From the Editor

Progress in Performing Arts Medicine

The announcement last month that *Medical Problems of Performing Artists* will now be indexed in Medline/PubMed is truly an important development for the field of performing arts medicine. While many of us wish that this had happened sooner, we should all be proud of our combined efforts that made it possible. In addition to the publisher Mike Bokulich, who has labored tirelessly to reach this goal, I also want to publicly thank (again) Alice Brandfonbrener, the founding editor of *MPPA*. Without her 20 year labor of love, we would not have been in a position to be included in Medline now.

Medline is very familiar to those of us in the biomedical world, whether we function primarily as clinicians or researchers. But for *MPPA* readers who are primarily performing artists, non-biomedical teachers, or otherwise unfamiliar with this entity, I want to give some background information that will help explain how big an accomplishment this is and how significant it will be to what we do in the future.

Articles published in medical journals have been indexed for well over a century. *Index Medicus* was started in 1879 as a function of the Library of the Surgeon General of the United States Army. When I was a medical student and resident in the 1970s and 80s, looking for articles that had been published in medical journals required going to the medical school library and pulling issues of *Index Medicus* off the shelf. The indexing for 1 year’s worth of articles occupied over a dozen volumes, with articles searchable both by subject and by author. Of course, the most recent articles would be listed in monthly updates until several months into the new year, when last year’s annual index was printed. As a result, looking for the most recent articles published on any given topic (or by any given author) in April or May meant looking through 15 or more monthly editions of *Index Medicus* in addition to whatever number of annual editions one wanted to peruse.

It’s hard to appreciate in 2010 how amazing the ability to do computerized searches of the medical literature was when it became available in the 1980s. First of all, there was no distinction between the annual and monthly editions of *Index Medicus*. As soon as an article was added to the database, it was there—it didn’t matter if it had been published a week ago or 10 years ago. Second, the ability to do more refined searches (e.g., show me only the articles on cumulative trauma disorders that include adolescents) became much faster, and the ability to combine the searches on two or more topics (e.g., show me only the articles that relate to both anxiety and musicians) became feasible for the first time to individuals—librarians had had the ability to do this a few years earlier.

I distinctly remember seeing this happen for the first time when a colleague showed me a search he had just done on articles about infectious mononucleosis in college students. It probably would have taken over an hour to find the relevant articles by looking through the printed version of *Index Medicus*. My colleague had done it on his computer in less than 5 minutes.

The last printed edition of *Index Medicus* was published in 2004. For over two decades, the preferred method of retrieving the biomedical literature has been to search online via Medline. Medline is officially the Medical Literature Analysis and Retrieval System Online, a service of the National Library of Medicine (NLM). It now comprises over 18 million records from over 5,000 publications (now including *MPPA*, as an occupational medicine journal). The staff of the NLM adds 2,000 to 4,000 articles per day, 5 days per week. It is possible to find references to articles going back to the late 1940s, and there is no cost other than having a computer with access to the Internet. The full text of many articles (especially those published in the last few years) can be accessed electronically now. In addition to articles in the field of medicine, Medline includes articles in the fields of nursing, dentistry, veterinary medicine, the health care system, and many of the preclinical sciences.

So how was the decision made to include *MPPA* in Medline? The NLM’s Literature Selection Technical Review Committee (LSTRC) is charged with making recommendations to the Director of the NLM, who officially makes the final decisions. The Committee looks at a number of factors that relate to the scientific quality of the journal. The “critical elements” include the journal’s scope and coverage, the quality of the content, the quality of editorial work (including peer review), production quality, the audience, types of content, and geographic coverage.

Without going into extensive detail about all of them, let me highlight a few. “Quality of editorial work” sounds like a rather boring term, but it encompasses things like adherence to ethical guidelines (which is why we require review and approval by an institutional review board for research involving human subjects), disclosure of financial conflicts of interest (on all submitted manuscripts), and the opportunity for readers to comment on and disagree with published articles (via letters to the editor). The Medline application asks specific questions about the article...
types published, the nature of the peer-review process, and whether statistical or other evaluation is done. Sponsorship by national or international professional societies is also taken into account, which is one reason why the sponsorship of MPPA by the Performing Arts Medicine Association (PAMA), the Dutch Performing Arts Medicine Association (NVDMG), and now the Australian Society for Performing Arts Healthcare (ASPAH) is significant.

“Types of content” is also worth describing in terms of how it relates to our journal. The LSTRC lists seven types of articles with an accompanying statement that ranks the order of importance: reports of original research are at the top, critical reviews are in the middle, and case reports are at the bottom. As the field of performing arts medicine has grown and matured over the last quarter century, the amount and quality of original research has increased. Twenty-five years ago, when MPPA was started, cases reports and experiential, personal reports were necessarily the first steps in building a knowledge base of performing arts medicine. As a result, over time, MPPA has been able to publish more and scientifically higher quality articles, with more rigorous methodologic design and statistical analysis. We are very appreciative of the expert reviews provided by Dr. Ji-Hyun Lee, our statistical editor in this regard. Likewise, as more research on a particular topic has been done, it has been possible to publish critical reviews of the work done to date (and we owe a debt of gratitude to Bill Dawson for overseeing the review articles in MPPA over the last several years). We will continue to publish case reports when they make a contribution to the understanding of some segment of the performing arts medicine world, with the understanding that they won’t be the primary focus of the journal.

So how do those who are not familiar with Medline get started in using it? For most, it’s simply a matter of going to the PubMed website. PubMed is a service of the National Center for Biotechnology Information, another program of the NIH, which also maintains searchable databases in other scientific fields. The PubMed home page has a link to the PubMed Quick Start Guide, where the user will find basic instructions on how to do searches by topic or author. In the past, a working knowledge of Medical Subject Headings (MeSH) was useful, but computer technology largely takes care of this in real time. One can type almost any topic into the search field, and the NLM’s computers will suggest the most relevant Medical Subject Headings to use instantly.

One other thing I should point out is the difference between Medline and MedlinePlus, which is a service of the NLM that is designed to make health information available to the public. While probably not as useful to the researcher, MedlinePlus is still a website that clinicians and others who work with performing artists will want to visit on occasion, if only to help patients and students find appropriate and reliable information. It has information on both dance and music medicine.

The field of performing arts medicine has “come a long way” since the 1980s, and the inclusion of Medical Problems of Performing Artists in Medline is one of the most important and happiest results of that progress. Thanks again to everyone in the field who has contributed. I hope the enhanced availability of scientific information on the medical problems of musicians, dancers, and other performing artists will further accelerate the improvement in their health status.

RALPH A. MANCHESTER, MD
Rochester, New York
rmanchester@uhs.rochester.edu

CALL FOR PAPERS:
Hearing Protection at Schools of Music

Papers presenting data on the state of hearing protection at music schools, as well as descriptions of hearing protection programs that have been implemented, are invited for consideration in MPPA. For information or to submit papers, please email the Editor at mppa@sciandmed.com.