

**U.S. Department of Labor**

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**Issue Date: 28 January 2009**

CASE NO.: 2006-ERA-00009

In the Matter of

**MINGHUA CHEN**

Complainant

v.

**DANA-FARBER CANCER INSTITUTE**

Respondent

*Appearances:*

Paula Finley Mangum, Boston, Massachusetts, and  
Peter D. Stanton, Framingham, Massachusetts,  
for the Complainant<sup>1</sup>

James J. Horgan and Frank E. Reardon  
(Hassan & Reardon), Boston, Massachusetts,  
for the Respondent

*Before:* Daniel F. Sutton, Administrative Law Judge

**DECISION AND ORDER**

This case arises out of a complaint of discrimination filed by Minghua Chen (“Dr. Chen” or “Complainant”) against the Dana-Farber Cancer Institute (“DFCI” or “Respondent”) under Section 211 (“Section 211”) of the Energy Reorganization Act of 1974 (the “ERA” or the “Act”), as amended, 42 U.S.C.A § 5851 (West 2008), and the implementing regulations issued at 29 C.F.R. Part 24 (2008).<sup>2</sup> The ERA protects whistleblowers from retaliation for engaging in protected activity related to atomic energy safety concerns. 42 U.S.C.A. § 5851(a)(1). Dr. Chen alleges that DFCI terminated her employment as a cancer research fellow in retaliation for activity protected by Section 211 -- reporting radioactive contamination in her laboratory. DFCI

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<sup>1</sup> Attorney Stanton passed away during the hearing and was replaced by Attorney Mangum.

<sup>2</sup> The ERA was amended by the Energy Policy Act of 2005, Pub. L. 109-58, title VI, § 629, 119 Stat. 785 (Aug. 8, 2005), and the ERA’s implementing regulations at 29 C.F.R. Part 24 were amended effective August 10, 2007. 72 Fed. Reg. 44,956 (Aug. 10, 2007).

avers that Dr. Chen was terminated for cause because senior researchers lost confidence in her after she allegedly demonstrated a repeated failure to follow established laboratory procedures. After a full evidentiary hearing and consideration of the record, including the parties' arguments, this administrative law judge finds that while Dr. Chen has proved that her protected activity was a contributing factor in DFCI's decision to terminate her employment, DFCI avoids liability any violation of the ERA because it has demonstrated by clear and convincing evidence that it would have terminated Dr. Chen even in the absence of any protected activity.

## I. Procedural History

Dr. Chen filed a complaint with the Department of Labor's Occupational Safety and Health Administration ("OSHA") on or about December 27, 2004 in which she alleged that DFCI violated the ERA by terminating her employment on November 29, 2004 in retaliation for her actions in reporting a radioactive spill and participating in the clean-up of the spill. *See* Administrative Law Judge Exhibit ("ALJX") 1. Following an investigation, the OSHA Regional Administrator issued a "Secretary's Findings" letter on January 20, 2006 in which she determined that there was reasonable cause to believe that DFCI terminated Dr. Chen's employment in violation of Section 211. *Id.* Based on the finding of reasonable cause, the Regional Administrator issued a Preliminary Order that DFCI reinstate Dr. Chen, pay her lost wages and compensatory damages in the amount of \$10,000.00, and expunge references to her termination from its personnel records. *Id.*<sup>3</sup> The Preliminary Order further stated that the parties had 30 days from their receipt of the letter to file any objections and request a hearing. *Id.* On February 17, 2006, the OSHA Regional Administrator issued a revised Secretary's Findings and Preliminary Order which stated that the parties had five days from receipt of the letter which to file objections and request a hearing. ALJX 5.<sup>4</sup>

DFCI filed an objection to the Secretary's Findings and Preliminary Order and a request for hearing on February 17, 2006. ALJX 2. A hearing was scheduled to convene pursuant to 29 C.F.R. § 24.6(a) (2006); ALJX 3; however, the hearing was then continued several times on joint or unopposed motions to allow the parties additional time for discovery and to participate in mediation. *See* ALJX 6-9, 11-13, 22-23. The hearing convened on May 24, 2007 and continued over a total of eight days on September 17, 18 and 19, 2007 and April 2, 21, 22 and 24, 2008. Dr. Chen testified in support of her complaint, and she introduced testimony of a former coworker which was taken at a videotaped deposition. DFCI called a total of six witnesses. Documentary evidence was admitted as Joint Exhibits ("JX"), Complainant Exhibits ("CX") and

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<sup>3</sup> The Preliminary Order included compensatory damages in the amount of \$5,000.00 for mental pain and suffering and \$5,000.00 for out-of-pocket medical expenses. ALJX 1, Jan 20, 2006 Ltr. at 5.

<sup>4</sup> The regulations in effect on January 20, 2006 stated that the notice of the Secretary's determination after an investigation under 29 C.F.R. Part 24 "shall include or be accompanied by notice to the complainant and the respondent that any party who desires review of the determination or any part thereof, including judicial review, shall file a request for a hearing with the Chief Administrative Law Judge within five business days of receipt of the determination." 29 C.F.R. § 24.4(d)(2) (2006). The amended Part 24 regulations now provide that objections and a request for hearing on the Secretary's Findings and preliminary Order must be filed within 30 days of receipt of the determination letter. *See* 29 C.F.R. § 24.106(a) (2008). Dr. Chen has not challenged the timeliness of DFCI's objections and hearing request.

Respondent Exhibits (“RX”). At the close of the hearing, the parties were granted leave to file briefs. The record is now closed.

## II. Findings of Fact

### A. Background

Dr. Chen received the equivalent of a doctoral degree in medicine from the Zhejiang University in China. Hearing Transcript (“HT”) at 41, 49; CX 3. During the course of her studies, she worked as a research assistant and research associate in the area of infectious diseases. HT at 42-43. Upon graduation, she came to the United States where she worked from May of 1999 until September of 2000 as a research fellow in infectious diseases at the Brigham and Women’s Hospital in Boston. HT at 43. After leaving the position at Brigham and Women’s, she gave birth to a son and returned to China where she taught a course in molecular biology at the Zhejiang University. *Id.* at 43-45.

In 2003, Dr. Chen returned to Boston with her son and husband who had a visa which allowed him to work in the United States. *Id.* at 45. She eventually looked for work and in April of 2004 was hired by Dr. Sam Lee as a research fellow in molecular biology at the Beth Israel Deaconess Medical Center. *Id.* at 46. To enable her to work in the United States, Beth Israel Deaconess applied for and obtained an “H1B” work visa. *Id.* at 51-52. However, she left this job after four months in August of 2004 because Dr. Lee shifted his research focus and relocated his laboratory to Charlestown. *Id.* at 46-47.

Desiring to work on cancer research, Dr. Chen applied for a position as a research fellow in Dr. Arthur Pardee’s laboratory at DFCI. HT at 47-48; CX 4. She was interviewed by Dr. Pardee and Dr. Debajit Biswas, the principal researcher in Dr. Pardee’s laboratory who recommended that she be hired based on her research experience. HT at 50; 672; 830. Dr. Pardee concurred and hired Dr. Chen to work under Dr. Biswas’s supervision, and he requested that her H1B visa to be transferred to DFCI. *Id.* at 50, 254, 256-257, 262; 886; CX 5, 6, 8. Dr. Chen began work at DFCI on August 30, 2004. HT at 54-55. Her salary at DFCI was \$36,000.00 per annum. CX 7.

Dr. Pardee has been on the staff of DFCI since 1975, and he is a professor emeritus of medicine at the Harvard Medical School. HT at 881; RX 1. He wrote his first research paper in 1943 and has a long and distinguished record of accomplishment in the field of cancer research. *Id.* Indeed, Dr. Biswas testified that Dr. Pardee had “missed the Nobel prize three times.” *Id.* at 664. In 2004, when Dr. Chin applied for the position as a research fellow, Dr. Pardee’s laboratory was investigating methods of treating aggressive forms of breast cancer that do not respond to existing treatments. HT at 657-658; 881-883. In particular, the research focused on “nuclear factor-kappaB” or “NF-κB” which is believed to be a prime driver of human malignancy and, hence, a prime target for human cancer treatment. *Id.* at 75; 757-658; 984; RX 20.<sup>5</sup>

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<sup>5</sup> The NF-κB research ultimately produced a paper entitled, Nuclear factor-κB: a molecular therapeutic target for estrogen receptor–negative and epidermal growth factor family receptor-positive human breast cancer (Singh, Shi *et*

Dr. Pardee's laboratory was also in a period of transition at that time as he had decided to retire and gradually transfer his responsibilities to Dr. J. Dirk Iglehart who was then the Chief of Surgical Oncology at DFCI and the Ann Dyson Professor of Women's Cancers at the Harvard Medical School. *Id.* at 883; 981-983. Drs. Pardee and Iglehart both testified that the transition plan was for Dr. Biswas to continue in his position as the laboratory's principal researcher. *Id.* at 883-884; 983-984. Dr. Pardee explained that Dr. Biswas was responsible for day-by-day supervision of the laboratory and research fellows such as Dr. Chen, while he played more of an overall advisory role. HT at 884. Indeed, Dr. Chen's only face-to-face contact with Dr. Pardee between her pre-employment interview and termination on December 29, 2004 was a five-minute conversation when he asked how her family was. *Id.* at 77-78. *See also* CX 11.<sup>6</sup>

Dr. Chen's regular workplace at DFCI was in a laboratory located in Room 934 of the Smith Building ("Smith 934") where Dr. Biswas and another research fellow, Dr. Sindu Singh, also worked. HT at 56, 62-64. Drs. Chen, Singh and Biswas also performed research work in a second laboratory, which is located on another floor of the Smith Building ("Smith 820"), but experiments involving radiological materials were only authorized to be performed in designated areas of the Smith 934 laboratory. *Id.* at 67-68, 70-72. In or around October of 2004, Dr. Biswas appointed Dr. Chen to serve as the radiation safety officer for the laboratory, and she received radiation safety training on October 6, 2008 from Eric Andersen, DFCI's radiation safety officer ("RSO"). HT at 80-82; CX 10.<sup>7</sup>

#### B. Problems in the Work Relationship between Dr. Chen and Dr. Biswas

Although the accounts provided by the various witnesses differ to some extent as to details, the testimony reveals that differences of opinion over laboratory procedures quickly arose between Drs. Chen and Biswas resulting in interpersonal tension. Dr. Chen testified that soon after she started work, she observed Dr. Biswas performing cell culture experiments in which he thawed frozen cells without using a "37-degree (Celsius) incubator" as she had been taught to use in her university training. HT at 82-88. She said that she then checked the National Institutes of Health ("NIH") website which specified use of a 37-degree incubator as the protocol for thawing cells in connection with cell culture experiments, and she told Dr. Biswas that she was going to follow the NIH protocol by using the 37-degree incubator. *Id.* at 87-88. According to Dr. Chen, Dr. Biswas initially responded that she could follow the NIH protocol but instructed her sometime later in October to stop using the incubator. *Id.* at 88. She said that she pointed out that he had previously agreed otherwise, and Dr. Biswas explained that he did not want her to use the incubator because it might contain "germs." *Id.* at 91.

Dr. Biswas had a somewhat different recollection of the incubator controversy. He explained that while it is a common practice to place tubes containing frozen cells in a water bath

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*al.*), 6 Mol. Cancer Ther. 1973 (July 2007). Dr. Sindu Singh, who worked with Dr. Chen as a research fellow in Dr. Pardee's laboratory on the NF- $\kappa$ B project was the paper's co-lead author. *Id.* at 1973; HT at 661.

<sup>6</sup> It appears from CX 11, an e-mail message dated October 6, 2004 in which Dr. Chen thanks Dr. Pardee for inquiring about the well-being of her son, that this brief conversation took place in early October.

<sup>7</sup> Dr. Singh also received radiation safety training. JX 2 at 88.

inside an incubator for thawing, there is a potential for contamination from the air when the tube is opened. *Id.* at 793-794. He testified that to avoid potential contamination from exposing the thawed cells to the open atmosphere, the protocol for thawing frozen cells in his laboratory called using a hood and ultraviolet light to create a sterile environment. *Id.* He stated that Dr. Chen told him that she wanted to use the “water bath technique” and that he “explained to her, but she would not listen.” *Id.* at 795. He also testified that he had another discussion with Dr. Chen a month or two after she commenced employment when he discovered that she was not following his procedures for dating flasks that were used in the laboratory for growing cells and harvesting the cells from those flasks. *Id.* at 788-790. He said that after instructing Dr. Chen to alter her procedure, he discovered that she had not followed his instructions. *Id.* at 790. Dr. Biswas testified that he then began insisting that Dr. Chen follow the procedures and protocols that had been established in the laboratory “for 10 years and 12 years.” *Id.* at 791. He said that Dr. Chen repeatedly responded to his instructions by stating, “I am not here to work with you. I’m here to work with Dr. Pardee.” *Id.* at 791-792.

Dr. Biswas cited another incident from early in Dr. Chen’s employment when he suggested that she consult with another laboratory chief at DFCI, Dr. Alexander Miron who is an expert in genetic assay and sequencing, about using a system developed in Dr. Miron’s laboratory to resolve a problem that she had encountered in her research. *Id.* at 783-786. He testified that Dr. Chen did consult with Dr. Miron but wrote in her laboratory notebook that Dr. Miron’s system did not work. *Id.* at 786-787; RX 13. He said that this frustrated him because he had referred her to an expert whose advice she had rejected “with the stroke of a pen.” Dr. Biswas further testified that Dr. Chen told him a day or two later that she had resolved the problem by using an alternative procedure. *Id.* at 787. He said that although he may have responded to Dr. Chen that this was acceptable, perhaps because he “was happy to see that something happened,” he was frustrated by Dr. Chen’s inability to collaborate with Dr. Miron and lost confidence in her as a researcher. *Id.*

Dr. Singh, who began work at DFCI in April of 2004,<sup>8</sup> testified that she began to observe a personality conflict between Drs. Biswas and Chen after Dr. Chen had been in the laboratory for a month, around mid-October of 2004. JX 2 at 18, 83-84. She was asked about specific instances and responded that Dr. Chen was unhappy over the way that Dr. Biswas had responded to her concerns about a possible adverse reaction to a chemical, PMSF, that was used for certain experiments. *Id.* at 18-19. She elaborated that Dr. Biswas disagreed with Dr. Chen’s claim that PMSF emits toxic vapors and should only be used under a hood, and he countered that he had used PMSF on the bench without experiencing any adverse reaction. *Id.* at 19.<sup>9</sup> She also recalled an incident where Drs. Chen and Biswas disagreed over the procedure for a new experiments which was resolved when Dr. Biswas contacted Yale University, which had developed the procedure, and learned that Dr. Chen was correct. *Id.* at 22. However, she conceded that her memory of this incident was not “very clear.” *Id.* Dr. Singh testified that there were multiple instances where Drs. Chen and Biswas disagreed over laboratory procedures,

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<sup>8</sup> JX 2 at 6.

<sup>9</sup> DFCI’s motion to strike Dr. Singh’s answer is denied as I find that it was responsive to the question and is not inadmissible as hearsay since the statements were not offered to prove the truth of the matter asserted – *i.e.*, whether or not PMSF is toxic.

and she confirmed that she observed interpersonal conflicts between Drs. Chen and Biswas prior to the November 12, 2004 incident, discussed below, where Dr. Chen reported a spill of radioactive materials in the laboratory. *Id.* at 83-84.

### C. The Error in the Primer Order

The researchers in the DFCI laboratory where Dr. Chen worked use substances known as “primers” in their gene experiments. HT at 93. Instead of allowing laboratories to individually order replacement primers directly from a vendor, DFCI requires that all orders be submitted through Dr. Miron who is able to obtain better prices by ordering materials in larger quantities. *Id.* at 795. In mid-October of 2004, Dr. Biswas asked Dr. Chen to order some primers through Dr. Miron. *Id.* at 93, 795-796.

Dr. Chen testified that this was the first time that she had placed a primer order at DFCI and that Dr. Biswas showed her how to log onto the vendor’s website and introduced her to a research fellow from another laboratory who instructed her on how to place an order. HT at 94-98. She said that she followed these instructions, typed in the order using the “default” quantity that was shown, and had Dr. Singh help her check that she had ordered the correct primer. *Id.* at 94-96, 98. She testified that she then called Dr. Biswas to tell him that she had placed the order and that Dr. Biswas “started to scold” her in a raised voice, stating that he wanted to check the order first. *Id.* at 99.

Dr. Biswas testified the primers are ordered with specific “sequences” which must be entered in the order “perfectly.” HT at 796. He said that he “told her [Dr. Chen] several times that before you order -- this was the first time that she’s ordering -- I said, ‘Check with me before you place the order,’ or check with two persons, ‘Check with Dr. Singh,’ which is sitting next to her, sitting next to her.” *Id.* at 796. Dr. Biswas testified that he did not learn that Dr. Chen had gone ahead and ordered the primer until the next day:

And she ordered and I did not know. I came to know the next day when Dr. Miron came to me. He said, “Dr. Biswas, why did you order so much primer? We don’t order that much.” That much means it is thousand fold more. Price is supposed to be \$66.00. It became \$2,400.00. So that was alarming. And I felt bad that Alex has to come and tell me. So I asked her, “What happened? Why did you order this?” She did not have an answer.

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We found out about it because he [Dr. Miron] checked, because so much is not a reasonable amount. So that was alarming. So I told her, “You check.” She said she checked with Sindhu. But sequence was not a problem. The problem was the amount.

*Id.* at 796-797. Dr. Biswas stated that following this incident he began to avoid direct dealings with Dr. Chen and reported to Drs. Pardee and Iglehart that “it is not working out.” *Id.* at 797.

A third view of the incident comes from Dr. Singh who provided the following observation: “There was not enough communication between Dr. Chen and Dr. Biswas as to the ordering of that material, and because of that there was some mistake in that process that caused some tension between the two people.” JX 2 at 20. Of the three versions, I find that Dr. Singh’s account is closest to what actually happened. I pause here to explain why.

As for the particular conversation between Drs. Chen and Biswas regarding the ordering of the primers, I took notice during the hearing that both witnesses speak English, the language generally used in the laboratory where they worked, with very heavy accents that at times make them difficult to understand. Another potential confounder is the fact that Drs. Chen and Biswas did not share a common first language.<sup>10</sup> Thus, it is entirely possible that some verbal communications between the two were compromised by misunderstandings that were simply the product of language factors rather than any personal fault or mendacity.

As for the relative credibility of these witnesses, I have significant reservations about both Dr. Chen and Dr. Biswas. Dr. Chen was a very reluctant witness, and at times during the hearing she was markedly uncooperative. She frequently took an inordinate amount of time to answer questions and often gave less than complete answers, leaving me with the distinct impression that she was attempting to weigh whether the answer would support her claims rather than simply responding to questions with truthful and complete answer. For example, when she was asked by her attorney about the conversation in which Dr. Biswas instructed her to no longer use the 37-degree incubator to thaw frozen cells, Dr. Chen initially responded that Dr. Biswas simply told her not to use the incubator, and she only disclosed that there was more to the conversation after I interjected, expressing some incredulity that Dr. Biswas had not explained his instruction:

JUDGE SUTTON: Do you remember exactly what it was he said?

THE WITNESS: He said, don't use it. Then I said, you agreed.

JUDGE SUTTON: And did he respond to that?

THE WITNESS: And he said, don't use it.

BY MR. STANTON:

Q. After he said don't use it, what did you do?

A. Then I didn't use it.

Q. And did you use Dr. Biswas' protocol?

A. Yes.

Q. Now, in October –

JUDGE SUTTON: Let me stop you here for a minute. That was the entire conversation you had with Dr. Biswas that you just described about the incubator?

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<sup>10</sup> Dr. Biswas is from India. HT at 655.

THE WITNESS: Yes.

JUDGE SUTTON: You didn't ask him why not to use the incubator? Did he explain to you why he didn't want you to use the incubator at any time?

THE WITNESS: He said, if you use the incubator there might be germ in the incubator.

JUDGE SUTTON: Did he say that during that same conversation in October when he told you he didn't want you to use the incubator?

THE WITNESS: Yes.

JUDGE SUTTON: Was there anything else? Before we leave, that was the entire conversation, or was there anything else between you and Dr. Biswas about using the incubator at that time?

THE WITNESS: Yes.

JUDGE SUTTON: Okay, what else was said?

THE WITNESS: That's the entire conversation.

HT at 91-92. I find it most unlikely that Dr. Chen, a trained research scientist, could have innocently overlooked the fact that Dr. Biswas explained to her that he did not want her to use the incubator due to the risk of contamination. Instead, based on my observation of her demeanor on the witness stand throughout the course of the hearing, I find that her reticence in disclosing the full conversation is indicative of a tendency to testify strategically rather than forthrightly and, in this particular instance, to unfavorably portray Dr. Biswas as arbitrary and capricious. Another example of Dr. Chen's lack of candor is found in her evasive testimony concerning her prior employment in Dr. Lee's laboratory and her application to the Harvard Scholl of Publis Health. HT at 345-368. Consequently, I find that Dr. Chen's testimony was not fully believable, and I will not credit her testimony where it conflicts with that of a more trustworthy witness.<sup>11</sup>

My confidence in Dr. Biswas is similarly impaired but for different reasons. Early on in his testimony, Dr. Biswas exhibited a tendency to answer questions in the manner that some politicians respond to questions during a debate or at a candidates' forum: an opportunity to hammer the points the politician wishes to make with the audience. Here's an example:

Q. And who developed the policies and protocols for the research that was going to be done in that lab?

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<sup>11</sup> Fortunately, the conflicts in the testimony are not especially significant in this case, though they will be noted and resolved where material.

A. Yeah, over the years from '92, Dr. Iglehart and Dr. Pardee at that time, and he entrusted me with the project, made me in charge of that project, and I develop the protocols and policies -- and we aren't dictators -- so that we can proceed and get something out of it. And, while it was proceeding, and I feel that we made substantial progress on the type of publications, *Behavior Journal* and it will be all the protocols and procedures established. Who saw my worked. Given that period, followed those protocols. And I believe that to get consistent and repeatable results we have to stick to those protocols and procedures. That doesn't mean that other protocols are wrong or -- they are different, but we don't want to take the risk of varying the system so that we may not get that same type of results which are already obtaining this -- and established in this lab.

HT at 665. A few questions later, Dr. Biswas seized another opportunity to make his point about the importance of experimental researchers consistently following established protocols and procedures:

Q. Now, do I understand that you had oversight of the day-to-day operations of that lab? Is that what you meant by, he entrusted the project to you?

A. Yeah, that's right.

Q. Can you explain to us what that means, in practical terms?

A. Well, we discuss in general -- doesn't matter how many people are there, and we discuss, we decide who will be doing this. I say, for example, we are doing a -- culture cells means cells isolated from human tumors. They are kind of an artificial, because it is not -- environment we are providing, we try to provide as much as what physiological condition. But it is not. So we don't want to vary more than --

Q. Well, Doctor, just for a second, I just want you to talk generally about --

A. Okay, so I am talking about --

Q. -- what your responsibilities were in the lab.

A. -- say, culture cells --

Q. We'll get there, we'll get there, but let's talk about, right for now, what were your duties within Dr. Pardee's lab?

A. To see that the works are done the way we want to do, following the protocols and policies.

*Id.* at 667. Despite the efforts of DFCI's attorney to rein him in, Dr. Biswas was back on the soapbox three questions later:

- Q. And what's the role of the postdoctoral fellows in the research?
- A. Postdoctoral fellows, initially we look into everything going on, and we try to get all the protocols and procedures and policies are done in proper - - this is the first thing I look after, that everybody is doing in the same manner. We agree.
- Q. Okay.
- A. I want to emphasize again that somebody doing differently does not mean those are bad, but they are not the same ones we are following, so I like to see that they are strictly followed.

*Id.* at 668. In fairness to Dr. Biswas, his proclivity to lecturing is certainly not a sign of dishonesty, and there is no basis in this record for questioning the integrity of his belief that strict adherence to established protocols and procedures is the cornerstone of reliable experimental research. However, his zeal in making sure that his perspective was understood, rather than confining his answers to the subject of the question posed, does in my view call into question his accuracy as a factual historian. And lecturing is not the only problem with his testimony. He also demonstrated a tendency to ramble and blur the important distinction between what was said and what the speaker may have meant or intended to say. This is illustrated by Dr. Biswas's account of the instructions that he gave to Dr. Chen regarding the ordering of the primer:

So Alex Miron was controlling that [*i.e.*, orders], and doing many things. He doesn't have time to see every order. And so I told her, "Read this sequence very carefully and if you need any help, call me or talk to Dr. Singh," because these sequences are, one by one, going into the computer. And it happens -- it happened to me also -- that when you are putting into the computer by myself, I make a mistake. There are sequences in perfect sequence, which means one after another. They are perfect sequence, so we have to input perfectly. And I told her several times that before you order -- this is the first time she's ordering -- I said, "Check with me before you place the order," or check with two persons, "Check with Dr. Singh," which is sitting next to her, sitting next to her.

*Id.* at 796. The best one can deduce from this testimony is that Dr. Biswas told Dr. Chen to be careful with the sequences and to check with someone if she needed help. Precisely what he said is far from clear. I emphasize again that I am not finding that Dr. Biswas testified falsely or engaged in any prevarication, but I do find that his testimony was sufficiently vague and inconsistent at times to reasonably question his ability to accurately recall pertinent events and particularly who said what and when. Therefore, as with Dr. Chen, I have not relied on Dr. Biswas's testimony to the extent that it is in conflict with that of a more credible and reliable witness.

On the other hand, I find that Dr. Singh is a very credible witness. She answered questions directly and consistently, and my observation of her demeanor while under examination disclosed no signs of untrustworthiness.<sup>12</sup> Therefore, where Dr. Singh's testimony conflicts with that of either Dr. Chen or Dr. Biswas, I have credited Dr. Singh.

#### D. E-mail Correspondence over the Primer Order

On the Sunday, October 17, 2004, following the primer order imbroglio, Dr. Chen sent Dr. Biswas an e-mail message in which she "scrutinized" their conversations and the sequence of events leading up to the placement of the erroneous primer order. CX 12. In this e-mail, Dr. Chen stated that Dr. Biswas had told her to order the primers and that she had submitted the order after checking the primer sequences with Dr. Singh. *Id.* She continued,

Then I called you and told you that the primers had been ordered. You started to scold at me on the phone. You said you want to check the sequences. Well, if that was the case, you should let me know before you let me know before you let me order them. As you changed your mind and did not let me know, please do not blame others.

I am working here as a research fellow in Dr. Pardee's laboratory. I did not expect to be scolded from time to time. I have been paying respect to you since I started working here.

I wish you could also pay respect to people while they are working with you.

*Id.* Dr. Biswas responded in an e-mail transmitted the following afternoon. CX 13. He began that he was surprised by Dr. Chen's e-mail "because it does not say the whole story." *Id.* He stated that there appeared to be a misunderstanding between them regarding the primer order "that should be clarified." *Id.* He continued,

What I tried to impress on you that you should double check the primer sequences either with Dr. Sindhu Singh who is sitting next to you or with me before emailing the order. At about 5PM on Thursday you informed me that this order is already placed without checking with either of us. This was disturbing, and it is more aggravating when I came to learn this morning that you have actually made a major mistake on this order. You have ordered  $\mu\text{M}$  rather than the routine order of nM quantities. Fortunately this mistake was detected by Dr. Alex Miron and he

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<sup>12</sup> Dr. Singh's testimony was taken at a videotaped deposition which has been viewed in its entirety. JX 2. While DFCI argues in its brief that Dr. Singh's testimony is supportive of its position that Dr. Chen was terminated for legitimate cause, it also hints of possible bias from the fact that Dr. Singh testified at the request of Dr. Chen whose attorney paid Dr. Singh's expenses for traveling from Nebraska to Massachusetts for the deposition. DFCI Br. at 9. With the rare exception of experts appointed by the court, all witnesses are called by one party or another which is responsible for any travel expenses the witness incurs. That fact alone does not establish bias. If anything, Dr. Singh's willingness to testify may be a factor suggestive of heightened reliability. See *Flexsteel Industries*, 316 NLRB 745 (1995) ("the testimony of current employees which contradicts statements of their supervisors is likely to be particularly reliable because these witnesses are testifying adversely to their pecuniary interests"), *aff'd mem.* *NLRB v. Flexsteel Industries*, 83 F.3d 419 (5th Cir. 1996). While Dr. Singh was no longer employed by DFCI at the time that she testified, the record shows that positive references from DFCI are important to advancement of her medical career. JX 2 at 106; HT at 819, 1004-1005.

stopped the order and replaced it with the right amount. Your mistake would have cost us \$2400 rather than \$60. Although my primary concern has been on the composition of the primers, this incident proves the point that double checking is important [sic] and can avoid costly mistakes.

*Id.* He concluded,

I would like to reemphasize that we have established certain procedures and policies for conducting different aspects of the ongoing research in this laboratory. I believe that these should be respected and followed routinely and religiously. On that account I like to be very close to everything on the on-going research of this laboratory and will continue to do so. I hope you respect that. I am sorry for the misunderstanding.

*Id.* Dr. Biswas sent copies of this e-mail to Drs. Pardee and Iglehart. *Id.*<sup>13</sup> The following morning, Tuesday, October 19, 2004, Dr. Iglehart sent the following e-mail to Drs. Biswas and Chen with copies to Drs. Pardee and Miron:

Deb Biswas is the boss....Alex Miron runs the operations of the laboratory. Dr. Pardee provides the direction for these projects, and is the senior scientist for this work. I am in charge of money, promotions, letters of recommendation, supplemental funds.... We are here to cure breast (period).

“A word to the wise should be sufficient.”

CX 13. Dr. Iglehart testified that his concern over this incident derived from communications with Dr. Miron who felt that there had been a breakdown in oversight procedures for placing orders. HT at 993-994, 1038-1040. He further testified that he sent this e-mail “to reiterate again what the game plan and the overall rules are in terms of the chain of command in the laboratory.” *Id.* at 996. He also testified that he was concerned because it was his perception that Dr. Chen was unable “to work under the direction of Dr. Biswas on the NF-kappa B project.” *Id.* at 997.

On the evening of Wednesday, October 20, 2004, Dr. Chen responded to Dr. Iglehart by e-mail in which she stated,

Dear Dr. Iglehart:

Thank you for your email of letting me know the situation of our laboratory.

I have been respecting Dr. Biswas as my direct supervisor since I started working here. My purpose of writing the email to him is to achieve better communication with him. I believe that better communication could lead to better achievement of our breast-cancer-curing vocation. I hope you could understand me.

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<sup>13</sup> Dr. Chen had not sent copies of her October 17, 2004 e-mail to anyone.

Thank you for your E-mail again.

Best wishes,

Sincerely yours,  
Minghua Chen

CX 14. Dr. Chen did not send this e-mail to anyone other than Dr. Iglehart who did not respond.

One week later, on October 28, 2004, Dr. Penelope Miron sent Dr. Chen an e-mail scheduling her to conduct a lab meeting on February 7, 2005. CX 15. This e-mail also showed that Dr. Biswas was scheduled to run a lab meeting on November 1, 2004. *Id.* Dr. Biswas agreed on cross-examination that he gave a presentation at the November 1, 2004 meeting and discussed the work Dr. Chen was doing and that he had not at that point in time indicated to either Dr. Chen or Dr. Penelope Miron that she might be terminated during her probationary period. HT at 850-854.<sup>14</sup>

#### E. The November 12, 2004 Radiation Contamination Incident

As mentioned previously, the researchers working in the Smith 934 laboratory used radioactive materials in some of their experiments. DFCI operates a radiation safety program under the oversight of radiation safety officer (“RSO”) Eric Andersen. HT at 466-467; CX 10. The purpose of the radiation safety program is to “ensure regulatory compliance, and promote the safest conditions possible for staff, patients, contractors, visitors, neighbors, and the environment.” CX 10 at p.1. To this end, DFCI provides radiation safety training to all personnel who intend to work with radioactive materials. HT at 468-469. In addition, there are detailed guidelines and procedures for handling radioactive materials set forth in a Radiation Safety Handbook. CX 10. As pertinent to this case, the Handbook provides that hands, work areas, clothing and floors should be surveyed every day after using radioactive materials and the survey results recorded on a “Personal Survey Form for Radioisotope Contamination.” *Id.* at 8 (attachment).

On November 11, 2004, Dr. Biswas performed a radioactive probe labeling experiment in the laboratory. HT at 127, 815, 855. He testified that he checked for radiation after completing this work and found none but forgot to record on the personal survey form that he had conducted a negative survey. *Id.* at 816, 854-855. Dr. Chen did not use any radioactive materials on that date. *Id.* at 128, 427.

On the morning of November 12, 2004, Dr. Biswas entered the Smith 934 laboratory while Drs. Chen and Singh were both present and instructed Dr. Chen to remove a bag of radioactive waste from the laboratory. HT at 130; JX 2 at 25. He then left the laboratory to attend a meeting. *Id.* The waste material was located in a plastic bag which was inside a lead-shielded container on a work bench in a designated radioactive work area. HT at 132-133. Dr.

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<sup>14</sup> Witnesses and counsel frequently used the term “probationary period” during the hearing. The DFCI Staff Member Handbook uses the term “provisionary period.” CX 36 at 5. The two terms are used interchangeably herein. ”

Chen tied the waste bag, placed a special yellow identification tag on the bag, and then removed the bag and placed it in a special transfer container on a cart which she took out of the laboratory to a facility room where radioactive waste materials are collected. *Id.* at 133-136; JX 2 at 27-29. Upon her return to the laboratory, Dr. Chen began a routine radiological survey of the work area, using a “GM” detector or counter. HT at 136-137; JX 2 at 31.<sup>15</sup> She noticed “high” readings, indicative of radioactive contamination, on a plastic protective shield at the radioactive work area and on a laboratory rack in that area. HT at 137-138. She then advised Dr. Singh that the area was “hot,” and the two researchers then checked the surrounding areas in the laboratory where they detected additional radioactive contamination on two floor tiles near the work station. *Id.* at 138-139; JX 2 at 31, 33-35. Dr. Chen then instructed Dr. Singh to call DFCI’s radiation safety office to report a radioactive spill. HT at 139; JX 2 at 36.<sup>16</sup> After calling radiation safety, Dr. Singh covered the floor tiles with an absorbent material, and she and Dr. Chen waited for Eric Andersen, DFCI’s radiation safety officer, to arrive. JX 2 at 37.

While Drs. Chen and Singh were waiting for the radiation safety officer to arrive, Dr. Biswas returned to the laboratory from his meeting and, observing the absorbent material on the floor, asked what had happened. HT at 141; JX 2 at 37. When told that there had been a spill of radioactive material, he asked Dr. Chen whether she had removed the radioactive waste as he asked her to do earlier. *Id.* Dr. Chen responded that she had removed the waste, and Dr. Biswas stated, “So now we know where it came from.” JX 2 at 37-38. Dr. Chen attempted to explain to Dr. Biswas how she had removed the waste and that it was not possible for her to have contaminated the area, but Dr. Biswas angrily insisted that she was responsible for the spill. HT at 142; JX 2 at 40.<sup>17</sup> Dr. Singh testified that Dr. Biswas also asked her at some point why she and Dr. Chen had been checking the floor, adding that it would be better if she told him the truth. JX 2 at 42.

Upon receiving the report of contamination, Mr. Andersen went to the Smith 934 laboratory. HT at 477, 483. He brought a portable radiation survey meter with him and detected no radiation in the corridor outside of Smith 934. *Id.* at 481-483, 550-555. However, once inside of the laboratory, he detected radiation on the floor where he observed “visibly damp” absorbent material and on the adjacent work bench. *Id.* at 485-486, 557-559. He testified that Drs. Chen and Singh indicated to him that Dr. Chen had been collecting radioactive waste and later discovered the contaminated areas. *Id.* at 561. He further testified that Dr. Biswas suggested that the contamination must have been caused by a spill or release that occurred while Dr. Chen was repackaging the radioactive waste materials. *Id.* He said that he discussed the contamination with Drs. Chen and Singh and advised them that the incident would not be “considered a violation or punitive event” because it had been “self-reported.” *Id.* at 487. Mr. Andersen’s survey detected contamination on the shoes of Drs. Biswas, Chen and Singh, and he instructed them to wash the contamination off the shoes in a sink. *Id.* at 143, 488-489; JX 2 at

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<sup>15</sup> “GM” refers to a Geiger-Mueller Counter. CX 10 at 30.

<sup>16</sup> Dr. Chen testified that she placed the call to the radiation safety office, but I credit Dr. Singh’s more detailed recollection that she made the call.

<sup>17</sup> Dr. Biswas denied accusing Dr. Chen of responsibility for the spill. HT at 857. However, this denial was contradicted by Eric Andersen, the radiation safety officer, as well as Drs. Chen and Singh. HT at 142, 561; JX 2 at 40.

41-42. One of Dr. Chen's shoes could not be decontaminated, and she left the lab to go home for a replacement pair while the contaminated shoe was placed in a bag along with the other contaminated materials. *Id.* at 144-145, 488-489; JX 2 at 43-44. Based on the information provided by Drs. Biswas, Chen and Singh and his own observations, Mr. Andersen concluded that the contamination was most likely caused by a spill incidental to Dr. Chen's removal of radioactive waste earlier that morning because "it had to be fresh, and that was the only use of radioactive materials at that time . . . ." *Id.* at 565. However, he acknowledged that the contamination also could have occurred during an experiment conducted with radioactive material. *Id.* at 562.

After Dr. Chen left the laboratory to go home for replacement shoes, Mr. Andersen also left, leaving Drs. Biswas and Singh in Smith 934. JX 2 at 44. Dr. Singh recalled that Dr. Singh continued to appear upset, and she heard Dr. Biswas muttering to himself, "This is not acceptable. I'm going to get rid of her." *Id.* at 46.<sup>18</sup> Dr. Biwas also pointed to the work station that had been contaminated by radiation, and said to Dr. Singh that this was "not acceptable." *Id.* Dr. Singh did not respond to these comments. *Id.*

When Dr. Chen returned to the Smith 934 laboratory, she proceeded to conduct further radiation surveying pursuant to instructions that Mr. Andersen had given to Dr. Singh. JX 2 at 47; HT 146. During this additional survey, Dr. Chen detected radiation around a small refrigerator and specifically on two tubes containing T4 kinase and primer that was used for probe labeling and stored in the refrigerator. JX 2 at 48-49; HT 147. Dr. Singh called Dr. Biswas who came to the laboratory and confirmed the presence of radiation around the T4 kinase and buffer. JX 2 at 50; HT at 152. Dr. Biswas also commented that he had not used these tubes in his experiments on the previous day and that he had instead used T4 kinase from the laboratory in Smith 820. *Id.* The contaminated tubes were removed from the refrigerator and discarded with the other contaminated materials. *Id.* Also at some point during the afternoon of November 12, 2004, Dr. Singh pointed out to Dr. Biswas that he had not signed the Personal Survey Form after he performed the radioactive experimentation on November 11. JX 2 at 52; HT at 153-154, 859; CX 16. Dr. Biswas then attempted to correct this error and later filled out a new personal survey form after explaining to Drs. Chen and Singh that the corrected version looked messy. JX 2 at 53-58; HT at 153-162.

Mr. Andersen filed a report on the November 12, 2004 incident. RX 7. In his report, Mr. Andersen stated that no violation was assessed or cited, and he stated that "[i]n general, response by lab staff was prompt, effective, and conservative." RX 7(b) at 1-2.

#### F. Dr. Chen's Report of the November 12, 2004 Incident

On November 15, 2004, Dr. Chen e-mailed a report to Drs. Iglehart and Pardee regarding the radiation contamination incident. CX 17 and 18; HT at 162-163.<sup>19</sup> In this report, Dr. Chen

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<sup>18</sup> Dr. Biswas testified that he did not remember saying that he was going to "get rid" of Dr. Chen, and he stated, "I don't think I said anything to Singh." HT at 858. I have credited Dr. Singh's account for the reasons discussed above.

<sup>19</sup> Dr. Chen's report on the November 12, 2004 incident was sent in separate but identical e-mails to Drs. Iglehart and Pardee. CX 17 and 18.

described the events leading to the initial discovery and then provided the following account of Dr. Biswas' reaction upon learning of the situation:

At that time, Dr. Biswas came back from a meeting. After knowing what we were doing, he assumed I spilled the radioactive. I explained to him how I disposed the waste bag. First, I tagged the waste bag very tight with yellow radioactive tag and transferred the bag into a plastic transfer container. Then I put this container on a cart and transferred the bag into the bigger container in the radioactive co-facility room. During the whole process, the bag was intact and nothing was dropped outside. Sindhu witnessed the entire operation I did in the lab. Common sense tell us one cannot contaminate things with radioactive without direct touching them. That is what the plastic bags designed for transferring radioactive materials. But Dr. Biswas ignored of what I had explained.

CX 17 at 1. She also stated, “[w]hen the radioactive officer Eric came, Dr. Biswas pointed me as the one who spilled the radioactive.” *Id.* Regarding the subsequent discovery of additional contamination, Dr. Chen's report continues,

Eric told us to continue the checking and he would be back this week. So I started to check everything in the lab. I found an icebox was radioactive contaminated and it was sitting in a non-radioactive labeled freezer. As the GM counter pointed to T4 kinase and buffer inside the box, it was highly possible someone who did the probe labeling and contaminated them with radioactive. Knowing Dr. Biswas did probe labeling the day before, Sindhu called Dr. Biswas to come upstairs. He identified that the T4 kinase tube was radioactive contaminated and he said he didn't use that kinase tube. He said he added T4 kinase in room SM820 for 32p probe labeling.

*Id.* at 2. Dr. Chen's email then concluded,

I'm required to report radiation safety violation to my principal investigator. Clarify what happened in the incident could make clear how many people who work in this area have been over-exposed and prevent future radioactive contamination. Eric will come back this week; I will keep you updated of the process. Please let me know if you have any instruction.

*Id.* Neither Dr. Iglehart or Dr. Pardee ever responded to Dr. Chen's November 15, 2004 e-mail report. HT at 163-164. Dr. Chen sent similar e-mails to Mr. Anderson and Dr. Miron which contain essentially the same account as set forth in her November 15, 2004 e-mails to Drs. Iglehart and Pardee. CX 20 and 21. She received no response from either Mr. Anderson or Dr. Miron. HT at 170-171.

Dr. Singh also sent an e-mail to Drs. Iglehart and Pardee on November 15, 2004 regarding the events of November 12, 2008. *See* JX 2 at Deposition Exhibit 2. Her e-mail does not mention Dr. Biswas's statements which attributed responsibility for the contamination to Dr.

Chen. There is no evidence in the record that Dr. Singh ever received any response to this e-mail.

#### G. Discovery of Contamination in Smith 820

On November 16, 2004, Dr. Chen spoke with Mr. Andersen about the additional contamination that had been discovered on the T4 kinase and primer tubes stored in the refrigerator in Smith 934, and she suggested that he check for contamination in the Smith 820 laboratory due to the transfer of materials between the two laboratories. HT at 165; 508; JX 2 at 59. Mr. Andersen performed an initial survey of Smith 820 which was negative, and he directed two contract employees to conduct a more thorough survey. HT at 509. This second survey by the contract employees discovered radioactive contamination on an “epitube” rack on a benchtop inside Smith 820. JX 2 at 60; HT at 510; RX 7(b) at 2; RX 9. Mr. Andersen testified that he was surprised by the finding of contamination on the rack, especially as he had specifically checked Smith 820 for radiation earlier in the day, and he said, “that raised some concerns from my perspective as to where that rack could have come from.” HT at 513, 514-516. After the contamination was discovered on the rack in Smith 820, Mr. Andersen inserted the following addendum in his report:

A follow-up survey also showed a contaminated rack had been brought down to a lab on the 8<sup>th</sup> floor, that is not posted for authorized for work with radioactive materials. The sequence of events leading to its discovery provides some uncertainty in its derivation; the RSO did not see it on the bench at the time of his 1<sup>st</sup> survey, despite dose rates as high as 2 mrad per hour at contact. Hours later, contract staff found it in a prominent location on the bench previously surveyed. Laboratory personnel (from both floors) denied any knowledge of its presence, or how it got there.

RX 7(b) at 2. Mr. Anderson also brought this discovery to the attention of Dr. Biswas who responded in a letter dated November 16, 2006. RX 10. In his letter, Dr. Biswas acknowledged the report that a contaminated rack had been found in Smith 820 where radioactive experimentation is not permitted. *Id.* He stated that “it may be presumed that one of us mistakenly brought the rack downstairs between 11-2PM.” *Id.* Dr. Biswas further stated that he has spoken with all lab staff about the problem and that they would henceforth maintain separate material inventories for the two laboratories and monitor all materials leaving Smith 934 to avoid a reoccurrence. *Id.* Dr. Biswas later asked Drs. Chen and Singh to cosign this letter. JX 2 at 63; HT at 166-167, 523; CX 19. Dr. Chen asked Dr. Biswas if she could first survey Smith 820 again for radioactive contaminations, and he granted her permission but became agitated and ordered her to stop and sign the form shortly after she had begun the survey. JX 2 at 64-65; HT at 167-168.

After signing on to Dr. Biswas’ November 16, 2004 letter to Mr. Andersen, Dr. Chen had no further discussion of radiation contamination incidents or her reports with either Mr. Andersen or Drs. Biswas, Pardee or Iglehart. HT at 171-173.

#### H. Dr. Chen's Termination

On November 24, 2004, Amy B. Porter-Tacoronte, Chief Administrator of DFCI's Department of Medical Oncology, sent an e-mail message to Dr. Pardee regarding the impending end of Dr. Chen's 90-day probationary period. In that e-mail, Ms. Porter-Tacoronte stated,

It has been brought to my attention that there was a radition [sic] spill that involved Minghua Chen. Minghua is currently within her 90-day probationary period at DFCI. As you may know, the probationary period allows the supervisor to terminate employment without initiating a the [sic] long, formal, disciplinary process. You also have an option to extend the probationary period for an additional month. If you have any concerns with Minghua's performance or fit with the lab and wish to pursue either of these options, please let me know as soon as possible as the probationary period ends, next Tuesday, November 30.

RX 25. Ms. Porter-Tacoronte testified that her issuance of this e-mail was precipitated by a call that she received from Ada Watson, the administrator for the Department of Cell Biology at DFCI, who advised that she was forwarding a copy of a "spill report." HT at 967. Ms. Porter-Tacoronte further testified that she did not recognize Dr. Chen's name, so she looked her up and discovered that she was still within her probationary period. *Id.* at 967-968, 972. According to Ms. Porter-Tacoronte, this discovery prompted her to send the e-mail to Dr. Pardee:

So I - - she, instead of waiting for the report to come to me, I just shot off my standard e-mail. But I also entered the first sentence to kind of just let them know that - - who Minghua Chen was, and that there was an incident that she was involved in, that I didn't know what level she was involved in or whether or not it would have any indication or implication in his evaluation for this 90-day probationary period. So I just sent that out to him for his judgment or review.

*Id.* at 968. Ms. Porter-Tacoronte said that she had not spoken to either Dr. Pardee or Dr. Biswas before sending the November 24, 2004 e-mail. *Id.* at 968-969. She acknowledged that she was aware that Drs. Biswas and Singh were also named along with Dr. Chen in the report on the radioactive spill, but she did not send any e-mail to Dr. Pardee regarding either Dr. Biswas or Dr. Singh. *Id.* at 974-975.

During the morning of November 29, 2004, Dr. Biswas told Dr. Chen that Dr. Pardee wanted to see her in his office. HT at 173-174. She went to Dr. Pardee's office where Dr. Pardee informed her that her employment was being terminated prior to the completion of her probationary period. *Id.* at 174. Dr. Chen testified that upon receiving this news, she became upset and began to cry, stating that she had done nothing wrong and asking Dr. Pardee why she was being terminated. *Id.* at 174-175. She further testified that Dr. Pardee was unable to provide her with a reason, and he unsuccessfully tried to call Drs. Biswas and Iglehart. *Id.* at 175. She said that she had done nothing that could lead to her termination other than reporting the radioactive spill and that she felt it was unfair for her to be terminated for that reason. *Id.* Dr. Pardee's only response was to say that he would help her find another job. *Id.* at 176. Dr.

Pardee then escorted Dr. Chen to human resources where she was again told that Dr. Pardee would find her another job. *Id.* at 178. After leaving human resources, Drs. Pardee and Chen walked back to the Smith Building, and Dr. Chen asked Dr. Pardee en route whether he would write her a reference letter. *Id.* Dr. Pardee responded that he wanted to see her research first. *Id.*

Dr. Chen then returned to the laboratory where she began to collect her research data to bring to Dr. Pardee. HT at 178-179. While she was in the laboratory, Dr. Pardee summoned her back to his office where she was presented with memorandum which stated that she was being terminated, effective immediately, for failure to successfully complete a 90-day probationary period. *Id.* at 178-179; CX 22. Dr. Pardee's memorandum stated that Dr. Chen had "been unable to demonstrate proficiency" in her overall performance, and identified the following as a specific area in which she had not met expectations:

Ability to effectively collaborate and follow the direction provided by the onsite supervisor – Dr. Debajit Biswas. This has proved counterproductive to the research project and the laboratory operations.

CX 22. Finally, the memorandum advised that Dr. Chen's salary would be continued until December 31, 2004, and it instructed her to report to DFCI Human Resources to complete exit paperwork. *Id.* Dr. Pardee asked Dr. Chen to sign the memorandum, but she refused. HT at 180. He then had an administrative aide escort her back to human resources. *Id.* at 181. At human resources, Dr. Chen saw a Jennifer Buck to whom she complained that her termination was unfair and that nothing could have led to the termination other than her reporting the radioactive spill. *Id.* Ms. Buck responded that Dr. Pardee had the right to terminate her job. *Id.*

On November 30, 2004, Dr. Chen sent an e-mail message to Dr. Pardee in which she asked for his home telephone number and stated that she would submit a letter of resignation after she had found another job at DFCI. CX 23; HT at 188. She then stated,

Dear Dr.Pardee, I came to your lab because of your reputation. You are so famous in the world. I wanted to learn more from you and become a good person like you. I did not hurt anybody, why people hurt me so much?

I wanted to tell you I did not want to do anything about radioactive, it is my responsibility [sic] to report. Actually Dr. Biswas accused me and pushed me to do that. Again, I have no intent to do anything to harm anybody. I only wanted be treated fairly.

CX 23. Dr. Chen concluded her e-mail by asking Dr. Pardee if she could retain her DFCI keys and ID so that she could have access to her computer for the purpose of arranging her research data for his review. *Id.*

Dr. Pardee responded in an e-mail dated December 1, 2004 in which he gave Dr. Chen his home telephone number and thanked her for turning in her keys and ID. CX 23. He also asked her to return her research notebooks and "reagents" to Dr. Biswas. *Id.* He then told Dr. Chen that he felt "very sad about your situation" and added, "It's too bad that we didn't get to

talk earlier. You were here for such a short time and your research was just starting (and I was traveling much in November).” *Id.* His e-mail concluded, “As I have told you several times, there is not a problem about radioactivity spill. I expect to hear from you when new job opportunities for you arise.” *Id.* (underlining in original).

Prior to filing her complaint with OSHA on December 27, 2004, Dr. Chen made several unsuccessful attempts to meet with DFCI human resources officials in an effort to reverse the termination decision which she contended was unfairly based on her actions in reporting radiation contamination. CX 24. She also appealed to Dr. Pardee in an e-mail dated December 9, 2004 that she needed more time to find another job:

The unjust 90-day provisional period termination to me posed great difficulty for me to find another research position. You knew it was not my fault. Why am I punished for what is not my fault? Could you withdraw the termination letter and give me enough time to find another position? I have no more intent to continue to work in your laboratory especially under Dr. Biswas’ supervision.

CX 26. Dr. Pardee responded three days later that he could not do anything about “this problem” as “[i]t now is an administrative matter.” *Id.* He concluded, “All I can do is write recommendations for you when you find possible jobs. Good Luck!” *Id.*

#### H. Evidence of DFCI’s Reasons for Terminating Dr. Chen

##### 1. Dr. Pardee

Dr. Pardee testified that he learned about the radiation spill in Smith 934 from Dr. Biswas and that he also received the e-mail from Dr. Chen (CX 18) about the incident. HT at 889. He said that after he spoke to Dr. Biswas and read Dr. Chen’s e-mail he had no concerns about the incident and “felt that everyone behaved properly.” *Id.* at 889, 922. Dr. Pardee further testified he had some discussions with Dr. Biswas about Dr. Chen’s performance, and he emphasized that these discussions only occurred at the “very end” of Dr. Chen’s 90-day probationary period when Dr. Biswas brought up the matter of “protocols, whatever you want to call it.” *Id.* at 891, 913-914. He conceded several times that he could not remember call all of the details of these conversations with Dr. Biswas, but he did recall that Dr. Biswas related that there had been a difference of opinion with respect to the procedure for growing and removing cells. *Id.* at 892-893. He further testified,

That was his main complaint that I remember, that Dr. Chen had ways she had learned of doing this, which I’m sure were perfectly good ways. And the ones Biswas used were different. As I said earlier, it’s important not to change techniques without testing the changes. So they seemed to disagree about just how these procedures would be carried out, which may sound trivial, but it’s not in terms of the experiment.

Q. What could be the potential impact on the experiment?

A. Well as I said a moment ago, if you do it a different way, you might lose different cells. So your population that you finally look at could be different, depending on how you do it. But I think the other point was that there was disagreement coming up, and that had to be resolved in terms of continuing the experiments.

Q. And so then, did you agree that it was appropriate to terminate Dr. Chen at that time?

A. Well, I was not very happy about it. But then I think it was necessary. I was in charge of the finances of government money, and I felt that if they weren't in agreement, the work could not progress equitably. It would be a mis-spending of the finances. And so I thought we really had to terminate this connection.

*Id.* at 893-894. Dr. Pardee said that he relied on guidance from DFCI's human resources department and Ms. Porter-Tacoronte in terminating Dr. Chen's employment, and he denied ever being "angry" with Dr. Chen over the radioactive material spill or for any other reason. *Id.* at 894-896.

Under cross-examination, Dr. Pardee testified that he had previously terminated two other employees at DFCI, one for alleged theft of equipment and a post-doctoral fellow with a difficult personality and history of violent behavior, but he agreed that these prior cases were "[t]otally different" from Dr. Chen's termination. HT at 901-902. He was shown an excerpt from the DFCI Staff Member Handbook which states that a supervisor "should perform an evaluation of the staff member's performance and indicate whether he or she has successfully completed the provisional period" (CX 36 at 5), and stated that he would have expected Dr. Biswas to evaluate Dr. Chen's performance because "he was in day to day contact . . . with Dr. Chen." *Id.* at 906-907. Dr. Pardee agreed that in accordance with the Staff Member Handbook, Dr. Biswas should have prepared an evaluation of Dr. Chen's performance and provided copies to human resources and Dr. Chen, and he said that he had never seen any evaluation of Dr. Chen. *Id.* at 908.<sup>20</sup> Dr. Pardee was asked if he could recall any other issues that Dr. Biswas had raised about Dr. Chen in addition to the cell transfer procedure, and he responded that he could not, adding, "It was sort of sudden. . . [when Dr. Biswas] "came to me with these concerns." *Id.* at 914. He agreed that Dr. Chen was an experienced scientist when she was hired, that there are alternate ways to perform experiments and that it was his expectation as the head of the laboratory that Drs. Biswas and Chen would "discuss alternative methods of doing this experiment and if they couldn't agree, to set up some sort of test to see if it made a difference or not." *Id.* at 918. However, he added, "[b]ut in the meantime, I expected Dr. Chen to do it the way we've been doing it, or Biswas was doing it, to keep the continuity of the work going. And I don't understand why Dr. Chen couldn't have tried his way." *Id.* Dr. Pardee agreed that he did not consider Dr. Chen's mistake on the primer order to be indicative of a failure to collaborate, and he confirmed that he "certainly wouldn't have fired anybody for making such a mistake." *Id.* at 921. Finally, Dr. Pardee was cross-examined about the radiation contamination incident,

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<sup>20</sup> It is undisputed that Dr. Biswas never prepared a written evaluation of Dr. Chen's performance. HT at 854.

the timing of Dr. Biswas' complaints about Dr. Chen and the reasons for Dr. Chen's termination which elicited the following testimony:

- Q. And when Dr. Biswas came to you with his concerns about Dr. Chen, it was after the spill? Was it after November 12th?
- A. I don't have the dates straight, but I think it was before the spill. He was worried about these procedures quite independent of the spill. I thought the spill was sort of peripheral, so I didn't pay too much attention to it.
- Q. I'm just trying to get a time frame. So you think Dr. Biswas came to you with his concerns prior to mid November?
- A. I believe so. Well, we have all the dates. We'd have to look and see. But I thought of the spill as something quite separate and not particularly important because it was taken care of properly. Of course, you don't want to have spills, but it's not a criminal offense, if I may call it that. I mean, it's not a thing to get too excited about.
- Q. Well, sir –
- A. They're two quite separate things.
- Q. Yes, and the basis for Dr. Chen's termination in your -- based on your termination letter was her failure to collaborate with Dr. Biswas?
- A. Yes.
- Q. And so when you issued the termination letter based on her failure to collaborate, did you consider the attention that she had brought to the lab and to Dr. Biswas' supervision of the lab?
- A. I did not consider the spill important, if that's what you're saying. Whatever attention was brought to the lab by the spill, I did not consider it as a major thing and it didn't do discredit to the laboratory.
- Q. Did you consider Dr. Biswas? Did you consider Dr. Biswas' communications to you about Dr. Chen in light of the attention that had been brought to the lab around the spill in Room 820?
- A. No, I thought they were quite separate things. And I did not consider the spill important in terms of deciding about Dr. Chen.
- Q. So is it fair to say you placed your trust in the information you got from Dr. Biswas?

- A. Yes.
- Q. And Dr. Biswas communicated to you his concern around an incident or two. And based on those, you agreed that she should be terminated. Is that fair to say?
- A. Yeah, in view of what it was doing to the prospects for that project.
- Q. And part of your concern about this, Doctor, is it fair to say that if people aren't getting along in the lab, it's not a good use of the money? Am I being too glib?
- A. I don't like the term, getting along. They couldn't reach agreement as to how to conduct the experiments. It was not a good use of the money because I can't see the results coming out reliably.
- Q. And did you have any reason to believe that Dr. Chen would not agree to do what Dr. Biswas had told her to do?
- A. Well, that's exactly what Dr. Biswas said, that she would not agree to do experiments the way he told her to do them.
- Q. And he told you that. And that, you accepted that and made no further inquiry?
- A. I've known him for ten years and I believe he's honest, and that he would not have said that if it wasn't true. Also –
- Q. And one of the things –
- A. -- I would just say that Dr. Chen had the opportunity to tell me what her problem was, but she never did, about these discussions with Dr. Biswas. I only heard one side of the story. But this all happened in a fairly short amount of time and it sort of grew until the very last moment, as you pointed out, later. So there really wasn't an opportunity until it was too late to talk to Dr. Chen. You know, you can't lock the barn after the horse is stolen.

*Id.* at 923-924.

## 2. Dr. Biswas

Dr. Biswas testified that he lost confidence in Dr. Chen as conflicts persisted over experimental procedures, and he testified that he discussed his concerns with Dr. Chen:

I told her that, "I am not happy with the way you are doing." To me, it is not a huge problem. She always tried to tell me that, "The way I am doing is right, it is better than yours." And I let her go ahead in that manner, as I interpret, because she goes on doing the way she wants to do. And that is not acceptable to me and to my supervisors. I discussed with them, because that could change our previous. We have been consistent with those, which is the whole issue, which we started 10, 12 years back, and got some meaningful results. Neither of us want to upset that situation. So I told her that, that look, we are not going to change these methods. We have to do it this way. You should accept that way. And she refused to do that.

HT at 805. He further testified that he frequently expressed his concerns about Dr. Chen to Drs. Pardee and Iglehart and ultimately recommended her termination based on her refusal to accept his established protocols. *Id.*<sup>21</sup> Dr. Biswas said that he was "pleased" and "happy" with the manner in which Drs. Chen and Singh handled the reporting and remediation of the radioactive contamination on November 12, 2004, and he stated that the incident had no impact on his recommendation to terminate Dr. Chen's employment. *Id.* at 809.<sup>22</sup>

On cross-examination, Dr. Biswas conceded that he did not prepare a written evaluation of Dr. Chen's performance as required by DFCI's Staff Member Handbook, but he insisted that he had verbally informed her of his dissatisfaction with her performance:

I verbally expressed my dissatisfaction of her performance. But you are right, I had not given any written anything because I was thinking that I should try with her as long as possible. But no written thing, you're absolutely right. But verbally I communicated with her that I am not satisfied with her performance.

HT at 829. He also agreed that he had not specifically told Dr. Chen prior to November 29, 2004 that she would be terminated and that Dr. Chen had followed his instructions regarding the procedure to follow when thawing cells. *Id.* at 829, 832. Dr. Biswas testified that he first began to lose confidence in Dr. Chen around the latter part of September 2004 following the incident

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<sup>21</sup> Dr. Biswas's testimony that he recommended termination of Dr. Chen's employment is contradicted by Dr. Iglehart, a more reliable witness, who testified that he did not recommend termination. HT at 1029. In fairness to Dr. Biswas, he never specifically said that he "recommended termination," though he did respond affirmatively to a leading question from DFCI counsel:

Q. Now are the reasons that you've just given us the reasons that ultimately you recommended Dr. Chen's termination?

A. Yeah. Yes, I talked with both Dr. Iglehart and Pardee.

HT at 805. As I find Dr. Iglehart to be a more credible and reliable witness, and noting that Dr. Pardee did not testify that Dr. Biswas recommended termination, I find that the weight of the evidence does not establish that Dr. Biswas ever recommended that Dr. Chen's employment be terminated.

<sup>22</sup> Dr. Biswas' claim that he was "pleased" and "happy" about the manner in which the Smith 936 contamination incident was handled conflicts with Dr. Singh's credited testimony that he was upset and muttered that he was going to "get rid" of Dr. Chen.

where she appeared to have somewhat casually dismissed Dr. Miron's process as unworkable. *Id.* at 839-840. He was then asked if this timing provided him with an opportunity over the next 60 days to notify Dr. Chen of his concerns regarding her performance, and he responded, "I did. I did. And the reply I got? That, 'I'm here not to work with you. I'm working with Dr. Pardee.' That's the reply most of the time." *Id.* at 841. Dr. Biswas denied that he can get agitated or raise his voice with employees, and he confirmed that he sent copies of his response to Dr. Chen's October 17, 2004 e-mail regarding the primer order to Drs. Pardee and Iglehart to let them know what was going on. *Id.* at 843-844. He concurred that all of his other communications with Drs. Pardee and Iglehart regarding his concerns with Dr. Chen's performance were verbal. *Id.* at 846. Dr. Biswas testified that he informed Drs. Pardee and Biswas that Dr. Chen was "defying" him and "not following my direction, procedure and protocol." *Id.* at 847. He reiterated that Dr. Chen repeatedly told him that she was working in Dr. Pardee's laboratory and was not there to work for him and that he took these comments "as an offense." *Id.*

### 3. Dr. Iglehart

Dr. Iglehart testified that he had an opportunity to interact with Dr. Chen on a weekly or biweekly basis over the course of her employment and that he formed an opinion from these interactions that she was "quiet, difficult to communicate with, and stubborn." HT at 997. He explained,

When I ask somebody in the laboratory how their work was going, it usually means that I want them to tell me what they think about the experiments that they've done, what they think those experiments mean, what those experiments -- how those experiments relate to the larger project, and to put some intellectual thought into what they're doing. And I just -- whenever I communicated with Dr. Chen, I never got any of those. I just -- I got almost a blank stare.

*Id.* at 997-998. Dr. Iglehart stated that this was a significant concern to him because "the most important skill in being a modern biomedical researcher is communication . . . the ability to tell other people what your ideas are, what those ideas mean, why they're important, and to listen to them when they tell you why they think that their ideas are important." *Id.* at 998. He said that he began to form these impressions "within the first month or two" of Dr. Chen's employment. *Id.* at 999, 1009.

In addition to his personal observations, Dr. Iglehart testified that that he developed concerns regarding Dr. Chen's performance from communications that he had with Drs. Biswas, Miron and Singh. HT at 1027. He said that he relied extensively on Dr. Biswas's complaints that Dr. Chen was not following his policies and procedures, and he agreed on cross-examination that his decision to recommend her termination was in part based on his belief that she had to get along with Dr. Biswas in order to be successful in the laboratory. *Id.* at 1008-1009, 1011, 1016-1018, 1029. However, he testified that Dr. Biswas did not recommend that Dr. Chen's employment be terminated. *Id.* at 1029. Dr. Iglehart testified that he also consulted with Dr. Miron about Dr. Chen's termination and that he had discussions with Dr. Singh regarding communication problems in the laboratory. *Id.* at 1011, 1027. Regarding his discussions with Dr. Singh, he stated that Dr. Singh approached him to express a concern, without criticizing Dr.

Chen or attributing fault to anyone in particular, that communications between Drs. Chen and Biswas had broken down and that there was tension in the lab. *Id.* at 1027, 1041-1043.<sup>23</sup>

Dr. Iglehart said that he was aware that Dr. Chen's probationary period ended in late November of 2004 and that he "strongly" recommended to Drs. Pardee and Biswas that Dr. Chen's employment be terminated based on his concerns with her "ability to work as a team member, the ability to take a direction from one's mentors, the ability to communicate one's findings, both written and spoken . . . ." HT at 1002-1003. He continued that the two most important skills in modern biomedical research are the ability to communicate and the ability to work as a member of a team, and he felt that "Dr. Chen just didn't have it." *Id.* at 1003. He underscored the importance of these skills as follows:

[I]n an academic biomedical research laboratory, it's the ability to work with a variety of different people coming from a variety of different backgrounds, to communicate openly and freely with those individuals, and be a member of the team. That quality is what, at least nowadays, is what characterizes the best biomedical research laboratories. And if you don't match that, if you don't make that criteria, you can't get grants and you're not being responsible, if you have grants, to the funding agencies that are giving you the money.

*Id.* at 1003-1004. Dr. Iglehart denied harboring any "animus" against anyone as a result of the radioactive contamination incidents in Smith 936 and 824 or the reporting of those incidents which he described as minor and completely resolved. *Id.* at 1000-1002. However, when he was specifically asked on direct examination about the reasons for the termination and whether the radiation contamination incident played any role, he candidly disclosed that Dr. Chen's response to the incident, as well as Dr. Singh's response, caused him concern:

Q. I'm showing you what's been marked Complainant's Exhibit 22. This is the termination letter that was provided to Minghua Chen. Would you say that what is indicated at letter (a) is the real reason that Dr. Chen was terminated from Dana-Farber?

A. Yes, that is certainly an important reason.

Q. Now did reporting the radiation spill or any other radiation issue at Dana-Farber play any role in your recommendation that Dr. Chen be terminated?

A. No.

Q. Why do you hesitate, Doctor?

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<sup>23</sup> Dr. Iglehart also revealed during cross-examination that Dr. Singh had complained to him at times over the course of her two-year employment at DFCI that Dr. Biswas was unreasonable in that "he tends to want procedures in the lab that he's set up and set out to be followed pretty much according to the letter of the law." HT at 1019, 1020, 1042,

A. The only thing that distressed me was the response in frankly both of Dr. Singh and of Dr. Chen to the radiation spill. It was, I thought, bizarre that there was the sense that there was going to be recrimination or that somebody was being blamed, that I thought was just inappropriate which again led me to think this was somebody who isn't communicating on the same level and the same playing field as the rest of us. So it was my concern about the way that she responded to this minor event that was concerning.

Q. Okay. What was it about the reaction that you found so strange?

A. Blame. That somehow there had to be blame for this, that somebody had to be at fault for this, which was, I thought, bizarre.

*Id.* at 1006-1007.<sup>24</sup> On cross-examination, Dr. Iglehart testified that he did not recommend Dr. Chen's termination during the first two months of her employment when he first developed concerns about her performance, and he confirmed that his decision with respect to termination of Dr. Chen's employment was made after the report of the radiation incident. *Id.* at 1008, 1028-1029, 1044. He also confirmed that he could not recall any other post-doctoral research fellows being terminated for failing to follow procedures. *Id.* He was asked whether he had spoken to Dr. Chen about Dr. Biswas' concerns that she was not following his procedures, and he responded, "probably not adequately," adding that his "direct communications were more general about the need for following procedures in general, respecting Dr. Biswas' mentorship and being part of the overall research team." *Id.* at 1018. Thus, he stated that he could not recall ever having a meeting with Drs. Chen and Biswas to discuss Dr. Biswas' complaints that she was not following his procedures. *Id.* at 1022-1023. When asked about his testimony that he was surprised by manner in which Drs. Chen and Singh reacted to the radiation contamination incident, he testified that he could not recall ever talking to Dr. Chen, Dr. Singh or Dr. Biswas about this issue. *Id.* at 1026. He also confirmed that he never made any inquiry to determine whether Dr. Biswas' concerns about Dr. Chen were influenced by the events related to the radiation spill, although he again pointed out that he considered the episode to be bizarre:

I think my impression at the time was that the whole thing seemed -- there was even a rumor that somebody had planted this contaminated test tube rack. And it just, the whole thing just seemed incredulous, bizarre. So that was the only -- the only thing I ever thought about it was how strange people were acting about it.

*Id.* at 1029-1030. He further explained that his incredulity was not related to anything that Dr. Biswas said or did:

Q. And again, did Dr. Biswas appear to you to be acting strange about it, as well?

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<sup>24</sup> Dr. Iglehart paused for several poignant moments before answering the question of whether the radiation incident played any role in the termination decision. While hesitancy by a witness may be indicative of prevarication, I find for reasons discussed *infra* that Dr. Iglehart was a completely credible witness.

A. Oh, no.

Q. And so you received no reports from anyone that he had been upset?

A. No.

Q. Or angry?

A. No.

Q. Or concerned about anything related to those events?

A. Oh, no.

*Id.* at 1030. Dr. Iglehart testified that he was unaware of many details related to the radiation contamination incident and that he did not learn of the issue concerning the personal survey form until after Dr. Chen's termination. *Id.* at 1030-1034. He was asked about his reference to Dr. Chen's stubbornness and said that it was his impression at the time that he recommended termination that Dr. Chen was unwilling to do things the way Dr. Miron or Dr. Biswas had recommended. *Id.* at 1035. He agreed that he did not review Dr. Chen's lab notes and that he did not have any independent verification that Dr. Biswas' complaints about Dr. Chen were accurate. *Id.* However, he rejected the suggestion that his termination recommendation was based "substantially" on the concerns that Dr. Biswas expressed to him, and he countered that his recommendation was based on his own observations that Dr. Chen had some communication difficulties, was quiet and stubborn. *Id.* at 1036. He then asserted that the information that he received from other sources about Dr. Chen was corroborated:

So everything that Dr. Biswas told me was corroborated by Dr. Miron. And everything that Dr. Miron and Biswas told me was indirectly corroborated by Sindhu Singh who offered her observations about the way things were going. And every interaction I had with Dr. Chen was unsatisfactory.

*Id.* He did, however, acknowledge some uncertainty as to the details underlying the complaints from Drs. Biswas and Miron that Dr. Chen failed to follow procedures. *Id.* at 1037-1040. And, he agreed that his discussions with Dr. Singh did not corroborate Dr. Biswas's complaints that Dr. Chen failed to follow protocols. *Id.* at 1043.

On redirect examination, Dr. Iglehart testified that no single issue related to Dr. Chen's employment formed the basis of his decision to recommend her termination. HT at 1047. Rather, he stated,

Again, I'll reiterate that it was the sum total of the interactions that I had, that I observed her having, and that other people told me they had with her, number one. Number two, and not necessarily in that order, my perception that Dr. Chen was going to have a hard time in this particular laboratory working with Drs. Pardee and Biswas. And number three, that Dr. Chen was going to have a hard

time and was not going to be an effective contributor in a multi-disciplinary disease-based research operation.

*Id.* at 1047-1048. When asked to elaborate further on his assessment that Dr. Chen would not prove to be a successful researcher on the NF- $\kappa$ B project, Dr. Iglehart testified,

And that, I think goes back to the inability to freely communicate and exchange ideas, interpretations, to have an interest and a knowledge of the human disease that we're studying over and above just a bunch of biochemical reactions, that this is important, it's an important disease that strikes a lot of people, and that our job is to try to find a cure for that cancer. And that means that you have to get involved with clinical trials, with human samples from patients, with doctors taking care of patients, radiologists, pathologists, and that that kind of broad interactive, multi-disciplinary work is just something that I didn't think that she was suited to.

*Id.* at 1048. Dr. Iglehart agreed that this assessment was based on his personal perceptions. *Id.* at 1052. Lastly, when asked by Dr. Chen's attorney to explain why he waited until the end of Dr. Chen's probationary period to recommend her termination when he had testified that he had formed a negative opinion of her suitability within a month or two of when she began working at DFCI, Dr. Iglehart responded as follows:

Because I think that the issue is, you know, "did I make a decision too fast in this situation?" And I guess that refers to the 90-day period which is the concern right towards the end there. And I thought, rightly or wrongly, it was my recommendation that she needed to go. And it was because of that 90-day period. If I didn't have that 90-day period, I think there would have been more opportunity to let the relationship develop. But, there just wasn't. And I'm sorry the way it happened, that it went right down to the eleventh hour. But it was, you know, it was my advice to Dr. Pardee and Dr. Biswas, and particularly to Dr. Pardee . . . that we say sorry it didn't work out, and move on.

*Id.* at 1056.

#### I. Dr. Chen's Post-DFCI Activities and Employment

Dr. Chen introduced evidence that she unsuccessfully applied for several research positions between January and May of 2005. CX 33. In or around June of 2005, she began a full time course of study in a Master of Public Health degree program at the Harvard School of Public Health ("HSPH"). HT at 370; RX 17. Dr. Chen somewhat reluctantly disclosed at the hearing that she originally applied to HSPH in 2003 and was accepted in March of 2004 before she began working at DFCI. HT at 362-365. Upon receiving acceptance to HSPH in March of 2004, Dr. Chen applied for and received a deferral of her admission to the 2005-2006 academic year. RX 17 at 2-3. On November 23, 2004, six days prior to November 29, 2004 when she was first notified by Dr. Pardee that her employment at DFCI would be terminated, Dr. Chen submitted a \$500.00 deposit to HSPH to secure her place in the 2005/2006 class. HT at 368-369;

RX 18. While attending HSPH, Dr. Chen worked part-time for a scientist, earning \$20.00 per hour. HT at 370. She graduated from HSPS in June of 2007. *Id.* at 199. Upon graduation, Dr. Chen obtained a clinical research position at the Tufts New England Medical Center which commenced on July 16, 2007 with an annual salary of \$50,000.00. *Id.* at 386, 395.<sup>25</sup>

### III. Discussion and Conclusions of Law

To prevail on her complaint, Dr. Chen's burden is to prove by a preponderance of evidence that (1) she engaged in protected activity under the ERA, (2) DFCI knew about her protected activity, (3) DFCI took an adverse action against her, and (4) her protected activity was a contributing factor in the adverse action. *Kester v. Carolina Power & Light Co. (Kester)*, USDOL/OALJ Reporter, ARB No. 02-007, ALJ No. 2000-ERA-31 at 3, 2003 WL 25423611\*4 (DOL Adm.Rev.Bd. Sept. 30, 2003). If Dr. Chen meets this burden, DFCI must demonstrate by clear and convincing evidence that it would have taken the same unfavorable personnel action in the absence of the protected activity. *Id.*<sup>26</sup> DFCI's burden is in the nature of an affirmative defense and arises only if Dr. Chen proves that DFCI took an adverse action against her in part because of her protected activity. *Id.*

#### A. Did Dr. Chen engage in protected activity?

The ERA protects employees from discharge or other discrimination with respect to compensation, terms, conditions, or privileges of employment because the employee,

(A) notified his employer of an alleged violation of this chapter or the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

(B) refused to engage in any practice made unlawful by this chapter or the Atomic Energy Act of 1954, if the employee has identified the alleged illegality to the employer;

(C) testified before Congress or at any Federal or State proceeding regarding any provision (or proposed provision) of this chapter or the Atomic Energy Act of 1954;

(D) commenced, caused to be commenced, or is about to commence or cause to be commenced a proceeding under this chapter or the Atomic Energy Act of 1954, as amended, or a proceeding for the administration or enforcement of any requirement imposed under this chapter or the Atomic Energy Act of 1954, as amended;

(E) testified or is about to testify in any such proceeding or;

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<sup>25</sup> Dr. Chen stipulated that she is not claiming any last pay damages beyond July 16, 2007 when she began working in her current position at Tufts. HT at 382.

<sup>26</sup> The 2005 amendments to the ERA did not change the applicable burdens.

(F) assisted or participated or is about to assist or participate in any manner in such a proceeding or in any other manner in such a proceeding or in any other action to carry out the purposes of this chapter or the Atomic Energy Act of 1954, as amended.

42 U.S.C.A. § 5851(a)(1). DFCI has not challenged whether Dr. Chen's activities in connection with the radiation contamination incident, including her reporting of the incident to DFCI's radiation safety office, were protected under the ERA, and the interpretive case law firmly supports a conclusion that Dr. Chen's reporting activities were protected. *See Devers v. Kaiser-Hill Co.*, USDOL/OALJ Reporter ARB No. 03-113, ALJ No. 01-SWD-3 at 9-10, 2005 WL 767132\*7 (DOL Adm.Rev.Bd. Mar. 31, 2005) (internal employee complaints about radiation exposure protected). *See also Kansas Gas & Electric Co. v. Brock*, 780 F.2d 1505, 1512-1513 (10th Cir. 1985), *cert. denied*, 478 U.S. 1011 (1986). Accordingly, I conclude that Dr. Chen has proved that she engaged in activity protected by the ERA when she reported the radiation contamination in Smith 936 on December 12, 2004 and thereafter cooperated in the radiation safety office's investigation of the incident.

B. Did DFCI have knowledge of Dr. Chen's protected activity?

Drs. Pardee and Iglehart both admitted that they were aware of Dr. Chen's protected activity when they made the decision to terminate her employment. Therefore, it is undisputed that Dr. Chen has successfully proved that DFCI had knowledge of her protected activity. *Cf. Muino v. Florida Power & Light Co.*, ARB Nos. 06-092 & 06-143, ALJ Nos. 2006-ERA-002 & 2006-ERA-008 at 7-9, 2008 WL 1925639\*4 (DOL Adm.Rev.Bd. Apr. 2, 2008) (affirming ALJ's grant of summary decision where complainant failed to offer more than speculation that employer officials responsible for challenged employment action knew of his protected activity).

C. Did DFCI take an adverse action against Dr. Chen?

A majority of the Administrative Review Board ("ARB") recently announced that the ARB would apply the "materially adverse" standard articulated by the Supreme Court in *Burlington Northern & Santa Fe Ry. Co. v. White*, 548 U.S. 53 (2006) to determine whether an employer took an adverse action against an employee within the meaning of all federal whistleblower anti-discrimination statutes enforced by the Secretary of Labor. *Melton v. Yellow Transportation, Inc.*, USDOL/OALJ Reporter ARB No. 06-052, ALJ No. 2005-STA-002 at 19, 2008 WL 4462979\*8-9 (DOL Adm.Rev.Bd. Sept. 20, 2008).<sup>27</sup> Noting that the Supreme Court in *Burlington Northern* held that for an action to be deemed "materially adverse," it must be such that it "could well dissuade a reasonable worker from making or supporting a charge of discrimination," the ARB stated that "[f]or purposes of the retaliation statutes that the Labor Department adjudicates, the test is whether the employer action could dissuade a reasonable

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<sup>27</sup> The dissenting member of the ARB argued in favor of a "tangible employment consequence" test under which a complainant must show that the employer took an action which had a substantive impact on the employee's compensation, terms, conditions, or privileges of employment. *Melton* at 9-12. There is no dispute in this case that a termination of employment qualifies as an adverse action under either the "materially adverse" or the "tangible employment consequence" test.

worker from engaging in protected activity.” *Id.* at 19-20 (quoting *Burlington Northern*, 548 U.S. at 57). In this case, DFCI discharged Dr. Chen which is the only category of adverse action specifically included in the language of Section 211. Consequently, it is unnecessary to engage in a *Melton* inquiry as to whether termination of employment would dissuade a reasonable worker from engaging in protected activity. Obviously, an employee might well hesitate before engaging in protected activity with the knowledge that such activity would result in termination which, quite bluntly, is the workplace equivalent of the death penalty. Accordingly I conclude, and DFCI does not contend otherwise, that Dr. Chen has proved that DFCI took an adverse action against her when it terminated her employment.

D. Was Dr. Chen’s protected activity a contributing cause of her termination?

Dr. Chen’s burden on this element is to prove by a preponderance of the evidence, direct or circumstantial, that her protected activity contributed to DFCI’s decision to terminate her employment. *Pafford v. Duke Energy Corp.*, USDOL/OALJ Reporter ARB No. 02-104, ALJ No. 2001-ERA-28, (DOL Adm.Rev.Bd. Jan. 30, 2004) (citing *Kester*, slip op. n. 19; *Desert Palace Inc. v. Costa*, 539 U.S. 90 (2003)). Based on my assessment of the evidence of record, I conclude that Dr. Chen has met this burden. I do so for the following reasons. First, Dr. Singh’s credited testimony shows that Dr. Biswas was agitated by the events of November 12, 2004 and was overheard muttering in regard to Dr. Chen that the situation was “unacceptable” and that he was going to “get rid of her.” Second, Ms. Porter-Taraconte’s e-mail to Dr. Pardee about the impending end of Dr. Chen’s probationary period directly referred to the radiation spill on November 12, 2004. Third, while Dr. Biswas may not have specifically recommended Dr. Chen’s termination or complained about her protected activity, Dr. Pardee credibly testified that he relied on Dr. Biswas’ complaints about Dr. Chen which were not brought to his attention until the very end of her probationary period. Fourth, there is no evidence that DFCI has terminated other post-doctoral research fellows for performance problems, and Dr. Biswas’s failure to follow DFCI’s provisional employee evaluation procedure emphasizes that Dr. Chen’s termination was an unusual event that was accomplished hastily.<sup>28</sup> Based on these considerations, and noting particularly that the record shows that the decision to terminate Dr. Chen was made shortly after her protected activity and was based in part on complaints from Dr. Biswas that were not brought to Dr. Pardee’s attention until just prior to the November 29, 2004 termination and in all likelihood subsequent to her protected activity, I conclude that a preponderance of the evidence establishes that Dr. Chen’s protected activity contributed to DFCI’s decision to terminate her employment. *See Dixon v. United States Department of Interior, Bureau of Land Management (Dixon)*, USDOL/OALJ Reporter ARB Nos. 06-147 & 06-160, ALJ No. 2005-SDW-008 at 13, 2008 WL 4124113\*9 (DOL Adm.Rev.Bd. Aug. 28, 2008) (“While temporal proximity does not establish retaliatory intent, it is ‘evidence for the trier of fact to weigh in deciding whether a complainant has proved by a preponderance of the evidence that retaliation was a motivating factor in the adverse action.’”). In other words, the credible evidence shows that Dr. Biswas was motivated to retaliate against Dr. Chen as a result of her protected activity, and the timing of his performance complaints to Dr. Pardee strongly suggests that her protected activity was a contributing, albeit unstated, factor underlying his complaints. While Drs. Pardee and Iglehart may not have considered Dr. Chen’s protected

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<sup>28</sup> Drs. Pardee and Iglehart both testified that the termination decision was made quickly so that it could be effected prior to the end of the probationary period.

activity, they both relied at least in part on Dr. Biswas' complaints which, in my view, is sufficient to support a conclusion that protected activity was a contributory factor in the termination decision.

E. Has DFCI demonstrated by "clear and convincing" evidence that it would have terminated Dr. Chen's employment in the absence of her protected activity?

As outlined above, because Dr. Chen has proved that her protected activity was a motivating factor in DFCI's decision to terminate her employment, DFCI can only avoid Section 211 liability if it demonstrates by clear and convincing evidence that it would have terminated Dr. Chen even in the absence of her protected activity. 42 U.S.C.A. § 5831(b)(3)(D). DFCI's burden in this regard carries with it a "risk that 'the influence of legal and illegal motives cannot be separated....'" *Mackowiak v. University Nuclear Sys., Inc.*, 735 F.2d 1159, 1164 (9th Cir.1984) (quoting *NLRB v. Transportation Management Corp.*, 462 U.S. 393, 403 (1983)). While there is no precise definition of what constitutes "clear and convincing evidence," the Secretary of Labor and Supreme Court have recognized that it is "a higher burden than 'preponderance of the evidence' but less than 'beyond a reasonable doubt.'" *Yule v. Burns International Security Service*, USDOL/OALJ Reporter ALJ No. 93-ERA-12, slip op. at 4 (Sec'y May 24, 1995) (citing *Grogan v. Garner*, 498 U.S. 279, 282 (1991) and *Pacific Mutual Life Ins. Co. v. Haslip*, 499 U.S. 1, 22 n.11 (1991)). More recently, the ARB held that an employer meets the ERA's "clear and convincing" evidentiary burden when it introduces evidence that it is "highly probable" it would have taken a challenged adverse action even if the complainant had not engaged in protected activity. *Duprey v. Florida Power & Light Co.*, USDOL/OALJ Reporter ARB No. 00-070, ALJ No. 2000-ERA-5 at 4, 2003 WL 724096\*3 n.22 (DOL Adm. Rev. Bd. Feb. 27, 2003) (citing *Colorado v. New Mexico*, 467 U.S. 310, 315-317 (1984) for the proposition that "[c]lear and convincing evidence is that which is 'highly probable' because it would 'instantly tilt [] the evidentiary scales in the affirmative when weighed against [the opposing evidence.]'" ). Whether DFCI meets this burden is largely dependent on whether the testimony of Drs. Pardee and Iglehart is credited.

After careful consideration of the entire record, and based on my close observation of their demeanor, I find that Drs. Pardee and Iglehart are highly credible and persuasive witnesses. In finding Drs. Pardee and Iglehart credible, I note that both witnesses answered questions directly, consistently, and without any evasion. In addition, both of these witnesses provided responses to questions which, given their high levels of education and intelligence, they had to recognize as potentially problematic for DFCI's defense. In particular, Dr. Pardee readily testified that he did not hear complaints from Dr. Biswas about Dr. Chen's performance until the "very end" of the probationary period which emphasized the close temporal relationship between Dr. Chen's protected activity, Dr. Biswas' complaints about her performance, and her termination. *Id.* at 891, 913-914. Dr. Iglehart was similarly candid when he acknowledged that he found Dr. Chen's response to the radioactive contamination incident to be "bizarre" which confirmed the negative impressions that he had formed regarding her suitability as a collaborator on the NF-κB research. *Id.* at 1006-1007. Obviously, if Dr. Iglehart was motivated to portray the termination decision in a favorable light for purposes of litigation advantage, he would have simply answered "no" when asked whether Dr. Chen's protected activity played any role in his recommendation that her employment be terminated. Instead he paused, took a deep breath, and

responded in a manner that I perceived as genuine and truthful. I was also impressed with his candor in willingly admitting that he did nothing to act on the reservations that he formed early during Dr. Chen's employment until after her protected activity in connection with the November 12, 2004 radiation contamination incident despite the clear implication that his concerns did not become substantial enough to warrant action until after Dr. Chen engaged in activity protected by Section 211.

Having determined for the above-discussed reasons that Drs. Pardee and Iglehart are credible witnesses, I specifically credit Dr. Iglehart's testimony that he recommended termination based on his assessment that Dr. Chen was going to have difficulty effectively collaborating with Drs. Pardee and Biswas and because he believed she would not be an effective contributor on the NF- $\kappa$ B research project. I also credit Dr. Pardee's testimony that his decision to terminate Dr. Chen was based on his conclusion that Dr. Chen's conflicts with Dr. Biswas over laboratory procedures potentially jeopardized a vital medical research project and that the radiation contamination incident was a peripheral matter that had no bearing on his decision to terminate Dr. Chen's employment.

Is this credited evidence sufficient to demonstrate that it is "highly probable" DFCI would have terminated Dr. Chen in absence of her protected activity? The case against answering this question in the affirmative is set forth in Dr. Chen's post-hearing brief in which she argues that: (1) Dr. Biswas' complaints about Dr. Chen's performance are shifting, inconsistent and not credible; (2) DFCI has given inconsistent, contradictory and shifting reasons for terminating Dr. Chen's employment; and (3) DFCI failed to follow its own personnel policies in effecting the termination. Cl. Br. at 26-36. These arguments are addressed below.

#### 1. Credibility of Dr. Biswas' Performance Complaints

Dr. Chen's brief thoroughly examines the record evidence relating to Dr. Biswas' complaints about her performance and identifies some areas of inconsistency which raise legitimate questions as to accuracy of Dr. Biswas' charge that she "refused" to follow procedures and even suggest that Dr. Biswas may have been irritated at being questioned or corrected by a junior scientist. This, however, misses a critical point. Dr. Biswas may not have acted fairly, reasonably and appropriately with regard to the differences of opinion that arose between him and Dr. Chen over laboratory procedures, but these disputes all pre-dated and had nothing to do with any protected activity. *See Mourfield v. Frederick Plaas & Plaas, Inc.*, USDOL/OALJ Reporter, ARB Nos. 00-055 and 00-056, ALJ No. 1999-CAA-13 at 4-5, 2002 WL 31996353\*4-5 (DOL Adm.Rev.Bd. Dec. 6, 2002) (employer's asserted non-discriminatory reasons for challenged adverse action do not have to be proven "lawful" and are "legitimate" so long as they are unrelated to protected activity). *See also Gale v. Ocean Imaging*, USDOL/OALJ Reporter ARB No. 98-143, ALJ No. 1997-ERA-38 at 8, 2002 WL 1917629\*7 (DOL Adm.Rev.Bd. July 31, 2002) (quoting *Kahn v. U.S. Secretary of Labor*, 64 F.3d 271, 277 (7th Cir. 1995): "[I]t is not enough for the plaintiff to show that a reason given for a job action is not just, or fair, or sensible . . . [rather] he must show that the explanation is a 'phony reason.'"). Thus, courts in employment discrimination cases should not act as "super personnel departments," substituting their judicial judgments for the business judgments of employers." *Bennett v. Saint-Gobain Corp.*, 507 F.3d 23, 32 (1st Cir.2007) (quoting *Mesnick v. Gen. Elec. Co.*, 950 F.2d 816, 825 (1st

Cir.1991)). Dr. Singh testified that there were conflicts and communication problems between Drs. Biswas and Chen before the November 12, 2004 contamination incident, and Dr. Iglehart's testimony shows that Dr. Singh was sufficiently troubled by these conflicts, as well as her own problems with Dr. Biswas, to approach Dr. Iglehart. That the conflict between Drs. Biswas and Chen was significant and unrelated to any subsequent protected activity is convincingly demonstrated by the testy exchange of e-mails between the two in October of 2004 regarding the erroneous primer order which culminated in Dr. Iglehart's October 19, 2004 rebuke that "Deb Biswas is the boss . . . 'A word to the wise should be sufficient.'" CX 13 (internal quotation marks in original). It is also shown by Dr. Biswas' uncontradicted testimony that Dr. Chen repeatedly told him that she was in the laboratory not to work under him but for Dr. Pardee. This conduct, which borders on insubordination and offended Dr. Biswas, too had nothing to do with any protected activity. Therefore, I find that the evidence clearly and convincingly shows that there were significant conflicts between Drs. Biswas and Chen that were unrelated to any protected activity and supported Dr. Pardee's reluctant determination that it was necessary to terminate Dr. Chen's employment because she could not work with Dr. Biswas. Though Dr. Pardee only heard Dr. Biswas' account, I conclude that it is neither curious nor unlawful that he sided with a long-standing and respected colleague over a junior researcher who had been in his laboratory for three months.

## 2. DFCI's Allegedly Shifting and Inconsistent Reasons

As Dr. Chen points out in her brief, there has been some variation in the reasons given by DFCI for her termination. The termination letter cites her failure to "effectively collaborate and follow the direction" of Dr. Biswas. CX 22. Dr. Pardee testified that he ultimately decided to terminate Dr. Chen because he accepted Dr. Biswas' representation that she would not follow his direction and decided that it was necessary to terminate the relationship because the disagreements between Drs. Chen and Biswas potentially jeopardized the laboratory's research. Finally, Dr. Iglehart testified that he recommended termination based on a combination of the complaints he had heard from Drs. Biswas and Miron and his own impression that Dr. Chen lacked the communication skills to be an effective contributor to the laboratory's research. Certainly, shifting and inconsistent explanations advanced by an employer for an adverse action may indicate a retaliatory motive. This is especially the case where there are "weaknesses, implausibilities, inconsistencies, incoherencies, or contradictions in the employer's proffered legitimate reasons" such that a factfinder could "infer that the employer did not act for the asserted non-discriminatory reasons." *Santiago-Ramos v. Centennial P.R. Wireless Corp.*, 217 F.3d 46, 56 (1st Cir.2000) (quoting *Hodgens v. Gen. Dynamics Corp.*, 144 F.3d 151, 168 (1st Cir.1998)). However, the presence of inconsistencies in an employer's explanation is not *per se* indicative of a hidden unlawful motivation or preclusive of a finding that the employer's evidence satisfies the "clear and convincing" evidentiary standard. See *Lamphere v. Brown University*, 875 F.2d 916, 922 (1st Cir. 1989). As Judge Breyer observed in *Lamphere*, a sex discrimination case, evidence that different, conflicting and changing reasons were offered by multiple individuals responsible for a challenged action need not be fatal to the employer's defense:

But life, unlike law, does not always present its reasons in neat packages. The issue is not whether the hiring committee (composed of nonlawyers) presented, at the time, a single, clear set of reasons for its decisions. The issue is, instead, whether [the employer] can show that the committee's actions had nothing to do with sex discrimination. *See Price Waterhouse*, 490 U.S. 228, 109 S.Ct. 1775, 104 L.Ed.2d 268 (Title VII requires that “gender must be irrelevant to employment decisions”). [The employer] must clearly and convincingly explain what happened, but its explanation may involve complex, shifting, and sometimes contradictory individual motivations. The essential question is whether the series of events as a whole, the story that they tell—muddled and conflicting as it may be—was inconsistent with sex discrimination. Of course, changing reasons, failure to articulate reasons contemporaneously, conflicts among individuals' reasons, etc. might suggest a subterfuge concealing sex discrimination. But, such conflict and confusion does not necessarily mean that [the employer] failed to prove that there was no discrimination. It might, instead, simply reflect a group decision-making process at work in the highly subjective area of faculty hiring.

875 F.2d at 922. In this case, there is no real conflict between the reason set forth in the termination letter and the reasons given by Drs. Pardee and Iglehart at the hearing. Granted, there are differences in language and emphasis, but when viewed in context, all say essentially the same thing - - that Dr. Chen had conflicts with Dr. Biswas and that it was the judgment of Drs. Pardee and Iglehart that she would not be able to effectively contribute to and collaborate on the NF- $\kappa$ B research. DFCI's burden is not to prove that the reasons articulated for Dr. Chen's termination “were perfectly consistent, rational, or in some objective sense ‘correct,’ but only that their actions were free from [prohibited] discrimination.” *Lamphere* at 922. Based on the credible testimony of Drs. Pardee and Iglehart, I find that DFCI was proved that the decision to terminate was free of any unlawful consideration of Dr. Chen's protected activity.

### 3. Failure to Follow Personnel Policies

It is undisputed that Dr. Biswas never wrote an evaluation of Dr. Chen's performance during the provisional period as called for by the Staff Member Handbook (CX 36), and Dr. Chen argues that the termination decision was made after the 90-day period expired. Cl. Br. at 35-36.<sup>29</sup> While the lack of an evaluation and timing of the termination at the very end, or arguably after, the 90-day provisional period are consistent with an decision that was made at the eleventh hour, I conclude that these procedural missteps do not reasonably call into question the credible and persuasive evidence that Dr. Iglehart's termination recommendation and Dr. Pardee's termination decision were free from impermissible consideration of Dr. Chen's protected activity. Indeed, given the absence of evidence that any other post-doctoral research fellows have been terminated for performance reasons, I find that it is not at all surprising that Dr. Chen's termination was not effected with assembly line precision.

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<sup>29</sup> The evidence as to whether November 29, 2004 (the termination date) fell within the 90-day provisional period is, at best, equivocal. While the termination date was more than 90 calendar days after Dr. Chen's first day of work, a DFCI human resources witness testified without contradiction that since the ninetieth day fell on a non-workday, November 29, 2004 marked the end of the period as it was the next business day. HT at 943-945.

For these reasons, I find that the credible evidence establishes that it is highly probable that Dr. Chen's employment would have been terminated even if she never engaged in protected activity. Accordingly, I conclude that DFCI has demonstrated by clear and convincing evidence that it would have terminated Dr. Chen's employment in the absence of any activity protected under the ERA.

#### **IV. Order**

The complaint filed by Minghua Chen is **DISMISSED**.

**SO ORDERED.**

**A**

**DANIEL F. SUTTON**  
Administrative Law Judge

Boston, Massachusetts

**NOTICE OF APPEAL RIGHTS:** This Decision and Order will become the final order of the Secretary of Labor unless a written petition for review is filed with the Administrative Review Board ("the Board") within 10 business days of the date of this decision. The petition for review must specifically identify the findings, conclusions or orders to which exception is taken. Any exception not specifically urged ordinarily will be deemed to have been waived by the parties. The date of the postmark, facsimile transmittal, or e-mail communication will be considered to be the date of filing. If the petition is filed in person, by hand-delivery or other means, the petition is considered filed upon receipt.

The Board's address is: Administrative Review Board, U.S. Department of Labor, Suite S-5220, 200 Constitution Ave., N.W., Washington, DC 20210.

At the same time that you file your petition with the Board, you must serve a copy of the petition on (1) all parties, (2) the Chief Administrative Law Judge, U.S. Dept. of Labor, Office of Administrative Law Judges, 800 K Street, NW, Suite 400-North, Washington, DC 20001-8001, (3) the Assistant Secretary, Occupational Safety and Health Administration, and (4) the Associate Solicitor, Division of Fair Labor Standards. Addresses for the parties, the Assistant Secretary for OSHA, and the Associate Solicitor are found on the service sheet accompanying this Decision and Order.

If the Board exercises its discretion to review this Decision and Order, it will specify the terms under which any briefs are to be filed. If a timely petition for review is not filed, or the Board denies review, this Decision and Order will become the final order of the Secretary of Labor. *See* 29 C.F.R. §§ 24.109(e) and 24.110, found at 72 Fed. Reg. 44956-44968 (Aug. 10, 2007).