# Forensic Science Laboratory/Forensic Science Program Cooperation and Relationships: The View from the Forensic Science Laboratory

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**ABSTRACT:** Some areas of common interest and potential cooperation between casework forensic science laboratories and university and college based forensic science programs are discussed. These include internships, joint research, the use of laboratory personnel as instructors in programs, and the use of faculty as consultants for the casework laboratory.

KEYWORDS: forensic science, symposium, education, surveys, laboratories

Casework forensic science laboratories and forensic science education programs each have their own interests and priorities. However, there are a number of areas of common interest and a number of levels at which cooperation and interaction are possible. Some of them are explored in this paper, including: (1) student internships in laboratories, (2) joint research between laboratory and academic program personnel, (3) laboratory personnel teaching in academic programs, and (4) the use of academics as consultants by laboratories.

Recently, a survey of forensic science laboratory directors was conducted to find out how many laboratories were involved in the various cooperative relationships outlined above. The results of this survey are presented below in connection with a discussion of each of the areas of potential interface mentioned previously.

Today, there are approximately 40 federal and 295 nonfederal forensic science laboratories in the United States. Nonfederal laboratories may be under the auspices of state, county, or city governments, and some are regional, that is, serving a number of counties or some other defined geographical area. Of the 295 nonfederal laboratories, approximately 59% are state, 18% county, 18% city, and 5% regional. Twenty-four states now have laboratory systems with at least two, and as many as twelve, laboratories. Of the laboratories that received questionnaires, 72% responded to the survey.

#### Student Internships

Many of the academic forensic science programs require or strongly advise that students complete an internship in a forensic science laboratory. Of survey respondents, 61% make

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internships available to students, and of those that do so, 19% are able to provide compensation to interns (see Table 1 and Fig. 1). Internships appear to work most successfully from the points of view of both the laboratory and the intern when the laboratory has a formalized internship program. Such programs may include a set schedule of attendance and activities, an appropriate length of time for the internship, and advanced arrangements for the intern to work in one laboratory section or rotate in an orderly way through the different sections of the laboratory. A mechanism for evaluating the intern's performance is also valuable. It may help in the academic program's evaluation of the individual's academic progress. In addition, it provides a business record for the laboratory to use should the intern later use the laboratory as an employment reference.

#### Joint Research

Some laboratories engage in research projects as the need arises, or on an ongoing basis. The research may be conducted jointly with a cooperating academic program. In the survey, 6% of the laboratories reported that they engaged in joint research efforts with university forensic science programs (Table 1).

These cooperative arrangements tend to work most effectively when the laboratory and the academic program are equal partners in the research effort. The project generally involves applied rather than pure research so that the results will have maximal value to the laboratory. Issues that arise with these joint research projects include the source or sources of fund-

TABLE 1—The relationship between the forensic science	e
laboratory and the university.	

	Yes, %	No, %
Student internships	61	39
Joint research	6	94
Personnel teaching	39	61
Utilize faculty consultants	22	78

#### Student Internship Programs

N=194

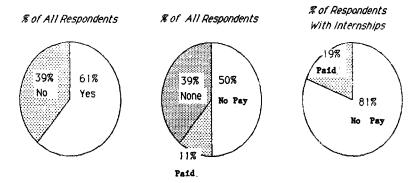


FIG. 1—Results of survey on student internship programs.

ing for the project, and in some cases, legislative authority for the laboratory to engage in relevant research projects and to enter into cooperative relationships for purposes of doing so.

### Laboratory Personnel Teaching in Academic Programs

Personnel from a number of laboratories teach in academic forensic science programs on a part-time basis. Thirty-nine percent of respondent laboratories in the survey reported that their scientists were engaged in teaching. This practice has potential benefits for the academic program, the laboratory personnel who are teaching, and even the laboratory itself. It helps to foster cooperation between laboratories and academic programs in many ways. The program's students typically enjoy the benefits of an instructor with a special area of expertise, and who has the perspective and experience of an evidence examiner. The scientist who is teaching takes advantage of an opportunity to organize his or her thinking in a particular subject area so as to be able to present it cogently, and to share expertise and experience with the next generation of laboratory examiners.

From the laboratory's viewpoint, the involvement of a laboratory scientist as an instructor in an academic program can serve as a catalyst for other relationships, in addition to helping the teaching practitioner keep his or her skills and knowledge up to date.

## Use of Academics as Consultants by Laboratories

Laboratories may have need periodically for a consultant with particular knowledge, skills, or expertise to handle a particular evidence examination problem or some specialized aspect of a particular case. A number of academic program faculty have such specialized knowledge. In addition, faculty consultants may help laboratories keep up with their caseloads on a more routine basis. In the survey, 22% of laboratories stated that they use faculty consultants. This kind of relationship can be useful to both the laboratory and the educator. It opens the way to the sharing of ideas and facilities, and can provide the laboratory with needed expertise in a subject area for assistance with casework problems or the training and education of newer examiners. At the same time, the academic consultant is afforded an opportunity to keep in close touch with the real world of casework problems and the day-to-day workings of a casework laboratory and its personnel. Potential research topic areas can be identified in the course of these interactions.

Some of the major potential interfaces between forensic science laboratories and academic programs have been briefly explored here. There are undoubtedly other ways in which laboratories and academic forensic science programs can cooperate and interact to the mutual benefit of both parties. As the survey indicates, a significant number of the nation's laboratories are taking advantage of the mutually beneficial effects of cooperating with academic programs on one or more levels.

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