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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
THE BOARD OF TRUSTEES OF THE LELAND
STANFORD JUNIOR UNIVERSITY,

Plaintiff

vs.

CASE NUMBER:
C-05-04158 MHP

ROCHE MOLECULAR SYSTEMS, INC.,
ROCHE DIAGNOSTICS CORPORATION;
ROCHE DIAGNOSTICS OPERATIONS, INC.
Defendants

ROCHE MOLECULAR SYSTEMS, INC.
ROCHE DIAGNOSTICS CORPORATION;
ROCHE DIAGNOSTICS OPERATIONS, INC.,

Counter-Claimants

vs.

THE BOARD OF TRUSTEES OF THE
LELAND STANFORD JUNIOR UNIVERSITY;
AND THOMAS MERIGAN.

Counter-claim Defendants

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The video deposition of DAVID H. SCHWARTZ,
M.D. was held on Monday, October 16th, 2006, commencing
at 9:15 a.m. at the Law Offices of Bowie & Jensen, LLC,
29 West Susquehanna Avenue, Suite 600, Towson,
Maryland, 21204, Baltimore, Maryland, before R. Dwayne
Harrison, Notary Public.
JOB NO. 54638

1 STIPULATION

2 It is stipulated and agreed by and between
3 counsel for the respective parties that the filing of
4 this deposition with the Clerk of Court be and the same
5 are hereby waived.

6 -----
7 follows:

8 VIDEOGRAPHER: Here begins media number one
9 of the deposition of Dr. David Schwartz in the matter
10 of the Board of Trustees of Leland Stanford Junior
11 University vs. Roche Molecular Systems, et al. and
12 Roche Molecular Systems, et al. vs. the Board of
13 Trustees of Leland Stanford Junior University. This
14 case is in the court of the United States District
15 Court Northern District of California and the case
16 number is C-05-04158 MHP. Today's date is
17 October 16th, 2006 and the time is 9:18. The
18 deposition is taking place at 29 West Susquehanna
19 Avenue, Suite 600, Towson, Maryland 21204 and it's
20 being taken on behalf of the -- is it the Plaintiffs?

21 MR. BOOZELL: Both.

22 VIDEOGRAPHER: Plaintiffs and defendants.
23 The videographer is Janet Thomas appearing on behalf of
24 Sarnoff Court Reporters & Legal Technologies located in
25 Irvine, Los Angeles, San Francisco, California.

APPEARANCES:

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On behalf of Roche Molecular
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On behalf of Board of Trustees of
the Leland Stanford Junior
University; and Thomas Merigan

ALSO PRESENT:

SUJATHA IYENGAR, Ph.D.
JANET THOMAS, VIDEOGRAPHER

1 Would counsel please identify yourselves
2 and state who you represent?

3 MR. BOOZELL: Jeff Boozell from Quinn,
4 Emanuel, Urquhart, Oliver & Hedges representing the
5 Roche defendants.

6 MS. RHYU: Michelle Rhyu from Cooley,
7 Godward, Kronish representing Stanford University and
8 the counter-defendants.

9 MR. GLIKIN: Joshua Glikin from Bowie &
10 Jensen in Towson, Maryland representing Dr. Schwartz.
11 Whereupon,

12 DAVID H. SCHWARTZ, M.D.,
13 called as a witness, having been first duly sworn
14 to tell the truth, the whole truth, and nothing
15 but the truth, was examined and testified as
16 follows:

17 EXAMINATION BY MR. BOOZELL:

18 Q Good morning, Dr. Schwartz. Thank you for
19 being here. As we said, I am Jeff Boozell. I
20 represent Roche in this patent litigation where
21 Stanford has sued Roche. We appreciate you taking time
22 out of your busy schedule. I know that time is short
23 and we will get right into it.

24 Can you please state your name for the
25 record?

1 A The goal had already been articulated.
 2 Q By who?
 3 A When I joined Stanford, Dr. Merigan
 4 approached me about the project and said that Cetus
 5 Corporation had developed polymerase chain reaction and
 6 that he and Cetus now wanted to quantitate it.
 7 Q When did you join --
 8 A And that would be my project.
 9 Q When did you join Stanford?
 10 A I don't recall exactly.
 11 Q Do you recall the year?
 12 A 1988.
 13 Q What was your position at Stanford in 1988?
 14 A My title was, I believe, physician
 15 specialist.
 16 Q And did you work in there Dr. Merigan's
 17 lab?
 18 A Yes.
 19 Q And did Dr. Merigan hire you?
 20 A That was my understanding.
 21 Q Would you consider Dr. Merigan your
 22 supervisor during the time '88, '89?
 23 A Yes.
 24 Q And you said that Dr. Merigan and Cetus had
 25 a goal of quantification. What was the ultimate

1 A -- which was ongoing when I joined, I
 2 believe.
 3 Q Okay. Do you have any understanding as to
 4 what Dr. Holodniy's level of knowledge with respect to
 5 PCR was when he joined Stanford?
 6 MS. RHYU: Objection, calls for
 7 speculation.
 8 A Yes.
 9 MS. RHYU: Misstates prior testimony as to
 10 joined.
 11 Q Your answer was yes?
 12 A Yes.
 13 Q Do you know whether he had ever conducted a
 14 PCR reaction before?
 15 A I do.
 16 Q Did he?
 17 A He had not.
 18 Q He had not? Had he conducted a PCR
 19 reaction before he started visiting Cetus?
 20 MS. RHYU: Objection, calls for
 21 speculation.
 22 A To the best of my recollection, we
 23 conducted a PCR reaction in the Stanford lab quite
 24 early after Dr. Holodniy joined using reagents that we
 25 had obtained from Cetus. I do not recall whether that

1 purpose of the quantification? Did it have a higher
 2 purpose or was it just to quantitate?
 3 MS. RHYU: Objection, vague.
 4 Q Why was Stanford and Cetus trying to
 5 quantitate HIV?
 6 MS. RHYU: Vague, calls for speculation.
 7 A There are many reasons why one would want
 8 to quantitate the presence of a pathogen.
 9 Q Was one of the purposes of quantitating the
 10 pathogen to monitor therapy?
 11 MS. RHYU: Objection. Calls for
 12 speculation, vague as to time.
 13 A That was an objective at some point shortly
 14 after I arrived.
 15 Q So sometime in 1988 the objective was to
 16 quantitate HIV in order to monitor therapy?
 17 MS. RHYU: Objection. Lacks foundation,
 18 misstates testimony.
 19 A I don't recall the exact date at which that
 20 objective was clarified.
 21 Q Do you recall it being an objective in
 22 1988 shortly after you joined?
 23 A I recall it being an objective of a trial
 24 of AZT and interleukin-2 --
 25 MS. RHYU: Objection, vague.

1 was the very first time Dr. Holodniy performed the
 2 reaction or whether he had visited Cetus on occasion
 3 prior to us doing that.
 4 Q Prior to Dr. Holodniy's going to Cetus, do
 5 you know whether Dr. Holodniy had any experience with
 6 gene expression?
 7 A I don't know for a fact.
 8 Q How about DNR or RNA extraction? Did he
 9 have any experience with that before he went to Cetus?
 10 MS. RHYU: Objection, calls for
 11 speculation.
 12 A I don't know for a fact. To the best of my
 13 recollection, Dr. Holodniy's training prior to joining
 14 Stanford had been as a medical physician. I don't
 15 recollect that he had laboratory research training
 16 prior to that.
 17 Q Do you recall whether going to -- prior to
 18 Dr. Holodniy going to Cetus, whether he had any
 19 experience in preparing primers, PCR primers?
 20 MS. RHYU: Objection. Vague, lacks
 21 foundation.
 22 A Dr. Holodniy did not have experience
 23 generating primers prior to joining the Stanford lab.
 24 I can't recollect whether he ever selected sequences
 25 off a known gene sequence prior to going up to Cetus or

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1 Q Do you know where that HRP labeled SK-19
2 probe came from that you were using in 1988 and '89?
3 A To the best of my --
4 MS. RHYU: Objection, lacks foundation.
5 A To the best of my knowledge, that was
6 obtained from Cetus.
7 Q I think you testified earlier that the
8 standard that was used in Exhibit 1 also was obtained
9 from Cetus?
10 MS. RHYU: Objection, vague.
11 A To the best of my knowledge, the standards
12 were synthesized and generated at Cetus.
13 MS. RHYU: Jeff, we've been going for an
14 hour and 20 minutes. Do you want to take a little
15 break now?
16 MR. BOOZELL: I think it's an hour and 15
17 minutes but we'll take a five-minute break.
18 VIDEOGRAPHER: We're going off the record.
19 It's 10:32.
20 (There was a brief recess taken.)
21 VIDEOGRAPHER: We're now back on the
22 record. It's 10:46.
23 BY MR. BOOZELL:
24 Q Dr. Schwartz, did you ever have occasion to
25 review Dr. Holodniy's lab notebooks in 1989?

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A I don't recall.
2 Q Do you know if Dr. Holodniy brought back
3 any protocols with him from Cetus?
4 MS. RHYU: Objection, vague.
5 A The conditions for ramping up, extending,
6 cooling down have to be optimized for polymerase chain
7 reactions. To the best of my knowledge, those
8 conditions were worked out collaboratively by
9 Dr. Holodniy and Cetus scientists on some occasions at
10 Cetus.
11 Q Do you know if Dr. Holodniy brought back
12 any protocols related to reverse transcriptase of HIV?
13 A I don't know.
14 MS. RHYU: Objection, calls for
15 speculation.
16 Q I'll show you something real quick here,
17 hopefully, a previously marked Exhibit 15. It's US
18 patent number 5968730. Have you ever seen this patent
19 before, Dr. Schwartz?
20 A I have.
21 Q Do you understand that on RMS00012, column
22 four --
23 MR. GLIKIN: He's referring to the Bates
24 number at the bottom right-hand corner, right there,
25 and they're numbered sequentially for litigation.

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1 Q Do you see in column four, section 5.1, PCR
2 assay of plasma HIV RNA?
3 A Which page?
4 MR. GLIKIN: 12.
5 A Please repeat your question.
6 Q Do you see the assay set forth in column
7 four under section 5.1, the description of the assay?
8 A Yes.
9 MS. RHYU: Are you referring to the section
10 that continues to column five and six?
11 MR. BOOZELL: Column five, yeah.
12 A I see that, yes.
13 Q Do you know whether this is the same assay
14 that we just looked at in the JID paper, Exhibit 1?
15 MS. RHYU: Do you want him to compare the
16 two now?
17 MR. BOOZELL: I want his opinion.
18 A I have to read it.
19 Q You have to read the whole thing? Okay.
20 Let me ask this, then. I see that you are not an
21 inventor on patent number 730. If I refer to it as the
22 730 patent, you'll understand what I'm saying?
23 A Yes.
24 Q I see that you are not an inventor. Do you
25 know why you are not an inventor on this patent?

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1 MS. RHYU: Objection. Calls for a legal
2 conclusion.
3 A No.
4 Q You said earlier you are familiar with the
5 patent, though, correct?
6 MR. GLIKIN: Objection.
7 A No.
8 Q But you've seen it before?
9 A Yes.
10 Q Do you have any reason to believe you
11 should have been an inventor on this patent?
12 MS. RHYU: Objection. Lacks foundation,
13 calls for a legal conclusion.
14 A I don't know.
15 Q While you were at Stanford, did you have
16 any occasion to sign any agreements with Cetus
17 Corporation?
18 A To the best of my recollection, I did sign
19 at least one agreement at some point.
20 Q What was that agreement?
21 A I don't recall --
22 Q You don't recall?
23 A -- the precise contents.
24 Q Let me show you what's been marked as
25 Exhibit 29. Oops, that's right. When you are done

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1 looking it over, if you can, just let me know whether
 2 you remember this document.
 3 (Pause.)
 4 Do you recall this document?
 5 A I don't specifically recall it but that is
 6 my signature.
 7 Q That is your signature on page STAN003863?
 8 A Yes.
 9 Q Do you recall the circumstances surrounding
 10 your execution of this agreement?
 11 A To the best of my recollection, this would
 12 have been shortly after I joined and Dr. Merigan had
 13 asked me to spearhead this effort to quantitate HIV.
 14 Q To the best of your recollection, this
 15 relates to the project that you referred to earlier
 16 that you and Dr. Holodniy were working on related to
 17 quantification of HIV?
 18 MS. RHYU: Objection. Lacks foundation,
 19 misstates prior testimony.
 20 A To the best of my recollection, this was
 21 prior to, I believe -- the project that was outlined to
 22 me prior to Dr. Holodniy joining. As I said, I don't
 23 recall exactly when he joined and what state the
 24 project was at the time this was signed. There was one
 25 other Cetus-related project I was involved in. This

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1 MS. RHYU: Objection, misstates prior
 2 testimony, lacks foundation.
 3 A I don't recall whether or not he brought
 4 back a standard. I recall primers and probes at some
 5 point.
 6 Q To the best of your understanding, were
 7 those primers and probes to be covered by this
 8 agreement, Exhibit 29?
 9 MS. RHYU: Objection. Calls for a legal
 10 conclusion, lacks foundation.
 11 A Can you clarify the question?
 12 Q I'm just wondering if you have -- reading
 13 this agreement and, in particular, paragraph two,
 14 whether you have any recollection of whether this
 15 agreement was designed to cover Dr. Holodniy's bringing
 16 back of probes from Cetus to Stanford?
 17 MS. RHYU: Lacks foundation, calls for a
 18 legal conclusion.
 19 A I can only tell you what my understanding
 20 was at the time in signing such a document.
 21 Q And what is that?
 22 A My understanding at the time of signing
 23 this document was that the polymerase chain reaction
 24 project being developed was a project involving the
 25 proprietary technology of Cetus and that the data from

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1 appears to apply, however, to the polymerase chain
 2 reaction only. I don't see a reference to --
 3 specifically to the other project.
 4 Q But you do recall that Dr. Holodniy visited
 5 Cetus in mid to late 1989; isn't that right?
 6 MS. RHYU: Objection, misstates prior
 7 testimony.
 8 A I recall that Dr. Holodniy visited Cetus
 9 frequently from shortly after he joined the lab
 10 until -- well, for many months. I don't recall exactly
 11 dates and I assume you don't want me to start doing
 12 calculations based on the dates of this document.
 13 Q Okay. Do you recall whether this document
 14 preceded Dr. Holodniy's first visit to Cetus?
 15 A I don't.
 16 Q Do you recall whether it related at all to
 17 his going to Cetus or was his going to Cetus one of the
 18 impetuses for this contract?
 19 MS. RHYU: Objection, calls for
 20 speculation.
 21 A I don't know what the impetus for this
 22 particular document was.
 23 Q You said earlier that you recall
 24 Dr. Holodniy bringing back primers and probes and a
 25 standard from Cetus; is that correct?

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1 that and any results of that would be considered Cetus
 2 proprietary data and that was my understanding at the
 3 time.
 4 Q Do you know whether this agreement was
 5 designed to cover information that Holodniy may have
 6 gathered during his trips to Cetus?
 7 MS. RHYU: Objection. Calls for
 8 speculation, lacks foundation, calls for a legal
 9 conclusion.
 10 A I have no way of knowing what the intent of
 11 this document was on the part of different parties.
 12 Q Did you ever discuss this document with
 13 anybody prior to signing it?
 14 A I did not, other than perhaps with
 15 Dr. Merigan.
 16 Q Would Dr. Merigan have given you this
 17 document to sign?
 18 A I don't recall who handed it to me. It
 19 could have been him.
 20 Q Let me show you a document previously
 21 marked as Exhibit 28. Dr. Schwartz, do you recall
 22 Exhibit 28?
 23 A It brings back memories, yes.
 24 Q What is Exhibit 28?
 25 A At this time, I was involved -- at this

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1 A On occasion we would look at results. I
2 did not review them as his daily or weekly supervisor.
3 He did not report to me his results.
4 Q Do you recall an entry in Dr. Mark
5 Holodniy's notebooks that consists of an invoice from
6 Operon Technologies ordering primers?
7 A I don't recall.
8 Q You don't recall it one way or the other?
9 A Correct.
10 Q But it's possible that Dr. Mark Holodniy
11 had ordered primers from Operon Technologies?
12 MR. BOOZELL: Vague and ambiguous, calls
13 for speculation, lacks foundation.
14 A Yes, it's possible.
15 Q And with respect to the publications that
16 you mentioned earlier describing amplification of HIV
17 sequences, those publications would have described the
18 sequences of the HIV primers that were used for
19 amplification, correct?
20 MR. BOOZELL: Calls for speculation, lacks
21 foundation, vague and ambiguous. It's a leading
22 question. You want him to testify whether each and
23 every one of the publications mentioned the actual
24 sequence of the primers? It's compound also.
25 A I don't recall the particular articles,

1 correspondence. I just recall that the relationship
2 with the company was positive in the sense that there
3 was cooperation and collaboration.
4 Q But you don't recall any specific transfer?
5 MR. BOOZELL: Assumes facts not in
6 evidence, vague and ambiguous.
7 A I can't recall a particular day on which
8 SK-38 or 39 arrived in a package that I opened.
9 Q Do you recall anyone handing you SK-38 or
10 39 or any other primer?
11 MR. BOOZELL: Vague and ambiguous.
12 Q I'm speaking of someone from Cetus
13 handing --
14 A Handing me personally?
15 Q Handing you.
16 A I don't recall that, no.
17 Q Do you recall observing someone from Cetus
18 handing primers or probes to anyone else at Stanford?
19 MR. BOOZELL: Vague and ambiguous, calls
20 for speculation, lacks foundation.
21 A I don't recall observing that.
22 Q Do you recall anyone at Stanford receiving
23 a package from Cetus that contained primers or probes?
24 MR. BOOZELL: Same objections.
25 A I don't recall specifically packages

1 therefore, I can't answer particularly. Typically, in
2 a molecular biology article on such a technique,
3 primers would either be listed or referenced.
4 Q You mentioned that you recall that primers
5 and probes were obtained from Cetus and used at
6 Stanford. I'd like to know everything you recall about
7 the transfer of primers and probes from Stanford -- I'm
8 sorry, from Cetus to Stanford. So let's start with
9 what do you recall about obtaining primers or probes
10 from Cetus?
11 A What do I personally recall?
12 Q Yes. Let me start with the question: Who
13 sent you primers or probes?
14 MR. BOOZELL: Assumes facts not in
15 evidence, vague and ambiguous.
16 A I don't recall who would have personally
17 sent them.
18 Q Do you recall whether there was any
19 correspondence associated with the transfer of a primer
20 or probe such as a letter or a sheet that described
21 what was being transferred?
22 MR. BOOZELL: It's compound, vague and
23 ambiguous. Calls for speculation, lacks foundation.
24 A I mean, I now recall the letter where I
25 requested those materials. I don't recall further

1 arriving through the mail.
2 Q And do you recall any specific instances of
3 Mark Holodniy bringing primers or probes from Cetus
4 into the lab at Stanford?
5 A It is my recollection that once Mark
6 started on the project, he made frequent trips back and
7 forth sometimes at Cetus, sometimes Stanford,
8 occasionally both places in the same day. And then at
9 some point he began doing PCR reactions at Stanford and
10 that, at least initially, those were done with reagents
11 obtained at Cetus. Of course, with respect to sequence
12 and synthesizing, I mean, the capability to sequence
13 and produce a small audio nucleotide was generally
14 available. So I don't recall whether on some occasions
15 only sequences were brought back and synthesized at
16 Stanford. But it's my recollection that he obtained
17 actual reagents on several occasions, at least
18 initially when we were starting.
19 Q And I just want to know everything about
20 that recollection that you have. Do you have -- can
21 you say anything specific about that recollection that
22 you have?
23 MR. BOOZELL: Vague and ambiguous.
24 A I recollect that at the time I think we
25 had -- we thought we had two of the only thermocyclers

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1 A I believe the name Sninsky came up in that
 2 conversation but I can't be certain. We discussed it
 3 several times. So I don't recall whether on the first
 4 time he told me whether he mentioned any particular
 5 names.
 6 Q Do you recall having this conversation in
 7 the context of regular meetings that you had with
 8 Dr. Merigan or was it just a single conversation that
 9 stands out? What do you recall about that?
 10 MR. BOOZELL: Vague and ambiguous,
 11 compound, leading.
 12 A I recall the first conversation because it
 13 seemed like quite a huge undertaking for someone who
 14 had not had, like myself, extensive molecular biology
 15 background. I remember him reassuring me at that time
 16 that Cetus had tremendous expertise. I remember
 17 subsequent conversations as I became more familiar with
 18 the problem where I indicated to him that there were
 19 certain real obstacles to developing it that way and I
 20 recall him indicating that these problems could be
 21 overcome because there was a lot of expertise at Cetus.
 22 That's the extent.
 23 Q What problems do you recall discussing with
 24 Dr. Merigan?
 25 MR. BOOZELL: Vague and ambiguous.

1 that you had identified?
 2 MR. BOOZELL: Vague and ambiguous,
 3 misstates his testimony, calls for speculation, lacks
 4 foundation, leading.
 5 A I recall discussions with, I believe,
 6 Dr. Sninsky regarding the need to really be sure that
 7 we had extracted essentially all of the DNA from the
 8 sample to be sure that we didn't have inhibitors in the
 9 biological samples of the change in efficiency to be
 10 sure that the regions we were using didn't contain
 11 common mutations and variations that might affect the
 12 efficiency of amplification.
 13 There was also a discussion, I believe,
 14 with Dr. Sninsky about whether a technique called
 15 nested PCR could still be used in quantitation. It
 16 increased the specificity of the assay but it added
 17 another level of quantitative variability. Once
 18 Dr. Holodniy joined, I had most of my discussions about
 19 these issues with him.
 20 Q When did you have these discussions with
 21 Dr. Sninsky?
 22 A Prior to and shortly after Mark joined --
 23 after Dr. Holodniy joined and then I believe on one
 24 occasion when we went up to discuss the Heparin issue.
 25 Q So when you say prior to when Mark

1 A The problems I recall discussing with him
 2 were that the intrasample interassay variability was
 3 quite large and that in order to generate reliable
 4 data, it would be extremely difficult to do it with a
 5 single sample and a single run which as I recall had
 6 been what he envisioned might be possible. And there
 7 were multiple discussions initially about sources of
 8 variability with the probes with the idea that one
 9 could run PCR to its maximum amplification and end up
 10 with something that was sufficiently quantitative
 11 because at least in theory I was concerned that very
 12 different starting concentrations could yield the same
 13 amount of product. So we discussed those sorts of
 14 issues.
 15 Once Mark Holodniy came on board, really the
 16 discussion on the scientific matters were largely
 17 Dr. Holodniy and he would report back to Dr. Merigan
 18 much more frequently than I and eventually took over
 19 much of that responsibility. So once Mark joined that,
 20 he became really the focus of these discussions of
 21 concerns about reproducibility or technical aspects
 22 more than Dr. Merigan.
 23 Q After you had identified these problems for
 24 Dr. Merigan, did you have any discussions with
 25 employees of Cetus to try to overcome the difficulties

1 joined --
 2 A When I was first given the project and read
 3 up on it and got involved in it, it just struck me that
 4 they were -- and also once we got some early results,
 5 it struck me that there were some formidable obstacles
 6 to doing this reproducibly enough to get meaningful
 7 data.
 8 One of the problems was at that time the
 9 drugs available, which were essentially AZT, really did
 10 not give more than a log reduction in virus. So we
 11 were dealing with the question of developing an assay
 12 that was capable of reliably detecting relatively small
 13 changes in viral log. So this made the problem very
 14 difficult. The advent of much more potent therapy, to
 15 some extent, minimized some of those issues.
 16 Q Do you remember where you had discussions
 17 with John Sninsky about the problems that you had
 18 identified?
 19 A Some were over the phone as I recall. Once
 20 or twice there were meetings at Cetus and I don't
 21 recall whether he ever came to Stanford.
 22 MR. BOOZELL: Objection as vague and
 23 ambiguous, misstates his testimony, leading.
 24 Q Did Dr. Sninsky ever show you how to do any
 25 experiments?

1 MS. RHYU: Lacks foundation. Asked and
2 answered.
3 A I'm not an expert on what the tracking
4 requirements were at that time.
5 Q Do you recall entering -- Michelle pointed
6 out to you that this says amend MTA research to
7 cover -- I read that completely wrong. "Amend research
8 MTA to cover research as part of clinical study." Do
9 you see that on the document?
10 A Yes.
11 Q Do you recall entering into an MTA
12 specifically related to IL-2 in November of '88?
13 A I don't recall. It could have happened, I
14 just don't recall.
15 Q Do you recall, at some point prior to the
16 publication of the JID paper that we looked at earlier,
17 that certain abstracts setting forth the work that was
18 done in collaboration with Cetus were submitted to UCLA
19 or ESF AIDS conference?
20 MS. RHYU: Objection, lacks foundation.
21 A I don't specifically recollect those
22 abstracts.
23 Q I show you one here. Exhibit 41,
24 previously marked. I don't have another one. Do you
25 recall this abstract?

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1 scientific program committee people keep this
2 information in the abstract confidential?
3 A Yes.
4 Q Is that consistent with your recollection
5 of the work that was ongoing at Cetus, that Cetus
6 viewed it as confidential?
7 MS. RHYU: Objection. Lacks foundation,
8 misstates prior testimony, calls for speculation.
9 A My understanding was that proprietary
10 information was confidential. I don't recollect which
11 aspects of this would have been considered confidential
12 and which weren't.
13 Q But it's your recollection that some of the
14 work that Dr. Holodniy was doing at Cetus related to
15 the project we were talking about earlier involved
16 Cetus proprietary and confidential information?
17 MS. RHYU: Objection. Lack foundation,
18 calls for speculation, calls for legal conclusion.
19 A I mean, to the best of my recollection, I
20 believed that PCR work was proprietary. I was never
21 particularly aware of which aspects of the work were in
22 the public domain and which aspects had already been
23 presented by Cetus at meetings and which aspects of the
24 technology were new. I knew that the data would be new
25 but I don't know whether I focused on the

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1 A I don't recall it. I mean, I'm reading it
2 but I don't recall the circumstances under which it was
3 submitted.
4 Q Do you recall whether Dr. Holodniy asked
5 for Cetus approval before publishing this abstract?
6 MS. RHYU: Objection. Lack of foundation,
7 calls for speculation.
8 A I wouldn't know that.
9 Q Did you attend the Sixth International
10 Conference on AIDS in San Francisco between June 20th
11 and 24th 1990?
12 A I don't know. I don't recollect.
13 Q Let me show you what's been previously
14 marked as Exhibit 604. Do you recall this letter?
15 A No.
16 Q You don't know if you ever received it?
17 A I don't recall. I don't know whether I
18 received it.
19 Q Do you have any reason to believe that you
20 didn't receive it?
21 A I don't have any reason to believe I didn't
22 receive it. At that time, I would have assumed that
23 that things were being done appropriately.
24 Q Do you see where it asks Dr. Groves, on
25 behalf of Cetus, asks that Stanford make sure the

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1 confidentiality aspect of it. I assumed that Cetus was
2 protected with respect to data we generated. I didn't
3 spend a lot of time worrying that something with Cetus
4 individuals on it would be -- in other words, if Cetus
5 individuals were on it, I guess I naively or perhaps
6 not naively assumed that this had been looked at
7 internally at Cetus and was going forward with the
8 approval of all the authors.
9 Q And that last answer when you say you
10 assumed that Cetus was protected, was that through the
11 various agreements that we looked at?
12 MS. RHYU: Objection. Lacks foundation,
13 calls for speculation, calls for legal conclusion.
14 A It was through agreement and through my own
15 perception as a junior person that the company involved
16 with a big university, for a long time it would seem to
17 me on multiple things would have worked out their
18 issues. I mean, I just -- it never would have crossed
19 my mind that there were areas of conflict or descension
20 on this. I guess it's a reflection of my state of mind
21 which was not really focused on these legalistic
22 aspects of it. I guess I went into this assuming that
23 the relationships had been worked out, the agreements
24 had all been worked out and now the business at hand
25 was to get the science done.

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1 you mean by proprietary technology? What is the
2 proprietary technology?
3 MR. BOOZELL: Vague and ambiguous, calls
4 for speculation, lacks foundation and it is a legal
5 question.
6 A My assumption was that this exciting PCR
7 technology that had been so much in the news and was so
8 promising, that was the technology I was thinking
9 about. I believed or I was under the impression that
10 the company owned that technology and, again, perhaps
11 naively, I don't know, but that things accomplished
12 with that technology in our lab would be part of that.
13 Q So you're referring to the CPR technology
14 invented by Kary Mullis?
15 A Yes.
16 Q Do you have any opinion of Dr. Mark
17 Holodniy?
18 MR. BOOZELL: Vague, ambiguous, calls for
19 speculation.
20 A In what respect?
21 Q You interacted with him regularly?
22 A Yes, I liked him. I liked him very much.
23 Q Was he a competent scientist?
24 MR. BOOZELL: Vague, ambiguous.
25 A I thought he was a very competent

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9 I, DAVID H. SCHWARTZ, M.D., do hereby declare under
10 penalty of perjury that I have read the foregoing
11 transcript; that I have made any corrections as appear
12 noted, in ink, initialed by me, or attached hereto; that
13 my testimony as contained herein, as corrected, is true
14 and correct.
15 EXECUTED this _____ day of _____,
16 20____, at _____,
(City) (State)
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DAVID H. SCHWARTZ, M.D.

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1 scientist. I have the highest regard for Dr. Holodniy,
2 his competence and professionalism. I thought he was
3 excellent.
4 Q Is it fair to say that he took the lead in
5 the project relating to developing an assay for
6 quantitating HIV RNA using PCR?
7 MR. BOOZELL: It's vague, ambiguous and
8 calls for speculation.
9 A It's fair to say he took the lead from me
10 in the development of the quantitative assay. I have
11 no knowledge, for example, on whether David Katzenstein
12 was more influential in pushing the switch over to RNA,
13 nor do I have any knowledge about the specific role or
14 the magnitude of the role played by Cetus employees.
15 But certainly I passed the baton to Dr. Holodniy at the
16 stage when we were still looking at DNA.
17 MS. RHYU: I have no further questions.
18 MR. BOOZELL: And it's 3:00. So given the
19 testimony that we've elicited and the documents
20 reviewed, I'd like to designate the transcript as
21 confidential "attorneys eyes only."
22 VIDEOGRAPHER: This concludes the third
23 media used. We are off the record at 3:01.
24 (Deposition was concluded at 3:01 p.m.)
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1 State of Maryland
2 County of Baltimore, to wit:
3 I, R. DWAYNE HARRISON, a Notary Public of
4 the State of Maryland, City of Baltimore, do hereby
5 certify that the within-named witness personally
6 appeared before me at the time and place herein set
7 out, and after having been duly sworn by me, according
8 to law, was examined by counsel.
9 I further certify that the examination was
10 recorded stenographically by me and this transcript is
11 a true record of the proceedings.
12 I further certify that I am not of counsel
13 to any of the parties, nor in any way interested in the
14 outcome of this action.
15 As witness my hand and notarial seal this
16 19th day of October 2006.
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R. DWAYNE HARRISON
Notary Public

My Commission Expires:
September 15th, 2009

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