SMK-1/PPH-4.1-mediated silencing of the CHK-1 response to DNA damage in early C. elegans embryos

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The editors of The Journal of Cell Biology have been notified by Dr. W. Matthew Michael of Harvard University, Cambridge, MA, that he and the other authors of the article referenced above retract the paper.

The authors state:

It has come to our attention that a mistake was made during the sequencing of the \textit{smk-1} allele from the \textit{rad-2}\textsubscript{(mn156)} strain that was used in our studies. In our paper, we reported three amino acid substitutions in the protein encoded by the \textit{rad-2}\textsubscript{(mn156)} allele: E497G, D580G, and D704G (see Fig. 5, and the correction that was published). We have gone back and resequenced this locus, and we have found that the D to G substitution at position 704 is incorrect, and that instead it occurs at position 928. Thus, our \textit{rad-2}\textsubscript{(mn156)} allele contains three substitutions, E497G, D580G, and D928G.

This is problematic because we based further experiments on the D704G mutation, most notably an immunoprecipitation experiment which shows that an SMK-1 protein containing the single D704G substitution fails to bind to PPH-4.1 (Fig. 5 C). Because this mutation does not exist in the \textit{rad-2}\textsubscript{(mn156)} strain, this experiment is now irrelevant. Because this mistake undermines a central conclusion of the paper, that the molecular basis for the \textit{rad-2}\textsubscript{(mn156)} phenotype is the inability of the mutant SMK-1 protein to bind to PPH-4.1, we are retracting the paper. We note that this sequencing mistake impacts the data reported in Fig. 5, and we have no reason to believe that any of the other data reported in our paper are incorrect or compromised by this mistake. We sincerely apologize for any problems our error may have caused those who were, or are, following up on our work.