

## **Program Review**

March 16, 2009

This is an extremely well designed doctoral program in epidemiology. As the only academic unit in the State of Indiana that offers a graduate epidemiology degree (MPH), the Indiana University School of Medicine, Department of Public Health is the ideal setting to administer this proposed program. The rationales for establishing this epidemiology doctoral program are elucidated in the proposal and supported by the nationwide shortage of systemically trained PhD level epidemiologists, the missing of epidemiology doctoral program in the state, the good number of potential trainees, and the great future job opportunities of different sectors in the state of Indiana and in the U.S.

The strengths of this proposed doctoral program are many. To list a few, it is very gratifying to see the comprehensive admission criteria. Requesting an in-person interview is an excellent decision. It will provide a valuable opportunity for faculty and a student to interact with each other and to assess whether it is a good match between the student and the program. As such, the in-person interview allows faculty to better identify potential problems and unique characteristics of the applicant so admission decisions can be made accordingly. The on-site essay is another valuable requirement. We have found that in our program many students' writing skills are less than satisfactory. Students' score in the GRE writing test is somehow correlated with their academic success, but the correlation is not very strong. Intuitively, the evaluation with an on-site essay will be more informative since the requirements for the essay may be customized towards the needed writing skills for the epidemiology program. I believe these admission criteria listed in the proposal are well thought and essential to ensure high quality students to be recruited into this new doctoral program.

From many perspectives, the curriculum for this training program is strong and extensive which are in line with the competencies for students in epidemiology doctoral programs around the nation. The preliminary and qualifying examines are very standard requirements in all doctoral programs. The PhD advisor's responsibilities and the committee structure are properly designed for this degree. The 20 credits for dissertation are within the normal range in this field. While the total 90 units of credits are at the high end of required units for a doctoral degree in epidemiology, it is well adjusted. Briefly, the required 31 credit hours for core courses and the additional 9 credit hours for methods courses will contribute to the establishment of a broad and solid foundation for students to either develop in special areas or become a general epidemiologist. There are significant needs in public health practices, research, and teaching for well trained general epidemiologists who may become strong leaders in academic, governmental, non-governmental and industry settings for emerging public health problems (Lilienfeld DE 2007). This new doctoral program, with its clear focus on epidemiology methods and basic public health practice and epidemiologic

research skills, is visionary and timely. Together with the various elective courses, the proposed program should be able to attract both full-time and part-time students from different public health disciplinary programs to the Indiana University for their advanced study in epidemiology.

The program is built on existing courses, but new courses also represent a significant percent of the credit hours in the curriculum. There are four courses that will be developed and added to the required core courses and another one to the method courses. These new core and method courses are fundamental and necessary. The elective courses are appropriate and interesting, but the program may consider of phasing in the development of these new courses given the limited number of doctoral students and the few primary faculty in epidemiology. Unless students from other graduate programs will be interested in taking these new elective courses, it will be difficult to fill in so many elective classes with 5-10 students each year in the epidemiology doctoral program. In addition, given the limited number of faculty, perceivably it will be difficulty to develop all the elective courses at the initial phase. Beside of developing the elective courses in an incremental manner, these courses may also be offered only in alternative years to maintain effective class sizes and to reduce workloads to the faculty.

The program leaders should be congratulated for their plan of taking a collaborative approach to mobilize an impressive number of epidemiologists from other departments to support the epidemiology curriculum by serving as adjunct faculty. However, it must be realized that it is also critical to have a minimal of 5 full time epidemiology faculty to ensure the sustainability of this program. The University should make any possible effort to help the Department of Public Health meet the faculty recruitment goals in epidemiology so there will be an adequate number of core faculty to mentor and to teach the coming doctoral students.

In summary, the proposed program is comprehensive and the curriculum is more than adequate for training doctoral students in epidemiology. The students of the current MPH program in the Department of Public Health present the definite applicant pool for the doctoral program. The unique and exciting learning resources, including faculty's research, existing and new courses, extensive databases and a large number of health-related research centers at the University, will make this new program competitive in attracting high caliber students from other universities across the nation. Dr. Marie Swanson is a well-known leader in program development and management. I fully expect this proposed doctoral program to prevail under her leadership.

*Lilienfeld DE. The general epidemiologist: is there a place in today's epidemiology? Am J Epidemiol (2007) 166:1–4.*