

Dear Adam,

Thank you for your inquiry. I am glad that you approached me via my personal mail. OIST admin suspended me from using my OIST email account, effectively muting my voice. I appreciate your diligence in reaching out to me.

Here are my answers to your questions in the letter:

*“Do you agree with the findings? If not, why not?”*

No. I don't agree with the findings. I dispute the conclusion of the investigation on scientific grounds that refute it entirely. The investigation was not conducted in a manner designed to obtain the truth, but rather to find a reason to dismiss me as I showed too much independence from the Provost on other matters. Any evidence we provided was ignored, and the conclusions of the committee were presented as assertions rather than evidence-based argument, making it difficult to refute them. The committee included members with very few degrees of separation from the complainant, and moreover, the expert members did not attend meetings held during the period of extended investigation during which the report was produced.

I'd be happy to answer in detail to any questions you have about this publication. At first, I'll just focus on the three points from the public report that you mentioned and provide my comments addressing all scientific points. I understand that there may be any further questions, so please feel free to send me a list of additional questions over email. From my personal point of view, the entire "investigation" mentioned in the public report was motivated by political and personal issues and I have to say that OIST, despite its effort to be international has evolved to be a fiefdom of one person, and remains a very hostile place for any young female PI.

The investigators found the following:

1. Figures obtained by the Whistleblower were used without acknowledgment.

Regarding the figures, the investigators did not provide any solid evidence showing who took the disputed images despite their claims. The image shown in Figure 2C was taken after the complainant already left the group, so quite obviously, it could not have been taken by him. It was recorded by another coauthor. The image in Figure 2B taken before the complainant left the group was also taken by the same coauthor of this paper, according to his notebook record. We provided all the notebook records confirming these facts to the investigators, including notebooks of the complainant that prove our point, but this evidence was just ignored. The only information they have is the location of the files in a directory. The essential question is who made the files. Feel

free to ask OIST administration to provide any solid evidence in favor of their conclusions, and in my turn, I'll be happy to defend myself and my research group from these allegations in an open discussion.

2. TEM images of lysosomes isolated from A549 cells were incorrectly described as from HeLa cells.

Again, the investigators chose to believe the complainant's claim based on his words, not his notebook, ignoring counter-evidence actually supported by our lab notebook record. The origin of the samples for TEM images in Figure 3D and S5 were clearly recorded by another co-author who did the lysosome extraction. According to complainant's notebook, he only used HeLa cells when he was a postdoc in my lab. The same experiments were repeated by a different group member who is also a co-author of the paper. In addition to the evidence, the complainant's claim is scientifically absurd. HeLa cells have the special enzyme ALP on the cell membrane that is critical to this research project.

3. The existence of compounds 1 and 2 reported in the paper is not supported by the published spectra.

The spectra of compounds 1 and 2 are published, including High field  $^1\text{H}$ ,  $^{13}\text{C}$ ,  $^{31}\text{P}$  NMR spectroscopy and Mass spectrometry data. After OIST upgraded the Mass spectrometer, we also recorded the high-resolution Mass spectrometry of the two compounds. The characterization spectra for intermediate molecules of each reaction step are also published. The whole stepwise synthesis is based on established chemical reaction protocols. Moreover, I have samples of these compounds and can provide samples to an independent laboratory working in the field for verification. I offered this possibility to the investigators, but they preferred to make a conclusion based on their supposition, rather than following the logical scientific path to the truth of the matter.

I'd be happy to provide any more specific answers regarding spectroscopic characterization of these compounds or their synthesis. I just want to point out that there were many inconsistencies in the way the investigators tried to find the evidence against existence of reported compounds, for example, claiming that compound 1 should not have a peak in the aromatic region (when in fact, it does have it), and it's clear to any synthetic chemist that compound 1 has aromatic protons in it appearing in exactly that region, which can be easily checked even by ChemDraw NMR spectrum simulation. I did my best to provide these explanations in my appeal, which was rejected without providing any counter-arguments to my points.

I would also like to clarify that the decision to make corrections was made before communicating to the complainant, which was before I knew of a complaint. We made the decision to submit corrections after completing the examination of the Original Article initiated by our own finding of mislabeling and mismatch citation of supporting figures. The origin of the samples for TEM images in Figure 3D and S5 was clearly recorded. Because of cell contamination, samples for TEM were prepared twice at the same time period, one is from contaminated HeLa cell and one is from healthy HeLa cells. We didn't find experimental records about TEM imaging for Figure 3D and S5 on the unit members' lab notebooks, including the complainant's. We could not identify whether the images were taken using healthy cells. Therefore, we decided to make corrections of these figures. Based on the complainant's contributions to the corrected article, I wrote to him about my decision regarding the authorship on May 21, 2019. On May 25, 2019, I received the complaint from the Provost.

I note that in the OIST response to your query, it is claimed that I did not attend a hearing. The background to this is that I requested the hearing because I saw the complainant frequenting the Provost office. However, they insisted on a peculiar format, in which I would not be able to see or hear the committee members, and the Dean of Faculty Affairs, a physicist, would communicate the questions to me and my responses to the committee members. At this point I had no confidence in this administration correctly relaying information via a form of the broken telephone game. Therefore, I requested a different format, which was denied. Subsequently, a hearing was held in a more reasonable format. However, none of the expert members of the committee attended, and no scientific questions were asked. It was a farce. I am happy to provide a recording of this upon your request.

During the investigation immense pressures were put on members of my unit, including students, to give evidence before the committee, in person, without any support. The entire group was forced to appear or face disciplinary action, even members with documented medical reasons for declining, and members who were physically in another country. The students, in particular, faced intense pressure, including delay of their thesis examination, and being placed on "academic probation" by the Dean of the Graduate School. This action was not pursuant to any policies, rules or procedures, and done on the sole discretion of the Dean, without due process or possibility of appeal. Their testimony was, therefore, coerced. Despite the pressure, none of the unit members agreed with the conclusions and provided all their data record for the defense of the research.

I do not believe my paper should be retracted and I hope it gets a more fair trial at least by those readers of Retraction Watch who know the field and who can read my response and

the paper and judge by themselves. I believe the claims made by the committee are not supported by evidence, and there is no scientific reason to retract it.

To conclude on a more personal note, throughout the process that lasted more than one and half year (much longer than a normal investigation in any other universities), I did make a mistake. It was trusting that I could win an investigation process against a hostile administration by letting the scientific facts of the matter speak for themselves, when that process was run by the administration. Even when the Provost was asked to recuse herself from the investigation, I indirectly found out she regularly met with complainant and likely directed it behind the scenes...

There were many senior and junior members of the scientific community who supported me behind the scenes as well (including some who are regular Retraction Watch readers and one who was delighted that I got a letter from you asking for comment), so this gave me a false sense of security. There were hints early on in the process that I could get out of it, and I was even told by someone who I think went through something similar that 'I had to find my own exit from this by compromising and making peace with the administration' like they found their exit. Probably I would have done things very differently if I knew that this would be the outcome. Being judged guilty of misconduct when I know I have never committed anything close to it really hurts and I didn't think it would get that far. This affects not only me but also the group. Probably this affects the complainant as well who left my group in 2017 for industry job, then left industry and was later employed again by OIST during the investigation, but is no longer employed. I do not believe that he intended for this to get to this point and probably just wanted a co-authorship and was not aware of the power dynamics between the faculty and the administration.

I'm not sure if I'll be allowed to answer more comments as it would be based on the lawyer's advice, but I wanted to take this chance to share my side of the story. Also I would like to thank friends and mentors who supported me (and my mental health) throughout, and who will probably read this and related posts.

Best,  
Ye