## Selection for preservation: considerations for the health sciences

By Daniel T. Richards, M.S. Collection Development Officer

National Library of Medicine Bethesda, Maryland 20894

Lucretia W. McClure, M.A. Medical Librarian and Associate Professor of Medical Bibliography

Edward G. Miner Library School of Medicine & Dentistry University of Rochester Rochester, New York 14642

Just as no health sciences library can afford to collect every work on a subject, neither can any health sciences library afford to preserve every item that is added to its collection. In decision making for collection development, health sciences libraries apply a set of selection criteria. Those same criteria have direct application in selection for preservation decisions.

This paper summarizes the literature of selection for preservation, describes the scholarly record of biomedicine, and presents criteria for selection for preservation decisions. The preservation priorities statement for microfilming of monographs and serials in the National Library of Medicine collection is included as an appendix.

### INTRODUCTION

Health sciences libraries exist as both information centers and repositories of the published and unpublished records of the health sciences. The collection of materials supporting the information center function of the library is ever changing, and must be timely, of high quality, and responsive to the information needs of the library's constituent user group. A library's collection development program draws from the large and ever-growing output of the publishing industry. For this reason, the selection process must be based on a mechanism that aids the making of choices; it is only at the level of a "special" collection that any library can aspire to assemble a collection that includes all materials its users might potentially require. Most cooperative efforts among libraries are based on a recognition of that fact. Consequently the notion that a single institution can be self-sufficient is rarely in evidence in librarianship

An effective collection development program provides the framework within which to make choices.

Selection criteria form an integral part of that framework. These criteria are weighed with or against each other in the decision process and can assume greater or lesser importance from item to item. With few exceptions, they may be applied effectively in the preservation process, because selection for preservation is, in effect, a "re-selection" decision.

The notion that a single institution can be selfsufficient is rarely in evidence in librarianship today.

Selection for preservation in the health sciences requires as well an awareness of the literature of the health sciences, in particular the scholarly record and its components. To document fully the scholarly record of biomedicine in a few paragraphs is, of course, presumptuous, but a description of some of its characteristics demonstrates the range of options available and factors to consider in selection for preservation.

### THE SCHOLARLY RECORD

The primary role of the literature of a scientific discipline is to record and transmit discoveries and ideas that advance the state of knowledge within the discipline. Another function of scientific literature is to help solve problems in research or practice; the ability to do so is directly affected by the amount and quality of relevant information available. Scientific literature can be regarded metaphorically as a form of external memory from which we can extract and add at will. One may also view it as a structure made up of additions of small segments until a larger picture emerges. Ortega y Gasset postulates that "science advances by many small discoveries" [1]. However one views it, that literature becomes a record of and for scholarship, hence, the "scholarly" record.

According to Derek de Solla Price [2], the literature of a scientific discipline doubles every fifteen years. There is also a significantly high death rate for that literature. Periodicals cease to be published and books become obsolete. Both of these observations are true for the scholarly record for biomedicine.

The biomedical literature can be viewed structurally in many different ways: by format, by subject, by date, by country of origin, by publisher, by language, or other device. Though all may serve an important function in collection development or preservation decision making, the three principal ways in which the literature is divided are format, subject, and date.

In examining the scholarly record by format, there are two principal levels of materials, each by its name reflecting in a real sense its relative importance to the biomedical literature. These two levels are:

Primary level material, which includes "source" documents, such as "true" journals, monographs, treatises, manuscripts, patient records, prints and portraits, and collateral "reference" items containing original observations, e.g., annotated bibliographies and dictionaries; and

Secondary level material, which includes all of the "synthetic" literature, or repackaging of the primary literature, made up of textbooks, reviews, popular treatments, annuals, handbooks, encyclopedias, etc.

Within each of these levels there is an additional hierarchy. It is generally acknowledged that the "true" journal literature represents the most important format of the published literature of biomedicine, with monographs assuming a subordinate role. The visual record, too, is of great importance in the health sciences literature, and it is present in both journals and monographs in the form of plates, portraits, photomicrographs, radiographs, and other materials. Visual representations constitute an integral part of the lit-

erature of medicine, and each may indeed be worth a thousand words because they may form, alone or in sequence, the very essence of an article. Only in art is the visual as important to the scholarly record.

When examining the scholarly record of biomedicine by subject, one may assign "importance" indicators, as most collection development policies do. The terms in the Collection Development Manual of the National Library of Medicine [3] divide the literature of biomedicine into four basic categories: core, related, peripheral, and out-of-scope. Many libraries use some version of these terms in describing collection development policy.

The scholarly record can also be explored by date. The most obvious method is to view the record by century. Another commonly used method is to carve out blocks around major advances in biomedicine, such as the discovery of the circulation of the blood, the development of anesthesia, or the discovery of DNA. In looking backward at the literature, it is a frequent misperception that the older something is, the more important. While this may frequently be the case, it is not necessarily true with the health sciences literature, especially as one reflects on Ortega y Gasset's "building blocks" phenomenon.

The scholarly record for biomedicine is vast. The collection of the National Library of Medicine (NLM) holds nearly 2 million book items and another 1.6 million nonbook items. These figures include nearly 600,000 monographs, approximately 1 million periodical volumes, 300,000 theses, and approximately 50,000 audiovisual items. There are approximately 22,000 currently received periodicals, and more than 150,000 pieces arrive at NLM annually.

The Library of Congress (LC) and the National Agricultural Library (NAL) each have collections in the health sciences that do not duplicate those in NLM. Most notable are LC's coverage of the popular medical literature and its comprehensive collections of related subjects such as anthropology and biology. The NAL collects some areas of veterinary medicine more comprehensively than NLM, and houses large collections of relevant documents, legislation, and foreign government reports, which are complementary to those held at NLM.

Beyond NLM and the other national libraries, there is a large network of medical libraries, both in the United States and abroad, that hold varying percentages of unique materials. Mammoth collections of records exist outside libraries in museums and archives, in patient-file rooms in medical centers, and in the files of practicing physicians and other health care providers. Actual numbers of items in each category are impossible to estimate as national inventories have not been done. Despite the imprecision in the last category, however, the numbers are significant, and all of these collections combined result

in a scholarly record for biomedicine comprising many millions of items. To preserve them all is likely unnecessary and may well be beyond the capabilities and economics of modern technology. As Oliver Wendell Holmes observed in his *Medical Essays*:

Our shelves contain many books which only a certain class of medical scholars will be likely to consult. There is a dead medical literature, and there is a live one. The dead is not all ancient, the live is not all modern. There is none, modern or ancient, which, if it has no living value for the student, will not teach him something by its autopsy [4].

Other disciplines face the same dilemma.

## SELECTION FOR PRESERVATION IN OTHER DISCIPLINES

As stated by Philip H. Abelson in a recent Science editorial, one of the "stimuli for scholarly publication is the belief by scientists and other authors that their work will add enduring values to the human heritage" [5]. The deteriorating condition of millions of books and journals belies that hope, and preservation inventories conducted in many major libraries make clear the extent of the problem. More than a quarter of the holdings of LC, some three million volumes, are already too brittle to handle, and an additional 77,000 volumes become brittle annually. It is not unusual for preservation inventories to report that 35% to 40% of a collection requires preservation attention. Preservation of materials is an immediate and essential issue for all libraries.

There is a wealth of information and a wide spectrum of publications focused on preservation issues: the extent of the problem, the methods available for restoration or replacement, and the financial resources needed. There has been relatively little, however, written on the selection of materials that should be preserved, a process founded on two primary questions: who should make the decision, and on what basis should the decision be made? The authors who have discussed the selection process offer a variety of approaches, and much of what they say is germane to selection for preservation in the health sciences.

Hazen [6] presents a conceptual framework for individual preservation decisions, stressing that the same considerations for building collections apply to preservation. He offers five factors for consideration as guidelines for preservation selection: academic activity (or user demand), historical precedent and tradition, the volume and cost of materials, the availability of alternatives to purchasing replacements, and discipline-specific access to information. He describes these five factors, first in relation to collection development and then in terms of what should be preserved. He points out the considerable staff time that

selection for preservation requires and concludes with a plea that libraries must have better information about the cost and cost-effectiveness of specific preservation options, and that it is essential to systematize the existing welter of information on material already available in other formats.

Walker [7] discusses the full spectrum of preservation issues. Pertinent to selection for preservation is the recommendation that there be a staff member to coordinate the process of gathering information about the volumes given to the subject specialist for decisions. The subject bibliographer then determines the fate of each work—whether to restore, repair, withdraw, box, transfer, or replace. If it must be replaced, then further decisions are needed—whether to purchase an available reprint or microform, or to photocopy or microfilm, either through commercial services or an in-house program. Walker includes an extensive outline of how to search for the information needed to make informed selection for preservation decisions. These recommendations assume that the library has the staff to carry out systematic searching and decision making. Unfortunately the recent preservation needs assessment survey of the nation's health sciences libraries, a survey conducted under NLM's Regional Medical Library Program and discussed in detail by Kirkpatrick in this issue, reveals that few health sciences libraries have preservation officers or staff dedicated to preservation activities.

Few health sciences libraries have preservation officers or staff dedicated to preservation activities.

Atkinson [8] proposes a decision-cycle model for selection-for-preservation decision making and discusses the technical (what needs preservation and which modes are possible?) and critical (what should be preserved and which mode should be used?) aspects of the model. His response to the fundamental question for preservation—why should certain items survive and others not?—is a second model identified as a typology of preservation, showing three classes of preservation distinguished by four factors. The four factors include the object or item/collection, the primary mode of preservation, the decision locus, and the decision type.

In Atkinson's model, Class 1 preservation includes those resources that will be preserved as artifacts because of their economic value, e.g., rare books and manuscripts. Also included here are level 5 collections, as defined in the user's manual for the Research Libraries Group (RLG) Conspectus [9]. These collections may also have significant capital value deriving from the combination of materials or the compre-

hensiveness of the collection. Preservation decision making for level 5 collections is generally of the "macro" variety and is done at the local level.

Class 2 preservation is represented by heavily used materials in current demand for curricular or research purposes. These materials are generally identified as they are returned from circulation. It is here, Atkinson says, that bibliographers have their most important role, employing the same criteria they have developed in building the collection to make determinations for preserving it. This category also emphasizes the item-by-item selection process called for by Hazen.

Class 3 preservation is more difficult to define, and it is in this area that decisions are made to preserve lower-use research materials for posterity. Development of criteria for preservation selection here is critical, as is cooperation in preservation activities. Atkinson suggests that quantity has become quality in today's research library, principally because of our inability to measure bibliographical quality in any other terms. Because of this, he argues against trying to assign values to items and proposes a coordinated, cooperative program for Class 3 materials to insure the preservation of a representative collection based on the most distinguished collection in a given discipline.

Child [10], while generally supporting Atkinson's three classes of preservation, takes issue with his inclusion of level 5 collections in Class 1, and proposes that such "collections must be included within the overall priorities of a cooperative national preservation program." She also suggests that the dilemma of decision making in Class 3 is more complex than Atkinson described, and offers two reasons—the expansion of American research since World War II, which broadened the range of documentation useful for historical research, and the fact that today it is technologically possible to save everything. Child's article focuses on the need for cooperative filming projects that would use the strongest subject collections as their base, but stresses the need to include other collections in the preservation effort to insure that the representative collection advocated by Atkinson is achieved.

Bagnall and Harris [11] discuss the importance of involving scholars in the process of selection for preservation, and list two levels for decision making: microdecisions (or title-by-title choices) and macrodecisions (or decisions at the collection level). They suggest four approaches to preservation selection: the vacuum cleaner approach, where preservation decisions are made for a particular range of dates, places of publication, etc., within a collection or a subject; the condition driven approach, where materials are queued for preservation decision when they can no longer circulate or be used because of their deterio-

rated condition; the bibliographic model, where all materials included in a particular bibliography are selected for preservation review and treatment; and the collection development model, where bibliographers and other collection development specialists make title-by-title preservation decisions. These authors advocate a shared responsibility between scholars and librarians for making selection-for-preservation decisions.

## SELECTION FOR PRESERVATION IN HEALTH SCIENCES LIBRARY COLLECTIONS

The literature addressing selection for preservation in health sciences libraries is very small, consisting principally of a few articles that have appeared in the Bulletin of the Medical Library Association. A series of articles on weeding health sciences library collections appeared as a Bulletin symposium in 1952. The symposium provides some viewpoints that are both interesting and relevant to selection for preservation, because weeding constitutes a decision not to preserve

The symposium contained five short papers discussing weeding of various kinds of library materials in various types of medical libraries. The authors advise caution as the guiding principle in any weeding effort. Carr [12] states: "First, be absolutely convinced of the necessity of the measure; second, make your selection with the greatest care; and third, dispose of the material so cautiously and surreptitiously that there will be no corpus delicti." Murphy [13] recommends keeping one copy of each edition of important texts, such as Osler's Practice of Medicine and Holt's Textbook of Pediatrics because they form "records of the development of these fields." Felter [14] and Reilley [15] point out the variations in weeding practices in the special hospital library and the association library. The series concludes with advice from Marshall [16] on weeding pamphlet collections.

Duffield [17] proposes a useful list of questions the librarian must answer in considering whether to discard multivolume series, often called cyclopedias, or systems of surgery or medicine. Her eight questions are worth repeating because they are similar to the ones we ask today in determining whether to retain a title.

- 1. Does this set contain historical material not found elsewhere in the library?
- 2. Does this set have historical value as far as your own institution is concerned? Was it edited by a member, or does it contain members' papers not found elsewhere?
- 3. If you disposed of this set, could you borrow it from a nearby library? What is the expense involved?

- 4. To your knowledge has this set been referred to in the past five years?
- 5. Are you serving a statewide area? Do you feel your library should have everything, regardless of present usage? Why?
- 6. Do you have housing for little-used or never-used material?
- 7. Do you intend to dispose of this material as the collection grows and you are faced with the problem of insufficient space?
- 8. If you have storage for sets that are seldom used, can you get them within an hour?

Several authors, including Meckel [18], relied on Garrison and Morton's *Medical Bibliography* as the first checkpoint in selection for weeding. Any item listed therein should be kept by the library. Duplicate copies of both textbooks and journals, loose-leaf compilations, and reprints were cited as the most likely candidates for withdrawal, although Meckel doubted the need to keep all editions of a textbook.

Patterson [19] calls for more "decisive and courageous" action, declaring that libraries must weed in order to survive and pointing out that there are depository libraries that can be relied upon. Cooperation in weeding collections can be useful, and the Mid-West Regional Centre, now known as the Center for Research Libraries, is cited as an example. Meckel and Patterson emphasize the need to establish policies for both acquiring and withdrawing. Finally Doe [20], in a 1953 Bulletin editorial, calls for a continuing compilation of outstanding publications in medicine, similar to the Standard Catalog for Public Libraries. She chides medical librarians for failing to make judgments on the worth of individual items. What a boon such a list would be today in making selection-for-preservation decisions.

## CRITERIA FOR SELECTION FOR PRESERVATION

Objective scholarly testimony in the form of a recommendation on a list or through other means is important in determining whether to preserve an individual item. Of equal importance is the retention and preservation of a collection that represents not just the best in a subject, but the typical—not just the current, but the widest range of years. Librarians collect today to meet the needs of current library users and must also collect for the future user. DeBakey [21] says: "Our vast pre-electronic archives also help us understand the nature and progression of research—the ambiguities, false starts, contradictions, incertitudes, and dead ends—and that understanding can direct scientists toward sounder and more productive studies."

As this paper has stated earlier, science builds on

the works of others. Librarians today must keep intact the record of that chain of development, so that future scholars can consult the preserved collection of literature pertaining to their topic with some certainty that they could in fact document how curiosity led to discovery, how errors were inherited and passed to succeeding generations. Scholars should be able to identify the great individuals as well as the charlatans, read fine writing as well as poor, and know the climate and tenor of the times.

The representative collection must include the full range of materials, both print and nonprint formats.

The representative collection must include the full range of materials, both print and nonprint formats. Each format contributes and is necessary to an understanding of the whole. It is not necessary to retain ten different authors writing the introduction to genetics or the basic principles of nursing, but it is essential that all points of view be preserved, especially when those points of view are controversial. These factors are basic to decision making in preservation, and they illustrate the complexity of that process.

The criteria governing selection for preservation should be codified in a written policy manual. In addition to their utility in routine preservation activities, these criteria are also useful public relations devices for articulating to the user group the library's preservation policy for appropriate disciplines. The policy may then be refined based on user input.

The general criteria for selection for preservation include the following:

- Place of the item or group of items within the literature of the discipline. A series of questions may be applied to the item, e.g., Is the item a first edition? Does it include the demonstration of a technique? Is it of historical importance? Is there a small number of similar publications of this format, subject, or period? Is it a "standard" work? The economic and artifactual values of an item are additional considerations in determining the item's place within the literature of the discipline. For periodicals one should consider the "impact" factor as measured, for example, in the numerous publications of the Institute for Scientific Information.
- Content of the item. The content of an item, as noted above, is comprised of primary material, synthesized material, or a combination of the two. Priority for preservation should be given to items containing primary material.

- Bibliographic accessibility of the title through major abstracting and indexing services. The decision to include a journal in an indexing source increases access to its contents and also its level of use within a library. Relying on predictable use, these titles might assume a higher priority than titles not included in indexing and abstracting services.
- The availability of the title at other local institutions or through networks. The availability of an individual item through consortial agreements may obviate a local preservation measure, but a library should make certain that the copy available through these agreements has in fact been preserved. By the same token, a unique or rarely held item may be a primary candidate for preservation treatment to insure its continued availability to other institutions.
- The continued relevance of the title to the actual or potential needs of research, clinical, or educational programs of the user group. Did the item in hand enter the collection for a specific purpose or group—such as a research center, an academic program, or a training grant—which no longer exists? If an item is now of purely historical interest, it will assume a different priority in the preservation queue.
- Quality. The quality of an item can best be determined by weighing several subjective factors collectively, i.e., its sponsorship; degree of scholarship; its reviewing or refereeing policy; the reputations of the publisher, the editorial board, and the authors; the quality of article bibliographies, etc. None of these should be the deciding factor alone, but each should be considered as it contributes to or detracts from the overall quality of the item.
- Type of publication. The type of publication will have a direct bearing on the preservation decision, as described above. Research journals that report scholarly results based on extensive scientific investigation would likely receive higher priority for preservation over clinical titles that report clinical information in case study format, though the latter may assume a higher priority in some health care disciplines.
- Use of the title insofar as it can be determined. An indicator of potentially heavy use in the future, and thus the worthiness of a preservation investment, is the degree to which an item or a group of items is used in a local situation. That something was used heavily in the past, however, should be interpreted only as a guide for the future.
- Regional commitments to retain titles under network arrangements. Cooperative resource sharing arrangements such as the Medical Library Center of New York's RECBIR (Regional Coordination of Biomedical Information Resources) program and the Cooperative Serials Acquisition Program of the University of California may have indicators in local serial control records that commit the local institution to

maintaining a particular title for the consortium. In a similar way, the Research Libraries Group has assigned Primary Collecting Responsibility (PCR) designations to institutions within the consortium. These assignments should be reflected in preservation priority statements and in decision making. NLM has assumed PCR for all RLG Medical and Health Sciences Conspectus areas for which the NLM collection is the only collection at level 5.

■ Language and country of origin. These criteria are rarely used as sole determinants for preservation in general health sciences library collections, but may have relevance in special collections.

Intellectual satisfaction would dictate that the full range of criteria be considered for each title; practical considerations, however, preclude that level of activity. A library might instead undertake a review of the criteria against the entire collection or segments of it. For such mass efforts, a priority statement should be developed to serve as a guide for deciding on preservation treatments for large and small collections.

### PRESERVATION PRIORITIES STATEMENT

A preservation priorities statement may be incorporated into a broader policies and procedures statement, or it may be considered separately. Paulson discusses local policy and procedure statements in an accompanying article and includes an example of such a statement. In general, these documents should include the following three elements:

- Introduction—general description of the library and its user group, special collections, etc.; a statement of the preservation status of the collection, especially including information derived from a condition survey; a description of cooperative agreements and an awareness of what other institutions, including NLM, are doing; a definition of the scope of the preservation effort and any limitations; the governing principles of selection for preservation, including criteria for selection and methods of selection; a description of the budget and funding support for preservation, including grants.
- Methodology—detailed procedure statement reflecting personnel involved with assignment of authority and responsibility clearly defined.
- Priorities and rationale—a detailed statement of priorities, arranged by number with any qualifications by category. In the National Preservation Plan for the Biomedical Literature [22], NLM articulated its priorities for microfilming brittle materials in its collection. These priorities are included as an appendix to this article.

### **SUMMARY**

Underlying the collection development and preservation efforts of libraries and librarians is use, potential and actual, by the physician, the scholar, the historian, the nurse, the student, the bench scientist. Perhaps not this year, or even this decade, but it is ultimately for their use that collections are built and resources are preserved.

Whether a library begins a preservation effort by restoring some broken spines, or filming a few major journals, or mounting a full-blown preservation program, the principles are the same. The policies developed for building the library's collection must form the basis for the decisions to select the materials to be preserved. Since all materials cannot, and, indeed, should not be retained, a balance must be maintained between the needs of current users and the preservation of materials that will be useful and needed over time.

A balance must be maintained between the needs of current users and the preservation of materials that will be useful and needed over time.

The criteria outlined above illustrate the principles on which selection for preservation in the health sciences should be based. They should be used in conjunction with the library's individual programs and disciplines. All processes, from basic weeding of the collection through building and preserving its components, must reflect some consideration beyond local demands by including regional and national preservation efforts. Policies and procedures should not be promulgated in a vacuum, but rather in consultation with NLM and other institutions, and with an awareness of the activities of others in this vital area.

The National Preservation Plan for the Biomedical Literature is based on the recognized need to preserve all of the important biomedical literature held by health sciences libraries in this country. Local decisions can, therefore, have a significant impact on the national effort. The scholarly record for biomedicine includes substantial resources held in institutions outside of NLM, and these resources constitute a portion of the nation's heritage in health care. A coordinated and cooperative effort will be needed if today's medical libraries as a group are to meet the demands of the future.

### **REFERENCES**

1. ORTEGA Y GASSET J. Revolt of the masses. New York: Norton, 1932.

- 2. PRICE DS. Little science, big science. New York: Columbia University Press, 1979.
- 3. NATIONAL LIBRARY OF MEDICINE. Collection development manual of the National Library of Medicine. Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health, 1985.
- 4. HOLMES OW. Medical essays, 1842-1882. Boston: Houghton Mifflin, 1891.
- 5. ABELSON PH. Brittle books and journals. Science 1987 Oct 30;238(4827):595.
- 6. HAZEN DC. Collection development, collection management, and preservation. Libr Res Tech Serv 1982 Jan/Mar;26(1):6–10.
- 7. WALKER G. Preserving the intellectual content of deteriorated library materials. In: Morrow CC. The preservation challenge: a guide to conserving library materials. White Plains, NY: Knowledge Industry, 1983:95–101.
- 8. ATKINSON RW. Selection for preservation: a materialistic approach. Libr Res Tech Serv 1986 Oct/Dec; 30(4):341–53.
- 9. THE RLG CONSPECTUS ON-LINE USER'S MANUAL. Stanford, CA: Research Libraries Group, 1982.
- 10. CHILD MS. Further thoughts on "Selection for preservation: a materialistic approach." Libr Res Tech Serv 1986 Oct/Dec;30(4):354-62.
- 11. BAGNALL RS, HARRIS CL. Involving scholars in preservation decisions: the case of the classicists. J Acad Libr 1987 Jul;13(3):140-6.
- 12. CARR E. Symposium: weeding the medical library: medical school libraries. Bull Med Libr Assoc 1952 Apr;40(2):162-3.
- 13. Murphy MA. Medical school libraries. Bull Med Libr Assoc 1952 Apr;40(2):164-5.
- 14. Felter JW. Weeding the special hospital library. Bull Med Libr Assoc 1952 Apr;40(2):165-6.
- 15. Reilley JM. On weeding an association library. Bull Med Libr Assoc 1952 Apr;40(2):166–8.
- 16. Marshall ML. Pamphlet weeding. Bull Med Libr Assoc 1952 Apr;40(2):168-9.
- 17. DUFFIELD P. Discarding sets of medical books. Bull Med Libr Assoc 1953 Oct;41(4):361-4.
- 18. MECKEL CL. Bigger or better collections? Bull Med Libr Assoc 1953 Oct;41(4):365-8.
- 19. Patterson MA. Some practical aspects of medical society library operation: a symposium. Preserve or

discard? A problem in librarianship. Bull Med Libr Assoc 1958 Jan;46(1):45-9.

- 20. DOE J. Best books in medicine. Bull Med Libr Assoc 1953 Jan;41(1):78-9.
- 21. DEBAKEY L. Book-burning in our medical libraries: prevention or palliation? Am J Cardiol 1988 Sep 1; 62(7):459.
- 22. NATIONAL LIBRARY OF MEDICINE. National preservation plan for the biomedical literature. Bethesda, MD: National Library of Medicine, Jan 1988.

Received February 1989; accepted March 1989

### **APPENDIX**

### National Library of Medicine Priorities for Preservation Microfilming

In 1987, the National Library of Medicine (NLM) issued the National Preservation Plan for the Biomedical Literature. That document set forth the priorities for preservation microfilming of brittle serial volumes in the collection. To minimize redundant microfilming, these priorities took into account past and current filming projects by other libraries and the commercial sector. In 1988, additional priorities were developed for microfilming of the brittle monographs in the NLM collection.

Priorities for Preservation Microfilming of Serials:

- Brittle serials indexed in Index Medicus.
- Brittle serials in NLM core subjects currently indexed in NLM data bases.
- Brittle serials in NLM core subjects currently indexed in other major abstracting and indexing services (e.g., Excerpta Medica, BIOSIS, Chemical Abstracts, Psychological Abstracts).
- Brittle serials which, according to SERHOLD, are unique to NLM.
- Remaining NLM brittle serials in core subjects.

## Priorities for Preservation Microfilming of Monographs:

The National Library of Medicine monograph collection numbers in excess of 575,000. Of that number, preservation surveys indicate that some 12.8%, representing about 73,000 volumes or 22,080,000 pages, is embrittled and in need of preservation microfilming.

Underlying the priority scheme for monographs are the following assumptions:

- all embrittled monographs published between 1800 and 1950 in all core collecting areas, as defined in the *Collection Development Manual*, will be filmed; in addition, embrittled monographs which are historically important but in disciplines which, under modern definitions, may no longer be considered "core" biomedicine, will be filmed;
- the age and condition of the item govern its priority in the microfilming queue;

- item-by-item preservation microfilming decisions will not be made for monographs, except as noted in 2c below;
- monographs in the following categories will *not* be filmed:
- [1] materials which are heavily illustrated in color, pending development of more effective color microfilming or other preservation technology; these titles will, however, be identified and bibliographic records annotated;
- [2] theses and pamphlets, which together include approximately 450,000 items, will not be queued for microfilming until item-level bibliographic control is available;
- [3] multiple copies of the same item; only the "best" copy available in the collection will be filmed;
- [4] titles for which preservation quality microfilm is already available, either commercially or from another institution. *N.B.* Items in categories [1] and [2] which are in such poor condition that immediate attention is warranted may be queued for preservation microfilming.
- funding to continue the preservation microfilming program at NLM will be included in future budget requests.

Given the above assumptions, monographs will be filmed in the following order:

Priority 1: Embrittled Monographs Published Between 1801 and 1914.

1a. monographs published in the United States between 1801 and 1900 in WZ 270 of the National Library of Medicine classification schedule;

1b. all other monographs published between 1801 and 1914.

Materials in this category have been selected for initial microfilm queuing for the following reasons:

- this category contains the highest percentage (48.5%) of brittle monographs within a readily identifiable collection category;
- this category contains the oldest brittle items in the collection;
- these monographs are physically together, allowing for the most efficient personnel and work flow.

Priority 2: Embrittled Monographs Published Between 1914 and 1950.

Modern monographs will be filmed in the following order:

- 2a. monographs in Medicine and Related Subjects in classification numbers W through WZ;
- 2b. monographs in Preclinical Sciences in classification numbers QS through QZ;
- 2c. monographs in Library of Congress classification numbers which are regarded, currently or historically, as important to core biomedicine.

Within category 2c, the initial filming effort will focus on those aspects of these subjects which are collected comprehensively.

Queuing for preservation microfilming using a priority

Richards and McClure

scheme based on the NLM and LC classification schedules is proposed for the following reasons:

- embrittled modern monographs in core biomedicine will be filmed first:
- the number of core biomedical titles diminishes with

each category, maximizing the number of large segments of the collection which can be identified for preservation microfilming, and minimizing the number of items for which item-by-item decisions must be made;

• filmed titles will be grouped by subject, facilitating subject access by users.

# Articles in Forthcoming Issues Reinventing the medical librarian Rachael K. Anderson

## Evaluating CD-ROM versions of the MEDLINE database: a checklist

Nancy S. Hewison

## NLM's practices for handling errata and retractions

Sheldon Kotzin and Peri Schuyler

## A microcomputer-based net-lending interlibrary loan system

Linda Yau, Michael Newman, and Maryse Gascard

## End-user searching in a medical school curriculum: an evaluated modular approach

Pamela S. Bradigan and Carol A. Mularksi

## Adapting IAIMS to a hospital library level

Michele S. Klein

## The medical information needs of internists and pediatricians at an academic medical center

Steven H. Woolf and Dennis A. Benson

### CINAHL and MEDLINE: a comparison of indexing practices

Saundra H. Brenner and Emma Jean McKinin

## The consequences of offering fee-based services in a medical library

Arthur Downing

## Journal de-selection in a biomedical research library: a mediated mathematical approach

Richard K. Hunt