

CONFIDENTIAL

Minutes of the Newark Initial Inquiry Committee
Meeting of April 17, 2001, 1:00 pm - 3:30 pm

PRESENT: Dr. Neil Cherniack, Dr. Daniel Fine (in part), Dr. Anthony Forrester, Ms. Teresa Marsico and Dr. Elizabeth Raveché (Chair), Ms. Julie Kligerman, Office of Legal Management (by phone for part of the meeting), and Office of Academic Affairs confidential staff: Dr. Karen Putterman, Vice President for Academic Affairs, Dr. Sheila Eder, Director of Institutional Research.

PERMANENTLY EXCUSED: Dr. Anthony Bocabella

Dr. Raveché presided.

Dr. Helene Hill was called in to meet with the Committee. She was greeted and introduced to the members, and asked to provide a chronology of the events she had reported to Dr. Raveché.

Dr. Hill began by reading a statement concerning her general principles of honesty and integrity; her reasons for her secret investigation of Dr. Bishayee; and her current situation in the Department of Radiology (attachment 2).

Dr. Hill then described an experiment performed by Dr. Bishayee in fall, 1999 under Dr. Hill's direction which first caused her to suspect misconduct by Dr. Bishayee. The experiment was a replication of a study done originally by Dr. Hill herself and is described in attachment 1a to the April 11, 2001 minutes. As the experiment neared conclusion, Dr. Hill found remaining in the incubator 50 100ml petri dishes (P100) of the type used in the experiment. When she asked Dr. Bishayee when he was going to apply fixative to the dishes to complete the experiment, he told her that those petri dishes were related to a different experiment. The 50 dishes were still in an incubator the following morning. Dr. Hill, using a laboratory microscope, could find no evidence of cells or mutant colonies on the dishes. When she asked Dr. Bishayee for the dishes he had used for her experiment, he said he had thrown them away. Dr. Hill was unable to find them in the trash.

Dr. Hill went on to say that Dr. Bishayee's data from this experiment were consistent with her earlier findings, but that it would be very difficult to tell whether the data had been "made up". She briefly described two reference books that were kept in the lab referred to as the "Banbury Protocol". The first volume describes the research protocol followed in the experiments, and the second volume is a collection of research articles utilizing the protocol. Dr. Hill had shown both

Dr. Hill also told the Committee that at one time Dr. Lenarczyk mentioned to Dr. Hill that he had one flask with cells that was contaminated and one flask that was not, while Dr. Bishayee had two flasks, both contaminated. Dr. Lenarczyk told Dr. Hill that Dr. Bishayee was proceeding to set up an experiment with cells from these contaminated flasks. Dr. Hill explained to the Committee that Drs. Lenarczyk and Bishayee share an incubator, while she has her own; therefore, she did not personally see the flasks in question. However, according to Dr. Hill, contamination is easily detectable from the cloudy appearance of the liquid in the flasks.

The Committee remarked that its task was to distinguish between scientific misconduct and poor research practices. Dr. Hill reiterated that Dr. Lenarczyk believed that Dr. Bishayee knowingly set up experiments with contaminated cultures.

Dr. Hill then proceeded to describe in detail the experiment performed by Dr. Bishayee during the week of March 26, 2001, which she and Dr. Lenarczyk secretly observed and photographed and which she believes represents misconduct in science. From Monday, March 26 through Friday, March 30, 2001, Dr. Bishayee ran another in a series of experiments on the survival rates of radiation-exposed and bystander cells using radioactive thymidine (attachment 4, diagram of the steps in this experiment later provided to the Committee by Dr. Howell). Dr. Hill told the Committee that Dr. Lenarczyk, working near Dr. Bishayee, told her he had observed that Dr. Bishayee's two T175 flasks were contaminated. The Committee learned that T175 flasks are used for bulk cell cultures. The cells in those flasks are used to set up the experiment, first by placing them into roller tubes, and then into helena tubes, and finally into petri dishes. According to Dr. Hill, Dr. Lenarczyk told her that he noticed that despite this contamination, Dr. Bishayee proceeded with his experiment using cells from one T175 flask which Dr. Lenarczyk had observed to be contaminated.

Drs. Hill and Lenarczyk then began to follow and photograph Dr. Bishayee's experiment. Dr. Hill and Dr. Lenarczyk recovered Dr. Bishayee's flasks from the trash and photographed them to show contamination. These are the first and second photographs in Dr. Hill's written allegation (attachment 1b to April 11, 2001 minutes). In response to the Committee's question, Dr. Hill said she and Dr. Lenarczyk used the camera attached to the fluorescence microscope in the lab to make the photographs.

The Committee asked Dr. Hill how she could know that the contaminated cells from these flasks were used for the experiment. Dr. Hill responded that that was her hypothesis. Dr. Raveché asked Dr. Hill for the evidence that the experiment was contaminated. In particular, Dr. Raveché

removed an aliquot from tube #7 only, and not from the other 6 tubes, to produce all the counts reported in the experiment. She explained how Dr. Bishayee might have achieved his experimental results from a single aliquot from tube #7, the missing tube.

At this point the Committee examined Dr. Hill's photographs of Dr. Bishayee's tubes. Dr. Hill told the Committee that she believes that the photographs indicate that the helena tubes were still in the 10.5 degree incubator at the point when Dr. Bishayee said he had concluded the experiment, and that one of the seven tubes was missing. She and Dr. Lenarczyk later found this tube empty in the lab's non-radioactive trash. According to Dr. Hill, the other six tubes disappeared after Dr. Bishayee was told that he was being watched and Dr. Hill said she could not find the tubes in the trash.

The Committee then asked Dr. Hill how Dr. Bishayee could have gotten results from his experiment if Dr. Hill's hypothesis about Dr. Bishayee was correct. Dr. Hill believes that Dr. Bishayee could have figured out how many cells to plate of those he received from Dr. Lenarczyk in order to get 1 percent survival, the expected result. She believes that Dr. Bishayee thought he would get away with this because Dr. Howell "didn't watch him".

The Committee noted that any such effort on Dr. Bishayee's part to fabricate the experimental results in this experiment would have been greater than simply repeating the experiment with fresh, uncontaminated cells.

The Committee thanked Dr. Hill for her cooperation. The next meeting dates were scheduled for Thursday, April 26 and Friday, April 27, 2001, at which time the Committee would interview Drs. Bishayee, Lenarczyk and Howell. The meeting then adjourned.