

Declaration of the Rector concerning the allegations of scientific misconduct by Dr. Kathrin Mädler

Dr. Kathrin Mädler is investigating new ways of combating the widespread disease of diabetes. Since 1 February, 2008, she has been employed as *Leiterin des Laboratoriums für Molekulare Diabetologie am Zentrum für Biomolekulare Interaktionen am Fachbereich 2 (Biologie/Chemie)* - head of Section 2 (Biology/Chemistry) of the University of Bremen's laboratory of molecular diabetology in the Centre for Biomolecular Interactions. In this laboratory, her team is investigating new ways of both improving the survival and functionality of insulin-producing beta cells in diabetes, and of detecting the disease at an early stage. In the context of her doctorate, she previously worked with Professor Donath at the *UniversitätsSpital Zürich* (Zurich University Hospital) in Switzerland from January 2000 to December 2004. From January 2005 to January 2008, she was Assistant Professor at the Larry Hillblom Islet Research Center at UCLA in the United States. She has been awarded several prizes and conducts her research in the context of peer-reviewed, externally-funded projects.

The University of Bremen is committed to investigate any concrete suspicion of scientific misconduct at the University of Bremen in accordance with the *Ordnung zur Sicherung guter wissenschaftlicher Praxis* (regulation for safeguarding good scientific practice) dated 22 May 2013 (hereinafter "Regulation"), and to complying with the *Grundsätze guter wissenschaftlicher Praxis* (principles of good scientific practice) adopted by the academic senate on 23 February 2002, the regulations of which are attached as an appendix. The academic senate of the University of Bremen elects the seven members of the commission for the investigation of allegations of scientific misconduct (hereinafter "Commission", see Members on this website)

Since 2014, comments have appeared on PubPeer regarding publications of which Dr. Mädler was either author or co-author. The comments drew attention to irregularities in these publications, in particular regarding duplicated images. In February 2015, the Commission initiated proceedings against Dr. Mädler in order to investigate the allegations of scientific misconduct. Dr. Mädler also asked the Commission to look into these allegations.

After completing the investigation into the allegations of scientific misconduct that had been brought to its attention, the Commission concluded that Dr. Mädler had published duplicate pictures in several cases and had repeatedly failed to exert due diligence in organising her area of study over a long period of time. In addition, she failed to store the original data on durable and secure storage media, which amounts to negligence.

Pursuant to Article 1, Section 1 of the Regulation, however, the conclusion that Dr. Mädler was guilty of "scientific misconduct" would require proof of "deliberate or grossly negligent misrepresentation." After weighing all evidence, the members of the Commission unanimously conclude that there is insufficient indication of deliberate or grossly negligent misrepresentation. An external review also concluded that so far, none of the experiments has been refuted in terms of content — on the contrary, additional checks confirmed the results.

After completing its investigation of the allegations, the Commission's decision is therefore as follows:

- **Dr. Mädler repeatedly failed to exert the due diligence required by her position over a long period of time and thus failed to comply with the code of conduct in accordance with Section 2, Paragraphs 2 & 3 of the Regulation, each in conjunction with Paragraph 2, Section 4, Sentence 1 of the Regulation and according to principles 2, 3 and 4, partly over a long period of time.**
- **The Commission is convinced that Dr. Mädler failed to exert the due diligence incumbent to her position and thus acted negligently. The breach of her obligations with regards to due diligence and the organisation of her laboratory — in particular regarding the storage and documentation of data and the quality control of the pictures submitted for publication — led to an unusually high number of duplicate images.**
- **However, following a comprehensive overall assessment, all members of the Commission believe that there is insufficient evidence to establish scientific misconduct pursuant to Section 1 of the Regulation for safeguarding good scientific practice or that Dr. Mädler was guilty of "deliberate or grossly negligent misrepresentation" in accordance with Paragraph 1, Section 1, by repeatedly duplicating images.**

The Commission's general conclusion is based particularly on the external assessment, on Dr. Mädler's written statement, and on a personal interview with her. Dr. Mädler has openly admitted the errors made with duplicate images in her publications, largely by means of errata. Incorrect images in publications have been corrected in the respective journals.

The Commission's decision is unanimous.

Professor Bernd Scholz-Reiter, the Rector of the University of Bremen, takes the result of this investigation very seriously. The investigation was concluded by an admonition issued by the Rector. In the admonition, the Rector of the University of Bremen adopted a recommendation from the Commission with regard to the identified violations of due diligence.

A warning was issued to Dr. Mädler regarding the identified violations of due diligence and she was cautioned that such errors could not be allowed to occur, particularly when publishing the results of research. The Rector's admonition also obliges Dr. Mädler to draw the attention of the publishers of the journals involved to the duplicate images and to publish the same as errata, if necessary by arrangement with her co-authors. Dr. Mädler is also obliged to submit a concept for external review which addresses in particular the subjects of data documentation, data storage, data backup, and the exclusion of errors, and includes measures which reflect her supervisory obligation as a research group leader. These measures must also include internationally-verifiable error-free laboratory organisation.

Bremen, 25 October 2016