

Regarding recent allegations of academic malpractices at NCBS-TIFR

The TIFR Academic Ethics Committee (TAEC), at the behest of the TIFR Director, carried out a thorough investigation into the allegations of data manipulation in connection with two papers published from a laboratory of NCBS-TIFR. The committee also examined allegations of malpractice and harassment in the laboratory. After studying all the aspects, interviewing concerned individuals (giving them a chance to explain their point of view), and making careful deliberations, the TAEC submitted its report to the Director, TIFR; its conclusions are summarized below.

1. Two papers were under consideration.
 - a) The first paper that appeared in the journal Nature Chemical Biology (NCB) has been retracted by the journal. There is unambiguous evidence that several of the images, on which the conclusions of the paper were based, had been deliberately manipulated, amounting to serious scientific malpractice. There are also strong indications that samples used in some of the experiments in the paper had been manipulated.
 - b) The second paper, which appeared in the Journal of Molecular Biology (JMB), contains an error traceable to inadvertent mislabelling of two samples. Once this mistake is corrected, the findings reported are genuine. The journal has accepted the explanation of the authors, and will publish a suitable corrigendum. No malpractice of data or image manipulation was found in this paper. However, this mistake could have been avoided had a careful scrutiny of the manuscript been carried out before its submission to the journal.
2. There is compelling evidence which indicate that the image manipulation and result falsification in the NCB paper (now retracted) were carried out entirely by the first two authors. The first author has admitted to his role in the offense. The third co-author, as well as the fourth and corresponding author (Principal Investigator, PI), were unaware of this malpractice, and did not encourage it in any way.
3. The corresponding author and PI of the laboratory must bear the overall responsibility for not subjecting these 'results' to proper scientific scrutiny before the paper was communicated for publication. In the opinion of the committee, the PI's scientific carelessness and lack of diligence while communicating the paper contributed substantially to this untoward incident.
4. The committee found substance in some allegations of authoritarian conduct by the PI in her laboratory environment. However, the laboratory members were unanimous in declaring that she would never have supported any unethical practice. The committee is of the view that no lapses in the behaviour of the PI — in any way — justify dishonest practices by any of her lab members.
5. Subsequent to the revelation of data and image manipulation, the paper was retracted following a proper procedure. The process was initiated in a timely manner, and the fact that the retraction took several months was due to investigations carried out by the journal

as well as the normal retraction formalities. No blame attaches to any party for the time lag between the initial exposure of irregularities and the final retraction.

6. The committee felt that while the PI and the NCBS-TIFR management did handle the scientific retraction professionally, they were not wholly correct in the public statements after the malpractices were discovered. The PI had shared the “raw data” to the Pubpeer site in haste and without verification. The statement in the press release of NCBS-TIFR that the malpractice was carried out by only one individual, and the statement made by the PI on her website implying that one author had left her lab abruptly were both incorrect.

In view of these findings, the TAEC has recommended the following action.

1. *For the junior co-authors:* While the actions of the first author of the NCB paper cannot be justified, the entire blame seems to have been unfairly apportioned to him and this impression should be corrected. For the other author involved in the manipulations, his current institution should be informed of the compelling evidence of his involvement in this particular incident of scientific malpractice. The third co-author should be issued a formal letter by TIFR, declaring that she was not involved in any malpractice related to these publications.
2. *For the lab PI:* She should be immediately counselled to be more professional in her scientific practices and her conduct in the laboratory; this should be monitored by the Centre. There should be an active Supervisory Committee with a clearly defined mandate, to oversee, for a specified period, the lab activities, including the lab environment, lab practices, and publication practices.
3. *For NCBS-TIFR:* The Centre should preserve the samples and laboratory records relevant to this case in safe custody, in case they are needed for future investigation. NCBS-TIFR should also put in place a more efficient mechanism to monitor the workplace environment for its students and staff members.
4. *For the TIFR system as a whole:* TIFR may create a pan-TIFR Student Support Cell across all its campuses, where students at all levels can raise any issues, academic or non-academic. Orientation programmes should be organized for the academic community to increase awareness about academic ethics and the implementation of best academic practices.

The TIFR Management accepts the findings of the TAEC, and will be considering its recommendations with utmost seriousness. TIFR as an institution remains committed to maintaining the highest standards in matters of ethics, scientific output and an amicable work atmosphere. The Management will take all efforts to see that systems are put in place to ensure that incidents like the current one cannot be repeated in the future.