



### E76 Developing an Information Literacy-Intensive Forensic Science Course

*Laura Sare\**, 5000 TAMU, College Station, TX 77843; *Sarah Bankston, MS\**, Medical Sciences Library, Texas A&M University, 4462 TAMU, College Station, TX 77843; and *Jeffery K. Tomberlin, PhD\**, TAMU 2475, Dept of Entomology, College Station, TX 77843-2475

The goal of this presentation is to demonstrate a model in which forensic science educators can utilize resources at university libraries to promote scientific information literacy and lifelong learning strategies for their forensic science students that they can continue to use in their professional forensic careers.

This presentation will impact the forensic science community by highlighting the benefits of forensic science faculty collaborating with subject specialist academic librarians to produce a course that fills a gap in the education of future forensic science practitioners. This course facilitates the development of productive search strategies and explains how different types of scientific research and legal materials are relevant to various forensic science disciplines. This collaboration has demonstrated a need for promoting information literacy, specifically for open-access materials, regarding forensic science information to these students, so once they graduate, they may still acquire the valuable information necessary for their jobs. As a result of this research, it was determined there was a need to expand this information literacy beyond the classroom and National Institute of Justice (NIJ) funding was acquired to allow for the development of these materials as modules to be used by practitioners in crime laboratories to enhance available resources for their use.

Forensic science is a multi-faceted field, including expertise from a variety of disciplines. A challenge for creating a college course to address skills to develop information literacy competencies and encourage lifelong learning for future practitioners is covering those diverse disciplines. This presentation will detail how librarians at Texas A&M University developed a junior-level forensic science seminar in collaboration with a forensic science faculty member to meet the research needs of students in the forensic sciences program. The learning outcomes of this class include: teaching students to describe problem-solving principles; organizing typical operational protocols; recognizing the scientific basis and application of tools and techniques in forensic science; comparing capabilities and limitations; and summarizing and illustrating current scientific, ethical, and legal issues. This presentation will detail the steps taken to create six separate information literacy-intensive classes, including the development of the assignments, and how feedback was provided to the students. These classes include sessions on dissecting scholarly articles and case law, as well as classroom discussions to teach students how to use the structure of research articles and case law to easily evaluate information. By creating this information literacy course, instructors were able to better prepare students for their program's research-intensive courses with the amount of detail required that cannot be covered in a traditional, one-hour library instruction session. Such skills will be of value when working in forensic science fields and when the need arises for locating similar resources in relation to casework. Additionally, this presentation will address issues raised in class, such as open access, database access, and evaluation of science and legal materials, which helps the students translate current school work to their future careers. To further this concept of information literacy, as previously mentioned, the researchers received NIJ funding to determine how forensic scientists locate and evaluate information, to create educational materials aimed at enhancing these skills, and to increase awareness of other valuable informational resources. Locating and evaluating high-quality forensic science literature will help forensic scientists engage in quality science practices.

Results from this class, which is now in its third year of evaluation, demonstrate that students who take this preparatory course are better prepared for conducting meaningful research for their writing-intensive senior-level classes, both in their abilities to find relevant materials and in how to utilize and cite these materials. Graduating students who go on to graduate or to law school have also reported back that taking this course gave them a foundation to build on in their advanced studies.

#### **Information Literacy, Forensic Science Education, Libraries**