Developing in a polluted atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity

Helen B Stolp
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The referees have opted to remain anonymous.

Review Timeline:
- Submission Date: 17-Nov-2021
- Editorial Decision: 30-Nov-2021
- Revision Received: 07-Dec-2021
- Editorial Decision: 16-Dec-2021
- Revision Received: 24-Dec-2021
- Accepted: 05-Jan-2022

Senior Editor: Laura Bennet
Reviewing Editor: Justin Dean

Transaction Report:
(Note: With the exception of the correction of typographical or spelling errors that could be a source of ambiguity, letters and reports are not edited. Depending on transfer agreements, referee reports obtained elsewhere may or may not be included in this compilation. Referee reports are anonymous unless the Referee chooses to sign their reports.)
Dear Dr Stolp,

Re: JP-P-2021-282577 "Developing in a bad atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity" by Helen B Stolp

Thank you for submitting your invited Perspectives article to The Journal of Physiology. It has been assessed by a Reviewing Editor and the author of the focus paper.

Minor alterations have been requested.

The reports are copied at the end of this email. Please address all of the points and incorporate all requested revisions.

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I hope you will find the comments helpful and have no difficulty in revising your article within 7 days.

To submit the revised version use the links in Author Tasks Link Not Available.

Please ensure that the article is a Word File with no more than 5 references, including the focus paper.

Thank you for your contribution to the Journal.

Yours sincerely,

Professor Laura Bennet
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EDITOR COMMENTS

Reviewing Editor:

Please address the minor comments provided by the reviewer.

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REFEREE COMMENTS:

Referee #1:

Thank you for the Perspective, it reflects the significance of the work well. A few minor comments below.

The use of “bad” in the title is unclear. Perhaps “polluted” would be a better alternative?

Paragraph 4 - maybe could also mention that the exposure duration was only a few months and that renal and osteological compensation may take longer to kick in. 3 months is “young-adult” in a mouse.
Second last paragraph - it is mentioned we said rodents can smell CO2. C57 mice (used in this study) have an effectively nil olfactory receptor response at CO2 < 1000 ppm (i.e. so it's unlikely the behavioural changes we saw are because of them smelling the CO2).
Dear Professor Bennet,

I would like to thank you for commissioning the manuscript “Developing in a bad atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity”.

I would also like to thank the reviewers for their constructive suggestions for improvement to this Perspective. I have incorporated all the suggested changes, as outlined in detail in the Tracked Changes version of the document.

Specifically, I have:

1. changed the title to: “Developing in a polluted atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity”

2. add a reference in the 4th paragraph to the 3-month treatment period and the significance of this on the findings of the study by Wyrrwoll et al. (2021)

3. removed the comment about rodents smelling CO2 from the second last paragraph, as it doesn’t add the to the point discussed and is addressed in detail by Wyrrwoll et al. (2021).

I hope you now consider this work acceptable for publication in The Journal of Physiology. I look forward to hearing from you in due course.

Yours faithfully,

Dr Helen Stolp
Dear Dr Stolp,

Re: JP-P-2021-282577R1 "Developing in a polluted atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity" by Helen B Stolp

Thank you for submitting your invited Perspectives article to The Journal of Physiology. It has been assessed by a Reviewing Editor and the author of the focus paper.

Minor alterations have been requested.

The reports are copied at the end of this email. Please address all of the points and incorporate all requested revisions.

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I hope you will find the comments helpful and have no difficulty in revising your article within 7 days.

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EDITOR COMMENTS

Reviewing Editor:

Thank you for your changes, the author is happy with changes but I suggest some minor changes for grammar:

Paragraph 1, Line 5: "...of air pollution on health as the role of atmospheric..." replace with "...of air pollution on health, as the role of atmospheric..."

Paragraph 4 Line 5: "...though sufficient to changes the structure and function..." replace with "...though sufficient to change the structure and function..."

Paragraph 5 Line 2: "...pollutants with neurotoxic capacity (e.g. pesticides, heavy metals)." replace with "...pollutants with neurotoxic capacity (e.g., pesticides, heavy metals)."

In addition, please present your References in journal style (https://jp.msubmit.net/cgi-bin/main.plex?)
The references should be given in full in the text (e.g. ‘Smith et al., 2021’) and then listed alphabetically in the References section. They should not be numbered, as they are currently.

REFEREE COMMENTS:

Referee #1:

I am happy with the revisions.

1st Confidential Review 07-Dec-2021
Dear Professor Bennet,

I would like to thank you for commissioning the manuscript “Developing in a bad atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity”.

I have incorporated all the suggested changes. I hope you now consider this work acceptable for publication in The Journal of Physiology. I look forward to hearing from you in due course.

Yours faithfully,

Dr Helen Stolp
Dear Dr Stolp,

Re: JP-P-2021-282577R2 "Developing in a polluted atmosphere: A link between long-term exposure to elevated atmospheric CO2 and hyperactivity" by Helen B Stolp

I am pleased to tell you that your invited Perspective article has been accepted for publication in The Journal of Physiology.

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The last Word version of the paper submitted will be used by the Production Editors to prepare your proof. When this is ready you will receive an email containing a link to Wiley's Online Proofing System. The proof should be checked and corrected as quickly as possible.

All queries at proof stage should be sent to tjp@wiley.com

Thank you very much for your contribution to The Journal of Physiology.

Yours sincerely,

Professor Laura Bennet
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