Npof.

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Decision regarding research misconduct

Decision

The National Board for Assessment of Research Misconduct ("the Board" or "NPOF") finds **and a second second**

Background

On 31 May 2022, Karolinska Institute submitted to the Board a case concerning research misconduct. The submission took place in accordance with Section 6 of the Act (2019:504) on responsibility for good research practice and the examination of research misconduct.

The case relates to medicine and the subject area of neurology, and how the narcotic substance ketamine can be used in antidepressive treatment.

The submission concerns the following article and unpublished manuscripts:



According to Karolinska Institute, fabrication in this article is suspected. The Board is told that, for some figures in the article, primary data have been unobtainable. **Second 10**, who was employed at the Institute in 2020 and 2021 and is responsible for the figures, previously held a position at Rockefeller University in the US. There, she is said to have conducted research that was questioned and investigated by the entity responsible for the research. The disputed research results are reported in an unpublished manuscript prepared at Rockefeller University. The unpublished manuscript is a significant part of the article published while **Second 10** was employed at Karolinska Institute. Ahead of publication, the unpublished manuscript was supplemented with a new section describing experiments carried out by **Second 10** at Karolinska Institute. **Second 20**, who also worked at the Institute, participated in writing the supplementary section.

has made a statement in the case, and believes that she was wrongly accused by Rockefeller University of fabricating an image. Moreover, she claims that Rockefeller University lacked the scientific evidence to be capable of drawing such conclusions. She confirms that the University has asked her not to publish the manuscript in question. She also confirms that the unpublished manuscript was originally prepared at the University, and published after a new section had been added

by and and asserts that the experiments performed by confirmed the results she had obtained at Rockefeller University.

Rockefeller University has expressed its views in the case. The University has confirmed that was employed there and that problems with her research data came to light. One problem concerned a number of images in the unpublished manuscript that were produced there. was investigated in-house by three senior researchers. Rockefeller University believes that was unable to show the original data underlying various images, and has therefore urged was not to publish any of the research reported in the manuscript.

The Board was unable to take part in the investigation carried out at Rockefeller University owing to its confidentiality, and consequently the Board does not know what the suspicions against concerned.

In a written communication, Karolinska Institute describes what had carried out within the scope of her appointment. It contained statements that, for example, she had worked on preparing the unpublished manuscript at the Institute and, with the assistance of **Mathematical and Mathematical According to the Institute**, where the performed no experiments of her own during the time she was employed there.

Grounds for decision

Legal regulation

Under the Swedish Act (2019:504) on responsibility for good research practice and the examination of research misconduct ("the Act"), the Board is tasked to investigate issues of research misconduct. Section 2 of the Act defines research misconduct as a serious breach of good research practice in the form of fabrication, falsification or plagiarism, committed with intent or through gross negligence, in the planning, conduct or reporting of research.

Research covered

Under Section 3, the Act covers research conducted by higher education institutions that have the Swedish state as the entity responsible for their research and are subject to the Swedish Higher Education Act (1992:1434).

The unpublished manuscript was prepared at Rockefeller University, which is not a higher education institution subject to the aforesaid Section 3. Research carried out at

the University is therefore not subject to Section 3 either and, accordingly, the Board is not obliged to examine the unpublished manuscript itself.

The new, supplementary sections were produced at Karolinska Institute, where they were combined with a significant part of the manuscript. Publication took place at Karolinska Institute. Since the research in the article was reported during period of employment at Karolinska Institute, it is subject to the Act, which covers the article and every section contained therein.

Planning, conduct or reporting of research

According to the definition in Section 2 of the Act, breaches of good research practice that may constitute research misconduct must have been committed during the planning, conduct or reporting of research. The wording means, according to the preparatory work, that the concept of "misconduct" refers to breaches throughout the research process.¹ "Reporting" refers both to publishing and to other types of disclosure.²

The article thus constitutes "reporting of research" and, accordingly, is covered by Section 2.

Fabrication, falsification or plagiarism

The Board's remit is to investigate three forms of research misconduct: fabrication, falsification and plagiarism. These terms are not defined by law, but the preparatory work for the Act refers to the fact that they are described in codes (codices) and guidelines on research ethics, such as *The European Code of Conduct for Research Integrity*.^{3,4} They are also explained in the Swedish Research Council's publication *Good Research Practice*.⁵

Fabrication is often described, according to the preparatory work for the Act, as inventing results and documenting them as if they were genuine. Falsification refers to manipulation of research material, equipment or processes, or unjustified alteration, omission or suppression of information or results. Lastly, plagiarism is defined as a researcher's use of other people's texts, ideas or work without duly acknowledging the original source.⁶

The allegations of research misconduct apply to the part of the article that is included in the manuscript drafted at Rockefeller University. The Board has not received this material from the University owing to its confidentiality. The Board therefore cannot investigate the allegations concerning the article.

¹ Government Bill 2018/19:58, p. 100.

² Government Bill 2018/19:58, p. 49.

³ The European Code of Conduct for Research Integrity, revised edition. Berlin: All European Academies (ALLEA); 2018, section 3.1.

⁴ Government Bill 2018/19:58, pp. 45, 100.

⁵ Good Research Practice, Swedish Research Council; 2017, Chapter 8.

⁶ Government Bill 2018/19:58, pp. 45, 100.

The Board finds tha **base was** aware of the recommendations from Rockefeller University concerning the unpublished manuscript, and the fact that had nonetheless chosen to publish it.

From the material received by the Board, it cannot be concluded tha has been guilty of research misconduct in her position at Karolinska Institute.

Under Chapter 1, Section 17 of the Swedish Higher Education Ordinance (1993:100), breaches of good research practice that are beyond the Board's investigative scope are examined by the entity responsible for research instead. In this case, Karolinska Institute is the entity responsible.

The Board has made a decision in this case, following a presentation by caseworker Magnus Gudmundsson.

Catarina Barketorp Chair Magnus Gudmundsson Caseworker