## Leaders in Cardiovascular Science

## Paul Simpson and Scientific Rigor

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The profile of Paul Simpson published in this issue of *Circulation Research*<sup>1</sup> is outstanding. It could not be more timely because it addresses the current reproducibility crisis that plagues biomedical research—a major threat to scientific progress that I have discussed in previous editorials<sup>2,3</sup> and that has motivated me to promulgate the rigor and reproducibility initiatives launched in 2017.<sup>4</sup>

Science that cannot be reproduced is not really science. At a time when many or even most papers published in the literature have been found to be irreproducible,5-8 we are proud that Circulation Research is a leader in demanding adherence to methods that are rigorous, transparent, and reproducible, thereby setting standards that are as high as, or higher than, those of any other journal4 (for detailed information on the rigor and transparency criteria used by Circulation Research, please see the checklists that authors must complete; these can be found in the initial editorial announcing these initiatives available at https://www.ahajournals.org/doi/10.1161/ CIRCRESAHA.117.311678). Readers should know that all papers published in Circulation Research are now thoroughly vetted for rigor and transparency not only by the reviewers and the handling editors, but also by our Editor for Compliance with Rigor Guidelines, Dr Joseph Moore, whom I have added to the editorial team specifically to insure maximal rigor and transparency in our content.

Paul Simpson is a role model for young and not-so-young investigators alike. His profile is rich of invaluable messages. In particular, I find it refreshing and very important to hear this scientist emphasize rigor and state that researchers must always be careful and double check the data to make sure they are solid before they are published. If everyone did that, the reproducibility crisis would not exist.

I believe the primacy of scientific rigor is the key takehome message from Paul Simpson's interview. His emphasis on truth rather than hype, on being right rather than being first, should be applauded. Sadly, his philosophy seems counter to the current prevailing attitude, whereby so many people rush to publish papers based on incomplete, premature, preliminary, or shaky data just because they want to be first. Instead of spending more time to confirm their findings and do more experiments to be sure that their conclusions are correct, they want to get to the finish line before the competition. I have heard people sum it up thus, "You don't have to be 100% right, but you have to be 100% first." Therein lies the problem. No wonder that much of what appears in the literature, particularly in high-profile and high-impact journals, cannot be reproduced. This deleterious and widespread attitude makes Paul Simpson's philosophy all the more crucial in today's scientific world. His lesson is the exact opposite: being right is more important than being first, not the other way around. This lesson needs to be heard and disseminated across the entire community of biomedical investigators. Every journal should make an effort in this direction.

## **Disclosures**

None.

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