

Open letter by the Board of Directors of the Research Center Borstel in response to an "open letter" supporting the former director, Professor Silvia Bulfone-Paus: This letter, which was distributed among select scientists and political representatives, raises a number of issues surrounding the discovery of scientific misconduct in her laboratory, which need to be rectified.

**OPEN LETTER - TO WHOM IT MAY
CONCERN March 16, 2011**

"We, the signatories, were dismayed to learn that our esteemed colleague, Professor Silvia Bulfone-Paus (Professor and Chair, Dept. of Immunology and Cell Biology, Borstel Research Center, Germany, and Professor of Immunobiology, University of Manchester, UK) recently has become embroiled in an affair of scientific misconduct that has attracted national and international attention."

"The massive and unfair punishment that our esteemed colleague in Germany is currently being subjected to, damages science much more than it protects it from future misconduct by others. This raises serious concerns, and must not be tolerated."

"This affair centers around evidence that two senior post-doctoral research fellows, who had worked in Silvia Bulfone-Paus' laboratory for about a decade, have systematically and covertly manipulated or duplicated data in an entire series of papers published by the Bulfone-Paus lab, mainly

**RESPONSE - TO WHOM IT MAY
CONCERN April 6, 2011**

As long-term colleagues of Professor Silvia Bulfone-Paus at the Research Center Borstel (RCB), we were equally shocked about the scientific misconduct that occurred in her laboratory for over a decade. We agree that the consequences for scientific fraud as well as the failure to prevent it need to be deliberated with utmost care.

With respect to the course of events surrounding the discovery of the fraud, we do, however, profoundly disagree with your assessment that the measures taken by the governing body and the directorate to restrict the managerial powers of Silvia Bulfone-Paus and downsize her department are unfounded.

We would like to share with you our grave concern that Silvia Bulfone-Paus's prolonged failure to be completely up-front about the nature and the extent of the fraud occurring in her lab, together with her reluctance to take timely and appropriate action by herself unless urged by our governing body to do so, have caused severe damage to the hitherto impeccable reputation of the Leibniz Research Center.

You state that systematic manipulations by two senior postdoctoral scientists were performed in isolation and secretly. However, Silvia Bulfone-Paus received repeated warnings (in writing) from her former co-worker, Dr. Karin Wiebauer, as early as January 2004 on inappropriately

between 1999 and 2005. All evidence that has become available so far suggests that this couple acted in isolation and secretly.”

“These systematic manipulations did not affect the main results, key concepts and conclusions of the publications in question, many of which have since been independently confirmed by other investigators. Yet, these manipulations sufficed to necessitate the retraction of 12 scientific papers.”

“However, during the entire period of her close collaboration with these trusted senior post-docs, she never had any reason to

labeled and presented data.

It bears also mentioning that, to date, there is no formal admission of guilt or acceptance of responsibility from any one of the three scientists involved or any of the co-authors with respect to their exact role in the manipulation and/or duplication of data. It therefore remains unresolved who carried out the manipulations.

In turn, however, the responsibility for the publications containing manipulations or duplications can clearly be assessed with regard to the role each of the scientists involved had during preparation and finalization of these papers. The view of the commission initiated by the Research Center Borstel, which is likely to be accepted by a wider scientific community, was that the first, the corresponding and the senior author of a scientific paper reporting original research data bear equal responsibilities for the validity of the publication.

Of the 6 papers identified by the commission to contain manipulations or duplications, all 6 were published under the senior authorship of Silvia Bulfone-Paus. Three of these 6 papers disclose Silvia Bulfone-Paus as corresponding author.

Retraction of additional 6 papers was initiated by Silvia Bulfone-Paus without any external investigation. These additional 6 papers, which are currently under scrutiny by a new investigative committee of the University of Lübeck, disclose the role of Silvia Bulfone-Paus as senior author (5), corresponding as well as first author (1).

It has been stated that, since many of the incriminated manipulations “only” concern Western Blots showing loading controls, the main results reported in the papers appeared not to be affected by the manipulations. The data supporting this contention however, have not yet been examined by independent referees from the respective Journals. This is relevant since the usage of identical Western blots to proof unrelated findings indicates a much

suspect that such a level of scrutiny would have been well-advised or essential. Moreover, we have learned that during numerous internal lab meetings and seminars at the Borstel Research Center, no colleague ever voiced suspicions of manipulation, duplication, or misconduct. including during international conferences where the figures which contain manipulations/duplications (mainly in controls) were first presented to the scientific community, Moreover, all of the incriminated papers have been carefully studied and extensively cited by numerous investigators world-wide, without any suspicion of manipulations/ duplications ever having been voiced over about a decade, i.e. until the end of 2009.”

“Considering that all manuscripts are subject to expert peer review, that all co-authors share at least some of the responsibility for a professional and truthful generation of the manuscript and that the final decision on the fate of each published manuscript lies in the hands of the journal's editor and his/her editorial team, it cannot be justified that the entire responsibility for covert manipulations/duplications committed by other individuals should solely rest on the shoulders of the principal investigator.”

“Professor Bulfone-Paus herself has repeatedly and publicly acknowledged that she fully accepts her personal responsibility as principal investigator for not having carefully scrutinized each and every data figure presented to her by these two post-docs before publication for any evidence of manipulation and duplication.”

stronger impact on the conclusions drawn from these data and whether they hold true. It is also pointing in the wrong direction to blame colleagues or referees for not having spotted the manipulations in presentations or manuscripts that the direct supervisor who should be most familiar with the data has overlooked. Therefore, the principal investigator bears full responsibility for any faulted data in publications.

A detailed description of the manipulations performed on a number of Western Blots was communicated to Silvia Bulfone-Paus on November 4, 2009 by Dr. Wiebauer. Responsible action would have necessitated the immediate handing-over of the issue to an independent investigative committee to assess the two papers in which these manipulated figures had appeared.

It was however, not until February 29, 2010, that Silvia Bulfone-Paus informed the Leibniz Center's directorate about the allegations, which finally paved the way to a formal investigation. After having carefully reviewed the report of the independent investigation, the Scientific Advisory Board

of the Leibniz Center Borstel advised Silvia Bulfone-Paus in November 2010 to step down as director, in order to signal that she accepted her share of responsibility for the scientific fraud perpetrated in her group (the contracts of the 2 postdocs had been terminated much earlier). Silvia Bulfone-Paus however, did not follow this strong recommendation and did not resign from her directorship until 4 weeks later and only, when specifically requested to do so by the governing body.

“In this context it is important to note that Professor Bulfone-Paus is widely regarded as an outstanding and brilliant scientist whose efforts have greatly advanced over the past decade our understanding of interleukin-15 biology. She has published over 80 other peer-reviewed papers in excellent journals, including papers in *Nature Medicine* and *Immunity* which are untouched by the current affair. She is the leader of a large academic department and is regarded as an outstandingly innovative scientist amongst her peers. It is very unfortunate that this gifted and motivated scientist was betrayed by her own trusted co-workers over such a long period of time.”

“We the undersigned scientists are even more dismayed to learn that a recent official investigation run by the Borstel Research Center concluded that Professor Bulfone-Paus carries the same level of personal responsibility as the two post-docs who had perpetrated these manipulations. While this investigation was going on, a vicious anonymous smear campaign was launched against her, fed with information by insiders from within the Borstel Research Center. This campaign even extended to her husband who has co-authored many of her papers.”

“On the basis of this misguided assessment, the supervisory committee of the Borstel Research Center (chaired by Dr. C. Andressen) and the directorate of the

As for the valuable contributions of Silvia Bulfone-Paus to the field of immunology or the development of the Leibniz Center Borstel: these merits are in no way disputed, but are related to another area of her duties. Severe failure in one area (as supervisor and responsible senior, corresponding and first author) can hardly be compensated by merits in other areas.

In December 2010, new evidence surfaced that a publication of which Silvia Bulfone-Paus was the first author (FASEB J 1999) also contained manipulated material. She then started retracting additional 6 publications, but failed to inform her directorate colleagues, with priority, that she no longer was just the corresponding or senior author but in one case also the primarily responsible first author. This lack of transparency damaged the trusting atmosphere within the directorate.

While we can understand your personal sympathy for our colleague, we do refute the implications of your statement that withdrawal of the papers is “ample penalty

Center (Managing director: Prof. P. Zabel), have recently issued a joint declaration. In this, they summarize how these two steering bodies wish to respond to this affair: Silvia Bulfone-Paus' large independent academic department shall be reduced to a minimal laboratory group with a negligible research budget. Moreover, she will not be assigned any more students from the Centre. Also, in blatant disregard of her impressive record of achievements on behalf of the Centre, most of her colleagues are undisguised signalling to Professor Bulfone-Paus that they just want her to leave the Centre as soon as possible."

"Beyond the personal tragedy of this individual case, we are deeply concerned about this development since it raises fundamental, generally important questions and concerns for all scientists. We are appalled that a victim of scientific fraud is now punished so harshly and unfairly for systematic, covert acts of scientific misconduct committed with intent by other researchers in responsible, senior post-doctoral positions, albeit within Professor Bulfone-Paus' lab. On the one hand, this violates all sense of natural justice. On the other, it raises the crucial question of what level of personal guilt is to be assigned to a principal investigator under whose supervision and ultimate responsibility a manuscript that contains manipulations/duplications is generated and published. Also, key here is what level of punishment is to be considered appropriate for supervisory inattention."

"As scientists, we all must ask ourselves: How much personal guilt does a principal investigator accumulate, who objectively has no reason to harbour suspicion and therefore fails to scrutinize figures that are to be published under his/her name with the level of professional diligence that everyone advocates and that peers and the public expect? And what punishment is appropriate for any negligence in this

of an insufficient supervisory performance". Inappropriate measures to prevent scientific fraud cannot remain without consequences for a scientist in a supervisory or managerial position and a role model for junior researchers.

The actions taken by the supervisory board and the directorate of the Research Center Borstel are primarily based on the recommendations given by the scientific advisory board in November 2010 after evaluation of the final report of the external investigation, i.e. on the basis of a total of 6 papers confirmed by the commission's investigation to contain manipulated or duplicated data. As detailed in the declaration of February 16th 2011, the consequences were drawn in view of the responsibility for the Research Center Borstel as well as the fiduciary duty towards the staff of the Center. They are of temporary character and will be re-evaluated as soon as the results of the current investigation by the University of Lübeck are available.

The steps to reduce the size of Silvia Bulfone-Paus's department were taken with respect to the fact that adequate supervision was seemingly not given in the original group and are in no way determined by maliciousness towards her. In fact, the reduced accoutrement is still more than any other independent group has at the Research Center Borstel.

At the Leibniz Research Center in Borstel, we embrace the universally accepted highest standards of scientific rigor and veracity. After all, 12 papers are burdened with manipulated data, and the person responsible for these papers as first, corresponding or senior author claims being merely a victim.

respect?"

"It is lamentable enough that the current affair has enormously damaged the reputation of a brilliant scientist, in whose personal integrity the undersigned have full confidence. It is also deeply regrettable that all the many important findings and concepts with which Professor Bulfone-Paus has enriched her field over so many years of hard work (many of which have been confirmed by other laboratories world-wide) now have to be withdrawn. All this constitutes ample penalty of an insufficient supervisory performance. In this imperfect, but progressing human world, one can be reminded on the wisdom in the age-old, 'there but for the grace of God go I'."

"The massive and unfair punishment that our esteemed colleague in Germany is currently being subjected to, damages science much more than it protects it from future misconduct by others. This raises serious concerns, and must not be tolerated."

For all scientists, one of the greatest goods in science is personal credibility and integrity, and that the most precious currency scientists have is the truthfulness of their data. The scientific community expects rigorous adherence to the rules of scientific research from principal investigators and, in particular, from heads of research divisions or departments.

In a recent publication in the Journal of Medical Ethics (Steen RG, 2011), "all 788 English language research papers retracted from the PubMed database between 2000 and 2010 were evaluated". From these total 788 retractions, 25 retractions in this period were of papers with the first author coming from Germany with only 3 retracted due to fraud. The case of scientific misconduct under the scientific responsibility and organisational leadership of Professor Bulfone-Paus adds another 12 "points" for Germany.

The scientific misconduct in Silvia Bulfone-Paus's lab and her procrastination to go public despite being ultimately responsible has highly damaged the reputation of the Research Center. This is what cannot be tolerated.

Sincerely,

The Board of Directors of the Research Center Borstel