

Review of MS in Forensic Science

I have read the proposal for the Master of Sciences Degree in Forensic Science that was submitted by Dr. Jay Siegel of the School of Science on the IUPUI campus. Justification of the new program is documented nicely and the mechanics are explained well. It appears that the campus has already invested in the Bachelor's of Sciences degree and that many of the needed resources are currently available for the MS. The goal of obtaining accreditation is both laudatory and yet mandatory if this program will grow to national prominence.

The objectives of the new program are clearly stated and the curriculum appears to be appropriate to the campus and the State of Indiana. The outlined course sequence and thesis should be sufficiently rigorous to produce outstanding graduates that can find employment throughout the state. Examination of similar programs on GradSchools.com indicates that the number of credits is appropriate, the course topics are reasonable, and the pedagogical model is doable. In short, the proposed MS program will compare favorably with other schools around the country. With the small student class size, it should be possible for five faculty to successfully run the program. The physical facilities and equipment appear to be adequate. It is also nice to note that there is a specific course dealing with legal issues in forensic science. This will provide a broader knowledge base for the students in this program.

There are a few concerns. One is that the proposal mentions cutting-edge research. I am not convinced that five faculty would have the time and breadth needed to support 20 students getting a thesis masters degree and do cutting edge work at the same time. Much research effort takes more than three semesters to obtain publishable data of outstanding quality. The proposal would be strengthened if I knew that adjunct faculty would be available to assist in the research work.

The proposal also mentioned that the State needs scientists in leadership positions. Unfortunately, the curriculum does not mention any didactic or experiential classes or sessions that might be tied to leadership or administrative development. This aspect of the training could be expanded.

On page 3 there is mention of a minimal GPA of 3.0, yet the first class has an average of 3.75. I wonder if the minimum is too low and might mislead applicants into applying who clearly do not have the credentials for admission. The same point applies to the upper one-third on the GRE general exam. There is much work in processing applications and I do not think the program has the staff needed to process large numbers of applications.

On page 4, a sample curriculum is outlined. Why is the course work so heavy (15 credits in fall versus 12 in spring and only 3 in summer. Most graduate programs use the 12-12-6 model for credits throughout the year.

On page 6, there is discussion of a needed teaching lab for forensic toxicology. Is there no need for research space as well and/or is that supplied by the Department of Toxicology. Will any Pharm/Tox faculty be involved in the research projects of these students?

There is no discussion of the issues of joint appointments between IUSM and PU School of Science. If the new forensic toxicologist is to be a joint appointment, then there are many issues

of 10 versus 12 month appointments, tenure expectations, etc. that are not addressed in the document.

It is clear that Dr. Siegel has the expertise to direct BS and MS programs in forensic sciences, and that Dr. Li would be an appropriate member of the faculty. However, their research publications and research grant support are minimal (especially since 2004) and I wonder about the quality of research theses that will be produced by the MS program students. If the program is to be high quality, then the theses should also be of high quality.