

## LETTERS

### Is There a Need for More Research-based Courses in the PharmD Curriculum?

*To the Editor.* A recent article by Hagemeyer and Murawski reported on an economic analysis performed for all careers associated with the PhD degree compared to that of a practicing community pharmacist.<sup>1</sup> The results, which were intuitive enough, showed a negative net present value and a lower internal rate of return for pharmacists earning the PhD degree. While, the intrinsic and non-monetary benefits of a career choice may not be reflected in this analysis, it shows an alarming trend. It illustrates why fewer PharmD graduates may be willing to pursue pharmacy graduate programs.

According to the latest *ACPE Update* newsletter from their Web site ([http://www.acpe-accredit.org/pdf/ACPE\\_Update.pdf](http://www.acpe-accredit.org/pdf/ACPE_Update.pdf)) there are 120 colleges and schools of pharmacy with accreditation status. This indicates that roughly 12,000 PharmDs will be graduating each year in the next 2-4 years. On the other hand, AACP lists 54 graduate programs in the country for the academic 2011-2012 year (<http://www.aacp.org/resources/student/graduateresearchstudents/Pages/graduateresearchstudents20092010.aspx>).

While difficult to estimate the graduation rate for the MS/PhD students per year, it suffices to argue that it will not reach the staggering numbers for PharmD graduates. Although, never meant to be a comparison, the question arises whether some of the PharmD graduates will then be asked to fill positions traditionally occupied by PhDs? If yes, then the next question is: are we adequately training our PharmD graduates to perform beyond their clinical responsibilities?

Our PhD graduates are the most sought after by pharmaceutical companies, pharmacy academia, and other drug research-based institutions compared to PhD graduates in the basic/biomedical sciences. If indeed true to the anecdotal evidence we see fewer PhDs graduating, these aforementioned research jobs will be lost to our graduates. The PharmD graduates are in an excellent position to compete for some of these jobs as long as they can convince recruiters that they have sufficient research backgrounds to grasp and further train themselves according to the skills the position requires.

As a student advisor, I often get inquiries from my students about pharmaceutical industry related jobs. With the current oversupply of community pharmacists in the New York-New Jersey area, our students are constantly looking for alternative career paths. I think this is an option for all pharmacy programs irrespective of their geographic location to consider. We owe it to our students to prepare them in the best way possible to compete for all jobs for which they may be qualified.

Introducing research methods-based courses, electives in bench or social/outcomes research, capstone projects, etc, are methods by which we can raise the research awareness of our PharmD students. While not a PhD program, we can definitely inculcate basic research methods training in our graduates that will help them compete for some of the research-oriented jobs. This can be done without a major change to existing curricula. At Touro College of Pharmacy, NY, in addition to teaching courses in research methods and biostatistics, we require all students to complete a capstone (research-based) project prior to graduation. The projects can be bench research, social or outcomes research, or clinical research. Kao and colleagues positively commented about the perceived value of student research projects by preceptors.<sup>2</sup> Research fellowships are the next step that will further hone the research skills of our graduates. However, there are limited research fellowships that are currently available across the nation and as such the onus is much upon the PharmD curriculum to raise the bar.

Pharmacy faculty members, as the keepers of the curriculum, should look at ways by which we can increase the research exposure of our PharmD graduates. This will not only increase the number of our graduates entering into PhD programs but also create more qualified employees for future academia, industry, and other health-related organizations.

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## REFERENCES

- 1 Hagemeyer NE, Murawski M. Economic analysis of earning a PhD degree after completion of a PharmD degree. *Am J Pharm Educ.* 2011;75(1):Article 15.
- 2 Kao DJ, Hudmon KS, Corelli RL. Evaluation of a required senior research project in a doctor of pharmacy curriculum. *Am J Pharm Educ.* 2011;75(1):Article 5.