

## Summary of LOWI opinion 2016-04

In response to LOWI opinion 2014-12, the Board asked the Research Integrity Committee (RIC) to reopen an investigation into the possible violation of the principles of research integrity. In the relevant opinion, the LOWI observed that the irregularities detected in the Petitioner's published data were of such a scale and severity that the Board, should it pursue further investigation, would need to consider whether data in the Petitioner's publications had been manipulated.

The RIC examined the research data on the Petitioner's hard drive and verified that the Petitioner had recorded and used this data and later incorporated it into his scientific publications. Based on this investigation, the RIC recommended the Board to inform the Petitioner that he had committed serious violations of the principles of research integrity. The RIC also advised the Board to have publications 1 and 2 by the Petitioner retracted, to forward a copy of the RIC's opinion to various individuals and organisations, and to publish the full text of the RIC's opinion on both the intranet and the internet.

The Board informed the Petitioner that it was adopting the RIC's conclusions and recommendations.

The Petitioner disagrees with the Board's decision and has asked the LOWI to issue an opinion on the matter.

The Petitioner's most relevant objections are as follows:

- The Petitioner considers the designation 'serious violation of the principles of research integrity' and 'falsification of data' as untrue and excessive.
- The Petitioner enjoyed international acclaim for the two publications. They have been replicated and reproduced, with the results of the follow-up studies being published in top scientific journals. The Petitioner argues that it would be more appropriate to publish errata for some of the irregularities.
- According to the Petitioner, the RIC did not exercise due care in its investigation. It did not make use of a USB stick containing raw data that the Petitioner had made available. The Petitioner submitted a second USB stick to the LOWI to substantiate his claim that, in so far as there were irregularities, they were merely inadvertent mistakes.

Below are the most relevant considerations in the LOWI's opinion:

- The LOWI concludes that the RIC conducted an impartial and comprehensive investigation.
- None of the RIC's members was involved in the prior investigation of the Petitioner's actions. The RIC also consulted external experts during its examination of the research data. It further interviewed many of the individuals who were involved in the case (some directly) to clarify the standards of research integrity applied.
- The LOWI has considered whether there is any reason to question the scrupulousness and accuracy of the RIC's investigation based on publications 1 and 2. It was in these publications that the RIC encountered the most irregularities.
- Because no lab journal containing the raw data was available, the RIC examined the text of publication 1. The LOWI concludes that the RIC acted with due care in its investigation; since the irregularities were evident enough in publication 1 itself, a lab journal was not necessary. The external experts further confirmed the RIC's conclusion. Quite apart from the foregoing, there is

the matter of the principle of Verifiability as set out in the Netherlands Code of Conduct for Academic Practice: it demands proper documentation of all research steps and requires raw research data to be stored for a minimum of ten years; it also requires raw research data to be archived in such a way that it can be consulted at any time with a minimum expense of time and effort. The Netherlands Code of Conduct for Academic Practice is intended for individual researchers; in the LOWI's view, this means that it is up to the Petitioner, and not others, to update and archive lab journals properly.

- The LOWI further observes that while the RIC did not examine the Petitioner's USB stick at the hearing, it did do so at a later date. The USB stick did not contain any raw data, and the data that was on the stick did not explain the irregularities in the publication. It cannot be said that the additional information was ignored and that there is thus reason to doubt the accuracy and comprehensiveness of the RIC's investigation.
- Nor has the information contained on the second USB stick led the LOWI to conclude that the RIC did not exercise due care in its investigation: the raw data was irrelevant because the RIC was able to identify the irregularities in publication 1 without a lab journal, and because a lab journal was available for publication 2.
- The LOWI shares the Board's substantive conclusions that the data on the second USB stick was used improperly in the publications. In various instances, the Petitioner suggested new figures, which confirms its conclusion that the data had been manipulated.
- The LOWI agrees with the Board's designation of the irregularities. These are not inadvertent mistakes or, at the most, errors that can be corrected. The Petitioner has transgressed the boundaries and displayed a culpable lack of scrupulousness. The number of irregularities encountered in publication 1 alone justify the designation 'violation of the principles of research integrity'.

In the LOWI's opinion, the RIC's further investigation has provided sufficient grounds to assert that the Petitioner violated the principles of research integrity. The LOWI advises the Board to omit the word 'serious' in its designation, however. There are no grounds for qualifying this (severe) judgement of violation of the principles of research integrity as 'serious'. Finally, the LOWI advises the Board to furnish the RIC's opinion to individuals and organisations only where strictly necessary. It would be unreasonably damaging to the Petitioner to make the RIC's opinion available to a larger group.

On 14 June 2016, the Board issued a decision in line with the LOWI's opinion and recommendations. The Board will also ask the editorial board of the relevant scientific journal to retract the Petitioner's publications.