Acknowledgement

In the paper “Finite-element-based photoacoustic imaging of absolute temperature in tissue” [Ref. 1, (Opt. Lett. 39, 5355 (2014)], I used one set of experimental data for each of three cases (in Figs 2 and 3), while additional data sets were collected for each case, but were rejected and not used in the reported results. The data selection methodology used was the widely used delay-and-sum algorithm (Refs. 2 and 3) and was based on the underlying physics that the photoacoustic signal of tissue should tend to increase when heated over time (Ref. 4). This methodology was only applied to identify the unreliable experiment data.

In addition, two sets of data for case 3 were used for the finite-element-based computation, but only one set was reported. The use of only one data set maintained consistency with the other cases reports and both of the data sets for case 3 showed very similar temperature imaging results.

I am writing to disclose that this data selection and rejection methodology might not be consistent with the “Guidelines of The Optical Society (OSA) Concerning Ethical Practices in the Publication of Research” because I should have discussed this data selection methodology in the paper.

References

1. L. Yao, [redacted], H. Jiang, Opt. Lett. 39, 5355 (2014).
2. S. Manohar, A. Kharine, J. van Hespen, W. Steenbergen, and T. van Leeuwen, Physics in Medicine and Biology 50, 2543 (2005).
3. C. Hoelen and F. de Mul, Applied Optics 39, 5872(2000).
4. I. Larina, K. Larin, and R. Esenaliev, J. Phys. D 38, 2633 (2005).

Regards,

Lei Yao, Ph.D.
7/20/2016