CONFIDENTIAL

Minutes of the Newark Campus Committee on Research Integrity Meeting of April 11, 2001, 11:00 am - 12:00 pm

PRESENT: Dr. Neil Cherniack, Dr. Daniel Fine, Dr. Anthony Forrester, Ms. Teresa

Marsico (by phone), and Dr. Elizabeth Raveché (Chair), and Office of Academic Affairs confidential staff: Dr. Karen Putterman, Vice President for Academic Affairs; Dr. Sheila Eder, Director of Institutional Research; Ms.

Teresa Valentin, Senior Staff Assistant

ABSENT: Dr. Anthony Boccabella

Dr. Raveché presided.

The meeting began with Dr. Putterman reminding the Committee members of the need for strict confidentiality to the extent possible and permitted by law. Dr. Putterman read the section of the University policy on misconduct in science dealing with confidentiality (Section V.L.).

The Committee proceeded to perform a preliminary assessment of the allegation that had been made to Dr. Raveché. The Committee commenced by reviewing the official definition of misconduct in science as stated in the University policy (Section IV.A.). Dr. Raveché then related the information that she initially received from Dr. Stephen Baker, Chair of Radiology, UMDNJ-New Jersey Medical School on April 9, 2001 at which time he told her that he had been informed by his faculty of possible misconduct in science. She also related the more substantive conversation she had in person on April 10, 2001 with this faculty member, Dr. Helene Z. Hill, Professor in the Department of Radiology, UMDNJ-New Jersey Medical School, who was accompanied by Dr. Roger Howell, Associate Professor in the Department of Radiology, UMDNJ-New Jersey Medical School. Dr. Hill is alleging that Anupam Bishayee, Ph.D., Research Associate III in the Department of Radiology at UMDNJ-New Jersey Medical School fabricated and/or falsified data in one or more experiments conducted under Dr. Howell's NIH grant RO1 #CA83838 (Effects of nonuniform distributions of radioactivity) on which Dr. Hill is a co-investigator. Dr. Hill told Dr. Raveché that she has suspected fabrication of data by this individual since she began working with him under Dr. Howell in October 1999. She described her observations of a specific experiment conducted by Dr. Bishayee in October 1999 involving irradiating mammalian V79 cells with the mutant gene HPRT. She said she looked at dishes in which

the cells were supposed to be growing colonies which would be counted as the end result of the experiment. Under the microscope, she found that these dishes contained no colonies or even dead cells. She asked Dr. Bishayee about this at the time and he told her the dishes she looked at were for another experiment. However Dr. Howell said there was no other experiment underway in the lab that would use this particular type of dish. In addition, the dishes she examined disappeared from the lab shortly after she questioned Dr. Bishayee and she could not find them even in the trash. From this, Dr. Hill concluded Dr. Bishayee had fabricated the data for this experiment. Dr. Hill reported her suspicions to Dr. Howell who, she says, did not believe her. She did not take the issue further because, she states, she was not "absolutely certain" she was correct because she was unfamiliar with and had difficulty using the particular microscope with which she examined the dishes in question. She also thought that Dr. Bishayee might have been merely sloppy rather than dishonest. Dr. Hill gave Dr. Raveché materials relating to the October 1999 experiment, including the experimental protocol, copies of pages containing data from Dr. Bishayee's lab book, and Dr. Hill's original data from the same protocol (attachment 1a).

In April 2000, Dr. Marek Lenarczyk joined Dr. Howell's lab as a postdoctoral fellow. Dr. Hill states that Dr. Lenarczyk told her he became suspicious of Dr. Bishayee's work also, and she shared her concerns with him. This led to their teaming up to observe and investigate an experiment conducted by Dr. Bishayee from March 26, 2001 through March 30, 2001. Their investigations of Dr. Bishayee's experiment were without his knowledge and were also kept secret from Dr. Howell. Drs. Hill and Lenarczyk secretly tested Dr. Bishayee's incubating test tubes for bacterial or yeast contamination and attempted to monitor the number and location of the test tubes during the experiment, documenting and photographing their findings.

As a result of this investigation, Dr. Hill said that she and Dr. Lenarczyk found gross contamination of the cultures which should have resulted in their being discarded. However, according to Dr. Hill, the cultures were not discarded, thereby calling into question the validity of any experimental results. In addition, Dr. Hill said that six of the seven tubes were not removed from the incubator on the day for harvesting the cells. Dr.

Hill found the seventh tube, which had contained radioactive substances, empty in the non-radioactive trash in the lab. Drs. Hill and Lenarczyk tested the tubes for radioactivity and concluded that Dr. Bishayee had used the contents of the seventh tube to add radioactive aliquots to the other tubes that were then measured in the FACS laboratory run by Mr. Thomas Denny, Director, Center for Laboratory Investigations. All the tubes subsequently disappeared and Dr. Hill could not find them anywhere, even in the trash.

From these secret investigations, Dr. Hill concluded that Dr. Bishayee fabricated and/or falsified the data from this experiment because he could not have obtained any valid results otherwise under the circumstances in which the experiment was observed by Drs. Hill and Lenarczyk to have been conducted. Dr. Hill gave Dr. Raveché a copy of the evidence she gathered from her investigation of the March 26-30, 2001 experiment, including a description of her daily activities and observations, photographs taken by Drs. Hill and Lenarczyk of Dr. Bishayee's tubes and the cultures made by Drs. Hill and Lenarczyk from the tube contents, radioactive counts of the material in the tubes, map of the lab, etc. (attachments 1b and 1c).

Following the meeting between Dr. Raveché and Dr. Hill accompanied by Dr. Howell, Dr. Raveché spoke with Dr. Putterman and it was decided to protect the data in question by sequestering them. On April 10, 2001, Dr. Raveché proceeded to collect Dr. Bishayee's notebooks, binders, diskettes and zip disks with the assistance of Dr. Howell who identified all the pertinent material. Thirty-eight petri dishes containing colonies from the experiment were also secured. These materials currently are in Dr. Raveché's possession and are secured under lock and key of which there are no copies. Dr. Raveché is developing a detailed inventory of these materials and she will give a copy of the inventory to the respondent and to Dr. Howell when completed. Dr. Raveché is making these materials available to Dr. Howell as needed for the continuing conduct of the research project. However she is present at all times when Dr. Howell reviews or uses the material. Dr. Howell has informed Dr. Raveché that the respondent, Dr. Bishayee, does not need to have access to these materials nor does he need copies of them. In addition, Dr. Howell collected Dr. Bishayee's key and ID, and will only allow him to work in the lab under Dr. Howell's direct and personal supervision.

A-00319

Following Dr. Raveché's description of the allegation and of the evidence given her by Dr. Hill, the Committee voted unanimously that (1) the allegations meet the definition of misconduct in science under PHS regulations and University policy; and (2) there is adequate information for an initial inquiry to proceed. Therefore the Committee immediately commenced the initial inquiry, the official start date of which shall be April 11, 2001. The Committee has sixty calendar days from this date in which to complete the initial inquiry and submit its report to the Senior Vice President for Academic Affairs.

The Committee first discussed whether any of its members had a conflict of interest or bias as described in the University policy, Section V.D.3. Each member stated that he or she did not have such conflict of interest or bias and therefore would remain on the Committee for the initial inquiry. Dr. Raveché was then requested to prepare formal written notification of the commencement of an initial inquiry for the respondent, the complainant, Dean Russell Joffe, and Dr. Karen Putterman, pursuant to University policy. The Committee then reviewed the six circumstances under which the ORI must be immediately notified of an allegation of misconduct in science, as set forth in the University policy Section V.H. The Committee decided that none of these conditions pertained to the current case and therefore ORI did not need to be notified at this time. Upon hearing from Dr. Raveché that the data in question were going to be presented at a meeting of the Radiation Research Society in Puerto Rico later this month, the Committee requested that she write to the PI, Dr. Howell, and tell him to cancel all presentations of any data that might be tainted, and to withdraw immediately all abstracts containing such data.

The Committee decided to interview the following people at its next meetings: Dr. Howell, Dr. Hill, Dr. Lenarczyk and Dr. Bishayee. The Committee also requested that the following materials be gathered for its review prior to the next meeting: a copy of the grant in question, all publications on which the grant was based, all publications appearing subsequent to receipt of the grant which report on data developed under the grant, all abstracts pending presentation, the CVs of Drs. Bishayee, Hill and Howell, and the evidence presented by Dr. Hill to Dr. Raveché. In addition, copies will be distributed to the Committee of a memo from Dr. Howell to Dr. Baker dated April 6, 2001 which informs him of Dr. Hill's allegations, and Dr. Raveché's notes following her meeting on April 10, 2001

with Drs. Hill and Howell. All of the aforementioned materials shall hereby become part of the official file.

At the request of several individuals in the room, Dr. Raveché described in relatively lay terms the subject matter of the research in question and the procedures involved in the experiments.

The meeting then adjourned.

(Subsequent to the meeting, at the request of the Committee, the Office of Academic Affairs staff obtained employment history of the respondent Dr. Anupam Bishayee. This information was presented to the Committee by Dr. Putterman at its next meeting. Dr. Bishayee was first hired by the University in February 1997 as a Research Teaching Specialist V in the New Jersey Medical School Department of Pathology. In October 1997, he made a lateral transfer to the New Jersey Medical School Department of Radiology. In July 2000 he was reclassified to a Research Associate III, a higher level position, in the Department of Radiology and he currently holds this title.)