

# EDITORIAL REJOINDER

*Evans and Bauman Reply:*

## **The pedigree is important**

We thank ACCP for giving us the opportunity to respond to Drs. Blouin and Pollack's comments about our editorial on how best to prepare the next generation of clinical pharmaceutical scientists.

We do not argue that preparing some of our future clinical pharmaceutical scientists via the Pharm.D.-Ph.D. route is a good thing, and we understand why leaders of institutions who have invested heavily in this approach need to be strong advocates of their past decisions. Our point is to have both pathways—*but on equal footing (not a “preferred” or “most appropriate” way)*. Having two types of scientists trained by two different pathways in the same department or laboratory but with one being preferred strikes us as repugnant—certainly not a good recipe for collaboration. As Blouin and Pollack point out, even the AACP position statement (unlike ACCP's) did not suggest we *abandon* the fellowship route. We do agree that, at this time, there are probably not enough sophisticated fellowship programs to create an adequate mass of clinical pharmaceutical scientists—but as we pointed out in the editorial, we are suspect that the graduate school route will be able to provide the needed quantity for the future. Therefore, let's have both and, to this end, we called for a renewed effort to reinvigorate high-level fellowship training in this nation.

We do argue with Blouin and Pollack's statement that "the critical issue is not one of pedigree, but rather one of preparation." If it were not an issue of both pedigree and preparation, then why are we having this debate? We would merely prepare all future biomedical researchers in exactly the same way, with the same pedigree. There would be no physician-scientists, no pharmaceutical scientists, no information scientists, etc.; all biomedical scientists would be cut from the same cloth in an identical fashion across all health professions and fields of biomedical research. That would be unwise. What we need are scientists whose pedigree is from the pharmacy profession, with others from the medical profession and others from the entire breadth of basic sciences. Therefore, the pedigree is a critical issue and one that cannot be ignored by focusing on preparation. That would be putting process over substance.

The question then becomes whether it is wiser to produce all future clinical pharmaceutical scientists via the Pharm.D.-Ph.D. process or to use broader approaches that include (and in some situations emphasize) the Pharm.D. (only) plus fellowship track, for reasons we have summarized in our editorial. We think the clear answer is a resounding "yes" to the latter approach.

What we think is perhaps the much more worrisome issue is the nature of students who are being attracted to enter the pharmacy profession and our fear that very few have any interest in a scientific career when they apply to pharmacy schools. The role model of most and the ambition of many is the pharmacists they see in their community drug store. Indeed, the "drug store on every corner" business model has fueled the staggering growth in pharmacy schools and pharmacy admissions in this country. Although not all bad, this model has translated into a decrease in the percentage of students who come to the

profession with an interest in science. Thus, if we are looking for our next generation of pharmaceutical scientists in the pharmacy school classrooms, we are looking for a diminishing number of needles in a proliferating haystack. Instead of arguing about what we do when we find one of these needles, we must, as a profession, find better ways to convey the scientific opportunities that exist within the pharmacy profession to undergraduate science students who are considering the next step in their higher education. If we don't change the substrate that is entering the pipeline, then it will not really matter what process we use to produce the next generation of pharmaceutical scientists. We might as well have our academic debates about how to get oil out of a pipeline that has lemonade coming into it.

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