AN INSTITUTION, WITHIN AN INSTITUTIONAL RESEARCH SETTING, BUT THE INDICATIONS WE'VE HAD FROM SOME OF THE MAJOR BANKING ORGANIZATIONS IS THEY WOULD BE PRETTY HESITANT TO TAKE A TRANSFORMED CELL AND REDISTRIBUTE THAT THROUGH A BANKING PROTOCOL.

SO IT'S REALLY THE SECOND STEP THAT I THINK GIVES FOLKS HESITATION TO DO THAT THROUGH THE

SCENARIO. SO I IMAGINE THAT WORK IS GOING ON QUITE FREQUENTLY WITHIN AN INSTITUTIONAL SETTING, BUT THEY WOULDN'T NECESSARILY WANT TO THEN -- A NATIONAL BANK WOULDN'T NECESSARILY WANT TO PICK THAT UP. AGAIN, I SUPPOSE THERE COULD BE AN EXTRAORDINARY CIRCUMSTANCE WHERE YOU'VE GOT SOMETHING OF SUCH SCIENTIFIC VALUE, AND THAT WAS SORT OF WHAT LED TO THE DISCUSSION AT THE BACK OF THE DOCUMENT THAT DOROTHY ROBERTS WAS ALLUDING TO.

DR. TAYLOR: GOING IN AN OPPOSITE DIRECTION, I CAN IMAGINE CIRCUMSTANCES LIKE IN THE (INAUDIBLE) EXAMPLE --

CHAIRMAN LO: I'M SORRY. PAT, I'M HAVING TROUBLE HEARING YOU. CAN YOU SPEAK UP AND A LITTLE BIT SLOWER PLEASE?

DR. TAYLOR: ABSOLUTELY. I CAN IMAGINE SOME CIRCUMSTANCES AS IN THE CASE OF THE CELLS SUBJECT OF THE RECENT NIH SETTLEMENT IN WHICH UNDER PRIVACY INTERESTS THAT PEOPLE WERE FAIRLY CAPTURED BY EXCLUSIVE TERMS OF THE CONSENT. I'M WONDERING IF THERE'S A REVIEW TO LOOK FOR SUCH ISSUES AS WELL. I'M JUST SORT OF RELYING ON EXPLICIT TERMS OF THE CONSENT. I MEAN I ACTUALLY PARTICULARLY UNDERSTOOD -- BERNIE IS CERTAINLY MORE THAN AWARE OF ALL THE ISSUES WITH GENERAL CONSENTS. AND SINCE

WE'RE GETTING MORE PRIVILEGE IN GENERAL CONSENTS (INAUDIBLE).

DR. ROBERTS: WELL, I THINK THAT'S AN IMPORTANT QUESTION. TO ME I SEE THE PURPOSE OF THESE STATEMENTS AS TRYING TO GO FROM -- TRYING TO ADDRESS THE CONCERNS ABOUT A GENERAL CONSENT. ON THE OTHER HAND, I THINK I DO HAVE THAT QUESTION ALSO ABOUT A CONSENT THAT, FOR EXAMPLE, TO DO RESEARCH WHERE IT WAS UNDERSTOOD THAT IT WAS FOR A PARTICULAR DISEASE, BUT WHAT IF THE CONSENT FORM DIDN'T SPECIFY THAT DISEASE? I'M THINKING OF THIS BECAUSE OF THE RECENT SETTLEMENT BETWEEN ARIZONA STATE AND THE HAVASUPAI INDIAN TRIBE WHERE THE TRIBAL MEMBERS DONATED DNA TO STUDY DIABETES. AND THERE'S SOME DISPUTE ABOUT EXACTLY TO WHAT EXTENT THE RESEARCHER WAS THEN GOING TO USE THE SAMPLES TO STUDY SCHIZOPHRENIA. BUT AT ANY RATE, THE INDIAN TRIBE SUED BECAUSE OF THAT, AND THERE WAS A SETTLEMENT LAST YEAR OR THE YEAR BEFORE.

AND THERE WAS A CASE WHERE THE DONORS DONATED DNA FOR ONE PARTICULAR PURPOSE, A STUDY OF A PARTICULAR DISEASE, AND THE RESEARCHERS WERE GOING TO USE IT TO STUDY A DIFFERENT DISEASE.

WHAT IF THE CONSENT FORM DOESN'T SPECIFY ANY DISEASE? IS THE ASSUMPTION, THEN, THAT IT CAN

BE USED TO STUDY A DIFFERENT DISEASE THAN THE SPECIMEN WAS ORIGINALLY COLLECTED? I DON'T KNOW IF THAT MAY BE A QUESTION OF A GENERAL CONSENT THAT'S BEING RELIED ON.

CHAIRMAN LO: I WANT TO FOLLOW UP ON, I THINK, THE VERY IMPORTANT DISCUSSION. FIRST, THE PARENTHESES AT THE END OF STATEMENT 1 SAYING THAT IT'S NOT JUST THE CONSENT FORM, BUT IT REFERS TO OTHER MATERIALS. AND I THINK WE ALL LIKE TO SAY CONSENT IS A PROCESS, NOT A FORM, AND THAT THERE'S ORAL COMMUNICATION BACK AND FORTH BETWEEN THE RESEARCHER AND THE PARTICIPANT. BUT OBVIOUSLY IT'S HARD TO ASCERTAIN WHAT EXACTLY WAS SAID. AND SO WE TEND TO GO BACK TO THE FORM AS BEING SORT OF AGREED UPON.

BUT I THINK THE CASE -- I FORGET, PAT, WHETHER IT WAS YOU OR DOROTHY, THAT THE FORM SAID ONE THING, BUT THERE WAS GOOD EVIDENCE THAT THE DISCUSSION WENT IN A DIFFERENT DIRECTION, THAT WE WOULD NOT LET THE FORM OVERRIDE CLEAR EVIDENCE THAT SOMETHING ELSE WAS AGREED UPON IN THE DISCUSSION. SO I GUESS ONE WAY TO FIX THAT IS TO AMEND THAT PARENTHESES TO INCLUDE ORAL DISCUSSIONS BETWEEN THE RESEARCHER AND THE PARTICIPANT, KNOWING THAT IT MAY BE HARD TO ASCERTAIN WHAT ACTUALLY WAS SAID.

BUT THERE'S ANOTHER POINT THAT, PAT, YOU RAISED ABOUT -- HOW DID YOU PUT IT -- PRIVILEGING THE GENERAL CONSENT FORM. JEFF BOTKIN, THIS CAME UP IN THE NIH EMBRYO PANEL THAT YOU CHAIRED, THAT THERE WAS AT LEAST ONE EXAMPLE THAT I CAN REMEMBER WHERE BY TRYING TO BE A LITTLE MORE SPECIFIC TO THE PROSPECTIVE DONOR AS TO WHAT THE CELLS WOULD BE USED FOR, THEY MENTIONED A SPECIFIC DISEASE THAT WAS CLEARLY IN THE HIGH PRIORITIES OF THE RESEARCH TEAM, BUT THEN THAT WAS LATER -- THAT PROVISION LED TO THE VERY QUESTION OF, GOSH, DOES THAT THEN PRECLUDE IT IF YOU SAY WILL BE USED FOR DISEASE X OR CERTAINLY ONLY FOR DISEASE X, DOES IT PRECLUDE USING IT FOR OTHER DISEASES? AND THAT WOULD THEN PROVIDE IN A SENSE AN INCENTIVE FOR USING A GENERAL CONSENT THAT SAYS LESS ABOUT WHAT WAS GOING TO HAPPEN WITH THE SPECIMEN.

THE IDEAL THING, I SUPPOSE, IF YOU SAY THE RESEARCH TEAM CURRENTLY IS PARTICULARLY INTERESTED IN DISEASE X; HOWEVER, IT MAY BE THAT YOUR SPECIMEN WILL BE OF USE OR THE IPS LINE DERIVED FROM IT WILL BE OF USE FOR STUDYING OTHER DISEASES AND SO, THEREFORE, WE WOULD LIKE TO REQUEST YOUR AGREEMENT FOR IT TO BE USED MORE BROADLY. I THINK THAT WOULD BE WHAT YOU'D LIKE TO SEE, BUT I CAN SEE PAT'S

POINT, THAT THE RESEARCHER MAY PERCEIVE AN ADVANTAGE TO SAYING LESS ABOUT WHAT YOU'RE GOING TO DO, BUT THAT UNDERCUTS THE NOTION THAT PEOPLE WANT TO KNOW -- THE MORE INFORMATION PEOPLE KNOW ABOUT WHAT THE PURPOSE WILL BE, THE MORE INFORMED THEIR CONSENT WILL BE IN GENERAL.

DR. ROBERTS: THE PROBLEM WITH THAT, THOUGH, BERNIE, IS THAT WHAT YOU'RE DESCRIBING IS WHAT TO DO PROSPECTIVELY.

CHAIRMAN LO: ABSOLUTELY.

DR. ROBERTS: BUT THE PROBLEM HERE IS WE'RE DEALING WITH A CONSENT FORM THAT MAY HAVE BEEN SIGNED TEN YEARS AGO OR 20 YEARS AGO --

CHAIRMAN LO: YOU'RE ABSOLUTELY RIGHT.

DR. ROBERTS: -- WHEN THERE WAS NO EVEN CONTEMPLATION OF THIS REPURPOSING. AND SO I THINK IT'S VERY -- WHAT YOU SAID ABOUT DOES IT SAY I DONATE MY CELLS FOR THE STUDY OF, LET'S SAY, DIABETES, DOES THAT MEAN IT CAN'T BE USED FOR THE STUDY OF ANY OTHER DISEASE, OR IT ONLY CAN BE USED FOR IT IF IT SAYS I DONATE MY CELLS ONLY FOR THE STUDY OF A PARTICULAR DISEASE? BUT THAT'S -- I DON'T KNOW IF THAT'S PERFECTLY CLEAR IN STATEMENT 1.

IT DOES SAY A SPECIMEN WILL BE USED ONLY TO STUDY A PARTICULAR DISEASE OR CONDITION. DOES

THAT MEAN THAT IT'S ONLY PRECLUDED IF THE WORD "ONLY" IS USED? I WOULD THINK THAT IN MANY CASES PEOPLE DONATE CELLS TO STUDY A PARTICULAR DISEASE, BUT THEY MAY NOT SPECIFY IT OR THEY MAY NOT SAY ONLY. IT'S HARD TO TELL WHETHER THEY CARE IF IT WERE USED TO -- THEIR CELLS WERE USED TO STUDY ANOTHER DISEASE OR NOT IF THEY DIDN'T USE THE WORD "ONLY."

DR. LOMAX: CAN WE OFFER A PUBLIC COMMENT HERE BECAUSE WE HAVE AN INSTITUTIONAL REPRESENTATIVE?

CHAIRMAN LO: THAT WOULD BE HELPFUL.

MS. DELANDA: MY NAME IS BERTHA DELANDA. AND I'M FROM THE RESEARCH COMPLIANCE OFFICE AT STANFORD UNIVERSITY, AND I WORK AS A PANEL MANAGER FOR THE PANEL THAT OVERSEES THE IRB AND THE STEM CELL RESEARCH IN COMBINATION. I KIND OF JUST WANTED TO EXPAND ON THAT POINT, THAT THIS DID COME UP WITH OTHER DISCUSSIONS WITHIN MY GROUP REGARDING THE CONSENT AND WHAT IS IT LIMITED TO.

IT WAS MORE HELPFUL FOR US TO DISCUSS WHAT A REASONABLE PERSON WOULD NOT ALLOW AND NOT WHAT THEY DID ALLOW FOR THE VERY SAME REASON THAT YOU JUST TALKED ABOUT, THAT SOMEONE WOULD SIGN A CONSENT FORM STATING THAT, FOR EXAMPLE, THEY WOULD BE OKAY

TO USE THEIR SAMPLES FOR DIABETES, AND IT WAS DOUBTFUL WHETHER THEY HAD TO BE RECONTACTED TO SAY BUT WOULD YOU ALSO USE IT TO CURE CANCER. WOULD THERE BE AN OBJECTION TO THAT?

IT WAS MORE FOCUSED ON WHAT THEY WOULD NOT ALLOW IN REGARDS TO LIKE SOME PEOPLE HAVE AVERSIONS TO ANIMAL RESEARCH, OR SOME PEOPLE DON'T WANT TO HAVE ANYTHING TO DO WITH A STUDY THAT HAS TO DO WITH THE DESTRUCTION OF EMBRYOS. SO FOR US IT WAS JUST BETTER TO FOCUS ON WHAT WOULD THEY NOT REASONABLY ALLOW AND NOT WHAT THEY WOULD ALLOW. AND I THINK THAT WORD "ONLY" SHOULD BE UNDERLINED AND BOLDED SO THAT IT VERY, VERY SPECIFICALLY STATES SOMETHING AND WE SHOULDN'T GO ABOVE THAT.

DR. ROBERTS: THAT'S VERY HELPFUL, ALTHOUGH I WONDER WHAT THAT QUESTION WOULD HAVE ELICITED IN THE CASE OF THE HAVASUPAI WHO DONATED DNA FOR THE STUDY OF DIABETES, BUT OBJECTED VEHEMENTLY TO ITS USE TO STUDY SCHIZOPHRENIA. NOW, I HAVEN'T READ THE CONSENT FORM, SO I DON'T KNOW IF IT SAID ONLY DIABETES. BUT JUST HYPOTHETICALLY, IT MIGHT BE HARD TO KNOW WHAT A DONOR WOULD NOT WANT. ALTHOUGH I AGREE IT'S PROBABLY MORE HELPFUL TO ASK THAT THAN THE OTHER WAY AROUND.

AND THE STATEMENTS HERE DO HIGHLIGHT TWO

AREAS WHERE THE QUESTION IS WHAT THEY WOULD NOT ALLOW, AND YOU WANT EXPLICIT CONSENT. AND ONE IS COMMERCIAL USE AND THE OTHER IS HUMAN TRANSPLANTATION.

MAYBE WHAT WE NEED TO BE THINKING OF, ARE THERE OTHER USES THAT A REASONABLE PERSON WOULD NOT ALLOW THAT SHOULD BE ADDED TO THE TWO THAT ARE INCLUDED HERE? THAT MAY BE ANOTHER APPROACH.

DR. LOMAX: AND WE CAN -- DOROTHY, I'M MAKING NOTES HERE. WHAT I ANTICIPATE COMING OUT OF THIS DISCUSSION IS A SET OF CORE QUESTIONS THAT WE WILL INCORPORATE INTO THE PROCESS MOVING FORWARD. SO WE CAN CONTINUE TO SURVEY ON THIS AND REPORT BACK TO YOU.

DR. ROBERTS: YEAH.

DR. BOTKIN: JUST A QUICK COMMENT. I THINK THAT THIS -- I LIKE, FOR THE MOST PART, THE LANGUAGE THAT'S HERE, AND I WOULD JUST SAY THAT OBVIOUSLY FROM THE PERSPECTIVE OF OPERATING AT A LEVEL THAT'S ABOVE WHAT'S REQUIRED, THAT'S MADE CLEAR IN THE INTRODUCTORY PARAGRAPHS. THAT ASPECT IS GOOD. THE FACT THAT YOU'RE ACTUALLY LOOKING AT THE CONSENT FORM TO SEE WHAT PEOPLE SAID, EVEN IF THE LINES HAVE BEEN DEIDENTIFIED, IS ABOVE COMMON PRACTICE AND THE REGS. SO THAT ASPECT IS GOOD. I

JUST THINK THE VAST MAJORITY OF CONSENT FORMS ARE AMBIGUOUS IN THEIR LANGUAGE. YOU HAVE TO DRAW A LINE, AND I THINK THE COMMON LINE OUT THERE IS TO SAY THE USE SHOULD NOT BE INCONSISTENT WITH THE CONSENT FORM. THAT'S SORT OF A BOTTOM LINE. IF YOU SPECIFICALLY PRECLUDE IT, THEN WE'RE NOT GOING TO DO IT.

BUT IF IT'S AMBIGUOUS, THEN IT'S GOING TO BE A JUDGMENT CALL, JUST AS FOLKS ARE SAYING, ABOUT WHAT WOULD A REASONABLE PERSON UNDERSTAND AFTER HAVING READ THIS CONSENT FORM. AND I THINK EACH INSTITUTION IS PROBABLY GOING TO HAVE A LITTLE INSTITUTIONAL MEMORY ABOUT HOW THEY MADE THAT CALL WITH SPECIFIC LANGUAGE IN THE CONSENT FORM.

DR. TAYLOR: THAT POINT IS REALLY WELL TAKEN. I'M WONDERING IF WE OUGHT TO SAY SOMETHING, AS JEFFREY SAID, ABOUT HOW AMBIGUITY IS TREATED. I'LL GIVE YOU AN EXAMPLE. I GUESS THERE'S GROWING EVIDENCE THAT AUTISM IS ACTUALLY CLOSELY RELATED MECHANISMS AND MAY BE THE SOURCE TO AUTOIMMUNE DISEASES OF BLOOD AND OTHER ONES. SO IF SOMEONE LIMITS THEIR USE OF THEIR TISSUES TO STUDYING ONE OF THOSE AUTOIMMUNE DISEASES, CAN IT BE USED TO STUDY PARALLEL DEVELOPMENT OF AUTISTIC THINGS OR THE EXTENT TO WHICH IT DEPENDS ON ROOTS? I COULD

IMAGINE SOMEONE NOT WANTING (INAUDIBLE).

IN ANY SORT OF SENSE FOCUSING ON A DISEASE ITSELF WOULD ACTUALLY FINALLY RESOLVE THE QUESTION OF WHETHER OR NOT RESEARCH OUGHT TO BE DONE ON SOMETHING THAT UNDERLIES IT. I WOULD EXPECT THAT TO COME UP A LOT, AND MAYBE IT CAN BE DECIDED DIFFERENT WAYS. PERHAPS THIS WAS TALKING ABOUT -- IN THE (INAUDIBLE), WE LAY PEOPLE DON'T REALLY KNOW MANY OF THESE THINGS, AND THERE MAY BE ARGUMENTS AROUND UTILITY AND THEIR IMPORTANCE THAT MIGHT OTHERWISE BE PRECLUDED BY SOME VIEW OF RIGID VIEW (INAUDIBLE) FOR TREATING DIABETES.

CHAIRMAN LO: THIS IS A VERY IMPORTANT AND USEFUL DISCUSSION. I'M WONDERING HOW MUCH SHOULD BE IN THIS DOCUMENT WHICH I UNDERSTAND TO BE SORT OF A HIGH LEVEL POINTS TO CONSIDER GUIDANCE. AND I THINK AS SOMEBODY SAID, JEFF BOTKIN, THAT FORMS ARE OFTEN AMBIGUOUS AND SOMEONE HAS TO MAKE A JUDGMENT CALL. AND WE WOULD URGE THAT THE STANDARD EVERYONE SHOULD ADHERE TO, THAT YOU SHOULD NOT BE INCONSISTENT WITH WHAT THE CONSENT FORM SAID IN PLAIN LANGUAGE. BEYOND THAT, I THINK PEOPLE HAVE TO DELIBERATE AND MAKE A JUDGMENT CALL.

I THINK WHAT WE'RE GIVING IS A LOT OF USEFUL, PRACTICAL ADVICE AS TO HOW TO MAKE THAT

JUDGMENT, BUT I'M NOT SURE THAT BELONGS IN THIS DOCUMENT. IT MAY BE SOMETHING THAT GEOFF CAN DO WITH WORKSHOPS, FOR EXAMPLE.

I THINK THIS IS IMPORTANT, AND I'D ALMOST LIKE TO SORT OF HAVE A SEPARATE ARTICLE THAT, DOROTHY, YOU AND JEFF BOTKIN AND PAT TAYLOR MIGHT WRITE. I'M JUST WONDERING. I DON'T WANT TO OVERLOAD THIS DOCUMENT, WHICH I UNDERSTOOD TO BE SORT OF A MUCH HIGHER LEVEL OF JUST RAISING THE ISSUES. I THINK THE ISSUE THAT I MIGHT SUGGEST ADDING IS THAT CONSENT FORMS ARE AMBIGUOUS, AND YOU NEED TO REALLY DELIBERATE AND MAKE A JUDGMENT CALL AND GIVE REASONS FOR IT, I SUPPOSE.

DR. TAYLOR: THAT SOUNDS GREAT, BERNIE. I LIKE THE IDEA OF SPAWNING THE LITERATURE.

DR. ROBERTS: I THINK WE'VE JUST GOTTEN MORE WORK. OKAY. THAT'S GOOD.

THE ONLY THING I WOULD ADD TO THAT IS WHETHER, GIVEN THE SUGGESTION BY THE PUBLIC COMMENTER -- I'M SORRY I'VE FORGOTTEN HER NAME -- THAT MORE ATTENTION BE PAID TO WHETHER THERE ARE ANY OTHER CATEGORIES THAT A REASONABLE PERSON MIGHT NOT INCLUDE AND HAVE ANTICIPATED IN A GENERAL CONSENT.

DR. WAGNER: I JUST WANT TO ADD ONE THING ON THAT. ONE THING THAT I'D LIKE TO ADD, BECAUSE IT

IS A GENERAL CONCERN INCREASINGLY, IS GENETIC STUDIES. BECAUSE OF THE FACT THAT NOW, AS MORE AND MORE INFORMATION IS COMING OUT ON GENOTYPES, PARTICULARLY THOSE WITH GENETIC DISEASES, YOU CAN ACTUALLY IDENTIFY THE PATIENT BASED ON WHAT'S ACTUALLY REPORTED IN THE LITERATURE. SO THEY JUST NEED TO BE TOLD THAT THERE IS ALSO THE POSSIBILITY OF GENETIC STUDIES BEING DONE THAT CAN ACTUALLY REVEAL WHO THEY ARE. AND INTERESTINGLY, THIS HAS ALREADY OCCURRED IN REAL LIFE, SO THIS IS NOT THEORETICAL.

SECONDLY, IF YOU'RE GOING TO DO WHOLE GENOME TESTING, IF THERE'S ANY HINT OF THE ABILITY TO GO BACK TO THE PATIENT, AT LEAST THEY NEED TO BE AWARE OF THAT POSSIBILITY THAT YOU COULD DISCOVER SOME UNDERLYING DISEASE FOR WHICH THEY DID NOT CONSENT.

DR. LOMAX: ALAN, YOU WANT TO MAKE A COMMENT?

DR. TROUNSON: I THINK IT'S A VERY GOOD AND HEALTHY DISCUSSION. I THINK, JUST AS JOHN WAGNER JUST SAID, THINGS ARE CHANGING. AND WE NEED TO BE ABLE TO HAVE SOME WAY OF ADDRESSING THOSE CHANGES AS THINGS MOVE ON IN TIME. CLEARLY GENOTYPING WILL SOONER OR LATER IDENTIFY A PATIENT,

IDENTIFY A SUBGROUP WHICH IDENTIFIES A PATIENT.

THE OTHER THING IS THAT IF THERE'S ONLY WRITTEN INTO THE CONSENT ONLY FOR SUCH-AND-SUCH DISEASE, THAT SEEMS PRETTY CLEAR. THE PRIMARY PROBLEM, I THINK, GOING FORWARD IS THAT DISEASES ARE GOING TO BE RECLASSIFIED BIOCHEMICALLY AND GENETICALLY. AND YOU MIGHT HAVE DIABETES, BUT THAT JUST MIGHT BE ONE ELEMENT OF A DIFFERENT DISEASE. AND SO IT'S GOING TO BE VERY DIFFICULT, I THINK, IN THE FUTURE TO SORT OF NECESSARILY SAY, WELL, THIS DISEASE COVERS THIS CONDITION BECAUSE AS YOU DEFINE IT BETTER METABOLICALLY, GENETICALLY, ETC., YOU MIGHT FIND IT'S PART OF ANOTHER DISEASE AND NOT THE DISEASE THAT WAS WRITTEN DOWN IN THE CONSENT FORM.

SO I DO THINK WE NEED TO HAVE SOME THINKING ABOUT WHAT NEW INFORMATION WILL DO TO THE CHANGES IN THE KIND OF CLASSIFICATION OF DISEASES. THE INTENTION, I THINK, OF THE PERSON DONATING THE MATERIAL WHEN THEY SAID ONLY I THINK IS PRETTY CLEAR; BUT WHERE THEY DON'T SAY ONLY, IT WOULD SEEM THAT THAT COULD BE SOMETIME PART OF A WIDER DISEASE BECAUSE, I THINK AS PAT SAID, IF AUTISM IS AN AUTOIMMUNE DISEASE, SUDDENLY WE'VE GOT A WIDE VARIETY OF IMMUNE DISEASES THAT MAY BE VERY CLOSELY RELATED TO AUTISM AND VERY MEANINGFUL IN RESPECT TO

THAT.

SO I'M A LITTLE CONCERNED ABOUT WHAT THE COURTS MIGHT THINK ABOUT THE INDIAN SITUATION SLIGHTLY DIFFERENTLY IN THE FUTURE THAN THEY DID WHEN THEY MADE THAT DECISION A FEW YEARS AGO.

BUT WE WOULD NEED TO, I THINK, BE CERTAIN THAT THE KIND OF SPECIFICITIES THAT WE DEAL WITH THESE DAYS ARE GOING TO CHANGE, ABSOLUTELY GOING TO CHANGE, AS WE MOVE FORWARD, AND WE NEED TO BE ABLE TO ACCOMMODATE THAT IN SOME WAY.

MS. LANSING: CAN I ADD TO ALAN WAS SAYING? WHAT'S SO FRUSTRATING ABOUT THIS, AND I DO BELIEVE WE HAVE TO FOLLOW THE GUIDELINES THAT WE HAVE SET UP BECAUSE THERE'S NO WAY OF GOING BACK AND ASKING A PATIENT THAT WE DON'T KNOW WHO THEY ARE OR DECEASED. WHAT'S SO FRUSTRATING IS YOU CAN BE WORKING ON A STEM CELL LINE THINKING YOU'RE FINDING SOMETHING FOR DIABETES AND THEN YOU HAVE A CANCER BREAKTHROUGH. THAT'S WHAT'S EQUALLY SO FRUSTRATING ABOUT THE WHOLE THING. WE ALL KNOW WHEN JUST RECENTLY THERE WAS A BREAKTHROUGH IN ONE DISEASE. THEY WERE LOOKING FOR SOMETHING AND IT ENDED UP HELPING CANCER PATIENTS.

DR. ROBERTS: THAT'S WHAT THE LANGUAGE THAT WAS CIRCULATING BEFORE ABOUT NOT INCONSISTENT

WITH THE CONSENT. I THINK THAT'S VERY HELPFUL BECAUSE WHAT'S CONSISTENT AND WHAT ISN'T MIGHT CHANGE DEPENDING ON THE SCIENCE. I THINK THAT KIND OF GENERAL GUIDELINE IS HELPFUL. AND THEN THERE WILL BE OTHER MORE SPECIFIC GUIDELINES FOR THINGS LIKE COMMERCIAL USE AND HUMAN TRANSPLANTATION, BUT STATEMENT NO. 1, TO LEAVE IT WITH THAT.

CHAIRMAN LO: I THINK THAT'S GOOD. AND I THINK WE DO NEED TO MOVE ON. LET ME JUST SAY THE LAST TWO COMMENTS, ALAN AND JOHN WAGNER, GO TO STATEMENT 2 AND STATEMENT 4. JOHN'S COMMENTS WE SHOULD INCORPORATE AS COMMENT, FEEDBACK WITH STATEMENT 4. AND I THINK ALAN'S POINT IS VERY GERMANE TO STATEMENT 2, THAT AS THE DISEASE TAXONOMY CHANGES AND WE GO CLASSIFY IT MORE ON THE BASIS OF MOLECULAR MARKERS OR MECHANISMS OF ACTION, EXACTLY WHAT ALAN AND SHERRY WERE SAYING, YOUR LINE MAY BE VALUABLE NOT JUST FOR DIABETES, BUT FOR CANCER OR SOMETHING ELSE AND NOT INCONSISTENT WITH GIVES YOU A BROADER RANGE OF SCIENTIFICALLY VALUABLE OPTIONS THAT ARE PLAUSIBLY PERMITTED BY YOUR CONSENT.

SO NOT TO EXCLUDE THINGS WHERE IT JUST MENTIONS THE DISEASE, BUT LEAVES OUT THE ONLY, I THINK, IS IMPORTANT. BUT ALLUDING TO THE FACT THAT DISEASE TAXONOMY WILL CHANGE, I THINK, WOULD BE

HELPFUL TO HELP COMMITTEES INTERPRET THIS DIFFERENTLY IN THE FUTURE THAN THEY MIGHT NOW.

DR. ROBERTS: MAYBE WE CAN GO -- WELL, WE DEFINITELY NEED TO GO MORE QUICKLY THROUGH 2, 3, AND 4. SO TWO MAKES THE POINT THAT IF THE ORIGINAL BIOSPECIMEN IS DESIGNED TO STUDY A PARTICULAR DISEASE, THEN THE IPSC DERIVATION AND USE WOULD ALSO BE -- FOR THAT DISEASE WOULD BE CONSISTENT WITH THIS PURPOSE. THIS BASICALLY IS JUST SAYING, AS I READ IT, THAT IF THE BIOSPECIMEN WAS COLLECTED FOR ONE WAY OF STUDYING THE DISEASE, IT'S CONSISTENT IF STEM CELL RESEARCH IS STUDYING THAT DISEASE. SO OBVIOUSLY THERE WOULDN'T HAVE BEEN IN THE ORIGINAL CONSENT AN EXPLICIT PERMISSION TO USE IT IN STEM CELL RESEARCH. AND SO THIS IS JUST SAYING THE CONSENT TO STUDY THAT DISEASE OR CONDITION IS APPLIED TO STEM CELL RESEARCH.

THAT MAKES SENSE TO ME UNLESS THE CONSENT FORM EXPLICITLY FOR SOME REASON EXCLUDED. THE PERSON SAID I DO NOT WANT MY CELLS USED IN STEM CELL RESEARCH. BUT OTHERWISE IT'S CONSISTENT WITH THE INTENT OF THE DONOR IF THE STEM CELL RESEARCH IS FOR THE INTENDED PURPOSE.

DR. TROUNSON: YOU'D HAVE TO DEFINE STEM CELL RESEARCH BECAUSE IT WOULD BE SEEN DIFFERENTLY

BY NIH.

DR. ROBERTS: I MEAN I WAS USING IT BROADLY, BUT THE IPS DERIVATION AND USE.

DR. LOMAX: CORRECT. YEAH.

DR. ROBERTS: I DON'T KNOW IF ANYBODY HAS ANY COMMENTS ON THAT.

DR. TROUNSON: THERE MAY BE ISSUES FOR OTHER ORGANIZATIONS WHO MAY STUDY THOSE SPECIMENS FOR NONSTEM CELL RESEARCH. IN THE CASE OF NIH, IT MAY BE BROADER THAN THAT; WHEREAS, I THINK WE WOULD SAY IT WOULD BE COLLECTIVELY UNDER OUR CANOPY JUST BY WORKING WITH IPS CELLS. THEY MAY WELL BE VERY USEFUL FOR OTHER FORMS OF STEM CELL RESEARCH.

DR. LOMAX: THE POINT OF THAT STATEMENT WAS THERE WAS -- I THINK THAT THIS PERIOD HAS SORT OF MAYBE COME AND GONE AT THIS STAGE, BUT IT WAS AN EARLY PERIOD WHEN IPS LINES FIRST BECAME AVAILABLE AS TO WHETHER THAT WAS THE KIND OF EXCEPTIONAL ACTIVITY THAT REQUIRED SOME KIND OF NEW CONSENT. WHAT WE TRIED TO SUGGEST IS THERE'S A SET OF CONDITIONS WHERE IPS RESEARCH HAS BECOME THE STANDARD OF CARE FOR CERTAIN TYPES OF RESEARCH AND DEFINED IT REALLY KIND OF IN THE BASIC SPACE AROUND DISEASE MODELING AND DRUG DISCOVERY.

DR. ROBERTS: STATEMENT 2 IS, I THINK,

FUNDAMENTAL TO THIS WHOLE DISCUSSION BECAUSE IF YOU DON'T THINK THAT IPS DERIVATION WOULD COUNT OR THE PRIOR CONSENT WOULD COVER IPS CELL DERIVATION AND USE, THEN THERE'S NO POINT IN WHAT WE'RE DOING. WE'D HAVE TO SAY WE HAVE TO GO BACK AND GET NEW CONSENT.

DR. LOMAX: CORRECT.

DR. ROBERTS: SO IF ANYBODY OBJECTS TO STATEMENT 2, IT WOULD BE AN OBJECTION TO THE VERY PROCESS WE'RE DISCUSSING HERE OF BASICALLY TAKING THE ORIGINAL CONSENT AND APPLYING IT TO THIS NEW USE.

CHAIRMAN LO: I THINK THAT'S RIGHT.

DR. ROBERTS: SO IF THERE'S -- I ALSO WOULD ASSUME THAT SUCH OBJECTION WOULD HAVE COME UP AT THE BEGINNING OF OUR DISCUSSION. RIGHT? OKAY.

SO I DON'T KNOW IF ANYBODY -- THE ONLY THING I COULD THINK TO ADD TO THIS, WHICH WOULD BE IMPLIED BY STATEMENT 1, IS IF IT'S INCONSISTENT WITH THE ORIGINAL CONSENT TO DERIVE IPS CELLS FROM THE BIOSPECIMEN, THEN YOU COULDN'T DO IT, BUT THAT WAS COVERED BY STATEMENT 1.

CHAIRMAN LO: RIGHT.

DR. ROBERTS: SO I WOULD MOVE ON UNLESS ANYBODY --

CHAIRMAN LO: I THINK WE SHOULD MOVE ON. WE GOT TO GET TO NINE.

DR. ROBERTS: STATEMENT 3 IS JUST THAT THERE HAS TO BE SOME REFERENCE IN THE ORIGINAL CONSENT THAT IT'S OKAY FOR OTHER RESEARCHERS TO USE THE DONATED BIOSPECIMEN. OKAY. ANY DISCUSSION ABOUT THAT?

THE ONLY THING I THOUGHT HERE IS THAT MAYBE IT COULD BE MADE CLEARER THAT THE ORIGINAL CONSENT MUST INCLUDE USE BY OTHER RESEARCHERS. THAT'S THE ONLY ADDITION I COULD THINK FOR STATEMENT 3.

DR. KAMP: SOME OF THE OLDER CONSENT FORMS MORE BROADLY JUST SAY COULD BE USED FOR RESEARCH AND DON'T NECESSARILY INCLUDE THAT STATEMENT. THERE ARE EXAMPLES FROM FIBERGLASS THAT DATE BACK TO THAT ERA.

DR. ROBERTS: OKAY. SO THAT WOULD BE TOO LIMITING TO SPECIFY THAT. WELL, THEN, DO YOU THINK STATEMENT 3 IS TOO LIMITING? WOULD THAT LIMIT THE USE OF DONATED MATERIALS WHERE THE CONSENT FORM JUST SAID I AGREE MY CELLS CAN BE USED FOR FUTURE RESEARCH?

DR. LOMAX: JUST TO ADD A BIT OF HISTORY HERE. WE HAVE ENCOUNTERED SITUATIONS WHERE CELL LINES HAVE BEEN REJECTED BY A REPOSITORY FOR NOT

HAVING SOME REFERENCE TO SHARING. SO THE RESEARCH ALONE DIDN'T CLEAR THE REVIEW OF A REPOSITORY. SO I THINK THIS IS A STATEMENT PERHAPS ONE THAT ELEVATES TO WE REALLY NEED TO LISTEN TO THE DISCUSSION THROUGH THIS ENTIRE PROCESS AND UNDERSTAND WHAT THE STANDARD OF CARE IS, IF YOU WILL, ON THIS POINT BECAUSE THERE'S BEEN A LOT OF CONTROVERSY, AT LEAST FROM SOME OF THE FEEDBACK I'M FROM GETTING FROM OUR GRANTEES ON THIS ONE.

DR. ISASI: IF I MAY SAY SOMETHING, I AGREE WITH GEOFF. IT'S VERY IMPORTANT STATEMENT 3 EVEN IF IT IS SELF-EXPLANATORY. EVEN IN CANADA AND OTHER COUNTRIES, I HAVE SEEN OBJECTIONS FROM IRB'S IN THAT IT WAS NOT CLEAR THAT SHARING BIOSPECIMENS WAS INCLUDED AS PART OF INFORMED CONSENT PROCESS. BUT THAT MENTION WAS THERE OF DISTRIBUTION. IT WAS ALWAYS INTERPRETED OF ALLOWING DEPOSITING IN A REPOSITORY AND A BIOBANK.

DR. ROBERTS: TO ME THE QUESTION IS IS A CONSENT TO USE OF THE DONATED MATERIAL, DONATED BIOSPECIMINS, IN FUTURE RESEARCH, DOES THAT IMPLY SHARING, OR DO THE WORDS TO THAT EFFECT, SHARING OR DEPOSITING, DO THOSE HAVE TO BE INCLUDED?

MR. HARRISON: CAN I ASK JUST A CLARIFYING QUESTION WITH RESPECT TO STATEMENT 3? WAS THE

INTENT OF THE STATEMENT TO SUGGEST THAT IF THERE IS NO REFERENCE, EXPLICIT REFERENCE TO THE POSSIBILITY OF SHARING IN THE ORIGINAL CONSENT, THAT IT, THEREFORE, WOULD NOT BE PERMITTED TO BE DISTRIBUTED VIA AN IPSC REPOSITORY? IN OTHER WORDS, IS THE OBVERSE OF THE STATEMENT TRUE AS WELL?

DR. TROUNSON: THAT WOULD BE A PROBLEM.

DR. ROBERTS: THAT'S HOW I INTERPRETED IT.

DR. LOMAX: SO I THINK ROSIE SUMMED IT UP PRETTY CLEARLY. THE CONTROVERSY HAS SURROUNDED THE SITUATION OR THE CIRCUMSTANCE WHERE THERE'S NO REFERENCE TO SHARING OF THE SPECIMENS, THAT WITHIN THE CONSENT PROCESS THE DONOR'S ASSUMING THAT THEY'RE GIVING THE CELLS TO A SCIENTIST AND A SCIENTIST IS USING THOSE MATERIALS EXCLUSIVELY FOR THEIR USE. THAT'S HOW IT'S BEEN INTERPRETED.

THEN IF IT'S THEN DECIDED TO REDISTRIBUTE THOSE MATERIALS BROADLY, THAT'S WHERE THE CONTROVERSY HAS COME UP. AS ROSIE INDICATED, IT'S THAT SHARING LANGUAGE THAT HAS ALLEVIATED THAT PROBLEM. THAT'S SORT OF THE HISTORY HERE.

DR. TROUNSON: I DON'T THINK IT'S VERY COMMON TO HAVE THAT IN MATERIALS BACK FIVE YEARS PLUS BACKWARDS, FIVE YEARS AGO. I THINK IT WAS QUITE COMMON TO USE MATERIALS FOR RESEARCH WITHOUT

ANY WORDS ABOUT SHARING. SO I THINK THE ASSUMPTION THERE, WHEN I WAS WORKING, WAS PRETTY CLEAR THAT IT WAS AVAILABLE FOR RESEARCH IN THE BROAD FIELD THAT THEY WERE TALKING ABOUT. SO THAT WOULD ALLOW -- THAT ALWAYS WOULD ALLOW SHARING.

SO I THINK IT'S A LITTLE COMPLICATING THE WAY IT'S BEING DISCUSSED.

DR. FEIGAL: I WOULD ALSO SAY THAT FUNDING AGENCIES EXPECT THAT MATERIALS ARE SHARED AND ARE SOMETIMES REQUIRED. SO I FIND THIS, TOO, PROBLEMATIC LANGUAGE.

DR. BOTKIN: I GUESS I WOULD SAY THE LANGUAGE THAT'S HERE IN THE DOCUMENT REALLY TALKS ABOUT IN THOSE CIRCUMSTANCES IN WHICH THERE IS LANGUAGE ABOUT SHARING, WE'RE GOING TO INTERPRET THAT TO MEAN THAT THE IPSC REPOSITORY IS COVERED. SEEMS LIKE WE'RE TALKING ABOUT A DIFFERENT QUESTION HERE WHERE THERE IS NOT LANGUAGE ABOUT SHARING, AND CAN WE JUSTIFIABLY SHARE STUFF IN THAT CIRCUMSTANCE. I DON'T KNOW OF ANY EMPIRICAL INFORMATION ABOUT ATTITUDES OF RESEARCH PARTICIPANTS ABOUT THIS ISSUE. I'M GOING TO GUESS IT'S PROBABLY SOMETHING WE MAKE A BIGGER DEAL OUT OF AS INSTITUTIONAL PEOPLE THAN PEOPLE REALLY CARE ABOUT, BUT I DON'T KNOW THAT. AND IT SEEMS TO ME TO BE A FAIRLY SIGNIFICANT

RESTRICTION TO SAY IT'S NECESSARY TO HAVE LANGUAGE THERE.

I THINK PART OF THIS LARGER CONVERSATION IS THE FACT THAT PEOPLE GET CONSENT AROUND A SPECIFIC PROJECT. I DON'T THINK ANYBODY IS THINKING ABOUT SECONDARY USES FOR THE MOST PART. IN THE MORE CONTEMPORARY ERA, WE'RE FORCING OURSELVES TO THINK ABOUT THOSE THINGS, BUT I DON'T THINK PEOPLE -- WE ASK WHAT WOULD A REASONABLE PERSON EXPECT. I THINK THEY WOULD EXPECT NOTHING BECAUSE THEY DON'T HAVE ANY EXPECTATION ABOUT WHAT HAPPENS WITH THESE THINGS AFTER THE RESEARCH IS BEING DONE. I THINK THAT'S -- I'M NOT SURE WE'LL BE GUIDED BY COMMON SENSE HERE.

DR. ROBERTS: MY CONCERN WOULD BE, THOUGH, THAT STATEMENT 3, WHICH IS INTENDED TO PERMIT THE REPURPOSING, MIGHT BE INTERPRETED AS PROHIBITING IT IF THERE IS NO LANGUAGE ABOUT SHARING IN THE ORIGINAL CONSENT FORM. AND SO I WOULD RECOMMEND DEALING WITH THAT BECAUSE THE STATEMENT 3 COULD BE MISINTERPRETED, I THINK.

DR. LOMAX: IT SOUNDS LIKE WE NEED TO DO MORE WORK ON THIS ONE. WHAT I WOULD SUGGEST IS THAT WE USE -- WE HAVE A VERY SUBSTANTIVE PROCESS MOVING FORWARD. AGAIN, THERE'S ABOUT THREE OR FOUR ISSUES I'VE FLAGGED. AND, AGAIN, THIS ONE CAME UP AS A

VERY SPECIFIC QUESTION, REALLY TO JUST COLLECT DATA ON WHAT ARE SORT OF THE DECISION PROTOCOLS ON THIS AT THIS TIME BECAUSE WE WILL HAVE AN OPPORTUNITY TO INTERACT WITH BOTH INSTITUTIONAL REPRESENTATIVES AND AGENCIES THAT HAVE CONSIDERED THESE ISSUES AND THEN REPORT BACK TO YOU. WOULD THAT BE --

CHAIRMAN LO: I THINK THAT'S RIGHT. WE SHOULD HIGHLIGHT THIS AS AN ISSUE TO BE FURTHER THOUGHT ABOUT AND ANALYZED. I GUESS, GEOFF, I WOULD SUGGEST THAT WE TRY AND GET WHATEVER EMPIRICAL DATA ARE AVAILABLE AS TO WHAT ARE THE PARTICIPANTS AWARE OF, WHAT ARE THEIR PREFERENCES ON THIS, DO THEY CARE, OR CONVERSELY, ARE THERE A SIZABLE PERCENTAGE OF PEOPLE WHO ARE ACTUALLY CONCERNED ABOUT SHARING IN SUCH A BROAD SENSE AS A REPOSITORY. I THINK I'D BE WILLING TO MAKE THE ARGUMENT THAT YOU SHARE WITH ALL THE OTHER PEOPLE AT THE INSTITUTION DOING THAT STUDY BECAUSE A LOT OF PEOPLE COME TO A RESEARCH INSTITUTION WITH THE IDEA THAT EVERYBODY THERE DOES RESEARCH. I DON'T THINK YOU CAN ASSUME THAT THEY WOULD SAY, OH, THERE'S NO PROBLEM SENDING IT VERY BROADLY TO OTHER RESEARCHERS WHO THEY HAVE NO CONNECTION WITH.

LET'S JUST FLAG THIS AS SOMETHING TO CONSIDER DEEPER.

DR. LOMAX: YEAH. BASED ON THESE RESPONSES THAT WE HAVE, I UNDERSTAND WE HAVE SOME WORK TO DO HERE.

CHAIRMAN LO: LET'S TRY AND MOVE ON, DOROTHY.

DR. ROBERTS: NO. 4 IS THE ONE THAT ALAN AND OTHERS REFERRED TO ALREADY HAVING TO DO WITH GENETIC RESEARCH. AND IT SAYS THAT REPORTING OF RAW INDIVIDUAL LEVEL GENOTYPIC DATA WOULD NOT TAKE PLACE UNLESS THE DONOR IS INFORMED OF AND HAS CONSENTED TO GENETIC STUDIES OR GENOMIC ANALYSIS BEING AN INTEGRAL PART OF THE PROPOSED RESEARCH.

MY ONLY QUESTION HERE WAS WHETHER IT WOULD BE CLEAR TO ALL AFFECTED WHAT RAW INDIVIDUAL GENOTYPIC DATA MEANS AND HOW THAT'S DISTINGUISHED FROM THE TYPE OF GENETIC INFORMATION THAT COULD BE REPORTED.

DR. LOMAX: WE CAN POSE THAT QUESTION. IT'S A SHORTHAND, THAT WE HAVE NO EMPIRICAL BACKING FOR THE CHOICE OF THAT WORD.

DR. TROUNSON: SHOULDN'T IT BE IDENTIFYING RATHER RAW? I KNOW THAT MIGHT CHANGE AS THINGS GO ON; BUT IF YOU SAID IDENTIFYING, IT'S THE ISSUE OF BEING IDENTIFIED, SIMPLY IDENTIFIED, BUT IDENTIFIED RATHER THAN THE RAW. I DON'T THINK THE RAW DATA IS

REALLY OF ANY CONSEQUENCE TO THE PERSON, BUT IDENTIFYING INFORMATION THAT COULD BE READ OUT. DEEP SEQUENCE WILL GIVE YOU THE WHOLE THING. SO I THINK THAT WOULD BE A PROBLEM UNLESS YOU CONSENTED TO THAT. THERE MAY BE A CERTAIN ARRAY OF GENETIC DATA THAT COULD STILL BE IDENTIFYING NOW. BUT THAT COULD CHANGE, AND THAT, AGAIN, NEEDS TO BE FOLLOWED IN TIME TO KNOW WHAT IDENTIFYING REALLY MEANS.

DR. LOMAX: I THINK ONE OF THE QUESTIONS WE WERE GOING TO POSE -- ROSIE, HELP ME OUT. I THINK WE TALKED ABOUT THE IDEA THAT GENETIC INFORMATION THAT CAN REASONABLY LEAD TO THE IDENTIFICATION OF WAS SORT OF ONE CONSTRUCT. AND SO WE'LL PLAY WITH THAT, BUT IT IS IN REACTION. I THINK YOU ALL WERE AWARE OF THE PAPERS THAT CAME OUT THAT AT A CERTAIN LEVEL THERE IS THE ABILITY TO MATCH. WE'VE GONE TO GREAT LENGTHS IN OUR UPDATED CONSENT FORMS TO MAKE PEOPLE AWARE OF THAT POSSIBILITY. SO IT'S JUST AN AREA THAT WE'RE PAYING CLOSE ATTENTION TO.

DR. ISASI: AND ACTUALLY IN OCTOBER WE ARE DISCUSSING A POLICY STATEMENT, RECOMMENDATIONS FOR HANDLING INDIVIDUAL GENOMIC DATA ARISING FROM IPSC'S AS PART OF THE INTERNATIONAL STEM CELL FORUM WORK, AND WE ARE DEVELOPING A LIST OF TRYING TO QUANTIFY

HOW MUCH THIS TYPE OF INFORMATION IS IDENTIFIABLE OR NOT. SO WHAT ARE THE THRESHOLDS IF YOU PUBLISH X AMOUNT OF SNP'S OR X AMOUNT OF SDR'S, ETC. SO I THINK THAT WILL BE HELPFUL REALLY IN OUR COMPLYING DOCUMENT TO CLARIFY WHAT THIS STATEMENT NEEDS WITHOUT PREJUDICE TO IMPROVING THE LANGUAGE.

BUT WE WERE TALKING ABOUT GENOMIC DATA. I THINK ONE OF THE EXAMPLES THAT CAME INTO OUR MIND WERE WE WERE THINKING IN THE CONTEXT OF DIRECT CONSUMER GENETIC TESTING WHEN DATA THAT HAD NOT BEEN ANALYZED OR VALIDATED AND ALL THE CRITERIA, CLINICAL UTILITY/VALIDITY HAD NOT BEEN DONE, BUT FROM ALL THE DATA.

DR. LOMAX: WE WILL PLAY WITH THAT. I THINK WE'LL MOVE TOWARDS REASONABLY RESULT IN IDENTIFICATION OR LEAD TO IDENTIFICATION AND REVISE ACCORDINGLY.

DR. ROBERTS: OKAY.

CHAIRMAN LO: GEOFF, JUST ANOTHER NOTE TO YOU. NIH WHICH HAS DRIVEN A LOT OF THE POSITING OF THE ACTUAL, QUOTE, RAW AND, QUOTE, SEQUENCING DATA IN DVGAP MAY CHANGE THEIR POLICY. SO WE NEED TO JUST MAKE SURE THAT WHATEVER WE SAY IS NOT INCONSISTENT WITH WHAT NIH IS GOING TO REQUIRE OF ITS GRANTEES.

DR. LOMAX: AND WE'RE TRACKING THAT PROCESS QUITE CAREFULLY. THEY HAVE A DRAFT POLICY FOR COMMENT RIGHT NOW.

CHAIRMAN LO: AND WHAT'S HER NAME, SARA HULL, IS ONE OF THE COAUTHORS, SO SHE'S IN THE LOOP.

OKAY. NO. 5.

DR. ROBERTS: SO THE NEXT SEVERAL HAVE TO DO WITH CATEGORIES WHERE EXPLICIT CONSENT IS REQUIRED. ONE IS COMMERCIAL USE OF THE RESULTING LINES. SO IF THEY'RE GOING TO BE USED TO DEVELOP COMMERCIAL PRODUCTS, THERE WOULD HAVE TO HAVE BEEN EXPLICIT CONSENT FOR USE OF -- COMMERCIAL USE IN THE ORIGINAL CONSENT.

NOW, HERE THE ONLY QUESTION THAT OCCURRED TO ME HERE WAS WHETHER THE TYPE OF COMMERCIAL PRODUCT NEEDED TO BE SPECIFIED OR NOT. THAT'S JUST AN ISSUE THAT CAME TO MIND. I'M NOT NECESSARILY RECOMMENDING IT, BUT --

MS. LANSING: WHAT WOULD BE THE REASON FOR HAVING TO SPECIFY IT?

DR. ROBERTS: WELL, YOU MIGHT AGREE TO A PARTICULAR COMMERCIAL USE, BUT NOT A DIFFERENT KIND OF COMMERCIAL USE. I GUESS IT'S NOT WHETHER IT SHOULD BE SPECIFIED. I GUESS MY QUESTION IS, RATHER, IF A PARTICULAR COMMERCIAL USE IS SPECIFIED,

WOULD THAT APPLY TO ALL COMMERCIAL USES?

MS. LANSING: NO, I DON'T THINK SO. AS I'M LISTENING TO THIS AS A PATIENT ADVOCATE, WHAT IS REALLY INTERESTING TO ME IS THE IMPORTANCE OF A COUNSELOR AS WE MOVE FORWARD TO REALLY TELL EVERYBODY THE MANY OPTIONS THAT THEY HAVE. IF YOU SAY I APPROVE THIS COMMERCIAL USE AND NOT THAT COMMERCIAL USE, THAT'S EASY. IF YOU SAY NO COMMERCIAL USE, I'M AFRAID, UNLESS THE COUNSELOR CAN DIG DEEP AND GIVE THEM ALL THEIR OPTIONS, WE'RE BOUND BY THAT.

DR. ROBERTS: THE QUESTION, THOUGH, IS MUST THERE BE AN EXPLICIT CONSENT FOR COMMERCIAL USE. WHAT IF THERE'S NO MENTION OF COMMERCIAL USE IN THE CONSENT FORM?

MS. LANSING: DOESN'T THERE HAVE TO BE IN THE CONSENT FORM?

DR. ROBERTS: I GUESS THAT'S THE QUESTION. IF THERE'S NO MENTION OF IT, THEN IT COULD NOT BE USED FOR COMMERCIAL USE. THE STATEMENT SAYS THERE MUST BE A REFERENCE. IT'S NOT QUITE THAT BOLD. THE REFERENCE TO COMMERCIAL USE SHOULD HAVE BEEN INCLUDED. SO I WOULD INTERPRET THAT TO MEAN A REQUIREMENT OF EXPLICIT CONSENT TO USE THE CELL LINES FOR COMMERCIAL PRODUCTS.

DR. ISASI: THE LAST PARAGRAPH SAYS ABSENT CLEAR DISCLOSURES, MATERIALS OR RESULTING CELL LINES SHOULD BE USED ONLY FOR COMMERCIAL. SO IT'S A VERY CLEAR IMPERATIVE.

DR. LOMAX: ALSO SOME INSIGHT HERE FROM THE IPS INITIATIVE. SO THIS LANGUAGE WE ACTUALLY MENTION COMMERCIAL USE IN THE MODEL FORM, BUT ONE OF THE AREAS THAT WAS KEYED INTO VERY MUCH BY THE DERIVING ENTITY IN PARTICULAR WAS ACTUALLY TO REALLY MAKE THAT LANGUAGE -- REALLY BRING THAT OUT AND MAKE IT VERY CLEAR. AND THEIR SENSE IS THAT ABSENT CLEAR DISCLOSURE FOR COMMERCIAL USE, A COMMERCIAL ENTITY WOULD BE VERY UNLIKELY TO USE A PARTICULAR CELL LINE, THAT THEY'RE VERY MUCH LOOKING FOR THIS LANGUAGE. SO I THINK THE SENSE WE'RE GETTING IS THAT THIS IN SOME SENSE TAKES CARE OF ITSELF BECAUSE IT'S A HUGE INVESTMENT TO START PURSUING A PARTICULAR LINE. IF THERE'S UNCERTAINTY ABOUT THE BASIC CONSENT, THE MESSAGE WE'RE GETTING IS THERE'S A REAL UNWILLINGNESS TO USE THAT LINE IN THE FIRST PLACE.

MS. LANSING: WE EMPHASIZE HOW WE MUST PUT THAT IN IN THE FUTURE.

DR. ROBERTS: OKAY. AND I THINK AS TO A PARTICULAR COMMERCIAL USE, THAT WOULD BE COVERED BY

STATEMENT 1, WHICH WOULD NOT ALLOW A USE THAT IS NOT -- THAT IS CONTRARY TO WHAT'S CONSENTED TO IN THE CONSENT FORM IN THE ORIGINAL DONATION. SO I THINK WE COULD MOVE ON UNLESS ANYONE HAS ANY OTHER COMMENTS.

SO THEN SIMILARLY, STATEMENT 6 ALSO REQUIRES A STATEMENT GRANTING PERMISSION FOR USE FOR HUMAN TRANSPLANTATION. AND THERE'S A FOLLOW-UP LINE: DONORS SHOULD CONSENT EXPLICITLY TO THE USE OF THEIR SPECIMENS IN HUMAN TRANSPLANTATION. OKAY.

DR. LOMAX: THAT'S PART OF OUR REGULATIONS ALREADY TOO.

DR. ROBERTS: STATEMENT 7. STATEMENT 7, THIS IS SIMILAR TO PRIOR DISCUSSIONS WE HAD ABOUT USE FOR RESEARCH, THAT IF THERE'S REFERENCE TO AN UNSPECIFIED OR UNFORESEEN FUTURE STUDIES, A FUTURE REFERENCE, THEN IT WOULD APPLY TO THIS REPURPOSING FOR DERIVING IPSC LINES OR IPS CELLS EXCEPT THAT COMMERCIAL PRODUCTS AND HUMAN TRANSPLANTATION USE REQUIRES EXPLICIT CONSENT. OKAY.

AND THEN, AGAIN, I THINK THE ONLY QUESTION WOULD BE WHETHER THERE ARE OTHER TYPES OF USES THAT SHOULD BE ADDED TO HUMAN TRANSPLANTATION AND COMMERCIAL USE.

STATEMENT 8 IS ONE SUCH ADDITION, WHICH IS

NOT USING THESE CELLS TO GENERATE GAMETES AND EMBRYOS WITHOUT SPECIFIC CONSENT.

DR. LOMAX: YEAH. AND WE WILL QUERY ON THAT QUESTION CONSISTENT WITH THE PREVIOUS COMMENT ON NO. 2, I BELIEVE.

CHAIRMAN LO: JUST TO BE REALLY WILD ABOUT THIS, WHICH ILLUSTRATES KIND OF THE BREADTH OF APPLICATION OF IPS CELL RESEARCH, RESEARCH IN TERMS OF INVESTIGATING THE MECHANISMS OF ACTION OF BIOTOXINS AND THINGS, SORT OF THE WEAPONS OF DEFENSE, WOULD BE SOMETHING THAT SOME PEOPLE WOULD NOT BE TO BE INVOLVED WITHOUT -- THAT COULD BE A PLAUSIBLE CANDIDATE FOR.

MY GUESS IS WE DON'T WANT TO BE -- WE WANT THIS TO BE A LIST OF FOR EXAMPLES AND NOT TO PRECLUDE. I GUESS IT'S NOT IN THE DEPOSITING STAGE AS MUCH AS IN THE USAGE STAGE WHERE A WITHDRAWAL FROM THE BANK IS MADE. AND IF SOMEONE DECLARES THAT WE'RE GOING TO USE THIS FOR BIOLOGICAL WARFARE, THAT MAY BE SOMETHING THAT YOU WANT TO HAVE THE BANK HAVE THE DISCRETION TO SAY. IT'S SORT OF LIKE 5, 6, AND 8.

DR. ROBERTS: YEAH. YEAH. IT'S AN INTERESTING QUESTION. I AGREE YOU DON'T WANT TOO MANY THINGS. IS THERE ANYTHING ELSE THAT RISES TO

THE LEVEL OF COMMERCIAL USE AND HUMAN TRANSPLANTATION AND CREATION OF GAMETES?

DR. LOMAX: WE DO HAVE A COUPLE OF COMMENTS IN THE QUEUE FROM THE PUBLIC. I THINK YOU GOT THEIR ATTENTION ON THAT POINT. I KNOW DON REED WANTED TO SAY SOMETHING.

CHAIRMAN LO: GO AHEAD.

MR. REED: I'M CONCERNED WE'RE TRYING TO BE SO SPECIFIC THAT WE'RE GOING TO COME UP WITH A WHOLE BUNCH OF THINGS AND SOMEBODY IS GOING TO SAY, "OH, LOOK. YOU LEFT OUT NO. 47. THEREFORE, I'M GOING TO SUE YOU." I WONDER IF WE COULD, INSTEAD, AIM FOR A BLANK CHECK PROPOSAL, SOMETHING LIKE A SEGMENT FOR PATIENTS TO SIGN, POSSIBLE LANGUAGE LIKE RECOGNIZING SCIENCE IS IN CONSTANT CHANGE, GIVE EXAMPLES, ARE YOU IN GENERAL OKAY THAT YOUR SAMPLES MIGHT BE USED FOR A RELATED, BUT NOT IDENTICAL SCIENTIFIC PURPOSE. DO YOU UNDERSTAND YOU WILL NOT BE FURTHER COMPENSATED FOR YOUR DONATION? THAT WOULD TAKE CARE OF THE FINANCIAL ONE, AND THE OTHER WOULD COVER OTHER POSSIBLE USES BECAUSE WE CAN NEVER THINK AHEAD TO ALL THE POSSIBLE ONES. I THINK WE SHOULD JUST SAY ARE YOU IN GENERAL OKAY WITH THE POSSIBILITY THAT YOUR SAMPLES MIGHT BE USED FOR RELATED, BUT NOT IDENTICAL PURPOSES.

DR. LOMAX: DON, THAT'S VERY GOOD. JUST TO BE CLEAR, WE HAVE DEVELOPED THAT LANGUAGE. WE SHOULD HAVE HAD YOU ON THE DRAFTING TEAM. YOU'VE GOT SOME GOOD POINTS THERE. SO WE HAVE MADE THAT AVAILABLE, I THINK. AND THESE ARE, AS BERNIE INDICATED, HIGH LEVEL SORT OF PLACEHOLDERS THAT SORT OF ALLOW YOU TO EXTRAPOLATE BACK FROM THE IDEAL TO WHAT YOU'VE GOT AND SAY DO WE HAVE SOMETHING THAT'S GOOD ENOUGH. BUT WE HAVE DONE A LOT OF THAT, SO WE DO HAVE THOSE EXAMPLES OUT THERE AND DID THEM THROUGH THE STANDARDS WORKING GROUP PROCESS.

CHAIRMAN LO: WE'RE NOT TALKING ABOUT PROSPECTIVE CONSENT. WE'RE TALKING ABOUT CELLS THAT HAVE BEEN ALREADY DONATED UNDER A PREVIOUS CONSENT SOMETIME IN THE PAST WHICH WE CAN'T REWRITE.

DR. LOMAX: WE DO HAVE ONE OTHER COMMENT HERE.

MS. DELANDA: I'LL MAKE MY STATEMENT BRIEF BECAUSE IT KIND OF REITERATES WHAT WAS JUST SAID. I THINK THE COMMENT, THE LAST COMMENT ABOUT BIOLOGICAL WARFARE, JUST KIND OF FALLS BACK UNDER STATEMENT 1 WHERE YOU HAVE TO CONSIDER WHAT A REASONABLE PERSON WOULD ALLOW. AND I CAN'T THINK OF ANY SITUATION, EXCEPT MAYBE IN THE MILITARY SETTING, WHERE SOMEBODY WOULD READILY SIGN A CONSENT FORM AGREEING TO USE

THEIR STEM CELL RESEARCH FOR MILITARY WARFARE. I DON'T KNOW. THAT'S JUST MY PERSPECTIVE IS IF WE KEEP STATEMENT 1 BROAD AND, AND AS THE PREVIOUS SPEAKER SAID, JUST MAKE SURE THAT WE DON'T START PINPOINTING IT TO EVERY SINGLE SITUATION WHERE PEOPLE MIGHT OR MIGHT NOT OBJECT AND JUST KEEP IT TO THE REASONABLE STANDARD, WE WOULDN'T HAVE TO ADD ADDITIONAL LANGUAGE TO THIS PROPOSAL.

CHAIRMAN LO: THANK YOU.

DR. ROBERTS: SHOULD I MOVE ON TO NUMBER --

CHAIRMAN LO: PLEASE, YES.

DR. ROBERTS: -- NO. 9. SO THE FINAL STATEMENT HAS TO DO WITH AN ISSUE I KNOW WE'VE DISCUSSED IN THE STANDARD WORKING GROUP BEFORE, AND THAT IS THE DONOR'S ABILITY TO WITHDRAW FROM THE PROPOSED IPSC RESEARCH.

NOW, WE'VE DISCUSSED BEFORE THE DIFFICULTIES IN HOW TO DRAFT CONSENT TO THAT BECAUSE IT'S BASICALLY IMPOSSIBLE TO WITHDRAW IN MOST CASES. BUT MY QUESTION ON THIS ONE IS HOW WOULD THE ORIGINAL CONSENT HAVE ANTICIPATED THESE PROBLEMS WITH WITHDRAWING FROM IPSC RESEARCH WHEN THERE MAY NOT HAVE BEEN SUCH A THING AS IPSC RESEARCH AT THE TIME. I WASN'T CLEAR ABOUT HOW THIS STATEMENT 9

WOULD OPERATE.

DR. LOMAX: YOU POINTED SOMETHING OUT. IT JUST OCCURRED TO ME, DOROTHY, YOU POINTED SOMETHING OUT THAT WE KIND OF DID A SLEIGHT OF HAND HERE. SO THIS ONE ACTUALLY -- IT WAS BASED ON THE SORT OF THINKING THAT WE SPENT QUITE A BIT OF TIME ON LAST YEAR IN THE STANDARDS WORKING GROUP IS THAT THERE'S A STAGE IN THE CHAIN OF RESEARCH WHERE BASICALLY ONCE YOU'VE DERIVED THE CELL LINE AND STARTED TO INVEST IN IT, THAT AT LEAST THE CELL LINE NEEDS TO REMAIN IN THE RESEARCH SPACE PROVIDED THE CONSENT MADE THAT CLEAR. BUT IT IS AN UNUSUAL STATEMENT BECAUSE NOW WE'RE ACTUALLY -- THE ASSUMPTION BEHIND THAT STATEMENT IS THAT THERE'S PROPOSED IPSC RESEARCH.

SO IT DIDN'T OCCUR TO ME UNTIL YOU JUST POINTED IT OUT, SO WE'VE DONE SOMETHING A BIT DIFFERENT WITH STATEMENT 9, AND MAYBE WE NEED TO SORT OF CULL IT OUT IN A SLIGHTLY DIFFERENT CONTEXT.

DR. ROBERTS: RIGHT.

DR. LOMAX: I APOLOGIZE FOR THAT. WE KIND OF OVERSHOT OUR ORIGINAL INTENT WITH THAT ONE.

DR. ROBERTS: OKAY. SO STATEMENT NO. 9 ACTUALLY IS A SEPARATE STAGE FROM THE PRIOR EIGHT STATEMENTS.

DR. LOMAX: YES. IT IS IN A CONTEXT WHERE IPSC RESEARCH WAS PROPOSED, AND WE'RE SORT OF PRESENTING OUR VIEW ON SORT OF THE EXTENT TO WHICH YOU CAN THEN HAVE WITHDRAWAL FROM RESEARCH, YES.

DR. ROBERTS: RIGHT. RIGHT.

DR. BOTKIN: I WONDER IF IN A LOT OF CIRCUMSTANCES YOU WILL HAVE BIOBANKING LANGUAGE IN THE ORIGINAL CONSENT LANGUAGE. AND IF THAT IS INTENDED TO COVER THOSE TISSUES WILL BE USED DOWN THE ROAD, THEN IT MIGHT WELL APPLY TO THE PROPOSED IPSC RESEARCH, BUT IT WOULD PRESUMABLY APPLY TO ANY SECONDARY RESEARCH USING THE TISSUES THAT HAD BEEN ACQUIRED. WHETHER YOU WANT TO SAY SOMETHING TO THE EFFECT THAT ANY LANGUAGE OF THAT SORT WILL BE HONORED IN THE CONTEXT OF THE SECONDARY RESEARCH, IN THIS CASE IPSC RESEARCH.

DR. LOMAX: THAT'S A VERY GOOD COMMENT AS WELL. I THINK WE SHOULD TAKE THAT UNDER ADVISEMENT. YOU AGREE, ROSIE?

DR. ISASI: YES, I AGREE. DID YOU CAPTURE THIS WHOLE COMMENT OR THE TRANSCRIPT, BUT IT'S A REALLY GOOD POINT.

CHAIRMAN LO: SO, DOROTHY, YOU HAVE LED US THROUGH A VERY DEEP AND INTERESTING DISCUSSION. I'D LOVE TO BE IN ONE OF YOUR LAW SCHOOL CLASSES.

GEOFF, I DON'T THINK WE'RE READY TO ENDORSE WHAT'S WRITTEN. WE'VE GIVEN YOU A LOT OF SUGGESTIONS TO TAKE BACK FOR CONSIDERATION AND THINKING AND REFINEMENT TO COME BACK TO US. IS THAT ENOUGH IN TERMS OF WHAT -- I THINK WE LIKE THE DIRECTION YOU'VE TAKEN, THE WAY YOU'VE SORT OF DEVELOPED WHAT WE DID AT A PREVIOUS MEETING, AND WANT TO ENCOURAGE YOU AND YOUR OTHER COLLABORATORS TO KEEP WORKING ON IT. BUT I THINK WE'VE UNCOVERED A LOT OF GOOD SUGGESTIONS FOR YOU TO CONSIDER.

DR. LOMAX: THAT'S FINE. WE HAVE A LONG PROCESS TO GO, AND WE ANTICIPATED SORT OF COMING BACK TO YOU WITH WHAT WE LEARNED. AT THIS POINT IT'S BEEN TREMENDOUSLY HELPFUL BECAUSE WE HAVEN'T HAD ANY FEEDBACK UP UNTIL THIS POINT IN TIME.

MS. LANSING: YOU'RE GOING TO DEVELOP IT MORE AND THEN WE'LL RESCHEDULE ANOTHER MEETING WITH THE IMPROVED DOCUMENT, I GUESS, IS WHAT WE'RE SAYING.

DR. LOMAX: YEAH.

CHAIRMAN LO: THAT SOUNDS GOOD. MY THANKS TO DOROTHY AND TO THE OTHER COMMITTEE MEMBERS.

SHOULD WE MOVE ON IN THE AGENDA NOW TO AN UPDATE ON THE PROGRESS OF THE IPSC BANK AND THE DONOR CONSENT PROTOCOL? GEOFF, AGAIN, THIS IS

UPDATING US ON THINGS THAT WE'VE DISCUSSED BEFORE.

DR. LOMAX: WE WANT TO KIND OF GIVE IT ABOUT TEN MINUTES SO WE GET DONE ON THE HALF HOUR?

CHAIRMAN LO: THAT WOULD BE GREAT.

DR. LOMAX: I'VE INVITED DR. YAFFE, WHO'S REALLY THE LEAD IN TERMS OF THE IMPLEMENTATION OF THIS PROGRAM, AND THE INTENTION HERE WAS YOU ALL SPENT THE BETTER PART OF TWO YEARS SORT OF HELPING US THINK THROUGH THE CONSENT AND SOME OF THE ISSUES RELATED TO THE BANK. I THOUGHT IT WOULD BE HELPFUL IF YOU JUST HEARD WHERE WE ARE AT THIS POINT IN TIME ON THAT PROJECT SO YOU'RE AWARE OF WHAT'S GOING ON AND GET A LITTLE BIT OF HIGHLIGHTS OF THE PROCESS.

CHAIRMAN LO: SOUNDS GOOD.

DR. YAFFE: GOOD MORNING. THIS IS MICHAEL YAFFE. AND LET ME JUST HIT A FEW SENTENCES TO REMIND YOU THAT THE IPSC INITIATIVE HAD AS ITS GOAL TO ESTABLISH A HIGH QUALITY DISEASE-SPECIFIC HUMAN INDUCED PLURIPOTENT STEM CELL RESEARCH RESOURCE IN CALIFORNIA. AND THIS PROGRAM WAS REVIEWED AND THE GRANTEES WERE SELECTED. THE ICOC APPROVED THOSE AWARDS IN MARCH, AND WE'RE VERY RAPIDLY MOVING TOWARDS RELEASING THE NGA'S FOR THESE RESEARCHERS.

THE INITIATIVE HAS THREE COMPONENTS. THE FIRST IS TISSUE COLLECTION, COLLECTING TISSUES FROM

INDIVIDUALS WITH PREVALENT GENETICALLY COMPLEX DISEASES. THERE ARE SEVEN TISSUE COLLECTORS AT DIFFERENT INSTITUTIONS IN CALIFORNIA WITH A RANGE OF DISEASES, INCLUDING SOME DISEASES COMMON IN CHILDREN, NEURODEVELOPMENTAL DISORDERS IN IDIOPATHIC AUTISM, DISEASES COMMONLY FOUND IN OLDER INDIVIDUALS, IDIOPATHIC PULMONARY FIBROSIS, A PROJECT IN VIRAL HEPATITIS, HEART DISEASE, AND THEN SOME DISEASES TYPICAL OF OLDER POPULATIONS OR ELDER POPULATIONS, ALZHEIMER'S DISEASE AND BLINDING EYES DISEASES.

THE SECOND COMPONENT OF THE IPS IS THE DERIVATION OF THE INITIATIVE -- THE DERIVATION OF THE IPSC LINES. NINE THOUSAND LINES WILL BE MADE FROM 3,000 INDIVIDUALS ALL BY A SINGLE DERIVATION METHOD. AND THE PI IS TOM NOVAK OF CDI, CENTER DYNAMICS INTERNATIONAL. THE DERIVATION WILL TAKE PLACE AT THE BUCK INSTITUTE. AND THEN THE BANKING OR REPOSITORY, THE THIRD PHASE, THE PI IS STEVE MADORE. THE CORIELL INSTITUTE IS THE INSTITUTION, AND THAT WILL ALSO TAKE PLACE AND THE CELLS WILL BE BANKED AND DISTRIBUTED FROM THE BUCK INSTITUTE, FROM A CORIELL COMPONENT FACILITY THERE.

WE'VE BEEN WORKING, AND WHEN I SAY WE, A LOT OF DIFFERENT PEOPLE FROM CIRM AND OUTSIDE CIRM,

SOME ADVISORS, GEOFF CERTAINLY HAS LED IN WORKING CLOSELY WITH GRANTEES TO ENSURE THE MANAGEMENT OF PATIENT SAMPLES AND MEDICAL INFORMATION TO CONFORM WITH CIRM REQUIREMENTS AND NATIONAL STANDARDS. PARTICULARLY WE HAD A KICKOFF MEETING IN JUNE WITH ALL OF OUR GRANTEES BROUGHT TOGETHER TO DISCUSS PROCEDURES AND OUTSTANDING ISSUES. AND OVER THE LAST FEW MONTHS, WE'VE BEEN MOVING, AS I SAID, RAPIDLY TOWARDS NGA. THE NGA'S FOR THE TISSUE COLLECTORS ARE ABOUT TO BE RELEASED WITHIN A DAY. THEY SHOULD BE RELEASED THIS WEEK FOR, I THINK, ALL OF THEM. CLOSELY BEHIND THAT WILL BE THE NGA RELEASES FOR CDI AND CORIELL.

I'D SAY THAT ALL APPLICANTS ARE UTILIZING A MODEL INFORMED CONSENT DEVELOPED BY THE STANDARDS WORKING GROUP WITH A LOT OF CONSTRUCTIVE INPUT FROM GEOFF AND FROM OTHERS. ALL TISSUE COLLECTORS HAVE RECEIVED IRB APPROVAL FROM THEIR INSTITUTIONS FOR THE COLLECTION PROJECT.

CIRM IS ALSO DEVELOPING AN EDUCATIONAL BROCHURE FOR THE PROJECT TO SUPPORT THE CONSENT PROCESS. AND CIRM IS WORKING WITH GRANTEES TO INCORPORATE DRAFT NIH GENOMIC DATA SHARING POLICY. SOME OF THE TISSUE COLLECTORS ARE COLLECTING, NOT AS PART OF OUR PROJECT, BUT AS PART OF A RELATED OR

ASSOCIATED PROJECT GENOMIC DATA IN PARTICULAR AND DEPOSITING THAT. AT LEAST IN TWO CASES IN CDGAP DATABASE AT THE NIH. WE WANT TO MAKE SURE THAT ALL THIS INCORPORATION IS CONSISTENT WITH ESTABLISHED POLICY.

AND ALSO JEFF BOTKIN HAS BEEN PLAYING A SPECIAL ADVISOR ROLE AND MAY WANT TO SHARE HIS OBSERVATIONS, OR GEOFF LOMAX MAY WANT TO SHARE HIS OBSERVATIONS.

DR. LOMAX: WE DID INVITE DR. BOTKIN. HE SIGNED OFF.

DR. BOTKIN: I'M STILL HERE.

DR. LOMAX: ANY THOUGHTS OR COMMENTS AT THIS STAGE?

DR. BOTKIN: I APPRECIATE THE OPPORTUNITY TO COMMENT. IT WAS A FASCINATING PROCESS WITH SOME REALLY EXCEPTIONALLY DIFFICULT ISSUES. AND I REALLY DON'T HAVE ANYTHING MORE TO SAY OTHER THAN THAT. I THOUGHT IT WAS A VERY PRODUCTIVE AND COLLABORATIVE PROCESS. SO THANK YOU.

DR. LOMAX: OKAY.

CHAIRMAN LO: OKAY. ALL RIGHT. SO ANYTHING ELSE THAT WE NEED TO DO, GEOFF LOMAX?

MS. LANSING: I JUST WANT TO THANK EVERYBODY ON THE CALL. AS I SAID, SO MANY OF YOU

HAVE BEEN HERE FROM THE BEGINNING AND YOUR DEVOTION TO THE CAUSE IN THIS EXCITING TIME WHEN WE HOPEFULLY ENTER CLINICAL TRIALS AND THE TIME THAT YOU DEVOTE TO THIS IS REALLY, FROM ALL OF US AT CIRM WE EXPRESS DEEP GRATITUDE FOR YOUR KNOWLEDGE AND YOUR TIME AND YOUR COMMITMENT.

CHAIRMAN LO: I AGREE TOTALLY. SHERRY SAID IT VERY ELOQUENTLY AS SHE ALWAYS DOES.

DR. LOMAX: THANK EVERYONE FOR THEIR TIME. WE WILL KEEP YOU POSTED AS WE MOVE FORWARD.

CHAIRMAN LO: THANK YOU, GEOFF, FOR PULLING THIS TOGETHER.

(THE MEETING WAS THEN CONCLUDED AT 11:27 AM.)

REPORTER'S CERTIFICATE

I, BETH C. DRAIN, A CERTIFIED SHORTHAND REPORTER IN AND FOR THE STATE OF CALIFORNIA, HEREBY CERTIFY THAT THE FOREGOING TRANSCRIPT OF THE TELEPHONIC PROCEEDINGS BEFORE THE SCIENTIFIC AND MEDICAL ACCOUNTABILITY STANDARDS WORKING GROUP OF THE INDEPENDENT CITIZEN'S OVERSIGHT COMMITTEE OF THE CALIFORNIA INSTITUTE FOR REGENERATIVE MEDICINE IN THE MATTER OF ITS REGULAR MEETING HELD ON TUESDAY, OCTOBER 1, 2013, 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.

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