population. The intuition of Dr. Pivalizza *et al.* regarding the conduct of reasonable clinicians is therefore unsupported.

Carette *et al.* raise the important point that using non–age-adjusted MAC values might have affected our conclusions. They could be right in that "single high" (age) might be much more important than "triple low" and that some of the patients in our study included in the "triple low" group might only have had "double low" (low mean arterial pressure and low bispectral index) when considering age-adjusted MAC. We chose the methodology in our study to approximate the approach that was used by Sessler *et al.*,[5] who chose not to use age-adjusted MAC values. But our findings would not have changed substantially had we used age-adjusted MAC. Based on the population in our study, the low MAC cutoff would likely have shifted from the (arbitrary) 0.8 age-unadjusted value to about 0.9 age-adjusted MAC.[6,7] Furthermore, although age was associated with 30- and 90-day mortality in the multivariable analyses, "triple low" remained independently linked to death despite the inclusion of age as a variable in the models. It is also notable that age was one of the variables used in our propensity score matching.

In conclusion, we apologize if the letter writers or readers were alarmed by our study or our conclusions. We wish to clarify that we do not believe that our findings mandate any changes in clinical practice, and we remain skeptical that "triple low" is causally implicated in postoperative death.

Competing Interests

The authors declare no competing interests.

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All Work Hours Are Not Equal

To the Editor:

We read Baird *et al.*'s[1] recent description of gender differences and trends in the anesthesiology workforce with great interest. As members of a large, vibrant academic level 1 trauma center with busy transplant and neurosurgical services, we observe that several issues raised by the 2013 RAND survey are relevant. We are a particularly diverse faculty group with a greater proportion of female anesthesiologists (49%) than represented in the study (26%).

At first glance, the conclusion that female anesthesiologists receive lower total and hourly compensation irrespective of the fewer hours worked is alarming. However, the context for this is the significantly three-fold greater part-time (defined as less than 35 h/week) employees in the female group, which in itself may explain the apparent discrepancy as 11% of that gender cohort. In a busy facility such as ours with increasing hospital demand for expansion of services, an employee working part-time in a 7 AM to 3 or 5 PM shift adds value to meeting the elective needs of the operating room. However, a significant proportion of urgent and emergency service is provided after hours, on weekends, and on public holidays, and it is both plausible and logical for the larger full-time (by definition, larger male) cohort taking these calls to receive greater compensation. If, as the authors suggest, marital status and the presence of children affect gender hours, then on-call overnight and weekend hours must be valued more significantly than routine office hours.

With reasonable call shifts (14 h on weekdays and 12 h on weekends) and generous use of postcall days, it is not surprising that a faculty member taking calls, irrespective of gender, may not have significantly total increased hours compared to a weekday-only anesthesiologist. However, with increasing hospital demands, the flexibility of on-call faculty members to take additional pre- and/or postcall shifts is increasingly valuable and facilitates management of the daily schedule.

Given the increasing proportion of female anesthesiologists in almost all age groups documented in the article, there will also be an increasing proportion of part-time anesthesiologists, which may negatively impact both the on-call cohort and flexibility in schedule management. For these

reasons, the decreased compensation for female anesthesiologists in the study may have a plausible explanation that was not proffered in the article.

Competing Interests

The authors declare no competing interests.

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In Reply:

We thank Pivalizza *et al.* for the valuable input based on their experiences that they provided on our original article.[1] We agree that one of the potential drivers of gender differences in earnings could be the types of hours worked and the costs and benefits associated with that type of work. Given that after-hour, weekend, and holiday time may be less desirable for many anesthesiologists, employers may need to pay a premium wage to staff their facilities during these times. And, as you argue, it may be the case that women are less likely to work these hours (based on preference or necessity), and this tendency to work traditional hours may account for meaningful differences in earnings.

We are limited by the data we collected in the survey and are therefore unable to examine all of the potential explanations for the gender earnings gap. We also attempted to limit speculation on aspects of the gender wage gap we could not measure by noting that some of the gap may be driven by individual preferences or constraints female anesthesiologists have, while some of it may be employer-driven. We did try to account for the types of facilities in which hours were worked and the percentage of time allocated to various types of care to account for some of the potential difference in the value of the time anesthesiologists are working. Unfortunately, we did not collect data on the times of day or days worked, so we cannot directly test your hypothesis. While we understand that your hypothesis is focused on the timing of call hours rather than on the total number of hours, we do have average weekly call hours and average call hours spent actively providing care. A quick check indicates that including average weekly call hours in the wage regression does reduce the gender earnings gap by $329 (please refer to the coefficient shown in table 7 in our article[1]) or 0.5% of the total earnings gap.

Future research should continue to explore the important drivers of earnings differences for physicians beyond what we were able to examine in our study.

Competing Interests

The authors declare no competing interests.

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Reference

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Specific or Nonspecific? There Is Very Little Light at the End of the Tunnel

To the Editor:

The article by Fragiadakis *et al.*[1] is an interesting attempt in an everlasting quest to establish reliable markers for postsurgical recovery. The authors hypothesized that by testing presurgical immunologic parameters, individuals with expected delayed recovery can be identified. Whole blood was stimulated with several ligands aimed at mimicking an immunologic environment in blood during surgery followed by a correlational study linking the activation of several pathways to the psychosomatic measures of recovery (fatigue, pain, and functional impairment). In conclusion, the authors showed an impressive correlation between the activation of nuclear factor kappa-light-chain-enhancer of activated B cells (NF-κB) and studied clinical endpoints.

Activation of the immune system is often a nonspecific act. NF-κB is one of the most ubiquitous proteins activated by virtually any stressor or insult to the immune system. It would be expected that NF-κB–mediated pathway will be activated during surgery-induced stress. The study confirmed a pretty well-established link between psychosomatic markers of well-being and generalized systemic inflammatory response heralded by activation of NF-κB. However, the nature of the study precludes a final determination that suggested pathways are truly a cause, not a bystander, of the impaired recovery. Another important question is whether any manipulation lowering the activation of NF-κB benefits patients and speeds up postsurgical recovery? The authors also pointed out that most of the immunologic pathways are interconnected; thus, affecting one of them will have widespread consequences. Furthermore, how much can the activation of the immune system be decreased or increased by manipulation of NF-κB or Toll-like receptor (TLR) 4 system?[2] The authors described a three- to five-fold difference between individuals with respect to the level of activation. Such a wide range of responses can affect statistical correlational analysis and