Summary of Comments by the SEBM President, to the Editorial Board Meeting of the psEBM

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I have been asked to make some general comments about the status of the Society for Experimental Biology & Medicine as a framework in which our journal, now entitled *Experimental Biology and Medicine (EBM),* is placed. The Society, as you all know, is a very historic one, having been founded in 1903 by Samuel Meltzer. Dr. Meltzer lived and worked in a pivotal time in American medicine when the foundation for the scientific basis of medical practice was being established. He was not the only figure involved in this process. For instance, Sir William Osler at Johns Hopkins was a trained pathologist and was the leading North American to use anatomic pathology to describe and elucidate disease states in living humans. The most important landmark in the establishment of science as the basis for the practice of medicine was the Flexner report in approximately 1912 which established a scientific basis for the training of physicians and the closure of medical diploma mills.

Meltzer and Abraham Flexner crossed paths at almost this very time when Flexner, who was head of the Rockefeller Institute, appointed Meltzer as Head of the Department of Physiology at that institution. Thus Meltzer and the Society he founded were at the nexus of establishing scientific medicine as the basis for medical practice in the 20th century.

Now we find ourselves in the 21st century and it is possible we are at a similar crossroads. Fewer and fewer physicians, including academic physicians, are being trained in the initiation and conduct of clinical research. The teaching of medical students is being delegated to the general internist who may or may not have a research specialty. Increasingly, practicing primary care physicians ask only for the guidelines for the treatment of individuals rather than an understanding of the underlying physiology or pharmacology of the diseases they treat or the agents they use. Curricula are being prepared to remove the scientific disciplines which were once the framework for teaching the physiological sciences and are taught now as integrated units. While perhaps more efficient, the experimental approach to the understanding of disease states is lost in the name of efficiency. Young physicians are being taught to think inside, not outside, of the box.

There is no question that students are still idealistic, anxious to learn, and highly motivated. However, if they are not taught by astute physicians who also do research, their sense of using the scientific process to learn at the bedside is never developed. In turn, the development of physicians who use the scientific method to do clinical research becomes an ever more distant prospect.

I don't mean to say that American medicine is at as desperate a stage as it was one hundred years ago but I still wonder if we aren't moving again toward the creation of diploma mill medical education in some places and if we might not need another Flexner report! Talking to colleagues at the Experimental Biology Meetings, I hear stories similar to my own observations that physicians enrolled in the MD/PhD programs which are designed to provide a pathway to the creation of the medical faculty of the future, may choose to practice medicine in any case, despite their extensive scientific training. Another weakness in this process is that physicians trained to cutting edge skill at the bench may lose their technical advantage during the prolonged period of clinical training in medical school and residency. Other MD/PhD graduates I've met seem not well suited for either specialty! Wouldn't it be better to have some physicians trained in a medical specialty initially and then obtain their research training, so that if they have the inclination for research, they will not lose their basic skills so dearly won at an earlier stage? Then a research oriented medical school curriculum could be for everyone and not just a select few.

Even more fundamentally, physicians well-trained clinically and also inclined toward the laboratory or to a research specialty may not be entering these specialties. One is my own, endocrinology, because of poor pay prospects, competitive grant funding, and conflicts between clinical and laboratory time among other problems. Clearly, the advent of HMO medicine and 15 minute patient interactions create a difficult environment for clinical investigation and is unfriendly, even inimical, to those contemplating such a career.

What difference does all of the above make to the Editorial Board of *EBM?* Our journal is unique in that it embraces the interests of physicians practicing clinical research and PhD's engaged in basic research. Our journal can be a forum for the discussion of the problems that exist and the solutions that may be brought to bear on medical school-based research and teaching. Our journal can be a friendly place for young scientists to present their first research. Two physician colleagues recently both told me their first papers were published in *psEBM.* There is no reason that this precedent can't continue. Our journal can serve as a forum for PhD thesis literature reviews to be molded and framed into a mini-review format allowing the work to see the light of published day that might not occur otherwise. We can work with the articles that we review to develop friendly and constructive critiques that can lead to a better, clearer presentation and help the development of young scientific careers. In this way, we can recruit the articles of young students and graduates so that they can continue to have their first papers published in *EBM.* The extra effort that goes into recruiting these papers and reviewing papers intelligently can enhance the appeal and the quality of the papers that are published, following a trend already clearly established by our editor Dr. Bartke.

In conclusion, we in the Society as well as those of us who review articles for the journal thank you for your great help and urge you to continue your excellent effort as the journal grows and attains an increasingly improved format and quality.