Letter to the Editor

Letter to the Editor: Not the Last Word: Rethinking the Resident Research Requirement

Howard Winet PhD

To the Editor,

I am just a scientist, so I generally work with data, not patients. But for more than 15 years, I enjoyed interacting with orthopaedic residents as they completed their research experience. I never felt that I was turning them into scientists, and certainly not basic scientists. My main function was

to help them learn how to critically read a research paper so they could logically evaluate its value for their practice.

Medicine is a truth profession in which clients expect a truth—their successful treatment—to be achieved. Empirical science applies epidemiological techniques to observations and yields what Plato called “knowledge of the giants” [1] or in other words, correlations good enough to support actions. Basic or causal science was once thought to be a path to “knowledge of the Gods” [1]—ultimate truths. That goal is now deemed beyond us scientists. Our conclusions are transitory—we were barred from asserting “proofs” by theoretical physicist Werner Heisenberg in 1927. Our data, however, and particularly the integrity of those data, define our worth. We are uncertain about all else. We must fail in order to grow as scientists because we are expected to learn from our failures. There is no doctrinaire scientific method, but there is peer review of any method that is different.

Some of my residents have published papers, but rarely were they more than just nice conversation at cocktail parties. Perhaps you, and Drs.

Chehade, Pinney, and Black (the commentators who had the “last words” in your column) have published papers that provide considerable contributions to orthopaedic research. I humbly congratulate you on your successes. My satisfaction, however, is driven by hearing one of my residents challenge a presenter’s sample size or his/her claim that (s)he has “found THE mechanism for” something, especially if the speaker fails to present alternatives or state problems with his own hypothesis. Writing an NIH grant, as you propose in your column, may be a useful exercise. However, having taught an ethics course for 10 years, I can appreciate how an ethical problem could arise when a principal investigator uses the resident as a technician or to perform research work without compensation or attribution. In other words, to exploit the resident. This is a dark side of research that must be acknowledged when evaluating any research experience program.

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