## Open Letter to the President of the National Academy of Sciences

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Peter Pressman |

Marcia McNutt, PhD.

President, National Academy of Sciences, 500 Fifth St, N.W.Washington, D.C. 20001.

Dear Dr. McNutt.

The COVID pandemic certainly provided a fertile environment for myriad social and political forces to breed confusion and distrust in mainstream science. The recent paper by E.J. Calabrese and J. Giordano which detailed the fact that the NAS Report by the BEAR 1 Genetics Panel in 1956 was neither written nor approved by the NAS Panel, and further fuels the growing crisis of faith in mainstream science.

I am writing to respectfully suggest that it is timely that the Academy make some public effort to stem a tide that occludes the importance of democratically and scientifically accountable entities to provide for safety and guide citizen efforts in an evidence-based fashion. If nothing is done, what goes unchecked is public health guidance from social media influencers—celebrity nutritionists, politicians, conspiracy bloggers—who have their own agendas and can influence public sentiment as never before. Their megaphone is sympathetic media, especially online: consumer websites, and an exploding number of alternative news outlets.

Along with others who are far more qualified, I embrace the suggestion that NAS and *Science* publish a statement that says something along the following lines:

In light of further information gained in the interim, we now see that the 1956 "report to the public" published by our predecessors at NAS had the effect of supporting a falsehood, one that arguably has had, and continues to have, negative public health consequences. Going forward we recognize that the preponderance of evidence is against LNT and in favor of hormesis, and that from this time forward, either valid refutations of hormesis must be

found and published, or if we are to be scientific and follow the preponderance of evidence, it must be granted that the hormetic effect in the low-dose range of ionizing radiation should be understood to be real, and that claims of linearity should not be regarded as valid.

In a Feb 18, 2022 editorial in *Science*, Dr. Susan Amara, president of the AAAS said it all:

"Public perception of science depends on an appreciation that the scientific process is nuanced and cannot be reduced to overstated conclusions, and worse, premature implications for use by society. Without this understanding, failures to predict outcomes or revisions of earlier findings may reinforce, in some quarters, a belief that science cannot be trusted. Let this be science's overriding message: As new discoveries inevitably alter our understanding, the methods of science push us ever closer to the truth."

Operationalizing Amara's implicit mandate in a statement recognizing the validity of hormesis effects of low dose ionizing radiation would be a genuinely noble and activist gesture, one that would help restore faith in the scientific enterprise.

Thank you for your consideration.

Very respectfully,

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