

The scandal surrounding faked data in Vienna

A story that has been invented in order to get rid of research results
on the biological effects of mobile radiation

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Since the year 2005, Professor Alexander Lerchl, Head of the Committee for Non-Ionizing Radiation in the German Radiation Protection Commission (SSK) of the Federal Office for Radiation Protection (BfS), claims that the research results on biological effects of mobile radiation obtained at the Medical University of Vienna (MUV) are faked. If they were true, the results would have consequences he describes as follows¹: 'The results by Diem et al.² were indeed worrying. Should they be confirmed would this be not only an alarm but the beginning of the end of mobile communication, as DNA damages are a first step towards cancer'. Since then he repeated and confirmed his accusation of data fraud several times, the last time in his talk at an industrial event in Vienna on September 22, 2009. Reasons for his claim are his own statistical examination of the data published by the MUV team in two scientific journals^{2,3} and the Final Report of the MUV Rector's Council of Ethics in Science⁴ (the "Council") that had been entrusted with the clarification of the case. In the form of an ultimatum, he demanded the withdrawal of the two papers^{2,3} from the scientific literature. While his analysis lacked substance to emphasize his demand, the impression the Final Report leaves to the normal reader is indeed able to permanently damage the reputation of the authors of the studies. Therefore, it is time to comprehensively comment on this.

Background

On May 23, 2008, the MUV Rector, Professor Wolfgang Schütz, appeared before the public with the announcement that two papers^{2,3} of the former Division of Occupational Medicine 'are based with very high probability on scientific misconduct'. In a further statement on July 29, 2008, he repeated his suspicion despite of a previous arrangement with Professor Hugo W. Rüdiger, former Head of the Division and of the accused team. In August of the same year, another MUV statement with the bombastic title *Science and Truth* came out maintaining the suspicion of data fraud and explaining this, in contrary to the truth, with the outcome of a hearing of the concerned staff members by the Rector's Council. So, the Rector supported the claim Prof. Lerchl – at that time simply a member of the Committee for Non-Ionizing Radiation - had approached him with in writing.

Whoever reads the Final Report of the MUV Council will realize that the claimed fraud is in no way proven by the minutes summarizing the findings of this committee. Thus, the MUV Rector and Prof. Lerchl must have either made a serious mistake in their assessment of the events or both of them aimed from the very beginning to enforce a withdrawal of the papers, whatever it will cost. The motives that might explain the aggressive action against obviously unpleasant results in scientific research remain altogether in the dark, but do allow at least a speculation. The fact that the "radiation protector" from Germany still vehemently adheres to the claim of fraud speaks in favour of the intention to wipe out the data. The irreparable destruction of the scientific reputation and the personal integrity of the MUV staff members is quite obviously accepted as a collateral damage. As the aim to have the authors being independent from MUV withdraw the two papers was not achieved, the Rector and – separately -also Prof. Lerchl turned directly to the editors of the scientific journals in which the papers had been published with their request of withdrawal. As they could not provide evidence for their claim their action was unsuccessful.

¹ Lerchl A (2008) Fälscher im Labor und ihre Helfer: Die Wiener Mobilfunk-Studien – Einzelfall oder Symptom? Books on Demand GmbH (ISBN-13: 9783837063417): page 43

²Diem E, Schwarz C, Adlkofer F, Jahn O, Rüdiger HW (2005) Non-thermal DNA breakage by mobile phone radiation (1800 MHz) in human fibroblasts and transformed GFSH-R17 rat granulosa cells in vitro. *Mutat Res* 583:178-183

³Schwarz C, Kratochvil E, Pilger A, Kuster N, Adlkofer F, Rüdiger HW (2008) Radiofrequency electromagnetic fields (UMTS, 1,950 MHz) induce genotoxic effects in vitro in human fibroblasts but not in lymphocytes. *Int Arch Occup Environ Health* 81(6): 755-67

⁴Endbericht des Rates für Wissenschaftsethik der Medizinischen Universität Wien betreffend Publikationen über erbgutschädigende Wirkungen von Mobilfunkstrahlungen (Causa Alexander Lerchl gegen Elisabeth Diem/Kratochvil et al.). Punktationen auf Grund der Beschlussfassung in der Sitzung vom 13. November 2008. Oddly enough, the signed document at http://www.izgmf.de/endbericht_wien.pdf

In the absence of evidence the Council cleared the team from charge of data fraud

In its Final Report presented in April 2009 the Council comes to the conclusion: 'However, the Council could not produce proof that the discovered knowledge of the concerned laboratory employee on how to break the blinding of the exposure device helped to deliberately falsify or fabricate data. A falsification or fabrication of data was denied several times by the concerned employee, and in this connection she was exonerated by another informant – among others with a remark regarding the proper coding of the slides and, thus, a second blinding'. This statement of the Council prompts the conclusion that the MUV team is finally cleared of the charge of data fraud and any suspicion by the MUV Rector and the "radiation protector" from Germany is not justified. But in order to clear the Rector from the approach of slander the Council obviously looked for reasons to be able to adhere to its doubts in regard of the credibility of the MUV team.

With untruthfulness, half-truth and deliberate deception the Council justifies its adherence to the charge of scientific misconduct

Thus, the Council refused to include in its Final Report the undisputable testimony that data fraud and data falsification did actually not occur, although it must have come to this conclusion. On the contrary, it tried in a several pages long and rather confused argumentation of its verdict of non guilty in the absence of evidence to justify the Rector's suspicion about the MUV team, so to make his irresponsible way of handling the matter at least understandable. Obviously, the damage to the Rector was to be reduced at the costs of the team, so that his further stay in office would be out of question. Since the charges raised by the Council to exonerate the Rector are mainly based on untruthfulness, half-truth and deliberate deception, a clear statement is urgently required:

1. The Council claims that it did find undisputable proof that the one co-author of the paper *Schwarz et al.*³ who evaluated the samples all alone was, at the time of the research experiments, in the position to make out – based on a description of the display in the manual - whether a sample was exposed or sham-exposed. As proof, the Council regards the fact that the concerned co-author listed the blinding code for several experiments already in August 2005 in her hand-written laboratory book. The statement in the Final Report that this co-author did admit and confirm in writing the insight into the blinding code during the meeting of the Council on July 24, 2008, however, is not true. The co-author solely admitted and confirmed in writing the fact that the entry in the laboratory book was her hand. She always contradicted the Council's conclusion that she was able to decode the blinding since August 2005. Moreover, the Council's charges do not consider that in addition to the blinding by the machine a second blinding common in the laboratory was carried out. Its claim that the data she gathered can no longer be called "scientific sound" and that she was obliged to inform her superior of her insight into the blinding code is lacking substance. This is also true for the claimed scientific misconduct from which she was exonerated by an informant. These claims disclose the desperate effort of the Council to protect the Rector by still suspecting this co-author of a possible scientific misconduct, even at the costs of the truth.
2. Furthermore, the Council states that the first author of the respective paper³ does not fulfil the prerequisites requiring that this place goes to the staff member who contributed procedurally, intellectually and conceptionally most to the project. Too, this is an allegation that is completely unfounded. Already in 2007, Prof. Rüdiger determined the first author to present the results she contributed to at an international conference in Switzerland for discussion. Based on this talk she later wrote a first draft of the paper on her own, which then was submitted by Prof. Rüdiger to the editors of the journal without major corrections. Only after the manuscript had been returned with the request for revision, he himself improved the text in close contact with the co-authors and according to the proposals of the editors. Too, the first author did receive a copy of the manuscript for a final check before submission. Her dissociation from the paper during the hearing can only be explained with the extremely strong pressure the Council put on her by claiming that the data fraud by her colleague cannot be doubted anymore. After all, even young scientists know very well that a career ends before it really starts if one is dragged into fraud. As matters stand, the Council's claim that she had no right to be a first author is fully untenable, and its statement that also this case is a question of scientific misconduct is farfetched. Again, all this can only be explained with its intention to exonerate the Rector at the costs of the team.
3. It appears quite improperly when the Council calls Prof. Rüdiger, head of the team, as a witness for the soundness of its statement that the possible insight into the blinding code seems to make the obtained data not reliable anymore. With this statement the Council wanted Prof. Rüdiger, the corresponding author, to withdraw the respective paper³, and in order to reach this goal it even did not shrink from threats of personal consequences in case of refusal. In turn for his concession, the Council promised that the Rector would no longer adhere to the charges of data fraud and that, in addition, he would refrain from the request to also withdraw the first paper² published in 2005. This latter concession was made although – as clearly stated in the Final Report - no proof of scientific misconduct had been detected for this and all former papers of the authors. But the Rector did not stick

to this compromise to which Prof. Rüdiger only agreed in order to reduce, as far as possible, the already occurred damage to MUV because of the worldwide spread of the fraud charges. Prof. Rüdiger followed the request of the Council and informed the editors of the journal of his plan to withdraw the respective paper³ with the argument that he can no longer guarantee the blinding of the experiments, although still convinced of its soundness. Shortly afterwards, MUV published a further press release repeating all previous charges against the team.

But suspicions and unjust fraud charges always will catch up in the end. Neither the MUV Rector nor the "radiation protector" from Germany could imagine at the beginning of their smear campaign that their charges would vanish in the air. Currently, at least three papers from other laboratories have been submitted, two of them already accepted for publication, in which the genotoxic effects of mobile radiation and, thus, the results of the MUV team are convincingly confirmed.

Conclusions

As matters stand, the question arises if the handling by the MUV Rector does meet the ethical and moral principles appropriate for the position of a university rector. His aim – whatever made him do it – was nothing less but the attempt to remove research data of a great industrial and political impact from the scientific literature. To do so, he was ready to approvingly accept as a consequential damage that the reputation and the integrity of the concerned authors might be destroyed. This question is even more important when one discovers that the chairman of the first Council in charge was an employee of the telecommunications industry who, after his affiliation became known by accident, had to be removed because of suspicion of prejudice. Although the other two members of the Council of three had already agreed with him that the fraud charges can be considered proven, they stayed in the next Council under a newly assigned chairman. As the hearing under the new chairman did not allow the conviction of the MUV team obviously planned from the very beginning, the verdict of non guilty in the absence of evidence has to be understood as a compromise.

One did probably refrain from the absolutely necessary new composition of the whole Council in order to save for the purposes of the Rector all that still could be saved. The minutes of the hearing under the new chairman – it does not seem to give any of the hearing under the first chairman - describe, with the exception of one single ambiguous sentence referring to the early insight into the code, a full rehabilitation of the accused staff member and, thus, the team suspected of fraud. This might be the reason why the Rector refused to publish the minutes. Up to now, only the authors of the two papers were allowed to read the secret document – under the strict supervision of a Council member. That in the later produced Final Report a few things were added at the costs of the team speaks for the situation at MUV as described in *Profil*, an Austrian news magazine (Nov 24, 2008; No. 48: 74-79). And a report in the noted journal *Nature* (August 2008; Vol. 454(21): 917) on a real fraud scandal at the University of Innsbruck ends with the conclusion: "But something, it seems, is rotten in the state of Austria, and it needs to be faced and dealt with openly". There is no need to add anything.