## Letter to the Committee On Publication Ethics (COPE)

University of Caen, January 31st 2014

Dear colleagues,

The scientific paper entitled "Long-term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize", written by the undersigned, has recently been retracted from one of your member Journals ("Food and Chemical Toxicology", FCT). We hereby request your consideration of this case, in which your Code of Conduct (CC) seems not to have been abided by.

To begin, we wish to make clear that this step we are taking is not aimed at re-establishing our reputations, since this issue goes far beyond the private satisfaction of a few scientists. As a matter of fact, the discredit brought on this study and its conclusions is likely to influence global food-related policies, and may result in a major public health concern.

With this general issue in mind, let us focus on the only CC criterion that could justify the decision made by the current FCT editors, namely the first point of the RETRACTION GUIDELINES chapter. More precisely, the editor claims that we have committed no fraud, but an "*honest error*", (Retraction Guidelines), which makes the paper "*inconclusive*" (the editor's wording in the retraction announcement).

We were surprised by this stated rationale, especially after having answered questions about our experimental protocol, compared to similar studies. This lack of understanding lasted until the current Editor-in-Chief clarified his position in a statement published recently in FCT: "*The review of the data made it clear that there was no misconduct. To be very clear, it is the entire paper, with the claim that there is definitive link between GMO and cancer that is being retracted*" (A. Wallace Hayes, 10 December 2013).

What is finally rendered clear through this statement is that the retraction of the paper under concern can be imputable to two "honest errors" made by the current editor(s): 1) *confusion,* and 2) *over-generalization.* 

1/ <u>Confusion</u>. As indicated from the outset in its title, the study is about "Long-term toxicity", not about "cancer", a term which is not even mentioned in the paper. Not surprisingly, therefore, this study does not follow the experimental protocol used in *carcinogenicity*.

Moreover, the stated reason for the retraction, the "inconclusive" nature of some of the findings, does not equate to "error". Lack of conclusiveness and error are not synonymous. And while error may be grounds for an editor requesting a correction from the authors or even for retraction in some cases, lack of conclusiveness is not grounds for retraction.

2/ <u>Over-generalization</u>. The "entire paper" is not focused on the issues of tumours. It mostly includes measurements of numerous biological parameters pertaining to the function of multiple organ systems, the statistical analysis and significance of which has not been challenged by the editor of FCT. Even if the paper had not mentioned the early appearance of tumours and premature deaths in rats, these chronic toxicity findings would have justified its conclusions. Even if cancer-related criticisms were valid, the retraction of the whole paper would not have been justified.

The analysis put forward to support this retraction may have been "thorough and time-consuming" (retraction announcement), but it did not avoid classic human errors that a scientific approach usually tries to avoid, namely: confusion and over-generalization. For resolving the consequent ambiguities, it is unfortunate that the editors did not first issue an official "expression of concern", rather than suddenly trigger the article retraction, over one year after its initial acceptance and publication.

We are led to the conclusion that this case has not followed due procedure for retraction as defined by COPE. This is also the opinion of high levels scientists that have published an editorial in Environmental Health Perspectives (Portier et al., 2014, EHP 122, 2, Feb.).

Given the serious issues mentioned at the beginning of this letter, correcting the current situation is now the responsibility of every decision maker, starting with those who are directly involved in its ethical aspects.

We apologize in advance for the inconvenience this demand may cause you, since you are thus given a part in an ongoing story which will certainly be referred to as "exemplary" in years to come. Let us hope that this will be as an example of human and scientific adventure with a fair and ethical ending.

Sincerely yours,

Gilles-Eric Séralini, Emilie Clair, Robin Mesnage, Steeve Gress, Nicolas Defarge, Manuela Malatesta, Didier Hennequin, Joël Spiroux de Vendômois.

<u>P.S.</u>: Another statement of your Code of Conduct could be considered in this very case, concerning the review panel members chosen for the reviewing process which resulted in the paper retraction: *"Editors should have systems for managing their own conflicts of interest as well as those of their staff, authors, reviewers and Editorial board members."* The identity, professional qualifications, and potential conflicts of interest of the review panel members have not been disclosed. Neither have the points of analytical reference by which they reached their judgement on our paper. Moreover, Richard Goodman who worked for the company Monsanto, responsible for the commercialization of the products we have assessed, entered in the meantime in the Editorial Board.

## References

Hayes, A.W., 2013. Food and Chemical Toxicology Editor-in-Chief, A. Wallace Hayes, Responds to Letters to the Editors. <u>http://www.journals.elsevier.com/food-and-chemical-toxicology/news/editor-in-chief-a-wallace-hayes-responds-to-letters/</u>.

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Séralini, G., Mesnage, R., Defarge, N., Gress, S., Hennequin, D., Clair, E., Malatesta, M., Spiroux de Vendomois, J., 2013. Answers to critics: why there is a long term toxicity due to a Roundup-tolerant genetically modified maize and to a Roundup herbicide. Food Chem Toxicol 53, 476 - 483.

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