Author's response to reviews

Title: Activation of inflammatory responses in human U937 macrophages by particulate matter collected from dairy farms: an in vitro expression analysis of pro-inflammatory markers

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Author's response to reviews: see over
RE: MS: 8479955506172915

Dear Dr. Grandjean,

Herewith we would like to submit our revised manuscript, entitled “Activation of inflammatory responses in human U937 macrophages by particulate matter collected from dairy farms: an in vitro expression analysis of pro-inflammatory markers” for your consideration for publication in your journal, *Environmental Health*. This work demonstrates new findings regarding the role of the aryl hydrocarbon receptor (AhR) in LPS-induced inflammatory gene expression in vivo in the absence of exogenous ligands of the AhR.

We have found that the comments were constructive and helpful in improving the quality of our work. We complied with the reviewers’ suggestions and were able to add requested data and we have made critical corrections and changes to improve the manuscript. The concerns of the reviewers are addressed point-by-point below.

All authors of the manuscript have agreed to be so listed and have seen and approved the manuscript, its content, and its submission to *Environmental Health* as indicated in the guidelines of the journal. The authors declare that there is no competing financial interest in relation to the work described.

We thank you for handling this manuscript.

Yours sincerely

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Point-by-point response to the concerns:

In your most recent revision, two authors have been added. We need justification for the addition of authors. According to the Authors' contributions, the two newly added authors performed the experiments and assisted with data interpretation. It is not clear if they contributed to the revision only and therefore were added now.
- Anna Lollies performed critical experiments for the main study as well as experiments necessary for the revision. Fumio Matsumura contributed only to the revision and was removed from the author list.

Also, the added sentence on p.10 need to be extended, as it is not sufficient to say 'Cells were usually treated...'. Please address these items, the peer review comments and the formatting in the cover letter as stated above.
- Sentence was rewritten to clarify the context (see page 11, first paragraph).

On the title page each institutional address should begin its own left justified line;
- All institutional addresses begin its own left justified line (title page).

The phrase *Corresponding author should be moved below the addresses and the other contact information deleted.;
- The phrase *Corresponding author has been moved below the addresses and other information has been deleted.

The title should include the study design, for example "A versus B in the treatment of C: a randomized controlled trial X is a risk factor for Y: a case control study"
- title includes information about the study design now: “Activation of inflammatory responses in human U937 macrophages by particulate matter collected from dairy farms: an in vitro expression analysis of pro-inflammatory markers”

Please insert the heading Email addresses above the email addresses and list under the heading as author's initials
- format for the email addresses has been corrected

Italicized text, except where indicated in the References, should be changed to normal font.
- Italicized text, except where indicated in the References, has been changed to normal font

In the Abstract, remove the colons and move the text below the headings. Please remove or limit the use of abbreviations in the Abstract. Sequential citations of three or more should be listed as [4-6]. For the tables, all horizontal lines should be visible. It is important that your files are correctly formatted.
- All the above points have been corrected in order to comply with the Journal’s correct format.
Reviewer 1:

1. The last paragraph on page 3 / beginning page 4 of the introduction is not very well written and unclear. It misses references and flow.
   - The last paragraph on page 3 in the introduction has been rewritten and missing references have been added.

2. The statement that occupational exposure introduces ODTS does not have a reference.
   - Reference has been added

3. Reference 7 is mentioned as to refer to occupational exposures which is not true, this reference includes indoor home exposures. Reference should be changed.
   - Reference has been changed

4. Page 4. first paragraph. "Interestingly children who grew up on a farm showed no effect modification except for allergic sensitization" What effect modification is ment? Which study does this refer to?
   - Reference of the study has been added and sentence has been rewritten for clarification

5. The authors should address the differences between asthma and sensitisation.
   - The difference between sensitisation and asthma has been addressed