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1
               UNITED STATES DISTRICT COURT
              DISTRICT OF NEW JERSEY
2
               CASE NO. 03-4837 (DMC)
3
4
5
  UNITED STATES OF AMERICA EX RE. :
6 DR. HELENA Z. HILL
        PLAINTIFF,
7
8
        VS.
9 UNIVERSITY OF MEDICINE AND
  DENTISTRY OF NEW JERSEY, DR. ROGER:
10 W. HOWELL, and DR. ANUPAM
  BISHAYEE,
11
            DEFENDANTS.
12
13
14
15
        DEPOSITION OF: DR. ANUPAM BISHAYEE, Ph.D.
16
        December 22, 2008
17
18
19
20
              TAYLOR & FRIEDBERG
21
          Certified Shorthand Reporters
22
             120 Washington Street
          Morristown, New Jersey 07960
23
               (973) 285-0411
         Email: Csr@taylorfriedberg.com
24
25
0002
1
2
3
4
        TRANSCRIPT of the deposition of the above witness,
  called for Oral Examination in the above-entitled matter,
6 said deposition being taken pursuant to Superior Court Rules
7 of Civil Practice and Procedure by and before KATHLEEN M.
8 ANDERSON, a Notary Public and Certified Court Reporter of
```

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9 the State of New Jersey, at McELROY, DEUTSCH, MULVANEY &
10 CARPENTER, LLP, 1300 Mount Kemble Avenue, Morristown,
11 New Jersey on Monday, December 22, 2008, commencing at
12 9:45 a.m.
13
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18
19
20
21
22
23
24
25
0003
1
  APPEARANCES:
2
3
        BUCCERI AND PINCUS
       1200 Route 46
        Clifton, New Jersey 07013
4
       BY: SHELDON H. PINCUS, ESQ.
        Attorney for Plaintiff
5
6
7
        McELROY, DEUTSCH, MULVNEY & CARPENTER, LLP
       1300 Mount Kemble Avenue
8
        Morristown, New Jersey 07962-2075
       BY: SCOTT S. FLYNN, ESQ.
9
        Attorney for Defendants
10
11
12
13
  ALSO PRESENT:
14
       Dr. Helena Z. Hill, Ph.D.
15
16
17
18
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24
25
0004
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0005
   DR. ANUPAM BISHAYEE, Ph.D., with offices at
1
2
     Northeastern Ohio Universities, Department of
3
     Pharmaceutical Sciences located at Rootstown,
4
     Ohio, having been duly sworn according to law,
5
     testifies under oath as follows:
6
  DIRECT EXAMINATION
7
   BY MR. PINCUS:
8
          Dr. Bishayee, good morning.
9
   Α
       Good morning.
           My name is Sheldon Pincus. I'm representing
10
       0
11 Dr. Hill in this matter that is presently pending in the
12 United States District Court for the District of New Jersey
13 in which the University of Medicine and Dentistry of
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- 14 New Jersey, Dr. Howell, and yourself are named defendants.
- 15 It is brought in the name of the United States of America
- 16 and Dr. Hill.
 - Have you ever had your deposition taken before?
- 18 A No.

- 19 Q Let me give you some ground rules in terms of 20 how we're going to operate.
- A deposition is part of a pretrial process known
- 22 as discovery, fact finding. We meet with witnesses and/or
- 23 parties that we believe are possessed with relevant
- 24 information in relation to the dispute. It's essentially a
- 25 question and answer session.

- 1 The only differences are two very important
- 2 ones. Number one, you're under oath and it's important that
- 3 you tell the truth. While we are gathered in this
- 4 conference room, somewhat of an informal setting, this
- 5 proceeding has as much seriousness and solemnity as if we
- 6 were actually in a courtroom.
- 7 Obviously there is no judge here but we guide
- 8 ourselves recognizing that everything that is being said by
- 9 anybody who is present, unless we're off the record, is
- 10 being taken by our stenographer. That's the second
- 11 difference of a question and answer session.
- We're going to proceed and I'm going to ask you
- 13 a series of question, show you some documents along the way.
- 14 I simply want you to answer those questions to the best of
- 15 your ability.
- 16 If you don't understand a question that I ask,
- 17 please don't be bashful. Tell me that. I'm not here to
- 18 trick you in any way, shape, or form. I just simply want
- 19 you to answer them to the best of your ability. If you
- 20 don't know the answer, tell me that too. I'm not going to
- 21 sit here from now until July asking you the same question
- 22 hoping you can come up with a response, but keep in mind the
- 23 distinction, however, between not knowing and not
- 24 remembering. Not knowing means I just don't know; not
- $25\,\,$ remembering means that I may be able to jog your memory by $0007\,$
- 1 giving you some surrounding facts or sharing a document that
- 2 might refresh it, the memory that is, sufficient to allow
- 3 you to give me a response. Do you understand that?
- 4 A Yes.
- 5 Q Also it's important that you give a verbal
- 6 response. It's very natural that we give a gesture or a
- 7 nod. If I remind you, don't be offended. There are times I

```
8 might actually describe your gesture, that you nodded your
9 head so that -- our goal is to accurately create a record of
10 your responses to my questions so that every one is fairly
11 represented.
12
           In that regard you have Mr. Flynn who is here
13 serving as counsel today for you. In the event he should
14 interpose an objection to any of the questions that I ask, I
15 would ask that you kindly hold your response, giving him the
16 opportunity to set forth his objection on the record and any
17 comments that I may have in response to that. Then you'll
18 be guided by him in terms of whether to answer the question
19 or not. Sometimes he may interpose an objection and still
20 direct you to answer; other times he might direct you not
21 to. Be guided by your counsel. In the event such an
22 objection is raised, please hold your response and let us
23 take care of what we need to do as the respective attorneys.
           This isn't a marathon. If you need a break, if
24
25 you want to use the men's room, whatever it is, please don't
8000
   be bashful about that. Let me know and we'll proceed
2 accordingly. Do you understand that?
3 A
        Yeah.
4
            Okay. Let me ask my questions completely before
5 you give a response. That way we're not going to get
6 interrupted telling "I can't take two people's responses or
7 voices down at a time." So if you will afford me the
8 courtesy of letting me set forth my complete question, I'm
9 going to afford you the same courtesy of giving a full and
10 complete response. Okay?
        Okay.
11 A
12
            Are you on any medications today that would
13 affect your ability to testify fully and truthfully?
14 A
         No.
15
            Dr. Bishayee, where do you presently reside?
       O
         671 Storm Water Drive in Kent, Ohio.
16 A
17
            That's a suburb of Cleveland. Correct?
18 A
         Yes, that's correct.
19
       Q How long have you lived there?
20 A
        A little bit -- one and a half years.
21
            Where are you presently employed, sir?
```

25 A Yes.

Universities, Northeastern Universities.

0009

24

1 That has its main facilities in Boston?

Is that the Northeastern that --

I'm employed by University -- Northeastern

- 2 A They're different universities, same name. It's
- 3 really small university.
- 4 Q What do you do there?
- 5 A I teach in the pharmacy school.
- 6 Q What did you teach there?
- 7 A I teach pharmaceutics, natural products of
- 8 pharmacognosy, which is natural products. It's plant and
- 9 their biological activities.
- 10 Q So is your position at Northeastern solely
- 11 teaching?
- 12 A Mainly teaching and a little bit of service work.
- 13 Q What type of service work?
- 14 A Committee, serving the different committees,
- 15 admission, interview, those kind.
- Q So you work on a committee in dealing with
- 17 admissions?
- 18 A Admissions.
- 19 Q That is for the pharmacy department?
- 20 A Yes.
- Q Do you do any research at all?
- 22 A There is some research component. It's expected that
- 23 I do some research.
- Q Are you in fact doing that now?
- 25 A Yeah. I have started.
- 0010

- 1 Q Did you just recently start that or have you
- 2 done other research during the one and a half years that
- 3 you've been associated with the University?
- 4 A Can you ask again please?
- 5 Q Sure. No problem. Glad you did that.
 - You said you started some research that is
- 7 expected of you. When did you start?
- 8 A I started like one year ago.
- 9 Q And prior to then when you first came to the
- 10 University you weren't doing any research?
- 11 A No.
- 12 Q What's the nature of the research that you're
- 13 doing?
- 14 A Cancer research.
- 15 Q Can you describe for me the nature of it?
- 16 A It is just the cancer chemo preventive effort of
- 17 different dietary components. It has been shown that
- 18 one-third of cancer is related to diet, so there a big
- 19 component of the dietary influence on the cancers.
- 20 So I'm interested in working on some natural compounds
- 21 and efforts on breast cancer, as an example, and liver

```
22 cancer.
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- Q Are you doing anything in regard to radiation
- 24 research?
- 25 A No.

8

- 1 Q So if today is the end of 2008 and you were at
- 2 Northeastern for approximately a year and a half it would
- 3 have been some time in 2006, mid year 2006, that you
- 4 commenced your duties and responsibilities at the
- 5 University?
- 6 A It's 2007, 2007.
- 7 Q Thank you.
 - MR. PINCUS: Off the record.
- 9 (Discussion held off the record.)
- 10 Q Before you commenced your duties there what was
- 11 the preceding job that you held?
- 12 A I was working as a radiation safety specialist.
- 13 Q And where was that?
- 14 A I'm sorry?
- 15 Q Where was that?
- 16 A Where was that? UMDNJ.
- 17 Q Who was your immediate supervisor?
- 18 A Venkata Lanka.
- 19 Q Spell please?
- 20 A V-e-n-k-a-t-a L-a-n-k-a.
- 21 Q And how long did you serve in that position?
- 22 A I was there several titles, five years.
- 23 O And did you commence working there immediately
- 24 after leaving Dr. Howell's lab or were there any other
- 25 intervening positions?

- 1 A Yeah. I was working for a short time with the other
- 2 faculty at UMDNJ before joining to.
- 3 Q Who was that?
- 4 A That person was Dr. Pain, P-a-i-n.
- 5 Q And what did you do for Dr. Pain?
- 6 A I basically worked to learn some molecular biology
- 7 techniques, yeast genetics.
- 8 Q And how long did you work for Dr. Pain please?
- 9 A It could be three months or four months I can't
- 10 remember exactly but it would be around that vicinity.
- 11 Q What was the reason that your work was limited
- 12 there for a matter of months, if any?
- 13 A Well, that time I was -- my marriage was set so I was
- 14 going to India to get married and come back. Meanwhile this
- 15 radiation safety opportunity came by and I was thinking that

- 16 it would be better choice for me, so after I came back with
- 17 my wife I joined the new department, started a new job.
- 18 Q How long were you in India after leaving
- 19 Dr. Pain's lab?
- 20 A Say it again?
- 21 Q How long were you in India after leaving
- 22 Dr. Pain's lab?
- 23 A One month.
- Q Okay. So if I understand you correctly, the
- 25 sequence is you were working in Dr. Howell's lab, you left 0013
- 1 and went to work for Dr. Pain for three to four months, you
- 2 left, went back to India for approximately a month.
- 3 Correct?
- 4 A Correct.
- 5 Q And from there you came back and worked at UMDNJ
- 6 as a radiation safety specialist for five years. Correct?
- 7 A Right.
- 8 Q And then from there you made the move to
- 9 Northeastern University?
- 10 A That's correct.
- 11 Q Okay. Now, in advance of today's deposition did
- 12 you review any documents?
- 13 A Yes, I did.
- 14 Q Can you tell me what you reviewed?
- 15 A I don't know specifically -- whatever, you know,
- 16 Mr. Flynn send me to review.
- 17 Q Sitting here today do you have a recollection of
- 18 anything?
- 19 A No. I didn't review anything today.
- 20 Q You didn't review anything today, but I mean in
- 21 advance of the deposition knowing that you were coming you
- 22 say you did get sent certain documents. Can you describe
- 23 them for me other than they're on a piece of paper? I mean
- 24 the substance of what you reviewed.
- 25 A Yes. I didn't get much chance to review each and 0014
- 1 every piece of document due to my, you know, final exam for
- 2 the students and all my teaching responsibility, but I did
- 3 briefly look at Dr. Lenarczk's deposition very briefly, see
- 4 how things go.
- 5 Q Okay. So you looked at Dr. Lenarczk's
- 6 deposition. What about any of the exhibits that were
- 7 identified during the course of that deposition?
- 8 A I just briefly look at the heading of the document. I
- 9 didn't read the whole document at the time.

```
10
            So is it fair for me to say that along with a
11 copy of the deposition you were provided copies of the
12 various exhibits that were marked and identified and
13 testified to during that deposition by Dr. Lenarczk?
        Yes. I received those documents but I didn't review
15 them carefully.
16
            Other than the Lenarczk deposition and the
17 exhibits what if anything else did you review?
        I didn't review anything else.
18 A
19
            Nothing else?
20 A
        Nothing else.
21
            Were you provided other documents to your
22 knowledge?
23 A
        Yes.
24
            Do you recall what they were?
25 A
       I know there were a lot of documents. I don't recall
0015
   with specificity the documents.
1
           Do you have them with you today?
3
   A Part of it.
4
       O
           Did you review them?
5
   A To some extent.
           Would you be able to identify what you reviewed
6
7
   by looking at those documents?
8
   Α
        Yes.
9
       Q
           Do you have them available with you here?
10 A
        No.
            Where are they?
11
       Q
12 A
        In my bag.
            Where is your bag?
13
        My bag is in the car.
14 A
15
            Okay. At a break I'd like you to potentially --
16
              MR. PINCUS: If you have no objection,
17 Scott, I'd like to know what he reviewed.
18
              MR. FLYNN: I'll take a look at what he
19 got.
20
              MR. PINCUS: Fair enough.
21
            We're not going to make you go running out right
       Q
22 now.
23
           When you left Dr. Pain's laboratory was that at
24 your request or at his?
25 A
        Mine.
0016
       Q
           So you left voluntarily?
1
```

While employed at Northeastern University have

2 A

3

Yes.

Q

- 4 you been the subject of evaluation?
- 5 A Yes.
- 6 Q Have there been any criticisms of your work?
- 7 A No.
- 8 Q Have you been disciplined or reprimanded in any
- 9 fashion?
- 10 A No.
- 11 Q You say you have a teaching load. What's your
- 12 load presently?
- 13 A I teach four different courses for first year and
- 14 second year classes. For first year I teach pharmaceutics
- 15 and for second year I teach a kind of pharmacokinetics.
- 16 (Discussion held off the record.)
- 17 Q When did you first come to work in Dr. Howell's
- 18 laboratory? Do you recall?
- 19 A When I came to work?
- Q When did you first start working for Dr. Howell?
- 21 A I guess it would be end of '97.
- Q Did you work continuously there until you left
- 23 in or about the end of July, beginning of August 2001?
- 24 A That's correct.
- 25 Q And you worked on some research associated with 0017
- 1 a grant that Dr. Howell applied for and received from the
- 2 National Institute of Health. Correct?
- 3 A That's correct.
- 4 Q And you also happened to work along with
- 5 Dr. Hill in some of the research associated with that grant.
- 6 Correct?
- 7 A Right.
 - Q And Dr. Lenarczk?
- 9 A That's true.
- 10 Q Anybody else that you know did any research on
- 11 that?

- 12 A Well, summer students came. I also worked with those
- 13 kind of, you know, visitors for a short while.
- 14 O The various experiments that were performed, you
- 15 know, by you in particular, how were the protocols for those
- 16 experiments constructed? In other words, did you do it?
- 17 Did Dr. Howell do it? Did you do it together?
- MR. FLYNN: Objection to form. You can
- 19 answer.
- 20 A It really depends on the specificity of the protocol.
- 21 Some protocol he told me how to do it. Some other things I
- 22 tried and I showed it to him and he said go ahead. Like
- 23 that. It's a constant discussion and, you know, checking

- 24 and making sure that things are okay.
- 25 Q He was the principal investigator. Correct? 0018
- 1 A Absolutely. That's correct.
- 2 Q So is it fair for me to say -- and again, I'm
- 3 not there; I need to rely on you -- my questioning, so we're
- 4 clear, is relating now to this National Institute of Health
- 5 grant, not anything else that you may have done.
- 6 In these kinds of experiments you say insofar as
- 7 the protocols, some he gave to you, some you constructed,
- 8 and shared with him; to use your words, there was "constant
- 9 discussion."
- Is it fair for me to say that any experiment
- 11 that you undertook was undertaken with the knowledge of
- 12 Dr. Howell that you were going to do that?
- 13 A Yes. That's correct.
- 14 Q Was there any mechanism or procedure that was
- 15 followed, or practice that was followed, how he would give
- 16 you his approval for you to proceed with an experiment or
- 17 experiments? I mean, tell me the procedure you gentlemen
- 18 followed.
- MR. FLYNN: Objection to form. Go ahead.
- 20 A It's hard to tell. It's been seven to nine years,
- 21 depending on start to finish. I cannot remember each and
- 22 every experiment or every detail, but sometimes he asked me
- 23 to do certain things and it took me for a week or sometimes,
- 24 you know, longer than that. Then I went back and he
- 25 checked.
- 0019
- 1 So there is no fixed procedure that each actually
- 2 happened. It depends on the nature of the experiment or
- 3 whatever he asked me to do. There is no fixed, you know,
- 4 format that I took.
- 5 Q Was it your practice that at some point during
- 6 or at the end of an experiment that you shared your results
- 7 and had a discussion with Dr. Howell insofar as what had
- 8 occurred?
- 9 A Not each and every one. Once again, it's long time so
- 10 I can't remember the specificity.
- But sometimes he checked immediately or I did discuss
- 12 immediately. Sometimes after one month of experiment we sit
- 13 together and then we discussed whatever we have found, like
- 14 that.
- 15 Q Did you have established times for these
- 16 meetings?
- 17 A No. Sometimes it was structured; we met on a specific

- 18 day and time. But sometimes like on demand, say: Hey, what
- 19 you got? Let's go and see. So it was random.
- Q Is there any question in your mind that
- 21 ultimately he reviewed each experiment that you performed in
- 22 regards to this grant?

- MR. FLYNN: Objection to form. Go ahead.
- 24 A I would say yes, but once again it also depends on the
- 25 specific incident or specific nature. I cannot say that it 0020
- 1 happened all the time.
- 2 Q Okay. If it didn't happen all the time would
- 3 you say it happened the majority of the time?
- 4 A I can't really recall the frequency of that.
- 5 Q Were you required to prepare anything by way of
- 6 a status report of your experiments?
- 7 A What do you mean by status report?
- 8 Q Did you ever have to prepare any document that
- 9 summarized what you were doing from day to day or week to
- 10 week or month to month?
- 11 A I documented the experimental finding using a
- 12 protocol, that kind of format to fill out some of the
- 13 blanks, and whenever I get some data I provided him the raw
- 14 data, and that was the mode of exchange of document.
- 15 Q So the protocols were exchanged, if I understood
- 16 you correctly?
- 17 A Yes, protocol in protocol book.
- 18 Q Describe for me how that worked. The protocol
- 19 book, what is that?
- 20 A Protocol book is for experiment. I just, you know,
- 21 print it, a couple of pages, depending on what I was doing
- 22 that time, and then I recorded whatever I found. And then
- 23 everything was placed in a book, laboratory notebook, and --
- Q Continue please?
- 25 A Yeah. And sometimes he checked the laboratory 0021
- 1 notebook but sometimes he didn't, but when I got the final
- $2\,\,$ result on then I gave it to him and he analyzed those
- 3 results.
- 4 Q So there was this lab notebook in which a
- 5 protocol was set forth for an experiment --
- 6 A Right.
- 7 Q -- number one. And as you progressed through
- 8 the various steps of the protocol you would make notes of
- 9 what your work was. Is that fair?
- 10 A Right.
- 11 Q And by doing this experiment you produced some

- 12 raw data. Correct?
- 13 A Correct.
- 14 Q You put that in the notebook as part of the
- 15 experiment. Correct?
- 16 A Right.
- 17 Q You would share that raw data along with the
- 18 protocol to Dr. Howell, and if I understood you correctly he
- 19 would interpret it?
- 20 A Right.
- 21 Q And then what would happen?
- MR. FLYNN: Objection to form, but go
- 23 ahead.
- 24 A What do you mean what happened? If you explain?
- Q Well, was that the end of the experiment or did 0022
- 1 he give you guidance in terms of what he wanted you to do
- 2 next? I'm not there. You tell me your practice and
- 3 procedure.
- 4 A Oh, I see. Sometimes he say: Okay, that's fine.
- 5 Let's move on to a new experiment or think about that, you
- 6 know, something different.
- 7 Sometime he say just to repeat this.
- 8 You know, so it depend on the particular incident.
- 9 Q The incident or the experiment?
- 10 A Incident, I mean the experiment.
- 11 Q So obviously different experiments may give rise
- 12 to different instructions, but you recall that as you went
- 13 through the experiment and you shared your data with him you
- 14 looked to him for guidance?
- 15 A Right.
- 16 O Correct?
- 17 A That's correct.
- 18 Q Okay. And given that he was the principal
- 19 investigator on this grant. Correct?
- 20 A True.
- Q Did you have a title associated with this grant?
- 22 Were you a co-investigator to your knowledge?
- 23 A I don't recall what was my title on this grant. It
- 24 was up to him I think. I don't recall.
- 25 Q To your knowledge you didn't do any experiments 0023
- 1 with regard to this grant that Dr. Howell didn't know about,
- 2 did you?
- 3 A Say it again.
- 4 Q To your knowledge you didn't perform any
- 5 experiments in regards to this NIH grant that Dr. Howell

- 6 wasn't aware of. Is that correct?
- 7 A I don't recall. We did a lot of things in the lab,
- 8 several work -- not only related to this grant but also I
- 9 did something which is no way related to this grant, so I'm
- 10 not clear when I don't know which experiment he put in the
- 11 grant and which experiment he didn't, so.
- 12 Q As you sit here today do you have any conscious
- 13 recollection of secretly doing research that Dr. Howell
- 14 didn't know about?
 - MR. FLYNN: Objection to form. Go ahead.
- 16 A No, there was no such thing.
- 17 Q You said that Dr. Lenarczk worked in the lab.
- 18 Do you remember when he came and commenced his work?
- 19 A He came after I joined but I don't have recollection
- 20 exactly when.

- 21 Q If you worked there for approximately four
- 22 years, as I can see '97 to sometime in 2001, for what period
- 23 of time or portion of that time do you recall Dr. Lenarczk
- 24 being present and working in the lab?
- 25 A I don't have the specific period of time but I 0024
- 1 could -- if you asked me to guess, I would say maybe about a 2 year.
- 3 Q About a year is your recollection?
- 4 A Yeah.
- 5 Q Was he working on experiments associated with
- 6 this grant to your knowledge?
- 7 A I don't know.
- 8 Q You don't know?
- 9 A No.
- 10 Q Did you have any responsibilities insofar as
- 11 instructing Dr. Lenarczk what to do?
- 12 A Yes. I showed him the basic lab techniques and a few
- 13 laboratory experiments that I was asked to.
- 14 Q And these were experiments associated with the
- 15 NIH grant?
- MR. FLYNN: Objection to form.
- MR. PINCUS: Let me rephrase.
- 18 Q Were these experiments that you showed him
- 19 associated with the NIH grant?
- 20 A I showed him what I was doing at that time, and that
- 21 was associated with the NIH grant.
- Q Did you do any experiments together to your
- 23 recollection?
- 24 A It's hard to tell. Maybe he watched me doing some of
- 25 the things to better understand what I was demonstrating

- 1 something, but principally he had his own project and I was
- 2 doing other area so I don't recall that working together day
- 3 after day. Maybe occasionally we just learned something
- 4 together.
- 5 Basically he learned from me and I showed him to do
- 6 something.
- 7 Q What is your recollection as to the area that
- 8 you were working in at the time Dr. Lenarczk was working in
- 9 the lab?
- 10 A I was working with all the different things, like cell
- 11 culture work.
- 12 Q Anything else?
- 13 A I also did work with animals.
- 14 Q I'm talking about specifically with regards to
- 15 this grant. You worked with animals in regards to this
- 16 grant?
- 17 A I'm not sure whether it is part of this grant or
- 18 something different in my various times. I did various
- 19 kinds of experiment, not only cell culture but also other
- 20 forms of research. So it would be hard for me to recollect
- 21 which experiment belonged to which grant.
- Q Did you work on mutagenesis?
- 23 A Briefly, yes.
- Q Did you work on survival?
- 25 A Yes.
- 0026
- 1 Q What about Dr. Lenarczk, do you know whether he
- 2 worked on mutagenesis?
- 3 A He worked with mutagenesis and survival too.
- 4 O He worked on survival also?
- 5 A Yes.
- 6 Q When you were working either on mutagenesis or
- 7 survival work did you know what experiments he was working
- 8 on and to your knowledge did he know what experiments you
- 9 were working on?
- 10 A Sometimes yes, but most of the time no.
- 11 Q Why was that, if you can?
- 12 A Well, we were given probably the separate part of the
- 13 study to do by our own, so he joined --
- 14 Q By who? You said we were given a separate part
- 15 of the study. By?
- 16 A By Dr. Howell, and our background was different so
- 17 what interest was probably different too. The only thing
- 18 that make them working together is that we were working for
- 19 the same P.I., and I don't know what he was doing exactly.

- 20 Q Sometimes in science I suppose that that's a
- 21 method of doing research; you separate different
- 22 researchers?
- 23 A Right.
- Q They go down their own path. Right?
- 25 A Right.

- 1 Q But in each instance when you were doing
- 2 mutagenesis work and/or survival work your ultimate
- 3 direction was being taken from Dr. Howell, if I understood
- 4 you correctly?
- 5 A Right.
- 6 Q To your knowledge that was the case with
- 7 Dr. Lenarczk based on your observations in the lab?
- 8 A I can't tell for him how he worked and what was his
- 9 mode of communicating with Dr. Howell. Whether he consulted
- 10 with other faculty, I have no knowledge of that, but I know
- 11 what I did.
- 12 Q To your recollection were there joint meetings
- 13 between the three of you in regards to your experiments and
- 14 research, the three of you being Dr. Lenarczk, Dr. Howell,
- 15 and yourself?
- 16 A Yeah, we may discuss something together. I don't
- 17 exclude, but I don't have any recollection of specific
- 18 event.
- 19 Q Do you have any recollection of there being a
- 20 periodic meeting like a department meeting where, you know,
- 21 he knew you were going to come and go over what was going on
- 22 and what direction you were going to go in? Was there
- 23 anything like that?
- 24 A We met time to time but I don't recall the frequency,
- 25 whether it was structured every Monday, you know, second 0028
- 1 Monday of the month or something. I don't recall how
- 2 frequent we met to discuss, but yeah, there was some
- 3 discussion. It could be informal way or maybe formal way.
- 4 I don't recollect.
- 5 Q As far as you recall the participants were
- 6 yourself, Dr. Lenarczk, and Dr. Howell?
- 7 A I don't really recall any specific incident we met.
- 8 Q Were agendas of these meetings prepared?
- 9 A I have no knowledge.
- 10 O Were there minutes?
- 11 A I don't know.
- 12 Q Did you keep notes to your recollection?
- 13 A For what?

- 14 Q If such meetings occurred did you make notes? 15 A No.
- 16 Q Did you observe anybody else, Dr. Howell or
- 17 Dr. Lenarczk, make notes?
- 18 A I don't know.
- 19 Q When you say "I don't know" is it that you don't
- 20 recall or you just don't know? I just want to be clear.
- 21 A I don't know. I don't have -- I really don't know
- 22 whether somebody took the notes or not.
 - (Exhibit BISHAYEE-1, Document -
- Experiment for 9/6/99, is marked for
- 25 identification.)

23

- 1 Q Dr. Bishayee, I'm showing you what has been
- 2 marked as Bishayee Exhibit 1. You see the little yellow
- 3 sticker in the righthand corner? That's how we identify
- 4 exhibits, you know, for the record. So if I make reference
- 5 to Bishayee-1 or Bishayee-6, that's what I'm referring to.
- 6 A Okay.
- 7 Q Also throughout this deposition I may also call
- 8 your attention to the series of letters and/or numbers in
- 9 the lower righthand column. Those are called Bates stamps,
- 10 bate stamp numbers. Because there's a lot of documents
- 11 associated with this case we attorneys try our best to keep
- 12 track of them, and we do that by stamping them with a
- 13 number. I may by way of a specific question or questions
- 14 that I have direct your attention to a particular Bates
- 15 stamp number within the exhibit itself. All right? Do you
- 16 understand that?
- 17 A Yep.

- Q Do you recognize this document?
- 19 A What do you mean by "recognize"?
- 20 Q Do you recognize this document as the
- 21 documentation associated with an experiment that you
- 22 performed on or about September 6, 1999?
- 23 A Yeah. I see my handwriting, so -- but I don't
- 24 remember creating this, but now that you're showing me.
- 25 Q So we're clear, your handwriting, to the extent 0030
- 1 that there is handwriting on the various pages compromising
- 2 this, is this all your handwriting or do you recognize it as
- 3 some of it not being yours?
- 4 Take a minute to look through all the pages so
- 5 you can respond to my question accurately.
- 6 A The handwriting part of this documents seem to be
- 7 mine. I can recognize my handwriting but there is some

- 8 other thing which probably I didn't generate, like this
- 9 chart.
- 10 Q The chart that is on B 013921?
- 11 A That's correct.
- 12 Q Are you saying you didn't or you don't have a
- 13 firm recollection of creating that chart?
- 14 A I didn't create this chart.
- 15 Q You didn't. Do you know who did?
- 16 A No.
- 17 Q What about the other handwriting on the
- 18 following -- the other way, the other pages, is all this
- 19 your handwriting to your recollection?
- 20 A It is.
- 21 Q Okay. Do you recall what the purpose -- having
- 22 looked at this can you tell me what the purpose of this
- 23 experiment was?
- 24 MR. FLYNN: Objection to form but you can
- 25 answer it.

- 1 A It looks like it has been done nine years ago. I
- 2 really don't know, but looking at the title, it's something
- 3 to do with the V79, looking at the response of the V79
- 4 against radiation.
- 5 Q And do you recall whether in this particular
- 6 experiment -- does this document reflect that you carried
- 7 out work associated with the survival arm of the experiment
- 8 that's set forth in the protocol?
- 9 MR. FLYNN: Objection to form but you can
- 10 answer it if you can.
- 11 A I see at the end it says something about the colony so
- 12 I would say that the survival was, yes, a part of this
- 13 experiment.
- 14 Q That you performed?
- 15 A Right.
- 16 Q Do you have a recollection that there was a
- 17 mutagenesis arm of this experiment based on what's set forth
- 18 in the protocols?
- 19 A No, I don't recall.
- 20 O Do you have a recollection as to whether you
- 21 performed this experiment together with Dr. Hill wherein you
- 22 did the survival arm and she did the mutagenesis arm?
- 23 A I see there is a mark here about mutagenesis but I
- 24 don't recall who did what.
- Q Do you have a recollection as to whether you 0032
- 1 observed Dr. Hill while she was performing the mutagenesis

- part of the experiment so that you'd be able to do it at a 3 later date? 4 MR. FLYNN: Objection to form. You can answer if you can. 6 I don't have any recollection of that. 7 Up until this point in time we've spoken about yourself, Dr. Lenarczk, Dr. Howell. We haven't discussed 9 Dr. Hill's presence in the lab. 10 She was present in the lab working on this grant 11 to your recollection? 12 A She was doing something that I didn't know and still I 13 don't know which part she was associated with this grant and 14 what was her own experiment. That I have no recollection. 15 Do you recall doing any experiments with her? 16 A No, I don't recall. You have no recollection of doing any 17 18 experiments with her? There may be some things that she showed me but I 20 don't recall what exactly she showed me at that time. 21 So if she were to testify that in regards to 22 this experiment that you did the survival arm of the 23 experiment and that she did the mutagenesis arm of the 24 experiment you have no knowledge or recollection of that? 25 A That's correct. 0033 1 So that if she had knowledge and recollection of what went on and testified to that, you would not be able to admit or deny that. Correct? 4 MR. FLYNN: Objection to form. Go ahead. 5 A Say it again. 6 If she had such a recollection of her 7 interactions with you in regards to you doing the survival arm of this experiment and she doing the mutagenesis arm of 9 the experiment you would not be able to admit or deny the 10 accuracy of what she said? 11 MR. FLYNN: Hang on. Are you asking if he 12 can recall certain specific things that she might say or the 13 fact that the experiment in general -- right now we're
- bringing it down to survival mutagenesis, that I can see,
 but if you're asking him specific things, I think you need
 to put them in front of him to see if he can recall them.

 Q Let's deal with the broader issue. If she were
 to say she worked on the mutagenesis arm while you worked on
 the survival arm, you have no recollection, wouldn't be able
- 20 to admit or deny that. Correct?
- 21 A We did a lot of things so specifically for this case I

```
22 don't have any recollection of who did what and what was the
23 purpose.
24
            So are you able to tell me by looking at this
25 documentation what the results of your experiment was?
0034
        Only can see what was recorded, that the survival
1 A
   experiment was terminated due to contamination.
3
              CERTIFIED COURT REPORTER: I'm sorry? The
4
   survival experiment was?
5
              THE WITNESS: Terminated.
6 A
        However, the mutation assay survived. So maybe one
7
   part worked and another part didn't work.
8
              (Discussion held off the record.)
9
              (The preceding answer is read by the
10
       court reporter.)
            I think, correct me if I'm wrong -- I know you
11
12 said that the survival was terminated due to contamination.
13 Is that correct?
14 A
         That's correct.
15
            So we're clear, do you have any recollection
16 whatsoever of Dr. Hill performing the mutagenesis arm of
17 this experiment?
18 A
        No.
19
       Q
            Do you have any recollection of Dr. Hill
20 advising you that she saw a rise in mutation with regard to
21 the arm of the experiment that she was performing?
22 A
         Say it again please?
            Do you have any recollection of Dr. Hill
23
24 advising you that she saw a rise in mutation --
25 A
        She saw a rise?
0035
1
           A rise in mutations in regard to the mutagenesis
   arm of the experiment that she was performing?
3
        No. I don't recall.
4
           Does the chart that is set forth on B 013921
   indicate to you that mutation appeared to increase in this
   experiment as a function of dose of radiation?
7
              MR. FLYNN: Objection to form. No
8 foundation.
9 A
        Say it again?
10
       Q Looking at the chart on B 013921 that is part of
11 your documentation associated with this experiment, does the
12 data that's charted signify to you that there was an
13 increase in mutations based upon the degree of dose of
14 radiation?
15
               MR. FLYNN: Same objection. You can
```

- 16 answer. 17 A This document I didn't create so I don't know how it 18 was plotted and how the document was created so it would be 19 hard for me to interpret that which I didn't create. 20 You can't interpret this chart at all; is that 21 what you're telling me? 22 A I'm not expert in mutation. I'm not expert in radio 23 biologics so I don't know. 24 So whatever was asked me to do, I did, and I provided 25 data to Dr. Howell. 0036 I don't know who created this chart and what was the 1 interpretation of the data. 3 Based on your knowledge and experience you're 4 telling me that you can't tell me whether this chart appears 5 to show an increase in mutation based upon dose? 6 A I see a lot of the things here and I don't know the 7 specificity of this result so I can't tell that, what was 8 happening here. 9 If you can't tell, you can't tell. 10 (Exhibit BISHAYEE-2, Document -11 Experiment for 9/20/99, is marked for 12 identification.) 13 Dr. Bishayee, I'm going to show you what I 14 marked for identification as Bishayee Exhibit 2. Would you 15 take a moment to look at that, the pages comprising that 16 document, and let me know when you're done? Are you ready, 17 sir? 18 A Uh-hum. 19 O Do you recognize this document? I recognize part of it, not the whole document. 20 A 21 What parts do you recognize and what parts don't 22 you recognize? 23 First of all, this does appear to be a 24 documentation associated with an experiment that you 25 performed on or about September 20, 1999. Correct? 0037 1 A Yes. 2 Q You said you recognize part of it and not some parts of it. 4 A Correct. 5 What don't you recognize? A I don't recognize the first page, B 007891, and also
- 8 Q Okay.9 A I recognize the rest of the document. However, there

7 the next page, B 007892.

```
10 is some marking here and there which may not be my
11 handwriting. For example, B 007898.
            Okay. Where are you looking?
12
13 A
        The top part.
14
            Where it starts 600 over --
        Yes, right.
15 A
            -.05?
16
       O
        Two.
17 A
18
            Okay. Anything else?
19 A
        That's all I can recognize.
            Okay. Now, one thing I'm curious of. If you
20
21 look at the protocol, page 7894, see where it says
22 Experiment 2? See where I'm referring to?
23 A
        Yes.
24
            If I go back to Bishayee-1 where it says
25 Experiment Number One --
0038
1 A
        Yes.
           -- can you relate for me the significance of
   that kind of designation on these protocols, what that
  means?
5 A
        Well, it looks to me that there are two different
  experiments that was done on two different dates.
           Would I be correct -- so there's two different
8 experiments, but am I also correct looking at these two that
9 the protocols are the same?
10 A I can't tell the scientific detail how these two
11 experiments were done and I cannot tell whether there were
12 any differences.
13
            You can't compare the protocols and respond to
       Q
14 me?
15 A
        No.
16
            Why not?
        I see here there is some changing the number so
17 A
    probably those experimental condition were not the same.
18
            You're looking at Number 13, is that what you're
19
20 saying, on the protocol associated with Bishayee-2? Is that
21 what you were --
22 A B 007895, I see that there is some scribbling here
23 changing the number.
24
            But aside from that do the protocols appear to
25 be identical to you?
0039
              MR. FLYNN: Objection to form.
1
2
       I can't tell.
  Α
           Would you take a moment to compare please?
3
```

- 4 A From the heading it appears to me that they're both
- 5 colony forming assay but I don't recollect exactly how this
- 6 thing -- two experiments were done nine years ago.
- 7 Q If I look at the first page of Bishayee Number 1
- 8 where the -- B 013918, and I see that there are 12 items
- 9 listed, or 12 steps I guess listed, and I compare that to B
- 10 07894 of Bishayee-2, do you see there are also 12 items
- 11 listed? Correct me if I'm wrong.
- 12 A That's correct.
- 13 Q Correct me if I'm wrong. They appear to be one 14 and the same?
- 15 A I see that there is a difference in the timing. If
- 16 you look at the date and time, they were started at
- 17 different time and there may be some difference in the
- 18 duration of time that each step was performed so I can't
- 19 tell whether they're identical, that means they were done
- 20 exactly with the same amount of time or not.
- Q But if you took away the time factor do the protocols appear to be the same?
- MR. FLYNN: Objection. Asked and
- 24 answered, but go ahead.
- 25 A I can't tell. In one document I see there is a number 0040
- 1 of cells per milliliter in document B 012918; however, for
- 2 the other document, B 007894, I don't see anything is
- 3 written there.
- 4 Q Is there anywhere else in the documentation
- 5 associated with Bishayee-2 in which the number of cells are
- 6 referred to?
- 7 A It says approximately 4 million cells per ml, but
- 8 however I don't see any raw number to check whether it was
- 9 exactly 4 million cells per ml or not.
- 10 Q You're saying in Bishayee-2 there is no
- 11 documentation of the actual number of cells?
- 12 A That's right.
- 13 Q Okay. To your knowledge based on your
- 14 experience in performing these would there be any
- 15 significance to there being 3,997,333 cells as opposed to
- 16 4 million?
- 17 MR. FLYNN: Objection to form. You can
- 18 answer if you can.
- 19 A I can't tell. I don't know.
- 20 Q Looking at these documents, Bishayee-2, am I
- 21 correct that you performed this experiment?
- 22 A Yes.
- Q Can you tell me does the documentation

- 24 associated with this experiment indicate to you that there
- 25 was a decrease in survival or an increase -- I'm sorry. 0041
- 1 Strike that. That means, by the way, just disregard that
- 2 question. Okay?
- 3 A Just disregard.
- 4 Q With respect to the cells that were resuspended
- 5 just before the radiation, does the data associated with
- 6 this experiment indicate to you that there was a decrease in
- 7 survival and an increase in mutations?
- 8 MR. FLYNN: Objection to form. You can
- 9 answer.
- 10 A I see a lot of data. If you could specify the page
- 11 please, that would be helpful.
- 12 Q I guess if you're looking over here -- can you
- 13 tell me what part of your experiment relates to the cells
- 14 that were resuspended just before the radiation?
- 15 A Say it again?
- Q Can you tell me which page of this data relates
- 17 to cells that were resuspended just before the radiation by
- 18 this chart?
- 19 A No, I can't tell.
- Q Can you tell from this chart?
- 21 A I didn't create this chart so it would be hard for me
- 22 to interpret it.
- 23 Q You can't interpret it?
- 24 A No.
- 25 Q Do you know who created it?
- 0042

- 1 A No.
- 2 Q Who else could it have been if it wasn't you?
- 3 A I don't know.
- 4 Q Okay. Would it have been Dr. Howell?
- 5 A I don't know.
- 6 Q Would it have been Dr. Lenarczk?
- 7 A Could be anybody, but I don't know who.
 - Q You've never seen that chart before?
- 9 A I don't know.
- 10 Q These documents came by the way as a result --
- 11 came into our possession by the way as a result of a
- 12 subpoena that was issued by the United States Attorney's
- 13 Office for the District of New Jersey to the University for
- 14 all the lab books associated with the experimentation done
- 15 for this grant and you have no recollection as to whether
- 16 these documents comprised your lab notebook associated with
- 17 this experiment. Is that what you're telling me?

```
18
               MR. FLYNN: Objection is form.
19 A
        No. I'm telling you that I recognize the part that I
20 did, my handwriting is there, but I don't know much about
21 the other documents which are created not by me.
22
            I'm still trying to figure out given your
23 description earlier insofar as the experiments that you did
24 and what you then did with them, if it wasn't you -- and
25 this part of a document associated with this experiment --
0043
1 who else would it have been that created this chart on 7891
2 or 7892?
3
              MR. FLYNN: Objection.
        I can only tell that I did part of it and I provided
4 A
5 the data to Roger, Dr. Howell, and I don't know what
6 happened after that, who created which chart. That I have
7
   no idea.
8
       Q
            Are you telling me you never charted your
9 results of experiments?
10
               MR. FLYNN: Objection. Go ahead.
        I know I did the experiment and I collected the data
12 and I recorded it, and I don't have any recollection that I
13 made any chart.
14
       I know that I probably gave the raw data to Roger to
15 analyze and interpret, but I have no recollection in
16 regarding making this particular chart.
17
            Okay. But my question to you is more general.
18 Did you in the course of your experiments chart your
19 results? If not this particular experiment, were there
20 experiments where you undertook to chart your results?
         I might have done some but I don't know which one and
21 A
22 I don't know -- what I can tell, that this one is not
23 created by me.
24
            How can you tell? I'm curious. What is it
25 about that chart that convinces you that you did not prepare
0044
1 it?
        I see there are bunch of number of something called at
3 the top of that diagram --
4
           You're looking at 7891?
5
      I'm looking at 7891, and I see there are some specific
6 numbers and I don't know how these numbers were generated
   and what does it mean.
8
           Let's go to the back page, page 7900. You
9 identified that as your handwriting. Correct?
```

10 A

11

Right.

What does this data relate to?

```
12 A Counting some colonies.
13
            And when you look at that, what does that data
14 signify to you in terms of the results of your experiments
15 when you were counting these colonies? What was the
16 significance of the numbers that are set forth on this
17 chart?
18
               MR. FLYNN: Objection to form. You can
19 answer if you know.
20 A
        I see the colonies were all over the place. Some
21 particular tube dilution, the number was high and for some
22 other was low.
23
            Do these indicate to you there was a decrease in
24 survival or an increase in survival?
25
               MR. FLYNN: Objection to form.
0045
1
  A
        That depends which tube you're talking about.
2
           Does this data relate to cells that remained as
3
   clusters before and during the radiation?
4
              MR. FLYNN: Objection to form.
5
   A I cannot remember.
6
           Can you tell by looking at the documentation?
7
       Please repeat your question again?
8
            Would I be correct that this data shows that the
   suspended cells in this experiment produced mutants?
10
               MR. FLYNN: Objection to form.
11
   Α
         No, I can't.
12
       Q
            You can't tell?
13 A
        No.
14
            Can you tell whether the clustered cells in this
15 experiment -- well, let's go back.
16
           Look at the chart entitled Mutant Colonies, B
17 007899, bottom of the page. What's the significance of that
18 data under the heading halfway down, Mutant Colonies?
19
               MR. FLYNN: Objection to form. You can
20 answer it.
        Well, once again, all I can tell that there are
22 different -- difference in the number of colonies and that
23 leads to the different number of mutants per cell.
24
            So I asked you, this related to suspended cells
25 that were suspended. Correct?
0046
1 A
       I can't tell.
           Does this indicate to you that your experiment
2
3
   produced mutants?
4
              MR. FLYNN: Objection to form.
5 A
        I recorded whatever I saw but I cannot interpret. I'm
```

- 6 not a radiobiologist; I'm not specialized in mutation. So I 7 can't tell for that this is mutant or something different.
- 8 Q If you recorded what you saw how did you know 9 what you were looking for if you can't interpret it? I'm 10 confused.
- 11 MR. FLYNN: Objection to form.
- 12 A Well, probably I was told to just record whatever I
- 13 see on this plate, but I didn't know, you know, the
- 14 scientific depth about those issues.
- So I just recorded whatever I got and I documented the result and I gave it to Dr. Howell, and it's up to him to
- 17 interpret and analyze and use the way he want to.
- 18 Q So your testimony, so we're clear, is that in
- 19 your recollection with regards to' this experiment you would
- 20 have recorded the data as to what you saw during the course
- 21 of performing the various steps of this protocol and you
- 22 gave it to Dr. Howell to interpret?
- 23 A Right.
- Q Okay. Do you recall any other discussions with
- 25 him about this experiment?
- 0047
- 1 A No.
- 2 Q Is there anything else about this experiment
- 3 that you can tell me that you haven't identified?
- 4 A No.
- 5 Q Do you recall that this particular experiment
- 6 became the subject of a discussion before the University
- 7 Committee on Scientific Integrity?
- 8 A I can't recall.
- 9 O Do you recall when you appeared before the
- 10 Committee there was a question as to why the data in an
- 11 experiment that you performed was the opposite -- strike
- 12 that.
- Do you recall when you appeared before the
- 14 Committee on Scientific Integrity that the results of an
- 15 experiment that you performed were disparate from the
- 16 results that Dr. Hill had performed by doing the same
- 17 experiment?
- 18 A I recall there was some discussion about discrepancies
- 19 between the various experiment, but I don't recall whether
- 20 it's specific to this or some other experiment. I don't
- 21 know the specificity.
- Q Do you recall generally what the experiments
- 23 that caused you to come before the Committee to explain your
- 24 process and procedures related to?
- 25 A Right. The particular steps I did, how I did certain

- 1 experiments, all I recall there is some question and I
- 2 explained how I done experiments.
- Q Do you recall which experiment it was that they questioned you about?
- 5 A I think they asked me a lot of question. It was very
- 6 lengthy discussion so a lot of things were discussed, and I
- 7 don't have proper recollection of each and every one
- 8 specifically.
- 9 There was some question regarding experiment I did in
- 10 the lab. It could be mutation; it could be survival. I
- 11 don't know.
- 12 Q You don't recall sitting here today?
- 13 A That's right.
- 14 Q So to your recollection if the Committee's notes
- 15 identified the experiment or experiments they questioned you
- 16 about you would not take issue with the accuracy of those
- 17 notes, would you?
- 18 A Say it again?
- 19 Q If the notes of the Committee indicated that
- 20 this was an experiment they questioned you about, do you
- 21 have any reason to doubt the accuracy of the University's
- 22 notes?
- 23 MR. FLYNN: Objection to form. You can
- 24 answer.
- 25 A I really don't understand.
- 0049
- 1 Q In other words, if the Committee's records of
- 2 the interviews or interview with you indicate that there was
- 3 an experiment that they reviewed with you, you don't deny
- 4 that, do you?
- 5 MR. FLYNN: Objection. Go ahead if you
- 6 can answer it.
- 7 A The only thing that I can tell, that I would not
- 8 remember whether they asked me about the specific experiment
- 9 or something else, so I cannot differentiate exactly which
- 10 piece that day -- which experiment I performed on a specific
- 11 day was discussed during this procedure.
- 12 Q And the same question, if the Committee on
- 13 Scientific Integrity's records indicate that they had
- 14 interviewed you with respect to Bishayee Exhibit 1 is there
- 15 any basis on which you would deny that that was the case?
- MR. FLYNN: Objection to form. You can
- 17 answer it if you can.
- 18 A If they say they discussed with me, then I have --
- 19 then I think -- it's hard for me to rephrase.

```
20
       If they say they discuss something with me, then
21 probably they did.
       But only thing is, I don't know exactly for the
22
23 particular day when that was organized at the University it
24 was discussed or not, but probably they did but I cannot
25 remember.
0050
1
           Have you reviewed the Committee's notes of their
2 investigation of Dr. Hill's complaint about you?
       I was given the decision about the Committee and I
4 reviewed that. I don't recollect whether -- what the other
5 documents were provided to me so I don't have any
6 recollection of that.
7
            You don't have a recollection of reviewing the
8 minutes of the committee meetings in terms of who they spoke
9 to, what they reviewed, the process?
         No, I don't have the details of that, but I reviewed
10 A
11 whatever the final decision of the Committee.
            You got a letter I believe from Dr. Saporito was
12
13 it?
14 A
         Somebody from the University.
            Somebody from the University indicating what the
15
16 results of the Committee --
17 A
        That's correct.
18
            That's what you recall looking at?
19 A
        Yes.
20
       O
            Okay. I'm going to close this.
21
           Do you recall in or about October 1999
22 Dr. Howell relating that Dr. Hill had concerns about the
23 accuracy of the data that your experimentation was
24 producing?
25 A I have no recollection of that.
0051
           Do you recall having any conversations with
1
2 Dr. Hill regarding that subject at or about that time?
3
        No, I don't.
4
              MR. PINCUS: I need a five minute break.
5 Okay?
6
                (Recess taken.)
7
              (Exhibit BISHAYEE-3, Document -
8
       Experiment for 9/9/99, is marked for
9
       identification.)
10 CONTINUED DIRECT EXAMINATION
11 BY MR. PINCUS:
12
            Dr. Bishayee, I'm going to show you what's been
13 marked as Exhibit Bishayee-3. This appears to be protocol
```

- 14 associated with an experiment that you performed on
- 15 September 9, 1999. Correct?
- 16 A That's correct.
- 17 Q Okay. Now, would you take a moment to look at
- 18 this protocol? I'd like you to tell me do you know what a
- 19 P-100 is?
- 20 A Could you please help me identify --
- 21 Q I'm asking are you familiar with tubes that are
- 22 known as P-100s?
- 23 A I really can't tell. If you tell me where it is --
- Q Dishes, not tubes. I'm sorry.
- 25 A Are you referring to any particular line of this 0052
- 1 document?
- 2 Q No, I'm not at this moment.
- 3 A Okay.
- 4 Q Do you recall using certain dishes in the course
- 5 of your experiments that were known as P-100s? Does that
- 6 signify a size of some sort?
- 7 A Yes, but it's been nine years so I don't --
- 8 Q Tell me what you recall. What is a P-100?
- 9 A Could be a petri dish, that's for P, and for 100 I
- 10 don't recall what does it mean.
- 11 Q Looking at this protocol can you tell me whether
- 12 to do this experiment you would have used P-100s?
- 13 A No, I can't tell.
- 14 Q Can you tell me whether you used P-60s?
- 15 A That would be also difficult for me to answer because
- 16 I don't know what I used, and whether it's appropriate or
- 17 not, I don't know.
- 18 Q Can you tell me looking at the protocol whether
- 19 you would have used P-60s for this experiment?
- 20 A No.
- 21 Q You can't?
- 22 A No.
- Q Can you think of any uses during the course of
- 24 the experiments that you were performing at or about this
- 25 time that you would have used P-100 dishes?
- 0053
- 1 A No.
- 2 Q You have no recollection of using them?
- 3 A That's correct.
- 4 O You have no recollection?
- 5 A No.
- 6 Q If you used them would there have been records
- 7 of your use?

```
8
              MR. FLYNN: Objection to form.
9
           To your knowledge if you used P-100 dishes would
10 you have recorded that fact?
11 A
        I would not know whether that was required or not.
12
            What was your practice? Whether it was required
13 or not was it your practice to record the size dishes that
14 you used for experimentation?
15 A
         After nine years it is not possible for me to tell you
16 whether that was a key part of this experiment or not so I
17 don't know whether that was valuable information or whether
18 I didn't record or not.
19
            Can you tell me looking at this protocol, and
20 take as long as you need, whether this protocol called for
21 plating of cells in dishes?
         I don't see any survival assay so I don't know whether
23 that was part of this experiment or not.
24
            Does it indicate the protocol? Does it call for
25 plating of cells in dishes?
0054
1 A
      No, I don't see it.
2
            Okay. Now, let me call your attention back to
  Bishayee-2 for a moment please. In particular I'm looking
  at B 007896, your handwriting. There's a reference to
5 P-100s there, is there not?
6 A
        Yes.
7
            So is it fair for me to say you used P-100s for
8 plating in this experiment?
       That's what I recorded, but I don't know which one I
10 used and I don't have recollection of using what kind of
11 dish, what I can see from this.
            Your records would serve as a recollection that
12
       0
13 you used P-100s --
14 A
         Yeah, probably I did.
15
            -- at these steps of the procedure. Correct?
16 A
        Right.
17
               MR. FLYNN: Objection to form.
            Can you think of any other uses that you might
18
19 have used P-100 dishes for at or about this time?
20 A
        No.
21
            You can't.
       0
               MR. PINCUS: This would be Bishayee-4
22
23 please.
24
               (Exhibit BISHAYEE-4, Document, is
25
       marked for identification.)
0055
1
            I'm going to show you what's been marked as
```

```
2 Bishayee-4.
3
        Thank you.
4
            Would you take a moment to look at that?
5
              (Discussion held off the record.)
6
                 (Recess taken.)
7
   CONTINUED DIRECT EXAMINATION
   BY MR. PINCUS:
9
            Do you recall -- I took it away from you; I
10 didn't give you a chance to look at it and stuff.
           Looking at the protocol for this exhibit, do you
12 recall whether you would have used dishes that were size
13 P-60 as opposed to P-100s to perform this experiment? Can
14 you tell from looking at the protocol what would have been
15 your practice, sir?
16 A
        No, I can't.
17
            This did call for plating though, did it not?
18 A
        Yes.
19
            I'll take that. Do you recall an event in or
20 about March 2001 when Dr. Hill requested and you indicated
21 that you were going to give her some V79 cells which she can
22 do an experiment with?
23 A
        No, I can't.
24
            Do you ever recall telling her that there were
25 three flasks of V79 cells growing but you were unable to
0056
   give her the cells?
1
2
   Α
        No, I can't.
3
            Do you have any recollection of telling her at
4 or about this time that you had trouble with the Coulter
  counter and had lost all of the cells?
6 A
        Time to time I had trouble with the Coulter counter,
7 that probably I discussed with many people in the lab but I
   don't know the specificity of this incident.
9
            What kind of trouble did you have with the
10 Coulter counter?
11 A
        Clogging.
12
            Do you remember at or about this time having any
13 difficulties with the Coulter counter?
14 A
         Say it again please?
15
            Do you remember back in March of 2001 having
16 clogging problems with the Coulter counter?
17 A
        No. I can't.
18
            Is that something that you would have
19 memorialized in a document?
20 A
        No.
21
            Does that require, when you have clogging in a
```

- 22 Coulter counter, the counter to be serviced in any fashion?
- 23 A No. I asked Roger how to remedy it or what I should
- 24 do if it happens, and then he showed me.
- 25 Q What did he say or tell you to do? 0057
- 1 A To clean and open it up and just to try to remove the
- 2 clog and then start again.
- 3 Q How do you do that?
- 4 A I don't know. I don't have recollection about that
- 5 machine but it may be spray to remove the nozzle -- removal
- 6 of the obstruction to the nozzle or something that I really
- 7 forgot.
- 8 Q So do you remember telling Dr. Hill that the
- 9 trouble with the Coulter counter precludes you from giving
- 10 her some V79 cells?
- 11 A I cannot connect these two pieces together. I know I
- 12 had trouble with the Coulter counter.
- 13 Q Is it correct that you maintained or stored your
- 14 cells in a flask or flasks?
- 15 A Yes.
- 16 Q Your V79 cells in particular?
- 17 A Yes.
- 18 Q Do you remember how many cells you could harvest
- 19 from one flask?
- 20 A No.
- Q Do you remember what volume you suspended the
- 22 cells?
- 23 A No.
- Q Do you remember what size aliquot you used to
- 25 withdraw cells from?

- 1 A No.
- 2 (Exhibit BISHAYEE-5, Document -
- 3 Experiment for 11/12/98, is marked for
- 4 identification.)
- 5 Q Dr. Bishayee, I'm going to show you a document
- 6 that we've marked as Bishayee Exhibit 5. It appears to be
- 7 an experiment that you performed regarding -- a 100 percent
- 8 experiment involving tritiated thymidine that you performed
- 9 on November 12, 1998. Correct?
- 10 A That's correct.
- 11 Q Tell me what a 100 percent labeling experiment
- 12 is in your words please?
- 13 A Here all the cells were labeled with tritiated
- 14 thymidine.
- 15 Q Do you remember performing this experiment?

- 16 A Seeing the document it looks to me that I did, but I
- 17 don't recall doing this actually.
- 18 Q Is the handwriting on the various pages
- 19 comprising the document yours?
- 20 A Yes.
- 21 Q It is. Okay. So do you have any recollection
- 22 as to whether this was the first 100 percent tritium
- 23 experiment that you performed?
- 24 MR. FLYNN: Objection to form. You can
- 25 answer if you can.

- 1 A I can't tell.
- 2 Q In reference to time when the grant, you know,
- 3 came out, does that refresh your recollection, if I orient
- 4 you to time, as to whether this was the first tritiated
- 5 thymidine experiment that you performed?
- 6 A No. I can't.
- 7 Q Am I correct that this protocol indicates that
- 8 you incubated the cells overnight during their exposure to
- 9 tritium using something called a shaker?
- 10 A Yes.

- 11 Q What is a shaker please?
- 12 A It's simply an instrument which has the capacity to
- 13 shake any tube or any flask that is being placed on.
 - Q Why were you using it in this experiment?
- MR. FLYNN: Objection to form.
- 16 A I can't tell. It appears to me that it may help cells
- 17 to get the radioactive material for a good penetration or it
- 18 could be part of the inherent nature of the experiment that
- 19 we should use a shaker, but I don't know the specific reason
- 20 behind it.
- 21 Q You said that in the course of your working with
- 22 Dr. Howell, you know, you did experimentation regarding
- 23 survival. Do you remember?
- 24 A Yes.
- Q Do you know the distinction between in terms of 0060
- 1 survival when something is designated as exponential versus
- 2 biphasic?
- 3 A I don't recall the times that I discussed or not. I'm
- 4 not expert in radiobiology. I'm not expert in nature of
- 5 curves.
- 6 Q So you're telling me that you have no knowledge
- 7 of the terminology of when somebody described a survival as
- 8 showing an exponential rate of survival versus biphasic rate
- 9 of survival? Is that what you're telling me?

- 10 A I know what they mean but I don't have any
- 11 recollection that I discussed --
- 12 Q I didn't ask whether -- that wasn't my question.
- 13 That's why I wanted to come back.
- 14 A Okay.
- 15 Q My question is, are you familiar with the terms?
- 16 A I know what they mean.
- 17 Q Okay. Tell me what you understand an
- 18 exponential rate of decline to mean?
- 19 A If some responses are linear -- if one thing is
- 20 different than another in a linear fashion, that is called
- 21 exponential.
- If you increase the concentration and, you know, get
- 23 the O.D., optical density, if it goes up proportionally to
- 24 the concentration, that is exponential.
- 25 Q You would have essentially a straight line? 0061
- 1 A That's correct.
- 2 Or if it's an exponential decline, it would show
- 3 a straight line down?
- 4 A Right.
- 5 O -- depending on what the other variable was. Is
- 6 that correct?
- 7 A Yes.
- 8 Q Am I accurately reflecting your understanding?
- 9 A Yes. If something is different than on the other
- 10 factor in a linear fashion.
- 11 Q And biphasic, what does that mean to your
- 12 knowledge?
- 13 A It means if a curve is not straight but if the curve
- 14 has two patterns.
- 15 Q And that signifies what to your knowledge?
- 16 A That means initially the response is one type and
- 17 later on the response change.
- 18 Q So it may be that, you know, by way of example
- 19 you might show if there are increasing doses of radiation
- 20 you might have an initial linear response, and then as the
- 21 radiation increased over time it didn't have the same linear
- 22 response; the shape of the curve changed.
- In layperson's terms am I describing it
- 24 accurately? If not, I would like you to describe based on
- 25 the examples I gave you.
- 0062
- 1 A It would be hard for me to explain. There may be a
- 2 lot of issues related to that.
- 3 Q But the shape of the curve changes; it's not

- 4 linear anymore?
- 5 A That means the condition is not the same. Whatever
- 6 the initial stage, the condition for the second stage would
- 7 be different.
- 8 Q In pharmacology do you deal with functions that
- 9 are both exponential and biphasic?
- 10 A I probably studied in school what I don't use these
- 11 days so there may be some response.
- 12 Q So you're saying you don't encounter that at all
- 13 in pharmacology now?
- 14 A Not now.
- 15 Q But you studied it?
- 16 A There could be something which shows differential
- 17 nature of the curve.
- 18 Q This experiment that you performed, I'd like you
- 19 to turn to page B 001760 please?
- 20 A B0017 --
- Q 60, the last page. That has the chart. Did you
- 22 prepare that?
- 23 A I see my handwriting on the top so I would say yes.
- Q So it's fair to say that you prepared this
- 25 chart. Would it be correct based upon your explanations of 0063
- 1 exponential versus biphasic that the survival shown in this
- 2 chart are biphasic?
- 3 A Yes.
- 4 Q Do you recall whether this was what you had
- 5 expected to be the result of the your experiment?
- 6 In other words, when you performed this
- 7 experiment and based upon your review of the protocols, was
- 8 it your expectation that the survival would be exponential
- 9 as opposed to biphasic?
- MR. FLYNN: Objection to form. You can
- 11 answer.
- 12 A When I recorded whatever I found and I plotted the
- 13 data when -- it was Roger to interpret whether it fits into
- 14 a theory or not.
- 15 Q That wasn't my question though, Dr. Bishayee.
- 16 My question to you was, when you were going into the -- you
- 17 go into experiments sometimes expecting certain things to
- 18 happen and they might not happen or other things might
- 19 happen. Am I correct?
- 20 A Yes.
- 21 Q So when you went in to perform this experiment
- 22 did you commence it with the expectation that the survival
- 23 was going to be exponential as opposed to biphasic?

```
24
               MR. FLYNN: Objection to form.
25 A
        In the lab you don't expect. You just record whatever
0064
1 you are getting and then try to explain why it was so. So
   probably that was the case here.
           You said a moment ago that there are experiments
4 that you perform where you do have an expectation of how
5 things are going to turn out. So did you have any
6 expectations going into this experiment regarding survival?
7
              MR. FLYNN: Same objection. Go ahead.
8
        The expectation was to get the data without
   contamination and that's it.
            Did you have any expectation in regards to
10
   whether survival would be exponential versus biphasic?
13
       Q
            Do you recall sharing this with Dr. Howell, this
14 experiment?
15 A
        No.
16
            In giving your testimony in regards to the
       0
17 practice and procedure of the lab is it fair for me to say,
18 fair for me to conclude, that you would have provided
19 Dr. Howell with a copy of this data?
         Well, I recorded this experiment and I place in the
20 A
21 lab notebook and probably Roger saw it, but I don't really
22 recall any specific incident going to him and showing him
23 this data.
24
       O
            Do you have any recollection that Dr. Howell
25 told you that he had expected an exponential decline versus
0065
   biphasic survival?
1
2
   A
        No.
3
              MR. PINCUS: This will be 6 please.
4
              (Exhibit BISHAYEE-6, Document -
5
       Experiment for 11/30/98, is marked for
6
       identification.)
7
           Dr. Bishayee, I'm going to show you Bishayee-6.
   Would you take a moment to look at that please?
8
9
           Are you ready, Dr. Bishayee?
10 A
         Yes.
11
            Do you recognize this documentation as being in
12 regard to 100 percent tritiated thymidine experiment that
13 you performed on or about November 30, 1998?
14 A I recognize the document but I don't recall doing it
15 exactly.
```

But the handwriting comprising the documentation

16

Q 17 is yours?

- 18 A Yes.
- 19 Q If you would compare -- I'm going to take you
- 20 back to Bishayee-5 for the moment please, and in particular
- 21 I want to call your attention to B 001759. Do you see where
- 22 I'm referring to?
- That chart, Table 4, says Colony Counts and
- 24 Survival Fraction. Do you see where I'm referring to?
- 25 A Yes.

- 1 Q And what this shows is the various tubes.
- 2 They're listed. Correct?
- 3 A Yes.
- 4 Q And then if you go all the way to the far
- 5 righthand column there's a series of numbers. I take it the
- 6 first two, 1.2 and 2.2, are they controls? Do you know?
- 7 A Yes.
- 8 Q Okay. And then you go to the tubes 3.2 to 10.3?
- 9 A That's correct.
- 10 Q And you see all the way in the righthand column
- 11 there's a series of numbers under the column S.F.?
- 12 A Right.
- 13 Q What does that mean, what do those numbers
- 14 signify?
- 15 A S.F. for Survival Fraction.
- 16 Q I want you to look at the experiment that we
- 17 just marked as Exhibit Bishayee-6. Now, first of all would
- 18 I be correct before we -- you can look at that, but am I
- 19 correct that the protocols for these experiments appear to
- 20 be identical other than the fact that in the first one,
- 21 Bishayee-5, you use the shaker that we spoke of but in this
- 22 experiment you're using something called a rocker roller?
- 23 A Yes, I can see that.
- 24 O Am I correct?
- 25 A Yes.

- 1 Q So other than incubating the cells overnight
- 2 during their exposure to tritium and a rocker roller versus
- 3 a shaker these protocols are identical. Correct?
- 4 A I can't tell.
- 5 Q You can't tell by looking at the protocols?
- 6 A I have no recollection of doing each and every step
- 7 how I did these two.
- 8 Q Looking at what protocols suggest --
- 9 A Looking at the broad heading or title on the top it
- 10 looks like it's similar kind, but I don't know whether I
- 11 maintain each and every step identical or not.

- 12 Q But if you followed the protocols, other than
- 13 the distinction that I mentioned a moment ago I would be
- 14 correct that the protocols are the same. Right?
- 15 A The protocol has numerous steps, as many as 40, 40 in
- 16 each case, but I don't recall doing it exactly in the same
- 17 fashion or not.
- 18 Q Don't you write protocols so you follow them
- 19 during experiments?
- 20 A But we were kind of experimenting; we changed left and 21 right.
- This protocol are intricate details. As you can see,
- 23 only one thing has been marked roller versus shaker.
- I don't know whether there are any other changes or
- 25 not. I can't tell.

- Q Were you done?
- 2 A Yes, I'm done.
- 3 Q But you did make a notation to the fact that you
- 4 were using the rocker roller versus the shaker?
- 5 A That's correct.
- 6 Q So if you made changes in your protocols
- 7 wouldn't it have been your practice to make a notation to
- 8 that effect?
- 9 MR. FLYNN: Objection to form.
 - Q Isn't that good science, so that you have --
- 11 A That depends what would be the impact of changing to 12 the overall outcome.
- 13 Q Well, if you had to go back and account for what
- 14 you did how would you be able to tell what you did or didn't
- 15 do?

- 16 A It wouldn't significantly, you know, be related to
- 17 what I expect, then I probably would record like a lot of
- 18 things I recorded, but there are only small things which may
- 19 not be recorded.
- 20 Q So what you're saying is if a change in the
- 21 protocol is going to be significant you would make a
- 22 recording of that effect?
- 23 A Yeah. I made a judgment at a particular time
- 24 depending on the situation.
- 25 Q You'll notice to the protocols to this, if you 0069
- 1 look at Number 27 on each of these, these show that you were
- 2 using 60-millimeter petri dishes. Isn't that so?
- 3 A You're referring to line?
- 4 Q Twenty-seven in the protocol.
- 5 A Twenty-seven. Exhibit 5 or 6?

- 6 Q Both, both.
- 7 A Both. Okay. Twenty-seven.
- 8 Q They show, your labeling, that you're using
- 9 60-milliliter petri dishes. Isn't that what that says?
- 10 A That's what it says, yes.
- 11 O And in both of them. Correct?
- 12 A That's correct.
- 13 Q Now, earlier I had called your attention to the
- 14 survival data on page B 1747.
- 15 A Okay.
- 16 Q Am I correct that in this experiment the
- 17 survival factor is linear as opposed to biphasic?
- 18 A I can't tell.
- 19 Q You can't tell?
- 20 A No.
- 21 Q Aren't the numbers decreasing?
- 22 A That doesn't tell you whether it's exponential or
- 23 biphasic.
- 24 Q How do you determine that?
- 25 A It could be biphasic because -- it means nothing in 0070
- 1 terms of biphasic. If biphasic, all data would be lower
- 2 than the initial point.
- 3 Q Can you explain why this tube 10 in the first
- 4 experiment --
- 5 A I'm sorry?
- 6 Q In Bishayee-5.
- 7 A Okay.
- 8 Q And if you go to 1759, go to Tube 10, see where
- 9 the survival factor is 0.0853?
- 10 A That's right.
- 11 Q And then if you come to Bishayee-6, Tube 10 has
- 12 a survival factor of .0002.
- 13 A That's correct.
- 14 Q Other than the change between shaker and rocker
- 15 roller can you explain why survival is so different?
- 16 A No, I can't.
- 17 Q And you're telling me by that answer that you
- 18 interpret this survival data in Bishayee-6, in particular
- 19 1747, B 001747, you consider this to be biphasic as opposed
- 20 to linear?
- 21 MR. FLYNN: Objection to form.
- 22 A I can't tell.
- Q You can't tell. Do you recall having any
- 24 discussions with Dr. Howell regarding this experiment?
- 25 A No.

- mediums in regard to the experimentation done pursuant to
- 9 this grant?
- No. 10 A
- So you have no recollection of ever using 11
- 12 deoxycytidine?
- No. 13 A
- Did you make any attempt to synchronize the
- 15 cells before you started the experiment?
- 16 A I have no recollection.
- Do you know what synchronization is? 17 Q
- 18 A No.
- So is it fair for me to say that if you don't 19

```
20 know what synchronization of cells is that it's unlikely
21 that you engaged in any act to synchronize those cells?
```

- MR. FLYNN: Objection to form.
- 23 A Can you rephrase the question?
- Q Sure. You say you don't know what
- 25 synchronization of cells is. Is that correct? 0073
- 1 A That's correct.
- 2 Q So is it fair for me to say if you don't know
- 3 what it is you weren't engaged in doing that in regard to
- 4 any of the experimentation?
- 5 A No. That is not true. I don't know. Maybe I was
- 6 told to do certain steps and I have no recollection whether
- 7 I did and why I did.
- 8 Q Okay. So do you have any recollection of
- 9 Dr. Howell telling you to synchronize cells for any of these
- 10 two experiments, Bishayee-5 or 6?
- 11 A Don't recall.
- 12 Q Do you have any idea how you go about
- 13 synchronizing cells?
- 14 A No.
- 15 Q No idea whatsoever? Never read any literature?
- 16 A No.
- 17 Q Do you have any recollection of Dr. Howell
- 18 instructing you how to synchronize cells?
- 19 A No, no recollection.
- Q Do you have any recollection of Dr. Lenarczk
- 21 instructing you how to do that?
- 22 A No.
- Q Dr. Hill?
- 24 A No.
- 25 (Discussion held off the record.)
- 0074
- 1 (Exhibit BISHAYEE-7, Article, is
- 2 marked for identification.)
- 3 (Exhibit BISHAYEE-8, Article, is
- 4 marked for identification.)
- 5 Q I'm going to show you what we marked as
- 6 Bishayee-7. Do you recognize that document, sir?
- 7 A Yes.
- 8 O What is that?
- 9 A This is an article.
- 10 Q You coauthored this?
- 11 A Yes.
- 12 Q Is there any significance that your name is
- 13 listed first?

```
14 A I don't know.
```

- 15 Q You don't know?
- 16 A No.
- 17 Q I'm going to show you Bishayee-8. Do you
- 18 recognize that?
- 19 A Yes.
- Q And you coauthored this also, did you not?
- 21 A That's correct.
- 22 Q Along with Dr. Howell and another individual, a
- 23 Dr. Rao --
- 24 A Rao.
- Q R-a-o. Okay.

- 1 MR. FLYNN: Just to be clear, that had
- 2 more names on it.
- 3 Q Bishayee-7 shows there are other authors
- 4 including Dr. Hill, Dana Stein, Dr. Rao, Dr. Howell.
- 5 Correct?
- 6 A Right.
- 7 MR. FLYNN: This is 8. That's what I'm
- 8 saying. We're getting confused with 7 and 8.
- 9 MR. PINCUS: Oh, I'm sorry. Bishayee-8.
- 10 My apologies. Let me go back, clear up the record.
- 11 Q Bishayee-7 has your --
- 12 A Correct.
- 13 Q Bishayee-8: Yourself, Dr. Hill, Dr. Stein,
- 14 Dr. Rao, and Dr. Howell. Correct?
- 15 A Yes. Right.
- Q You read this and you're familiar with it, this
- 17 article?
- 18 A Yes.
- 19 Q I want to call your attention to Figure 3 on
- 20 page 402.
- 21 A Okay.
- Q Would I be correct that this figure among other
- 23 things depicts the 100 percent survivals of V79 cells as a
- 24 function of cluster activity of tritiated thymidine?
- 25 A We're looking at the legend. It shows that either 0076
- 1 50 percent or 100 percent of the cells were radio labeled in
- 2 multicellular clusters. So it's 100 percent and 50 percent,
- 3 not only 100 percent.
- 4 Q And this figure shows that with regard to the
- 5 100 percent survivals, the survivals were exponential, isn't
- 6 that so?
- 7 MR. FLYNN: Objection to form. Go ahead.

- A I can't interpret the data here and I don't see the 9 top part very clear so I can't tell. 10 You wrote this, did you not? 11 A No. I just did the experiment and I provided data to 12 Dr. Howell, and he probably wrote this thing. 13 To your knowledge were all of the 100 percent 14 experiments that are reported in this paper done by you? 15 A I don't know which data he used. I did the experiment 16 and I gave data to Dr. Howell and that's all I know, but I 17 don't know which data he used to put in this paper. 18 Are you aware of any other 100 percent 19 experiments that were used to prepare this paper other than 20 Bishayee-5 and 6 that I showed you a few moments ago? 21 A Once again, I did the experiment and I provided data 22 to him. I don't know what he did next. 23 So are you aware of performing any other 24 100 percent experiments prior to the time this paper was 25 performed? 0077 1 A No, I have no recollection. 2 And to the extent there were such 100 percent experiments done, if I understood your testimony regarding your practice and procedure those experiments would have 5 been placed in your lab notebook. Correct? 6 Α Say it again? 7 MR. PINCUS: Read that back please. 8 (The preceding question is read by the 9 court reporter.) Well, whatever experiment I did I have recollection 10 A 11 that I recorded the data, and that's all I can say. If I 12 did an experiment, I would record that. 13 But I don't know what was in the paper, which data, 14 and those data came from which experiment. I have no --15 My question to you was, if you performed 16 100 percent experiments as we've been describing them here, 17 those experiments would have been placed by you in your lab 18 notebook? 19 A I think so. 20 Okay. And other than the two experiments that 21 we have identified here are you aware of any other 100 percent experiments that you performed for Dr. Howell 23 before such time as this article was published? 24 MR. FLYNN: Objection to form. Go ahead.
 - Q Let's go to Bishayee-8 for a moment please if

I have no recollection.

25 A

```
2 you would?
3 A
        Okay.
           If you turn to Figure 1 please? You can look at
5 Figure 2 on documents -- well, the page numbers 337 and 338.
6 It's the page number of the article rather than the Bates
7 stamp; I just thought it might be easier.
8
          See Figure 2 where I'm referring to? Now,
9 again, did you have any responsibility for preparing these
10 figures?
11 A No.
12
       0
            Are you aware of whether your experiments, the
13 100 percent experiments, were used for purposes of creating
14 this?
15 A
        No.
            Are you aware of any other 100 percent
16
17 experiments that you performed other than Bishayee-5 and 6
18 prior to the time that this document was prepared?
19 A
        No.
20
            Let's leave this on the side for the moment.
       0
21 A
       Do you mind if I take a break?
22
                 (Recess taken.)
23
              (Exhibit BISHAYEE-9, Document -
24
       Experiment for 7/16/01 is marked for
25
       identification.)
0079
1
              (Exhibit BISHAYEE-10, Document, is
2
       marked for identification.)
3 CONTINUED DIRECT EXAMINATION
4 BY MR. PINCUS:
5
           Dr. Bishayee, I'm going to show you what we've
6 marked for identification as Bishayee Exhibit 9. This is a
7 100 percent tritiated thymidine experiment that was done
8 apparently by Dr. Howell on or about July 16, 2001. Have
9 you ever seen this document?
        I can't tell whether I have seen it. Now I'm seeing
11 it, it looks like he did the experiment and it has been
12 documented.
13
            You were still employed in the lab in late July,
14 correct, 2001?
15 A
        Yes.
            Are there any notations or handwritings on any
17 of the documents comprising this exhibit which are in your
18 handwriting?
19 A
        I don't see any.
20
            Okay. If you'd look at page 7455?
21 A Okay.
```

```
Q It's Survivals. Do those appear to show a
```

- 23 biphasic as opposed to exponential decline?
- 24 A There are two figures.
- 25 MR. FLYNN: Objection to form.

- 1 A Which one are you referring to?
- 2 Q The little square, the corrected one.
- 3 A The top one or the bottom one?
- 4 Q It says "corrected," which is a little square.
- 5 The upper one. I apologize.
- 6 A Okay. I don't see any lines so I can't tell.
- 7 Q You can't tell looking at that data at all?
- 8 A That's correct.
- 9 Q What about the next page, 7456, same question.
- 10 Can you tell?
- 11 A 7456, once again, which one, top or bottom?
- 12 Q Top.
- 13 A Top. I can't tell whether it is biphasic or
- 14 exponential.
- 15 Q I'm going to show you Bishayee-10. Have you
- 16 ever seen this document before?
- 17 A I don't recall.
- 18 Q If you would, I'd like you to go to page 7485
- 19 and again, the upper chart. Can you tell me whether the
- 20 data representing in that chart show an exponential or
- 21 biphasic --
- 22 A I can't tell.
- Q Can you tell at all by the survival data that's
- 24 to the left of the chart?
- MR. FLYNN: Objection to form. You can 0081
- 1 answer it.
- 2 A Would you repeat the question please?
- 3 Q Can you tell whether looking at that data
- 4 survival is biphasic or exponential?
- 5 A No, I can't.
- 6 Q Okay. Thank you very much. Let's go back to
- 7 Bishayee-6 for a moment please. Never mind. I'm sorry.
- 8 A It's all right.
- 9 MR. PINCUS: This will be 11, 12, and 13.
- 10 (Exhibit BISHAYEE-11, Document 50%
- Experiment 4/29/01, is marked for
- identification.)
- 13 Q Before I show you 11 I'd like to go back to 10
- 14 please for a moment, Dr. Bishayee.
- 15 A Sure.

- 16 Q Do you have any recollection of Dr. Howell
- 17 sharing with you the results of this experiment?
- 18 A Yes.
- 19 Q Really? When did that occur?
- 20 A I don't know.
- 21 Q Okay. This experiment, were you employed at the
- 22 time that he shared this with you?
- 23 A I don't know whether this experiment was done while I
- 24 was there or I left.
- Q Going by the date of the experiment, 0082
- 1 September 27, '01 -- can you see where I'm looking in the
- 2 upper righthand corner?
- 3 A Yes.
- 4 Q Based on the time frame that you outlined to me
- 5 you were no longer employed in the lab by this point in
- 6 time, September of 2001. Is that correct?
- 7 A September -- I don't know exactly when I resigned. If
- 8 you refresh my memory --
- 9 Q I'm going to represent to you it was about
- 10 July 31 or August 1 of 2001.
- 11 A Okay. If my resignation date is prior to this date
- 12 then I would not know that Dr. Howell discussed with me or
- 13 not.
- When I was there I know there was some experiment was
- 15 done that didn't match what I got so I cannot tell about
- 16 specific -- this experiment or some prior experiment.
- 17 Q But you recall that an experiment was done that
- 18 didn't match with the results of your experiment.
- 19 A Correct.
- 20 Q Correct? Now let's first talk about your
- 21 experiment.
- Do you recall whether it was a 100 percent
- 23 experiment or 50 percent experiment that we're talking
- 24 about?
- 25 A I can't tell.

- 1 Q Do you recall whether your experiment showed an
- 2 exponential decline in survival as opposed to a biphasic
- 3 decline in survival?
- 4 A All I can recall, that some of my experiment couldn't
- 5 be reproduced the way I did but I don't recall the
- 6 specificity of the particular experiment.
- 7 Q And who was doing the other experiment? That
- 8 was Dr. Howell?
- 9 A Which experiment?

```
10
            You say you learned that the results of an
11 experiment or experiments that you had performed could not
12 be replicated. Is that fair?
13 A
        Right, right.
14
            Somebody else had tried to do that. Who was
15 that person? Was it Dr. Howell?
        I don't know who did the experiment. Could have been
17 Dr. Howell, could be Lenarczk. I don't know which two we
18 are talking about.
19
            But what you do recall, if I understood you
20 correctly, was that their results were different from your
21 results?
22 A
        That's right.
23
            And you don't remember whether their results are
24 biphasic or exponential?
25 A
        No.
0084
1
       O
           How about a time frame? Do you remember when it
   was that you learned that somebody was trying to replicate
   your experiments? When was that?
4 A I don't know.
5
           Do you remember whether if we go back to
6 Bishayee-11 -- I don't think that's right in fairness to
   you, sir.
8
          If we go back to Bishayee-9, do you recall
9 whether this was the exhibit that was discussed with you, or
10 the experiment that was discussed with you, or again are you
11 not sure?
12 A
         I can't tell which particular one was discussed with
13 me.
14
            All right. I'm going to show you Bishayee-11.
15 This is a 50 percent experiment as opposed to 100 percent
16 experiment?
17 A
         Correct.
18
            Right?
       Q
19 A
        Right.
20
            That appears to have been performed on or about
21 April 19, 2001. This doesn't, on the face of the document
22 7383, indicate an investigator, but if you go back to 7390
23 you see Dr. Howell's name listed as an investigator.
24 A
         7390, okay.
25
       O
            Sir?
0085
1 A
        Yes.
```

See where I'm referring to?

3 A Yes, I can.

- 4 Q What is this page? Can you identify what this
- 5 is as part of this experiment data?
- 6 A You're talking about this page, B 007390?
- 7 Q Yeah. Do you recognize this?
- 8 A No.
- 9 Q Have you ever seen any documentation associated
- 10 with these experiments?
- 11 A No.
- 12 Q Did you ever use an Excel program in terms of
- 13 setting forth or plotting or describing the data in any of
- 14 your experiments?
- 15 A No, I can't.
- 16 Q You can't or you didn't? Did you use an Excel
- 17 program?
- 18 A I don't recall whether I did or not.
- 19 Q So do you recall whether you've seen this
- 20 document? You saw this document?
- 21 A I don't know whether I saw it before or not.
- Q Do you recall having any discussions about a
- 23 50 percent experiment that Dr. Howell performed on April 19,
- 24 2001?
- 25 A No, I don't.

- 1 Q Does this refresh your recollection at all
- 2 insofar as whether Dr. Howell advised that he was trying to
- 3 replicate your 50 percent experiment as opposed to
- 4 100 percent experiments?
- 5 A No.
- 6 Q Okay. If you look at page 7394, the upper --
- 7 can you tell me whether the data there is, by way of
- 8 survival, shows an exponential versus a biphasic survival?
- 9 MR. FLYNN: Objection to form. You can
- 10 answer.
- 11 A Which figure are you talking about?
- 12 Q The upper one, this one here. Can you tell now?
- 13 A I can't tell.
- 14 O You can tell?
- 15 A I can't tell.
- 16 Q You can't?
- 17 A Yes.
- 18 Q There's a line here. I thought that might help
- 19 you.
- 20 A It depend on how you draw a line. I can make it
- 21 biphasic; I can make it exponential. It depend on how you
- 22 draw the line.
- Q What do you mean by "I can make it biphasic" or

```
24 "exponential"?
         Can I show you on a piece of paper or directly on this
0087
1 document?
2
           No. I don't want you to write on that.
3
        Okay.
4
       O
            You can use my pen.
5
       It might not be accurate representation. I can -- it
  could be both curve. If I draw a line, then the line would
7 be like this. If I draw the line the way I did, so you can
8 get two curves.
       Q
           Okay.
10
               (Exhibit BISHAYEE-12, Diagram, is
11
       marked for identification.)
12
               MR. PINCUS: So B-12 is the handwritten
13 diagram drawn by Dr. Bishayee.
14
            Go back on Bishayee-11 if you would please,
15 7387. Do you see where it has Coulter counts here?
16 A
         Yes.
17
       Q
            Is that your handwriting?
18 A
        No.
19
            Do you recognize whose that is?
20 A
        Possibly Dr. Howell's.
21
            Fair enough.
22
               MR. PINCUS: This will be 13.
23
               (Exhibit BISHAYEE-13, 50% Experiment -
24
       5/3/01, is marked for identification.)
25
            Dr. Bishayee, I realize some of this is tedium
0088
1 and I apologize, but I got to go through it. All right?
        Do it. We're all here to do our job.
           I'm going to show you Exhibit Bishayee-13. It
4 appears to be a 50 percent experiment performed by
5 Dr. Howell on May 3, 2001. Do you recognize this document?
6
  Α
        No, I don't.
7
           I'd like you to look through the various pages
  and tell me if you can identify any of the handwritten
9 comments that are yours, if any?
10 A
        I haven't seen any.
            Okay. Do you have any recollection of
11
12 Dr. Howell sharing this experiment with you?
13 A
        No.
14
       Q
            You were working in the lab at this point in
15 time still. Correct?
16 A
         The date shows, yes.
17
            You were still employed in the lab. Correct?
```

- 18 A That's correct.
- 19 Q Do you have any recollection of Dr. Howell
- 20 discussing that the results of this experiment differed from
- 21 the results that were reported in the publications?
- 22 A Not specifically that, but there was some discussion
- 23 about some of the experiment by either him or somebody else
- 24 that he didn't match what I got.
- Q What did he tell you in that respect? Tell me 0089
- 1 the discussion as best you can recall.
- 2 A Okay. Some of the experiment he did, or somebody
- 3 else, didn't show the same result that I observed, so.
- 4 Q Did he tell you that he had been ordered to
- 5 perform those experiments?
- 6 A I'm sorry?
- 7 Q Did he indicate to you why he was performing
- 8 these experiments?
- 9 A No.
- 10 Q Did he tell you that he had been ordered by
- 11 anyone in the University to do that?
- 12 A No.
- Q Did he ever tell you that Dr. Raveche -- do you
- 14 know who Dr. Raveche is?
- 15 A Yes.
- 16 Q Who is she?
- 17 A She's one of the faculty at UMDNJ.
- 18 Q Did Dr. Howell ever indicate to you that he had
- 19 been instructed by Dr. Raveche to perform any of these
- 20 experiments?
- 21 A No.
- Q So you don't recall discussing this experiment
- 23 or the results of this experiment?
- 24 A That's right.
- MR. PINCUS: That will be 14.

- 1 (Exhibit BISHAYEE-14, 50% Experiment -
- 2 6/28/01, is marked for identification.)
- 3 Q Dr. Bishayee, I'm showing you what I've marked
- 4 as Bishayee Exhibit 14 it appears to be a 50 percent
- 5 tritiated thymidine experiment done by Dr. Howell on or
- 6 about June 28, 2001. Do you recognize this document?
- 7 A I see it now but I don't recall.
- 8 Q If you would be so kind as to look at the
- 9 various pages on which there is handwriting? Are any of
- 10 those handwritten comments authored by you?
- 11 A I don't see any.

```
12
            Do you recall having any discussions with
13 Dr. Howell about this experiment?
14 A
        No.
15
       O
            You indicate that this was an experiment that he
16 had performed for purposes of determining whether he could
17 replicate the experiments that you had performed.
18
              MR. FLYNN: Objection to form.
19 A
        No, I don't recall.
20
            If you would look at page 7430, the upper chart
21 as I've been asking you, can you tell me whether the data
    set forth there shows a biphasic as opposed to exponential?
23 A
        No.
24
       Q
            You can't. Okay.
25
              MR. FLYNN: I object to the question but
0091
1 it's fine that you answered.
2
              MR. PINCUS: We'll mark that 15.
3
              (Exhibit BISHAYEE-15, 50% Experiment -
4
       1/11/99, is marked for identification.)
5
           Dr. Bishayee, this appears to be an experiment,
6 a 50 percent tritiated thymidine experiment that you
7 performed on or about January 11, 1999. Is that correct?
8 A
        Correct.
9
           I take it that the handwriting on the documents
       Q
10 comprising this exhibit are all yours?
11 A
        Yes.
12
            Can you tell me what the results of this
13 experiment were by way of survival? To your knowledge was
14 it exponential or biphasic?
        Can't tell.
15 A
16
            Where were you looking to determine that?
       O
17 A
        Survival fraction.
18
            B 012289?
19 A Yes, B 012289.
20
       Q For purposes of seeking to determine whether
21 survival was exponential versus biphasic the data you relied
22 upon was the column S.F. or survival fraction?
23 A
        That's correct.
            And you can't tell?
24
25 A
       No, I can't.
0092
1
           Do you recall learning of the fact that there
2 came a point in time where Dr. Hill and Dr. Lenarczk had
3 been observing an experiment that you were performing in
4 about March of 2001?
5 A
        No.
```

- 6 Q You never learned of that?
- 7 A I learned later but I didn't know that at the time.
- 8 Q Not at the time. When did you learn of it?
- 9 A I don't know exactly when.
- 10 Q Did you learn of it after such time as a
- 11 complaint was lodged with the Committee on Scientific
- 12 Integrity, or was it before that?
- 13 A I don't know the time sequence.
- 14 Q And so do you recall the experiment that you
- 15 were advised that they had observed you performing, what it
- 16 was about?
- 17 A No.
- 18 Q You don't have any recollection of it?
- 19 A Not for any particular experiment. Somebody's -- I
- 20 didn't have any recollection about others observing me doing
- 21 any particular experiment.
- Q Do you recall there being a question about
- 23 certain tubes being left in an incubator?
- 24 A Yes.
- Q What do you recall about that?
- 0093
- 1 A As part of the University investigation and the
- 2 committee I appeared before they asked me about some
- 3 question about the tubes in the incubator.
- 4 Q And they questioned you about the fact that
- 5 when -- apparently the tubes that you were using during your
- 6 experiment, you were going to take them to a machine known
- 7 as a FACS, F-A-C-S, for separation. Correct?
- 8 A Right.
- 9 Q And that apparently when you went to get those
- 10 tubes you related there was still a rack of your tubes in
- 11 the cold incubator. Correct?
- 12 A Right.
- 13 Q Am I right that's your recollection?
- 14 A I didn't -- actually I don't really recall saying
- 15 me -- that was part of the discussion. I don't recall what
- 16 are the specific questions were asked.
- 17 Q But you do recall the subject coming up at th
- 18 Committee?
- 19 A All I recall, that there is some issues with the tubes
- and the cold temperature.
- 21 Q You told them that you believed those tubes were
- 22 for another experiment. Correct?
- 23 A I don't recall that.
- 24 Q And do you recall there being a question as to
- 25 where the protocol for that experiment was and that you were

```
0094
1 unable to produce that? Do you recall anything of that
2 nature?
3
   A No, I don't.
4
           You have no recollection of that?
5
  A No recollection it was asked.
6
           If there is a reflection of this dialogue
7 between you and the Committee in the minutes of the
8 investigation sitting here today you have no other
9 recollection of that discussion other than what might be set
10 forth in those minutes. Is that fair to say?
               MR. FLYNN: Objection to form. Go ahead
11
12 if you can.
13 A
         You're asking me if I see the minutes it may refresh
14 my memory about this specific question that was asked to me
15 and how I answered that?
16
            Do you have any recollection of being asked to
17 produce protocol for an experiment that you indicated you
18 were doing, and were unable to produce such a protocol?
19 A
         I don't recall anything. Once again, if I am given
20 more information maybe I can tell.
21
               (Exhibit BISHAYEE-16, 50% Experiment -
22
       3/19/01, is marked for identification.)
23
               (Discussion held off the record.)
24
25
                 (Recess taken.)
0095
1 CONTINUED DIRECT EXAMINATION
  BY MR. PINCUS:
3
       Q I'm going to show you what's been marked as
4 Bishayee-16. This appears to be an experiment that you
5 performed on March 19, 2001. Again, a 50 percent. Do you
6 recognize this document?
        It seems my handwriting so it appear it is documented.
7 A
8 I don't recall about doing it.
9
           But the handwriting that's on this document is
10 yours. Is that correct?
11 A
        That's correct.
12
       O
            Let's put that aside.
13 A
        Okay.
            Now, we were talking about your leaving
15 Dr. Howell's lab earlier today. I indicated to you that
16 that took place on or about July 31 or August 1.
17
           Do you recall at or about the time that you
18 determined -- it was determined that you were leaving
19 Dr. Howell's lab having lunch with Dr. Hill in a church?
```

- 20 A Yes.
- O What's the name of that church?
- 22 A Priory.
- 23 Q And was anyone else present other than you and
- 24 she?
- 25 A No.

- 1 Q Did she ask you to go to lunch with her or did
- 2 you ask her to go to lunch?
- 3 A She asked me to go to lunch.
- 4 Q You didn't feel uncomfortable going to lunch
- 5 with her?
- 6 A Initially I did and then I thought it would be nice to
- 7 go and see what's happening.
- 8 Q Okay. So what do you recall discussing with her
- 9 during that lunch?
- 10 A Well, the discussion was what is going on, what I was
- 11 going to do, resign from the lab, and discussion about my
- 12 future, what I should do.
- Dr. Hill indicated Roger fired you so we should -- you
- 14 should take action against him, so Roger is a bad guy, you
- 15 should bring something against him.
- 16 Q So let's go over this again. Tell me again
- 17 please as best you can recall?
- 18 A She asked me about what happened in the lab. I said
- 19 that I resigned, and she indicated that Roger didn't like me
- 20 to be in the lab so he used me and then he's kicking me out
- 21 from the lab and I should bring something against him.
- Q Okay. So Dr. Hill asked you what had happened?
- 23 A Yes.
- Q And you said you had resigned?
- 25 A Yes.

- 1 Q And then you said that Dr. Hill said that Roger
- 2 didn't like you?
- 3 A Yes. Roger didn't want me to be in the lab so he's
- 4 kicking me out from the lab and I should be doing something.
- 5 Q You should be doing something in terms of what?
- 6 A In terms of -- that the way he behaved was not right
- 7 so I should do something.
- 8 Q Do you recall whether the decision to resign was
- 9 yours or Dr. Howell's?
- 10 A It was mine.
- 11 Q Why did you resign?
- 12 A Well, the environment was not very good for me. I
- 13 realize that tenured faculty was fighting left and right,

- 14 and as a young investigator who just started the career it
- 15 was not very pleasant environment to do the research and to
- 16 do the job.
- 17 So the atmosphere was very bad and I decided to leave
- 18 to get rid of this kind of hostile environment.
- 19 Q And who was the atmosphere bad between?
- 20 A Between Dr. Hill and Dr. Howell.
- 21 Q Did you know the reason or reasons why --
- 22 A No.
- 23 Q -- they had bad feelings?
- 24 A No.
- Q Did Dr. Howell ever tell you that the atmosphere 0098
- 1 was bad because of you?
- 2 A No.
- 3 Q Did he tell you that the atmosphere was bad
- 4 because of anything that Dr. Hill was doing to you?
- 5 A I recall that he said that Dr. Hill doesn't like me to
- 6 be in the lab.
- 7 Q That she doesn't like you being in the lab?
- 8 A Yes.
- 9 Q Did he go into any details or explain the basis
- 10 on which -- the factual basis on which he was making that
- 11 statement?
- 12 A No.
- Q Okay. So he didn't indicate any event or events
- 14 that led him to believe that Dr. Howell didn't want you in
- 15 the lab?
- 16 A Yeah. He didn't give me any specificity or what --
- 17 the overall situation was not pleasant so it was -- it was
- 18 very clear to me. I didn't need his explanation to
- 19 understand.
- MR. FLYNN: I want to check because the
- 21 question, the way it was phrased, that Howell didn't want
- 22 Howell to be in the lab with you. If we read it back --
- 23 MR. PINCUS: If it was, it should be
- 24 amended to reflect that Hill didn't want -- Dr. Hill didn't
- 25 want Dr. Bishayee to be in the lab. Thank you for 0099
- 1 clarifying that if I misstated that.
- 2 Q You say it was very clear to you. What was very 3 clear to you?
- 4 A The environment was not good for me.
- 5 Q Was it very clear to you that Dr. Hill did not
- 6 want you in the lab?
- 7 A I was told about that. I didn't hear directly from

```
8 her.
           Who told you that?
9
       Q
10 A
       Dr. Howell.
11
            But you never heard Dr. Hill state to you
12 directly that she didn't want you in the lab. Correct?
13 A
        That's correct.
14
            She never said any words to that effect to you.
       Q
15 Correct?
16 A
        No, not directly.
17
           Did she always treat you politely?
18 A
        Yes, she did.
19
       Q Did she manifest any behavior toward you that
20 you found to be hostile?
21 A
        I'm sorry? Say it again.
22
            Did she manifest any behavior, physical, verbal
23 or otherwise, to you that you found to be hostile?
              MR. FLYNN: Objection to form. Continue.
24
25 A
        That I found she was hostile to me?
0100
1
       Q Yeah.
2
   A Okay. No.
           She never behaved that way to you?
4
  A No.
5
       Q
           Did she ever make any comments about your
6 national origin or ethnicity to you?
7
   A
       No.
8
           Is it fair for me to say if she had made such a
9 comment or comments about your national origin or ethnicity
10 to you you would remember that?
11 A Yes, I would.
12
            Did anybody relate to you that Dr. Hill had made
13 such comments about you?
14 A
        I'm sorry? Say it again?
15
            Did anybody ever say to you that Dr. Hill made
16 comments about your national origin or ethnicity?
17 A
        No.
18
       Q
            Dr. Howell never related that to you?
19 A
        No.
20
       Q
            Did Dr. Azzam ever say anything to you about
21 that?
22 A
        No.
23
            Did doctor -- are you familiar with an
24 individual by the name of Rameswar?
25 A
        Yes.
0101
1
           Can you spell that please?
```

- 2 A R-a-m-e-s-w-a-r.
- 3 Q What was her position?
- 4 A At the time he was a faculty with UMDNJ.
 - Q Did Dr. Rameswar ever indicate to you that
- 6 Dr. Hill had made statements about your national origin or 7 ethnicity?
- 8 A I can't recall.

- 9 Q So let's get back to this luncheon. Do you
- 10 recall during the course of that luncheon saying to Dr. Hill
- 11 that you were sorry that you had hurt her?
- 12 A Yes, I said that.
- 13 Q Why did you say that to her? What were you
- 14 talking about?
- 15 A Yes. I was a little surprised when she called me for
- 16 the luncheon and she said that we need to talk.
- 17 At that time I was not sure about her motive, what she
- 18 was trying to do to me. I heard that she doesn't want me to
- 19 be in the lab, and now she's calling me for luncheon so I
- 20 was very worried. So I was trying to get some information
- 21 to know what's coming for me next.
- Q Okay.
- 23 A So I didn't want to argue anything; rather, I wanted
- 24 to become very polite and to understand what she's trying to
- 25 do and what she wants me to do.

0102

- 1 Q So I understand that, then you say that you
- 2 recall saying to Dr. Hill that you were sorry that you hurt
- 3 her. In what way did you think you had hurt her?
- 4 A I didn't hurt her in any way but the whole atmosphere
- 5 was very unfriendly so I said if I did anything wrong to
- 6 you, you know, just as a nice gesture, to be friendly with
- 7 her and know what's in her mind.
- 8 Q I'm not there; you are. So I hear a statement
- 9 that you admit making and I'm trying to understand what was
- 10 your thinking behind making that statement.
- 11 A Thinking was just to behave as friendly and to get as
- 12 much information as I can of because I didn't know what she
- 13 was thinking.

- (Exhibit BISHAYEE-17, Memorandum dated
- 15 7/30/2001, is marked for identification.)
- 16 Q I'm going to show you what we marked
- 17 Bishayee-17. Do you recognize that?
- 18 A That is my resignation letter.
- 19 Q Now, do you recall in the course of this
- 20 luncheon at The Priory with Dr. Hill telling her that
- 21 Dr. Howell handed you this letter of resignation and told

- 22 you to sign it?
- 23 A I don't recall exactly saying that but it was part of
- 24 a discussion that I resigned from the lab.
- 25 Q Did you prepare this letter of resignation? 0103
- 1 A No.
- 2 Q Who did, to your knowledge?
- 3 A Dr. Howell did.
- 4 Q So tell me as best you can recall the discussion
- 5 you had with Dr. Hill during this lunch about your letter of
- 6 resignation. What did you tell her? What did she have to
- 7 say, if anything?
- 8 A I don't recall exactly the conversation in detail.
- 9 What I was trying to accomplish there, to know what she was
- 10 up to, and I told that I resigned from the lab and that's
- 11 it. It was part of the discussion.
- 12 Q Did you tell her that you had been afraid not to
- 13 sign the letter lest Dr. Howell would not give you any
- 14 recommendations?
- 15 A I don't recall that.
- 16 Q Do you have any recollection at all of
- 17 discussing recommendations with Dr. Hill during the course
- 18 of this luncheon?
- 19 A I don't recall.
- Q By the way, had Dr. Howell told you that he
- 21 wouldn't give you a recommendation unless you signed this?
- 22 A I don't recall.
- Q No recollection whatsoever of any discussions
- 24 with Dr. Howell about letters of recommendation; is that
- 25 your testimony?
- 0104
- 1 A Yes. I don't have any recollection about the
- 2 specific.
- 3 Q At the time you signed this letter of
- 4 recommendation did Dr. Howell --
- 5 A I'm sorry. It's letter of resignation.
- 6 Q Resignation. Did I say letter of
- 7 recommendation? I'm sorry. I apologize.
 - Did you tell Dr. Hill that you'd been instructed
- 9 by Dr. Howell not to come on campus after resigning?
- 10 A I don't recall.
- 11 Q Do you remember telling Dr. Hill that Dr. Howell
- 12 had taken your keys away?
- 13 A I don't recall.
- 14 Q Do you remember telling Dr. Hill that Dr. Howell
- 15 had taken your ID away?

```
I don't recall.
16 A
17
               MR. FLYNN: I'm just going to put an
18 objection to the way you're asking the questions. You're
19 saying "do you remember" saying it as if he said it.
20
               Do you have a recollection of saying it
21 would be more proper.
22
               MR. PINCUS: Fair enough.
23
            So do you have a recollection of saying any of
24 those statements?
25 A
        No, I don't have a recollection.
0105
1
            Do you have a recollection of telling Dr. Hill
   that Dr. Howell told you not to apply for research positions
   on campus, campus being UMDNJ?
        No, I don't have.
5
            Had Dr. Howell told you not to apply for
  research positions on campus?
7 A
       I don't recall.
8
            Do you have a recollection of telling Dr. Hill
9 that Dr. Howell told you not to apply for research positions
10 in radiation biology anywhere, that would be UMDNJ or any
11 other campus or facility?
12 A
         I don't recall whether that was part of discussion.
13
            Did Dr. Howell ever have discussions with you
14 about not applying for research positions on UMDNJ?
15 A
         I don't have a recollection of that, he said that.
16
            Do you have any recollection of Dr. Howell
17 telling you not to apply for research positions in radiation
18 biology anywhere?
        No, I don't.
19 A
20
            Do you recall discussing your visa status with
21 Dr. Hill during the course of the luncheon?
        I don't recall.
22 A
23
       0
            Do you remember what visa you were on at that
24 point in time?
25 A
         Probably H1B.
0106
1
            Do you recall having any discussions about
2
   changing that visa from H1B to visitor's or tourist visa?
3
        No.
   Α
4
       Q
            Did you in fact ever undertake to do that?
5
   Α
       No.
6
            Do you recall at or about this time that you
   were living in her son's apartment in Newark?
7
8
        Right.
9
            What was the address? Do you remember?
```

- 10 A It was 25 Manor Drive.
- 11 Q Do you recall having discussions with Dr. Hill
- 12 during this lunch as to whether you could continue to live
- 13 in that apartment?
- 14 A I don't recall.
- 15 Q Did you continue to live in that apartment for a
- 16 period of time?
- 17 A Yes.
- 18 Q For what period of time?
- 19 A I would say -- maybe beginning of 2002 until I got
- 20 married and brought my wife, and we stayed there shortly and
- 21 then we found an apartment and we moved out.
- Q When did you move out to the best of your
- 23 recollection in 2002?
- 24 A 2002, let's see, March -- maybe April, maybe May.
- Q May? So for the better part of almost another 0107
- 1 year you continued to reside in that apartment, from the end
- 2 of July of 2001 through the following May of 2002. Is that
- 3 correct?
- 4 A Yeah. Whatever the period was, yes, I was there.
- 5 Q Fair enough. She never told you you needed to
- 6 get out, did she, Dr. Hill?
- 7 A No pressure to move out.
- 8 Q You were welcome to stay as long as you wanted,
- 9 isn't that so?
- 10 A Right.
- 11 Q Do you recall telling Dr. Hill during this
- 12 luncheon that up until that time all of the evaluations that
- 13 Dr. Howell had prepared regarding your performance had been
- 14 good?
- 15 A I don't recall.
- 16 Q Do you recall having any discussions with
- 17 Dr. Hill during this luncheon regarding any of the bystander
- 18 effect experiments?
- 19 A I don't recall.
- 20 Q Do you recall telling Dr. Hill during the course
- 21 of the luncheon that some of the experiments that you
- 22 performed showed it and some of it did not?
- 23 A I don't recall.
- 24 Q That being the bystander effect so we're clear.
- 25 A Okay.
- 0108
- 1 O You don't recall?
- 2 A No.
- 3 Q Do you recall telling Dr. Hill that in regards

- 4 to the bystander, you know, experiments that Dr. Howell had
- 5 picked and chosen from among the experiments for purposes of
- 6 reporting?
- 7 A I don't recall, but I know that I did the experiment
- 8 and I gave it to him and it was up to him to use whatever he
- 9 thought reasonable.
- 10 Q Did you ever give him any experiments that you
- 11 recall that reflected results different from that which was
- 12 reported in the literature that we reviewed here earlier,
- 13 the two articles?
- 14 A Say it again.
- 15 Q Do you recall giving Dr. Howell any experiments'
- 16 results which results differed from the results reported in
- 17 the two articles?
- 18 A It's the other way. I did the experiment and gave it
- 19 to him and he used those data to produce this publication,
- 20 so I was not sure which one he used and which one he didn't.
- Q Okay. So you're telling me that the data that
- 22 was chosen to be put in those two articles, Bishayee-7 and
- 23 8, to your knowledge was chosen by Dr. Howell and not by
- 24 yourself?
- 25 A That's correct.

- 1 Q Do you recall telling Dr. Hill that you had been
- 2 pressured to produce data by Dr. Howell?
- 3 A No.
- 4 Q Were you pressured to produce data by
- 5 Dr. Howell?
- 6 A No.
- 7 O Do you recall telling Dr. Hill that Dr. Howell
- 8 was always pleased when your data fit his mathematical
- 9 models?
- 10 A I don't recall exactly.
- 11 Q I don't understand your response.
- 12 A What I said, whether she asked me the specific
- 13 question and I answered, I don't recall that.
- 14 Q You recall the question being asked of you?
- 15 A No, I don't recall this question.
- 16 Q That's what I wasn't sure of. So if you would
- 17 again tell me why it was exactly that you left the lab,
- 18 Dr. Howell's lab?
- 19 A The environment was not pleasing for me as I realized
- 20 that a lot of things is happening, not very healthy
- 21 environment for me to be there as it's kind of an animosity
- 22 between two senior faculties -- tenured faculty, and being a
- 23 very junior post-doctoral fellow it was not pleasant for me

- 24 to stay and survive.
- Q Were there any other reasons?
- 0110
- 1 A No.
- 2 Q That was it?
- 3 A That was it.
- 4 Q So it was the relationship that was in the
- 5 laboratory?
- 6 A Yeah.
- 7 Q Do you recall being questioned by Dr. Putterman
- 8 regarding the allegations, Dr. Karen Putterman?
- 9 A There was a part of the procedure.
- 10 Q And do you remember when it was that you were
- 11 questioned by her?
- 12 A When?
- 13 Q Yeah. Do you recall when?
- 14 A During this time. I don't recall the exact timing.
- 15 Q And do you recall telling her that a reason that
- 16 you left the lab or decided to leave the lab was the
- 17 relationship with Dr. Hill and the allegations she brought
- 18 against you which made you feel uncomfortable working in her
- 19 proximity?
- 20 A I don't recall that.
- 21 Q You don't recall making that statement?
- 22 A No.
- Q Do you recall telling Dr. Putterman that there
- 24 were any professional reasons or career reasons why you
- 25 chose to leave the lab?
- 0111
- 1 A No, I don't recall.
- 2 Q Do you recall telling Dr. Putterman that you
- 3 were desirous of upgrading your technical skills in basic
- 4 molecular biology?
- 5 A Yeah. Probably I said that, that I would like to
- 6 learn new things and try something different.
- 7 Q Did you tell her that you couldn't accomplish
- 8 that by working for Dr. Howell?
- 9 A I don't recall that.
- 10 Q Do you remember telling Dr. Putterman that you
- 11 wanted to further your development and career with a goal of
- 12 becoming an independent researcher?
- 13 A I don't recall that.
- 14 Q Do you recall telling Dr. Putterman about
- 15 working -- the desire to work in Dr. Pain's lab?
- 16 A That I was talking to Dr. Pain for a possible
- 17 position, so.

- 18 Q I want to just be clear. I've heard everything
- 19 you said and the fact that Dr. Howell prepared the letter of
- 20 resignation.
- 21 Do you feel by Dr. Howell preparing that letter
- 22 of resignation that he was asking you to leave the lab?
- 23 MR. FLYNN: Objection. Go ahead.
- 24 A It was my decision more or less to leave the lab
- 25 because that's the only thing I could do as a favor to 0112
- 1 myself, to be out of this kind of environment.
- 2 Q Why couldn't you write your own letter? I'm
- 3 confused. Why did Dr. Howell write the letter as opposed to
- 4 you writing the letter?
- 5 A I don't know.
- 6 Q All right. Was it your understanding that
- 7 Dr. Howell wrote any letters of recommendation for you?
- 8 A Say it again?
- 9 Q At or about the time you resigned was it your
- 10 understanding that Dr. Howell wrote any letters of
- 11 recommendation for you?
- 12 A I don't know.
- Q Did he ever provide you copies of letters of
- 14 recommendation?
- 15 A No.
- 16 Q Did you ever ask for a recommendation for
- 17 Dr. Pain from Dr. Howell?
- 18 A No.
- 19 Q How would you describe your relationship with
- 20 Dr. Howell at the time you left the lab?
- 21 A It was okay.
- Q Okay? Any bad -- any positive -- what were the
- 23 positives and what were the negatives, if you could tell me,
- 24 if any?
- 25 A Nothing. You know, I just took it as a friendly way 0113
- 1 that you work hard for him and we have good times and now
- 2 the situation is not that good so I must leave.
- 3 Q Now, what efforts did you then undertake to
- 4 learn molecular biology?
- 5 A I understand that I need to upgrade my basic technique
- 6 about scientific research, and of staying in the lab for
- 7 that long you only learn a few things but a lot of things
- 8 that I should learn to expand my horizon.
- 9 Q You needed that job for purposes of maintaining
- 10 your H1B visa, isn't that so?
- 11 MR. FLYNN: Objection.

```
12
            If you know?
        No, I don't know that.
14
            You don't know that?
15 A
        No.
16
       Q
            You had recently been promoted to research
17 associate?
18 A
        Recently? What time?
19
            Prior to your resigning you had recently been
20 promoted by Dr. Howell to research associate. Isn't that
21 so?
22 A
         Yes.
23
            And along with that promotion had come an
24 increase in salary, isn't that so, to your knowledge?
         I can't recall, but there may be some increase that
25 A
0114
1
   goes by year.
2
              MR. PINCUS: Off the record.
3
              (Discussion held off the record.)
4
           Were you aware whether that promotion came with
  a salary increase?
6
        Possibly, yes, but I can't tell exactly when that was
7 effective.
8
            But notwithstanding that you had been promoted
       0
9 and that you were in line for a salary increase you were
10 willing to resign and get along without any income for a
11 period of time. Isn't that so?
12 A
         Say that again.
13
            Notwithstanding you had been promoted and were
14 due to receive an increase of salary you determined to
15 resign and get along without an income for a period of time.
16 Isn't that so?
17
               MR. FLYNN: Objection to form. You can
18 answer.
19 A
         Again, if you could please rephrase the question
20 again?
21
            Notwithstanding that you had been promoted and
22 were due an increase in salary, you determined to resign.
23 Correct?
24 A
         Yes.
25
            And you resigned knowing that by doing so you
0115
```

1 would do without income for a period of time until you

By the way, did you sign up for any courses in

2 obtained other employment. Isn't that so?

That's right, that's right.

5 molecular biology?

3 A

- Not fulltime courses for molecular biology. 7 Q Parttime? 8 No. Α 9 Q None? 10 A No. Did you purchase any molecular biology 11 12 textbooks? 13 A No. 14 So if I understood you correctly, you left the O 15 lab because there was this environment but you could not 16 identify anything specifically that Dr. Hill had said or 17 done to you. Correct? 18 MR. FLYNN: Objection. Go ahead. 19 A Not directly to me, but once again, the environment 20 was not suitable for me. 21 Did you ever tell Dr. Putterman that you were 22 uncomfortable working in close proximity with Dr. Hill? 23 A I don't recall that. 24 Do you recall whether you and she carried on 25 certain email correspondence in terms of your payment of 0116 1 rent? 2 Correspondence between whom? Α Dr. Hill and yourself. 3 Q 4 I don't recall. 5 Do you recall ever using the terms "how's the weather" in any email for purposes of ascertaining whether 7 Dr. Howell had left the lab so that you could pay the rent? I don't recall the specific word but I recall that I 9 needed to come to give her a check as the rent. (Exhibit BISHAYEE-18, Copies of 10 11 Emails, is marked for identification.) 12 Dr. Bishayee, if you would please take a moment 13 to look at these pages comprising various emails? My question to you is, do you recall being one 14 15 of the parties who authored or received these emails? 16 A Yes. 17 Do you recognize these? Q 18 A Yes. 19 Any references to Anupam or emails --0 I see my name. 21 Do you recall writing to her and she writing to
- 25 Q Do you know what the basis was for your

I don't recall exactly but I recall the document which

22 you? 23 A

24 is part of it.

- 1 communicating with her by email?
- 2 A You see this is to giving her the money for the rent.
- 3 Q Do you remember what period of time you
- 4 communicated with her this way?
- 5 A No, I don't know how long I did.
- 6 Q So do you recall in the fall of 2001, you know,
- 7 subsequent to your resignation receiving unemployment
- 8 compensation?
- 9 A Yes.
- 10 Q Can you tell me how you were able to do that
- 11 when you resigned from your employment with Dr. Howell?
 - MR. FLYNN: Objection. You can answer if
- 13 you know.

- 14 A I don't know. I resign and then I realized that
- 15 somebody mentioned, I don't recall who, and I learned that
- 16 there is some mechanism that I can be qualified, be
- 17 eligible, for unemployment benefit because I pay taxes while
- 18 I was employed, unemployment insurance.
- 19 So I checked with the human resources whether I am
- 20 eligible or not, and I also checked with the Department of
- 21 Labor.
- The Department of Labor told me that they would
- 23 check -- they need to check with human resources to make the
- 24 decision about my case, and so that I get the name -- the
- 25 information.

- 1 Q You provided the name of who?
- 2 A Provided the name of the department, human resources,
- 3 and let them figure it out, and subsequently it was approved
- 4 and I got a check.
- 5 Q Is it your recollection that you told
- 6 Unemployment you had resigned?
- 7 A I didn't say what I did. I told them to verify from
- 8 human resources whether I am eligible for any compensation
- 9 or not.
- My understanding is that they talked to each other.
- 11 Department of Labor verified the fact with the human
- 12 resources, and then they decided to grant me the
- 13 unemployment benefit.
- 14 Q Do you recall telling Unemployment that you had
- 15 been terminated by the University or Dr. Howell?
- MR. FLYNN: Objection. Go ahead.
- 17 A I don't recall what I said but I recall that I told
- 18 them to verify whether I am eligible or not, and that's what
- 19 they did.

- 20 Q Did Dr. Howell assist you in regards to your
- 21 unemployment application?
- 22 A No.
- 23 Q To your knowledge did the University ever
- 24 contest your application to receive unemployment benefits?
- 25 MR. FLYNN: Objection.
- 0119
- 1 A I don't know.
- 2 Q You were kind enough to share the fact that you
- 3 had an impending wedding. Correct? You had a wedding
- 4 coming up at this point this time? You went to India to get
- 5 married, right?
- 6 A Right.
- 7 Q When was that exactly?
- 8 A Oh, boy. I should remember my marriage date.
- 9 Q This could get you in trouble. Better get this
- 10 one right.
- 11 A I think February 28th is my marriage.
- 12 O Of 2002?
- 13 A 2002.
- 14 Q And you had a reception to celebrate your
- 15 wedding?
- 16 A Right.
- 17 Q Yes?
- 18 A Yes.
- 19 O Where was that?
- 20 A That was one of the restaurants in Montclair.
- 21 Q Did you invite Dr. Hill?
- 22 A Yes, I did.
- Q Why did you invite her?
- 24 A I invited everybody whom I worked, so Dr. Azzam,
- $25\,\,$ Dr. Howell, all my associations, social gathering, and I was $0120\,$
- 1 still staying with her apartment. It was a nice gesture to
- 2 introduce her to my newly wife, bride.
- 3 Q Is it fair to say that had she done anything
- 4 that caused you to pause and say gee, I don't want to invite
- 5 her or she shouldn't be invited to this day of happiness --
- 6 A I was upset about the atmosphere.
- 7 Q You might not have invited Dr. Howell too,
- 8 right?
- 9 A In the end I invited everybody regardless how I feel I
- 10 guess about these people.
- 11 Q So regardless of how you felt about Dr. Howell
- 12 or Dr. Hill or the atmosphere you undertook to invite them
- 13 both. Correct?

```
Yeah. I think it was maybe it's last time we see each
15 other and I was prepared to leave the department and go
16 somewhere else, maybe new job, so.
            She gave you a gift to your knowledge?
17
18 A
        I'm sorry?
            Did she bring you a gift to your knowledge?
19
20 A Yes, she did.
21
            Was she accompanied by her husband to your
22 recollection?
23 A
        Probably she came alone.
            Have you ever met her husband?
24
25 A
        Yes, I did.
0121
       O
1
           What is his name?
2
        George.
3
           Do you have any recollection of George attending
  your wedding reception at that restaurant in Montclair?
5
       No, I don't.
6
             (Discussion held off the record.)
7
           You do recall sending her an invitation?
8
   A Right.
9
           And do you recall sending her a thank you for
       O
10 attending?
        That I did for everybody.
11 A
              MR. PINCUS: Just give me two minutes but
12
13 I think we're done.
14
                 (Recess taken.)
              MR. PINCUS: I have nothing further unless
15
16 Mr. Flynn does.
17
              MR. FLYNN: I do not.
18
              MR. PINCUS: Dr. Bishayee, thank you for
19 much for your time and travels.
20
              THE WITNESS: Thank you very much for
21 having me.
22
              MR. PINCUS: Have a good safe trip back.
23
24
              (Proceedings concluded at 1:25 p.m.)
25
0122
1
                CERTIFICATION
     UNITED STATES OF AMERICA, RE: HILL v. UMDNJ, et als.
2
              Case No. 03-4837 (DMC)
            Monday, December 22, 2008
3
         I, KATHLEEN M. ANDERSON, a Certified Court
5 Reporter and Notary Public of the State of New Jersey, do
```

6	hereby certify prior to the commencement of the examination
7	DR. ANUPAM BISHAYEE, Ph.D. was duly sworn by me to testify
8	the truth, the whole truth, and nothing but the truth.
9	I DO FURTHER CERTIFY that the foregoing is a
10	true and accurate transcript of the testimony as taken
11	stenographically by and before me at the time, place, and on
12	the date hereinbefore set forth.
13	I DO FURTHER CERTIFY that I am neither a relative
14	nor employee no attorney nor counsel of any of the parties
15	to this action, and that I am neither a relative nor
16	employee of such attorney or counsel, and that I am not
17	financially interested in this action.
18	
19	
20	
21	KATHLEEN M. ANDERSON, CCR
	License No. X1O1440
22	Notary Public State of New Jersey
23	
24	
25	