



Pathology Biology Section - 2012

G115 Literature Search for Journal Articles Authored by Board Certified Forensic Pathologists

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After attending this presentation, attendees will understand the scope and type of peer-reviewed journal articles authored or co-authored by board certified forensic pathologists since the board certification was first offered in 1959.

The presentation will impact the forensic science community by providing a summary of the number and types of articles written by board certified forensic pathologists and by having available a readily searchable database of such articles written and published between 1959 and 2010.

Although typical on-line research resources such as Medline, PubMed, and other medical journal databases provide for easy searching of published articles by author or subject, it is much more difficult to search and retrieve articles written by specified types of authors. Further, a specified group of authors may publish articles that are not captured by a single key word or even large group of keywords.

In February 2010, a research grant from the AAFS Pathology/Biology Section to conduct a literature search was received. Shortly thereafter, an on-line survey was conducted of forensic pathologists that provided data which was extrapolated to suggest that the total number of journal articles authored or co-authored by the nearly 1,400 persons board certified in forensic pathology since 1959 could be estimated to fall between 10,000 and 20,000.

Using a master list of board certified forensic pathologist names, an initial search of Medline and PubMed disclosed more than 182,000 articles containing the last names and first initials of the authors. A search was constructed using author last name and all permutations of first name, first initial, middle name, and middle initial. It was apparent in reviewing these articles for subject matter that the large number of articles was due mainly to author names that included that same first initial but were different people. Attempts to narrow the list down by using keywords such as "forensic pathology" or MeSH headings had some impact on reducing the number of articles, but further study of board certified forensic pathologists with known numbers of articles showed that such filtering eliminated articles that should be included in the study results. Similarly, limiting the search to a relatively large group of selected journal titles also resulted in elimination of articles that should be included. A different approach was then taken to filter the number down by eliminating articles written 10 years or more before a person with a given last name and first initial was certified in forensic pathology, then eliminating articles that did not contain one or more of 238 key words in the title or abstract, then by eliminating articles that were not published in one of 645 selected journals with two or more published articles possibly published by a board certified forensic pathologists and having a journal title that seemed potentially relevant to forensic pathology subject matter. After these filters were applied, the group of remaining articles numbers 33,469. The titles and abstracts of these articles were reviewed manually and articles were eliminated if the subject matter did not involved forensic pathology-related issues. Ultimately, at the time this abstract was prepared, there were 27,052 articles remaining, although further review and filtering was still underway.

In short, this research project has been more complicated and time consuming than the authors had originally envisioned. Because many board certified forensic pathologists since 1959 have died, retired, or are no longer active in the field, and because there are nearly 1,400 such persons over time, it was not feasible to collect the curriculum vitae of individual forensic pathologists and combine their publication lists into a database.

Between August 2011 and the AAFS Annual Meeting in February 2012, it is anticipated that the target group of published articles will be further refined by manual review of publications. The plan is to categorize published articles into groups including Letters and Editorials, Case Reports, Case Series, Review Articles, Original Research, and others which do not fit into the preceding categories. A draft database will probably be made available for review by forensic pathologists to gauge how effective the search was in identifying appropriate articles, with an opportunity to add articles that were not located by our search procedures. The finalized database will be available on-line for review and searching by those who are interested. It is conceivable that yearly updates to the database could be made. Options will be explored to facilitate retrieval of such articles in the future, perhaps by suggesting that the board certification status of forensic pathologist authors be noted somehow in the published manuscript.

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