

NATIONAL LIBRARY OF MEDICINE

A N N U A L R E P O R T

Fiscal Year 1961

Washington: 1961

NATIONAL LIBRARY OF MEDICINE

ANNUAL REPORT

for the

FISCAL YEAR 1961

September 15, 1961

OFFICERS OF THE NATIONAL LIBRARY OF MEDICINE

OFFICE OF THE DIRECTOR

Director	Dr. Frank B. Rogers
Assistant to the Director	Miss M. Ruth MacDonald
Deputy Director	Mr. Scott Adams
Associate for Extramural Planning	Dr. Estelle Brodman
Executive Officer	Mr. Ray W. Grim
Personnel Officer	Mr. James D. Lawrence
Administrative Officer	Mr. John P. Spain
Supply Officer	Mr. Joseph McGroarty

CIRCULATION DIVISION

Chief	Mr. William H. Kurth
Head, Loan and Stack Section	Miss Isabelle T. Anderson
Head, Binding Section	Miss Helen Turnbull
Head, Photographic Services Section	(Vacancy)

HISTORY OF MEDICINE DIVISION (Cleveland, Ohio)

Chief	Dr. Dorothy M. Schullian
Head, Catalog Section	Miss May G. Hardy

INDEX DIVISION

Chief	Mr. Seymour I. Taine
Assistant Chief	Mr. Edward A. Miller
Head, Subject Analysis Section	Mr. Edward A. Miller
Head, Processing Section	Mr. Lloyd L. Wommack

REFERENCE DIVISION

Acting Chief	Mr. Robert B. Austin
Acting Assistant Chief	Mr. Charles A. Roos

TECHNICAL SERVICES DIVISION

Chief	Mr. Samuel Lazerow
Assistant Chief	Mr. Leslie K. Falk
Head, Selection and Searching Sec.	Mr. Leslie K. Falk
Head, Acquisition Section	Mr. James W. Barry
Head, Catalog Section	Miss Eleanor R. Hasting
Acting Head, Editorial Section	Mrs. Mildred C. Moreland

CHAPTER I

OFFICE OF THE DIRECTOR

In a more rational world the National Library of Medicine, in its last full fiscal year of life at 7th Street and Independence Avenue S.W., might have been expected to devote all its energies to the clean-up and consolidation tasks incident to architectural metamorphosis and new life in Bethesda. But the demands of its new life were too insistent; two great new projects were undertaken--planning for the MEDLARS development, and laying the groundwork for a new program of extramural activities.

In September Mr. Scott Adams joined the staff as Deputy Director, with special responsibilities in the Extramural Program area. Mr. Adams had left the Army Medical Library a decade before, after serving as Chief of Acquisitions and Acting Librarian, to become Librarian of the National Institutes of Health, and later Director of the Foreign Science Information Program of the National Science Foundation. Dr. Estelle Brodman, who had served as Chief of the Reference Division for more than ten years, was assigned as the Deputy's Associate for Extramural Planning.

BOARD OF REGENTS

The Board of Regents held two meetings, on November 5, 1960, and on April 7, 1961. At the first meeting the Director reviewed the status of various Library programs, and the Deputy Director presented a detailed report on proposed new extramural activities. At the second meeting the Director reported on the development of the MEDLARS project, and presented the proposed NLM budget estimates for FY 1963. The Board also considered plans for dedication ceremonies for the new building.

Drs. Hussey, Stecher, and Valk joined the Board in the fall. Mrs. Davie resigned from the Board in January; Dr. Worth B. Daniels, who had been first Chairman of the Board, was reappointed to fill the unexpired balance of Mrs. Davie's term, and was elected Chairman for the one-year period beginning August 1961. The membership of the Board as of June 30, 1961, was as follows:

Dr. William B. Bean, Chairman (Iowa State)
Dr. Worth B. Daniels (Washington, D. C.)
Lieutenant General Leonard D. Heaton (U. S. Army)
Dr. Maynard K. Hine (Indiana University)
Dr. Hugh H. Hussey, Jr. (Georgetown University)
Rear Admiral E. C. Kenney (U. S. Navy)
Mr. Thomas E. Keys (Mayo Clinic)

Dr. William S. Middleton (Veterans Administration)
Dr. L. Quincy Mumford (Library of Congress)
Major General Oliver K. Niess (U. S. Air Force)
Dr. William W. Stadel (San Diego County Department of Medical
Institutions)

Dr. Robert M. Stecher (Cleveland, Ohio)
Dr. Luther L. Terry (U. S. Public Health Service)
Dr. William L. Valk (University of Kansas)
Dr. Theodore R. Van Dellen (Northwestern University)
Dr. Warner L. Wells (University of North Carolina)
Dr. John T. Wilson (National Science Foundation)

THE NEW BUILDING

A major disappointment, and a cause of revision and rerevision of many plans, was the imcompletion of the new building by the original target date, June 1961. At the end of the year only about 80% of the work had been finished. The building was completely enclosed and the high roof was in place, final grading and the paving of roadways and parking areas had commenced, and the contract award for landscaping was imminent. Severe conditions of cold and dampness still prevailed in the basement, and a prolonged heating and drying-out process would be required before finish work could proceed.

The Board of Regents has approved plans to hold dedication ceremonies for the new building on December 14 and 15, 1961, regardless of whether or not the Library has actually made the move to Bethesda by that date.

Equipment. All regular and special furniture and equipment requirements were on order well before the end of the fiscal year. Due to delays in building, there may now be difficulties in storing some of this material while awaiting completion of the particular work areas to which it is assigned.

Contract Changes. Changes during the year in the construction contract included a revised partition plan on "A" level to better accommodate circulation functions and a new partition plan for the mezzanine to provide offices for the Extramural Program.

Art Work. On February 13, 1961, a contract was given to Mr. Paul Jennewein to execute a group portrait of Billings, Fletcher, and Garrison, the work to be incised in the marble wall of the main lobby adjacent to the entrance to the History of Medicine room. On the same day Mr. Frans Wildenhain was commissioned to execute an abstract mural in ceramics for the wall of the Public Catalog area.

Moving Plans. A general plan was completed in March 1961. Some of its assumptions have been tested, but the refinement of many of the procedural steps is in abeyance. Surveys have been conducted to assess the impact of the coming move on staff turnover.

BUDGET, FISCAL, AND SUPPLY

Financial management activities reached a new peak of intensity in FY 1961. The Library's 1961 basic appropriation was \$1,662,000, the amount requested in the President's budget. The general pay raise increased the Library's pay costs by \$93,000, but under the President's policy of 3% reduction in employment the Library absorbed \$17,000 of the increase and received a supplemental appropriation of \$76,000 to defray the balance of the increased pay costs. Appropriated funds for "Operations" then totaled \$1,738,000 in 1961.

During the year NLM managed reimbursable funds from the Veterans Administration (ICMTA), the Library of Congress, Cancer Control Branch and Occupational Health Branch of the Bureau of State Services, and the National Science Foundation. Under other agreements funds were transferred to the Library of Congress and the Communicable Disease Center.

The appropriation for "Construction of Library Facilities" was merged with the appropriation "Buildings and Facilities, PHS." This was the fourth change in the accounting symbol for construction funds--the fund as a whole is controlled from four separate accounts, a situation requiring extreme care in the preparation of budget and fiscal forecasts and reports.

Preparation of the budget estimates for 1962 was complicated by the injection of a new system of object classification codes by the Bureau of the Budget with the requirement that the new codes be used in the 1960 and 1961 columns of the 1962 budget while continuing to operate under the old classification codes. The formal submission of budget requests for 1962 was further complicated by the cost-type budget statements required and the last-minute revisions of instructions on preparation and submission of estimates.

Property. Part plans showing furniture and equipment layouts for the new building were prepared with the cooperation of Public Buildings Service. The part plans show the actual location of both new and reused furniture in the new building. All property to be moved to the new building from present quarters is being marked to show its exact location.

The total value of all personal property as of June 30, 1961, is \$33, 868,847.

Property declared excess to current needs and valued at \$23,245 was disposed of during the fiscal year.

ACTIVITIES OF THE ASSISTANT TO THE DIRECTOR

Internship Program, 1960/1961. The three interns selected for the 1960/1961 Internship Program, Miss Patricia A. Dabney (University of Illinois), Mr. Irwin H. Pizer (Columbia University), and Miss Judith M. Williston (University of Wisconsin), began their training on September 6, 1960, in redecorated and refurnished quarters. Their program, as set up by the Library's Training Committee, varied somewhat from that of previous years. The general orientation period was reduced to four days; two weeks in the public service divisions preceded their first regular work assignment in the Technical Services Division. After a visit to the History of Medicine Division in May, each intern spent two days in each of three other Washington area medical libraries. The year's schedule also provided a period of several weeks at the end of the training year to be spent on assignments chosen by the interns.

Recruiting Program. Under the recruiting program plan, letters and announcements of the 1961/62 Internship Program were sent to all American and Canadian library schools in November and December. A schedule was established in December covering the seven schools to be visited by a Library representative (Wisconsin, Illinois, Michigan, USC, UCLA, California, and Denver); the date for the Denver visit was changed in January when an eighth school (Washington) requested a visit from NLM. Miss M. Ruth MacDonald visited the three schools in the Midwest and Miss Maxine E. Kennedy visited the five schools in the West, February 20-27, 1961.

Seventeen librarian candidates from eleven library schools applied for the three appointments in the 1961/62 Internship Program. On March 20 the Training Committee selected three interns and three alternates; their names were announced on March 31:

Miss Karen S. Hampe, University of Wisconsin
Miss Elizabeth J. Sawyers, University of California at Los Angeles
Mr. David A. Smith, University of Illinois

Hospital Library Survey. At the request of Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital in Washington, Miss M. Ruth MacDonald and Miss Frances Seaver (Reference Division) made a survey of the Hospital library. The surveyors spent a week (July 18-22) at the Hospital and submitted their report on August 9. During the year Miss MacDonald has been consulted on several occasions about building and equipment plans for the new Hospital library and has assisted the newly appointed Hospital Library Committee.

Second International Congress on Medical Librarianship. A very exciting and far-reaching decision was made in August when the Medical Library Association invited the Second International Congress on Medical

Librarianship to meet in Washington in 1963 in conjunction with its annual meeting. Dr. Frank B. Rogers was appointed General Chairman of the Congress and Chairman of the Organizing Committee, consisting of present and past presidents of the MLA. Miss M. Ruth MacDonald was appointed Executive Secretary, and the Congress Secretariat was established in NLM. The dates for the Congress were set, June 16-22, 1963, and the Shoreham Hotel was designated as the Congress headquarters. During the remainder of the year many conferences were held on planning, programming, committees, and finances. In June 5,000 copies of a brochure on the Second Congress were printed for general distribution.

Visitors. In addition to the numerous American visitors who came singly and in groups, 45 visitors from 22 foreign countries were received by the Assistant to the Director and given tours of the Library. These visitors came from all parts of the world (e.g., Peru, Hong Kong, Iraq) with the largest representations (8 each) from India and Japan.

A group of four Soviet librarians was received by the Director and his staff on April 14. The members of the delegation were Nikandr Gavrilov, Chief, Central Library Inspection, Ministry of Culture, USSR; Irina Bagrova, Director of the Reference and Bibliographical Department, State Lenin Library, Moscow; Viktor Barashenkov, Director of the State Public, Saltykov-Shchedrin Library, Leningrad; Lev Vladimirov, Director of the Research Library, Vilnius State University of Lithuania. They were accompanied by Dr. Raynard Swank, Director of the International Relations Office, American Library Association.

Pictures of NLM. With the very generous assistance of the Commandant of the Armed Forces Institute of Pathology and its Medical Illustration Service, pictures were taken of various areas and features of NLM's 1887 building. The negatives, together with two prints of each, were presented to the Library by the AFIP; they provide a very welcome up-dating of the record of the Library's operations in its old building.

NLM Motion Picture. Early in 1961 a decision was made to prepare a motion picture which would show the resources and operations of the Library in its new building and which would include some comparable scenes taken in the present building. In February an agreement was signed with the Communicable Disease Center's Audiovisual Section for production of the motion picture; in March the contract script writer began his work, and the outline for the motion picture script was approved on April 4. The script, received in the Library about June 1, was studied by all members of the supervisory staff and returned to the writer with suggestions for additions and changes on June 28.

Civil Service Commission Committee. The Assistant to the Director is a member of the Librarian Equivalency Test Committee of the Civil Service Commission, and served as Chairman of the Area IV Subcommittee

on Cataloging and Classification. At the end of June the Subcommittee had completed 135 of the required 150 five-part multiple-choice questions on cataloging and classification.

EXTRAMURAL PROGRAM

Origins of Program. The increase of publication resulting from the expansion and acceleration of research raises serious questions about the adequacy of the channels through which new knowledge reaches those who can make use of it. This concern is general, covering all the sciences and technologies. In the medical research field it was expressed by the Jones Report¹ and by the Study Group on Mission and Organization of the Public Health Service,² which specifically proposed for the National Library of Medicine responsibility for "greatly expanded research in storage and retrieval methods, research in medical library sciences, large translation activities in both directions, experimentation in indexing and classification methods, and experimentation in methods of disseminating scientific information." In response to these needs the Library took the first steps toward the establishment of an extramural or support program during FY 1961.

Purposes of the Program. The purpose of this program is twofold. It is intended to strengthen existing mechanisms and systems which handle published medical information, and at the same time to support study and development of nonconventional systems for storing and retrieving information. The Program's primary emphasis is on research or scientist-to-scientist communication. All support is to be provided through grants and contracts; direct operations are to be minimal.

Legislative Requirements. Early in the year it appeared that the Library's legislative authority (Sec. 371) was inadequate, in that it did not permit the expenditure of funds for project or training grants, nor did it authorize the Board of Regents to make recommendations concerning grants to the Surgeon General. Steps were therefore taken to obtain the necessary legislative amendments. These efforts are continuing, and it is hoped that legislation will be introduced at the next session of the Congress.

¹U.S. Senate. Committee on Appropriations. Committee of Consultants on Medical Research. Report. Washington, 1960. p. 94.

²U.S. Public Health Service. Study Group on Mission and Organization of the Public Health Service. Final report. Washington, 1960. p. 53-55.

Program Development. A comprehensive program was developed in the fall of 1960 providing for support activities in the following areas:

1. Library resources. Provides for the study of the adequacy of existing library resources for the support of research, and the development of remedial measures.
2. Secondary publication, with particular reference to indexes, abstracts, reviews. This program includes both the Russian Scientific Translation Program initiated by the National Institutes of Health and the overseas translation activities authorized by Public Law 480 and Public Law 86-610.
3. Research and development. This includes basic studies of the principles underlying the organization, storage, and retrieval of published medical information, and is coordinated closely with the Library's own development of Medical Literature Analysis and Retrieval System (MEDLARS).
4. Fellowships. Intended to support productive work by qualified individuals on publications (bibliographies, critical reviews, compendia, etc.) for the purpose of making information more readily available by exploiting the Library's collections.
5. Education and training. Intended to increase the manpower potential for medical library and documentation work.

The Library's Board of Regents discussed and approved the program at its November 1960 meeting. Digests were subsequently prepared and circulated for comment within the Public Health Service, and specialized aspects (Education and Training, Library Resources) were discussed at interdepartmental meetings called by the National Science Foundation, which is engaged in developing its own programs in these areas. Provisions for support of construction of medical library facilities, contained in the Hill-Burton program, in the proposed Aid to Medical Education bill, and in the renewal of the Research Facilities Construction Act, were followed with interest.

During the year the Program operated the Public Law 480 translation program in cooperation with the National Science Foundation, and developed and defended a budget for extension of international communication activities under Public Law 86-610, the International Medical Research Act of 1960. After protracted negotiations the NIH Russian Scientific Translation Program was transferred to the Library at the close of the year, and the Extramural Program thus becomes the Service's principal center for scientific translation.

* * * * *

The senior personnel of the Office of the Director were heavily involved throughout the year in conferences, symposia, teaching, and lecturing chores. They roamed coast to coast (Washington and New York, Los Angeles and Seattle, and points between), went abroad (Canada, Russia, Nigeria), and, along with other members of the staff, held offices and committee assignments in a variety of professional organizations.

It was a hard year; the institution survived; it will prevail.

CHAPTER II

TECHNICAL SERVICES

At the end of its first full year of operation, the new Technical Services Division showed substantial production increases in virtually all program areas. The number of prospects searched increased from about 45,000 in 1960 to 49,000 in 1961 and the number of orders placed from 18,000 to almost 20,000. The number of titles recataloged increased from 11,000 in 1960 to almost 15,000 in 1961; this acceleration in the recataloging rate gives rise to the hope that the end of the project is in sight. Important among the year's activities are publication of the NLM Catalog, continuation of editorial work on the List of Medical Serials, 1950-1960, and management surveys designed to assist the Division in achieving the maximum integration of its functions.

SELECTION AND SEARCHING PROGRAM

Changes in Area Control. The effectiveness of the Area Specialist System established in the spring of 1957 is evidenced by increased receipts of material through purchase and exchange. Personnel losses and replacements required a new alignment of area responsibilities in order to utilize new combinations of language skills and at the same time keep the workload fairly distributed. The seven areas have been contracted to six, defined as follows:

1. English-language countries outside Africa and Asia and exclusive of United States Government publications; the subject of international congresses; United Nations publications
2. France, Belgium, Italy, Spain, Portugal, and the countries of Latin America
3. Germany, the Netherlands, the Scandinavian countries, Austria, Hungary, Poland, Czechoslovakia, Rumania, Greece
4. The Soviet Union, Bulgaria, Yugoslavia
5. Africa, South Asia, the Near East, the Philippines
6. Nationalist China, Communist China, Japan, Korea, and Outer Mongolia

List of Prospect Sources. The Division's list of serially issued bibliographical sources was revised and reissued as a Library publication. The area specialists removed some fifty titles that had been found to be of insufficient value. The remaining 188 items are presented first in a combined numerical and alphabetical order and then in a rearrangement to provide a national or multinational approach.

Revision of Scope Manuals. Revision of the Library's manuals on scope and coverage of the collections (LM B-5 and LM B-5a) was completed in the fall; no radical changes were made in the main part (B-5), which carries the text, nor in the schematic Resumé (B-5a). The text was considerably reorganized to allow for the treatment of numerous fringe areas not considered in the revision of 1958. The topics in the Resumé are now more clearly and adequately presented with reference to the Library of Congress classification schedules, after which the document is fashioned.

Special Searching Projects. A bibliography compiled by the National Library of Calcutta titled "Indian Scientific and Technical Publications" was exploited for prospects and showed that the Library's coverage of Indian publications is well below what it is for most other areas. Of 792 items selected as in scope, only 117 are represented in the collection. The dates of publication range from the early 1800's through 1959 but 60% are of the 1950's, and of these later publications about 48% are not held by the Library.

A test of the Library's Russian holdings was furnished by a list of 172 monographs offered by the State Lenin Library in Moscow. Of these, 132 were found to be already in the collection. This comes close to confirming our previous estimate of an 80% degree of completeness. Searching of a list of 203 Polish books published in the 1950's gave a better showing; of these only 14 (or 7%) were lacking.

The 1956 Annual of Czechoslovak Medical Literature furnished a basis for testing still another country. Searching of the 393 items selected as in scope showed that 263, about 70%, were in the Library, and 18 of the remaining 130 were on order.

Wide-Field Photography. Early in the year an enlarged mask needed for the purpose of photographing citations up to a width of 7.2 inches was constructed by Photographic Services Section and put to use on the Division's considerable backlog of wide citation serial sources. By April the accumulation was eliminated. The regular mask takes 4.5 inches, which is adequate for the majority of the sources. The two masks together will accommodate all list sources so far encountered.

PROCUREMENT PROGRAM

Complimentary Review Copies. A project for the solicitation from publishers of free subscriptions to American periodicals indexed in Index Medicus was executed during the year and met with a gratifying measure of success. Of the 315 titles solicited, 267 were expressly offered and 40 issuing offices manifested acceptance by a changed mailing designation. In seven cases the matter is still being considered, and one publisher, after vacillating, refused.

Article Translations. Medical articles in translation, representing less than the cover-to-cover text, were accepted as valid for comprehensive collecting. Collecting has been limited almost exclusively to translations from Oriental and Eastern European (mostly Russian) languages. The several bibliographies which list translations are exploited regularly and well over a thousand pieces were acquired during the year. These have been put in order with a temporary card approach for easy retrieval.

Cost Studies. Basic studies on the cost of American medical publications were updated and submitted to the American Library Association. Base period and latest year figures for medicine are:

	<u>Average price</u>	<u>Index</u>
Periodicals 1947-1949	\$ 6.94	100.0
1961	11.19	164.1
Books 1947-1949	6.36	100.0
1960	8.41	132.0

Russian Publications Procurement. Acquisition of Russian literature continued via the four main channels: the Procurement Officer in Moscow, direct exchange with libraries in the Soviet Union, purchase from dealers, and gifts.

Exchange of catalog cards with the State Central Medical Library in Moscow continued, 1,563 SCML cards being received for 1,812 sent by NLM. In addition, the SCML is forwarding 60 Russian periodicals in exchange for subscriptions to American journals. From all sources, about 1,250 Russian monographs have been received during the year.

To widen the network of exchange sources bilingual letters offering Library publications were sent to 94 other libraries in the U.S.S.R. As a result a number of new libraries have come under our exchange agreement. The significant additions are:

Antiplague Institute of Siberia in Irkutsk
Antiplague Institute in Stavropol'
Academy of Pedagogical Sciences in Moscow
Central Institute of Traumatology and Orthopedics
in Moscow
Institute of Epidemiology and Microbiology in Kiev
Medical Institute in Tashkent

Twenty-eight new serial titles, the majority of which are transactions of institutes published annually or irregularly, were received from the Soviet area. The most important are:

Bulletin of the Scientific Medical Council of the
Ministry of Health, U.S.S.R. (quarterly)
News in medical technology. (quarterly)
Annals of biology. (annual)
Problems of obstetrics and gynecology by the
Society of Obstetricians and Gynecologists,
Rostov-on-the-Don Branch
Physiology of sports, issued irregularly by the
Institute of Physical Culture in Moscow
Transactions of the Elista Antiplague Institute
Proceedings of the All-Russian Congress of
Theraputists in Moscow
Proceedings of the Congress of Dermatologists,
Ukrainian S.S.R.
Nervous system, published by the Physiological
Institute, Leningrad University
Transactions of the Tbilisi Research Institute of
Traumatology and Orthopedics

The visit of the delegation of four Soviet librarians in April afforded staff members the opportunity to meet in person representatives of some libraries with which NLM maintains an exchange.

Trip to the Soviet Union. From May 22 to June 10 the Division Chief visited about 25 libraries, publishing organizations, and other institutions in Moscow, Leningrad, Tbilisi, Sukhumi, and Kiev. This trip was made under the provisions of the U.S. - U.S.S.R. Cultural Exchange Agreement and at the invitation of the Soviet Ministry of Health. The objectives of the tour were to gather information on the organization of the Soviet medical library system and to arrange for the exchange of medical literature.

The largest and most interesting library visited was, of course, the State Central Medical Library in Moscow. This library is roughly comparable to the National Library of Medicine in service functions, and in size of collections and staff. Also visited were the central medical

libraries of the Georgian Republic (Tbilisi) and of the Ukrainian Republic (Kiev), as well as the libraries of a number of medical research institutes. Among the non-medical libraries on the itinerary were those of the U.S.S.R. Academy of Sciences, and of the Academies of Sciences of the Georgian and Ukrainian Republics, the Lenin Library, the Saltykov-Shchedrin Public Library, and the library of the Institute of Scientific Information of the U.S.S.R. Procurement matters were discussed with officials of the State Publishing House of Medical Literature (Medgiz) and of the International Book (Mezhkniga).

East Asia Procurement. The export ban placed on serial publications by the Chinese Communist government has severely hampered the Library's acquisition program in the area. The embargo appears to have extended to monographs as well. During the fiscal year only 35 titles bearing a 1960 imprint date were received. This number probably constitutes less than 3% of those printed. In 1958 (the last year for which statistics are available) 930 titles were published and for the last decade there have been sharp annual increases.

The Library's holdings of medical literature from Communist China were reviewed at the end of the year and found to consist of 69 serial titles and about 1,800 monographs. The monographs represent more than half the total number of bio-medical titles published on the mainland as cited in Chinese Publishing Statistics 1949-1959 of the Association of Asian Studies Committee on American Library Resources on the Far East. Because of the considerable interest in Chinese serials generally, the Library's volume and issue holdings of the 69 journals have been set forth in a 15-page published list titled Chinese Mainland Journals.

Miscellaneous Exchange Activity. The Library of the Medical Research Institute of Accra, Ghana, has confirmed an exchange and announced (in May) a first shipment on its way. Exchange relations were established with the Wellcome Research Library in Nairobi. Exchange inquiries have been sent to 42 other African medical institutions located south of Sahara.

Through Miss Uthai Dhutiyabodhi of the University of Medical Sciences in Thailand, NLM will receive on exchange from the University the medical publications of that country. In Indonesia the Faculty of Medicine at Djakarta and the VD Research Institution of Surabaja have offered to supply their publications.

From the National Library of Prague the Encyklopedie praktickeko lekare in 14 volumes was received on exchange after several unsuccessful attempts to procure it in past years. Future volumes are promised.

CATALOGING PROGRAM

Recataloging. Almost 15,000 titles were recataloged in 1961, as compared with 11,000 titles recataloged in 1960. The following collections were completed: 1801-1849 alphabet collection, quartos and folios, Cleveland pamphlets, and Japanese serials. The following collections are now in process of recataloging: hospital reports, Oriental monographs, documents, and the serials collection. The serials collection is now the largest unrecataloged area remaining, with about 15,000 titles to be done.

Proposed Catalog Code. During November and December a test was made of the draft Code of Cataloging Rules: Author and Title Entries by applying them in the cataloging of one hundred titles. The proposed rules were found to be explicit and reasonable, hence easy to follow, although there were objections to the use of standard titles and to the rule for entering universities under "University."

Serials Both Analyzed and Indexed. A special survey revealed that 145 serials are both analyzed for the Name Catalog and indexed for the Index Medicus. It was decided that analyzing of the supplements to thirty-four journals, including 29 Acta publications, could be discontinued as well as the cataloging of theses also published as Acta supplements.

Card Files. During the year the Process File, discontinued three years ago, was cleared of all cards for material other than uncataloged theses and titles in languages which cannot now be cataloged. There are seven trays for theses cards and one for Indonesian, Chinese, and Arabic titles.

There was little change in the size of the Name Catalog during the year. It is housed in 660 well-filled trays but no expansion is planned before the move to the new building. The New Subject Catalog grew from 36 to 49 trays. With the publication of Medical Subject Headings the old Subject Authority File was no longer of use, but it was filmed for the historical collection before discarding the cards. The cards for the geographic subdivision file, which were also filmed, will be retained as they provide a good index to the Old Subject Catalog.

The official shelflist is now housed in 334 crowded trays. After the move to the new building it will be expanded into 240 additional trays.

During the latter part of the year studies of the old public catalog were made to determine what types of cards could be discarded. Agreement was obtained from the Reference and Circulation Divisions

on categories to be eliminated and withdrawal began late in the year. Cards for these constitute the largest of the categories. Altogether it is estimated that a reduction of between 50% and 60% can be accomplished by these eliminations.

The Published Catalog. The second quinquennial issue of the NLM Catalog (1955-1959) was published in July 1960, and the volume for 1960 was published in April 1961. The six volumes of the second quinquennial follow the same general format as that of the first quinquennial (1950-1954); the 1960 volume presents substantial changes in Part II, Subjects. The subject headings are taken from the new authority list Medical Subject Headings, used since January 1960 by Index Medicus, and there are substantial typographical changes as well; main headings are no longer repeated with each subheading and the subheadings are printed in italics and indented. The same typographical pattern as in Index Medicus is followed for subject cross-references.

SPECIAL PROJECTS

While the major special project for the fiscal year has been the continuing work on the List of Medical Serials, mentioned in the 1960 report, the unit engaged in this effort has also been involved in varying ways with several other important serial-list publications in preparation outside the Library.

Union List of Serials 3d ed., Checking Edition. This came out in four sections, listing 12,165 serials which began before 1950, but which had not been listed in earlier editions of ULS. As one of the cooperating libraries, NLM selected 1,173 titles within the scope of the collection, searched records and stacks, and reported its holdings and the required additional bibliographical information to the editors of ULS. Statistical information for this activity is as follows:

- 1,052 titles reported held by NLM
- 197 titles reported held by NLM for which additional bibliographical information was also reported to ULS
- 121 titles apparently in scope for NLM which were not in the Library

The in-scope titles not in NLM were apparently minor titles; many existed for only a short time a long time ago, and for many only meager bibliographical information was presented in the Checking Edition. All of them, however, were given consideration as prospects for acquisition.

World Medical Periodicals, 3d ed. NLM's cooperation in this publishing venture was twofold. Copies of about 415 catalog and holdings cards were prepared for the editor of WMP; these cards represented about 200 titles currently indexed by Index Medicus which had not appeared

in the second edition of WMP. In addition, bibliographic information for 46 American medical serials was supplied to the editor, who had been unable to obtain the information from other sources.

The 1961 List of Periodicals Abstracted by CHEMICAL ABSTRACTS. Key to Library Files. Checking Ed. This list, containing 8,522 entries, mainly serials, from which papers are selected for abstracting by Chemical Abstracts, is revised quinquennially and indicates libraries holding the titles. Titles which might possibly be in NLM were selected and records searched for currently existing receipt arrangements. The statistical result was that NLM reported 2,288 titles in the Library's collection. Bibliographical data was supplied for some entries.

List of Medical Serials, 1950-1960. The progress made during the year on this major undertaking may best be reported by stage of development: selection for inclusion, choice of entry, editing, format and typing, and final review.

Selection was made from a Working File of about 18,500 serials for which NLM had received at least one issue for 1950 or later. Establishment of scope criteria was greatly complicated by the variety of serials in the Library. Sampling studies made against the file resulted in reducing the number estimated for inclusion from 14,200 to about 9,000. The standards adopted should preclude the exclusion of anything possessing scientific significance. Selection itself began late in July, much of it of necessity done by examination of the publications. In December selection from cards then in the Working File was completed (total: about 8,750); about 300 serials have since been added to the inclusions. Some weeding is being done during the editing process.

The decision to enter all serials in the List under titles was made in October. It was a difficult and somewhat painful decision to make, since some 2,400 or so of the publications selected are entered under corporate author in the Library's records. The loss of conformity will mean more work for NLM's service staff later, although various devices have and will be used to minimize this. The opinions of other medical librarians, most of whom strongly favored title entry, proved compelling.

This final decision paved the way for the editing phase of the project: standards were set up and policy established for the conversion; order of entry in the final list was decided; manual sheets covering all phases of master card editing were prepared. By the end of June about 80% of the title inclusions and about 25% of the items to be converted from corporate entry had been edited.

In March the decision was reached to produce the List by photo-offset, with copy typed at NLM--cost being the determining factor. A two-column, 8-1/4" x 10-3/4" trim size format was selected. Entries,

but not cross-references, will be numbered. In May detailed instructions for the typing were prepared, and this phase commenced with proofreading following only slightly behind the typing. At the end of June 1,907 of approximately 9,050 entries had been typed.

When typing and proofreading have been completed the copy file will be given a final reading to review filing order and to make necessary adjustments in cross-references. In the meantime, prefatory matter will be composed, typed, and proofed. It is expected that the List will be ready for printing before the end of 1961.

Further consideration will be given to the best means of keeping the List up to date. The List itself will be helpful to the Technical Services Division in trying to fill in incomplete sets for the period 1950-60, since symbols in the List identify them. The possibility of issuing subject, geographic, issuing body, and/or language indexes to the List will be explored. The Working File, containing both the included and excluded sections, may be of value in studying patterns of serial publication.

CHAPTER III

REFERENCE SERVICES

Fiscal Year 1961 brought additional radical changes within the organizational framework of the Reference Division. On September 19 the Chief of the Division was transferred to the office of the Deputy Director as Associate for Extramural Planning; the Special Projects Section was transferred to the Index Division; and the Head of the Art Section was detailed to the History of Medicine Division for the interim period pending the move into the new building. All of these changes left the Division with an end strength of 13 positions. The Assistant Chief became Acting Chief and the Head of the Document Section assumed the role of Acting Assistant Chief.

The reference service functions were reviewed and reevaluated. A program whereby the reference librarians would take on specialization in chosen subject areas, conforming to their respective background qualifications and interest, was initiated. Areas selected included neurology and psychiatry, medical jurisprudence and economics, military medicine, public health, medical and paramedical education, drug literature, and nursing.

There are several advantages to this program: the quantity of the literature received by the Library is now so great that a special subject approach to it reduces its awesomeness to a more practical and reasonable scale for handling by the individual reference librarian. This method also generates a feeling of progressive learning on the job beyond the normal day-by-day experience routine. It affords an opportunity to apply special knowledge in a manner that gives individual recognition within the immediate work group of reference librarians. This does not mean that the librarians participating in the program are working only within their chosen subject fields; but it provides a particular responsibility and opportunity of acquiring more "know how" in special subject areas. This program also has implications for the improvement of public relations from the standpoint of the Library user; he will soon develop a greater feeling of satisfaction and confidence in his relationship with the Library by being referred to and receiving help from a reference librarian who is thoroughly familiar with the literature in the specialist's own subject area. The success of this program depends on the mutual cooperation of the reference staff and firm control exercised at all times by the Head of the Section.

Americana. While the Acting Assistant Chief assumed the responsibility for the day-by-day operations of the Division, the Acting Chief was occupied with completing and sending copy to the printer of Early American Medical Imprints. A guide to works printed in the United States 1678-1820. This work, comprising 2,106 entries, is scheduled to be off the press in September 1961.

Special Projects. Several special projects were completed during the year in anticipation of the move to the new building. Some of these included: (1) a careful analysis of the books making up the reference collection in the Reading Room with the objective of making this a more efficient ready-reference collection; (2) liquidation of obsolete material in filing cabinets; and (3) screening for scope of a special collection of individually bound pamphlets housed in the basement.

Exhibits

June-August	Archeology and the Medical Sciences
October-December	Yale School of Medicine Sesquicentennial, 1810-1960
January-June	Medical Aspects of the Civil War

CHAPTER IV

C I R C U L A T I O N

The Circulation Division administers the responsibility for the physical care and preservation of the collection, its storage, its maintenance, and its servicing, and this responsibility is executed through an organizational structure consisting of the Binding Section, the Loan and Stack Section, and the Photographic Services Section.

CARE AND PRESERVATION OF THE COLLECTIONS

The custody, arrangement, and preservation of the Library's collection, currently comprising well in excess of one million pieces of research materials in a variety of formats including periodicals, serials, monographs, documents, anatomical tables, lantern slides, charts, photographs, microfilms, and motion pictures, and the effective servicing of these materials involve the Division in large-scale and varied custodial functions.

Maintenance and Care of the Collection. Maintenance activity covering correction of misshelving, investigation of overdue binding charges, and orderly arrangement of unbound issues of serials was restricted by heavy interlibrary loan service. Some relocations and readjustments in shelving were necessary to accommodate the results of the recataloging program and the influx of new acquisitions. The transfer of 1914 and later imprints from the 19th Century Monograph Collection (Room B-14) to the 20th Century Collection (Room 119) was begun in February; 2,600 volumes were shifted. On the basis of sampling procedures it is estimated that 7,900 volumes are involved and that sufficient space exists in Room 119, although some relocation will be necessary to accommodate them. The relocation will bring the two monograph collections in consonance with the defined NLM classification criteria for 19th Century (1800-1913 imprints) and 20th Century (1914 and later imprints) and desirably complete their relocation prior to moving to the new building.

A substantial portion of the Bio-Bibliography Collection was transferred from the Technical Services Division (Room 20b) to Room B-11. Approximately 400 translations into English of Slavic and Oriental scientific reports were relocated in Room B-11. The reports are shelved in easy-to-use containers and are effectively controlled and serviced by means of a card file.

Only negligible damage to the collection was sustained during the year from rain leaking through the roof and from the unusually heavy snow storms. A more serious factor is the accumulation of dust prevailing in the book collections, to which only sporadic and very superficial remedial attention could be given. A thorough and careful cleaning operation is a requirement before or during the moving of the collection to the new building.

Entomologists of the Insect and Rodent Control Section, National Institutes of Health, again visited the Library to make a survey of infestation throughout the stack areas. Although the incidence of infestation was not as high as had been supposed, their finding indicates short-term remedial action before the collection is placed in the new building.

Poor Paper Program. The problem of deteriorating and disintegrating book papers and the potential loss of the knowledge recorded thereon constitutes a grave challenge to all large research libraries. The NLM program has turned to preservation through microfilming, and although great strides have been made in the recent past, a large quantity of seriously deteriorating paper still requires transference to film. The decline in this operation during the year is the result of the increase in interlibrary loan traffic which precluded a higher level of activity.

A significant preservation activity completed during the year was the comprehensive microfilming of 17 Russian medical journals (approximately 300,000 pages) including such important journals as Biulletin Eksperimentalnoi Biologii i Meditsiny (1936-1959) and Mikrobiologiya (1932-1959). Although properly a preservation action, the consequent availability to medical and scientific libraries in the United States, who may now obtain positive microfilm copies of these Russian medical journals, cannot be overlooked.

Twenty-two Chinese mainland medical journals (1956 to date) also were microfilmed. These journals aggregated some 49,000 pages; the project was undertaken in cooperation with the National Science Foundation.

During the year 174 serial titles wholly or partly on microfilm were added to the Temporary Series. This collection was initiated in 1956 as a repository for such serials until they could be given full cataloging treatment; it now comprises 902 titles.

One elusive problem is the determination of the actual extent of deteriorating paper on hand. A satisfactory response is difficult to frame in a single figure, and it would have only transitory validity at best, since there would be increments of paper which would be in continual process of "maturing" toward disintegration. An attempt is in process to

formulate an inventory, to gauge the extent of material requiring remedial attention at the present time, and also to make a determination as to the number of pages requiring such attention within five years.

Commercial Binding. The binding of library materials was greatly facilitated by the fact that the contract bindery is located in nearby Pennsylvania, permitting overnight deliveries and substantially reducing transit time in comparison with previous years.

The amount of binding transmitted was a little larger than last year's, and this production was accomplished with some 8% less manpower than in 1960. Improvement in location of work stations, as well as in work flow, and the abolition of unnecessary revision contributed to the greater productivity. A new and improved system of binding charges was initiated to signal material removed from the shelves for binding purposes, using color-codes to correlate with a given quarter year; this procedure simplifies the periodic checking of apparently tardy binding returns. Need for acceleration of the binding program is indicated. A large quantity of material, much of it ancient and for the most part lacking issues necessary for completion of volumes, has been inadequately maintained in envelopes on the serial shelves for long periods of time. The condition of this material is generally unsatisfactory because it has not been bound. It is estimated that some 23,000 items (potentially volumes) require binding or a combination of procurement of needed issues and binding. This estimate is, however, subject to some reduction since a portion of this material is clearly eligible for microfilming under the Poor Paper Program because of the advanced state of deterioration of the paper.

Plans for Moving the Collection to the New Building. Important progress was made in planning the moving of the collection to the new building. Factors studied included the determination of material on hand by class, its growth characteristics, degree of anticipated use, location in the new building stacks, and the calculation of expansion needs for the various classes of material.

An interdivisional committee was established in March 1961 to advise the Division on the factors relating to the placement of the collection in the new building. On June 23, 1961, a test moving exercise took place which was designed to examine the feasibility of utilizing several teams working concurrently on loading a segment of the serial collection into a van, and to determine the practicability of using book trucks. The results were gratifying; a high degree of success was achieved in the accurate and orderly loading of book trucks; 15 staff members organized into teams loaded 42 book trucks into a moving van in 43 minutes.

SERVICING THE COLLECTION

Circulation of library materials rose by 13% over the previous year--from 135,366 to 152,768--to reach a record high. Circulation encompasses the library materials furnished in the Reading Room as well as the materials provided through the interlibrary loan service.

Interlibrary Loans. The dramatic increase in the interlibrary loan service in the last three fiscal years is illustrated by reciting the actual number of loans received and completed by the Library. In 1959 there were 87,844 loans requested with 72,728 completions; by 1960 the figures had advanced to 109,466 requested with 95,595 completed; and in 1961 the total reached 129,391, of which 109,258 were completed, an advance of 14.3% over the previous year.

Of especial significance is the procedure, initiated in January, of retaining interlibrary loan requests which could not immediately be serviced because the requested material had been caught up in the binding process. Instead of returning these loan requests to the originating library for subsequent requesting, they are now integrated with binding records so that these requests will be serviced automatically upon return of the material from the bindery. This has meant that the requests sustained a delay of only four weeks; in the half year of its operation the new procedure has serviced 1,588 interlibrary loan requests which otherwise would have experienced delays of much greater length.

With the unabated increase in number of interlibrary loan requests it becomes more than ever necessary to stress the importance of accurate and complete citations by libraries sending interlibrary loan requests to NLM. Inadequate citations hinder the orderly processing of all interlibrary loans; they represent a high unit cost in processing and they create delays in service.

A procedure developed in cooperation with the National Union Catalog of the Library of Congress relates to the disposition of requests for monographs not held by NLM. The NUC indicates on the loan form the symbols of the libraries possessing the material and forwards the data directly to the requesting library. Usually these requests relate to monographs outside the purview of NLM's collection policy; the same procedure is followed, however, for monographs apparently within NLM scope but with the added step of advising the Technical Services Division of the title for acquisitions consideration.

Planning continued toward a simplified interlibrary loan request form, possibly involving the use of punched cards, and providing for the requesting of titles by means of a system of code numbers (with year and pagination). The use of code numbers would provide for a more convenient access through telecommunications facilities. On an experimental basis

the University of Utah Medical Library in Salt Lake City began the transmittal of its requests in this form, utilizing commercial telegraph night letters.

Statistical Survey of Interlibrary Loan Operations. The many factors and influences at work in the interlibrary loan operation prompted a comprehensive survey of its nature and extent, including determination of the titles principally requested and the time period for material requested.

Data available thus far indicate widespread use of the collections--some 1,800 libraries requesting interlibrary loan services in the course of a year, with some 20% of the libraries sending in 80% of the requests. The years of publication specified indicate an expected reliance on recent issues; thus, for the 25 most heavily used titles, the requests indicate that 49% relate to publications of the most recent ten years; another 24% relate to those of the next prior decade, and 12% to the decade 21-30 years past.

PHOTODUPLICATION ACTIVITIES

Output of microfilm totaled 2,775,552 pages, of which 2,037,757 pages related to the interlibrary loan process, and 689,954 pages to the Poor Paper Program. The number of pages produced on the CopyFlo for external orders was only a trifle higher than last year, but the number of interlibrary loan requests completed by photocopy was 15.6% above the level of the previous year.

New Equipment and Research. In order to meet requirements more efficiently, principally those for copying oversize volumes and also those for reproducing urgently needed materials, a Xerox 914 Copier was installed in the Photographic Services Section in April 1960. In September a replacement Xerox CopyFlo (Model 1) was purchased and placed into operation without interruption in service. Difficulties in the toner dispenser caused some lack of fidelity in the copy; this was eventually remedied.

Experiments continued toward the improvement of the electronic cutter, designed for cutting the Xerox reproductions on the basis of a signal activating a photoelectric cell; these were unsuccessful, although promising research is in process at another government agency.

A masking technique, utilizing the requesting library's address on the interlibrary loan form to generate a combination mailing label-wrapper, was placed into operation, superseding the use of envelopes and the manual affixing of mailing labels. The new masking procedure, which carries an identifying number, pinpoints operator failure and contributes also to elimination of page-by-page inspection of outgoing work.

Mobile Camera. After extensive investigation of requirements, the Library concluded an arrangement with the Machine Tabulating Division of the Bureau of the Census for the construction of a mobile microfilm camera system. The work was begun late in October 1960 and the completed assembly was delivered to NLM on June 13, 1961, where it is undergoing further testing.

The mobile camera is designed to accomplish interlibrary loan microfilming in the stack aisles of the new NLM building, thereby avoiding large-scale transportation--an average of 500 volumes daily--to a central microfilm room. The system should also markedly curtail shelving time and, importantly, result in greater availability of library materials, since volumes will be removed from their correct shelf location only to the end of the stack range during the microfilming process.

The mobile camera assembly utilizes the Recordak Model MRD-1 camera within an aluminum frame and side panels, with a canopy which can be raised or lowered consonant with the reduction ratio employed; the assembly is equipped with an improved bookholder.

Testing of Microfilm. Testing of the Library's holdings of microfilms on a sampling basis to determine their conformance to archival standards was initiated during the year. All samples thus far tested by the National Archives have met specifications (containing not more than 0.005 mg. of residual thiosulfate of soda). The program will be continued.

DOCUMENTARY MEDICAL MOTION PICTURE PROGRAM

The archival collection of medical motion pictures reached a total of 621 films, 30 having been added during the year.

Film Reference Guide. The 1961 edition of Film Reference Guide for Medicine and Allied Sciences was published. This edition contained 1,974 titles, of which 43 represent additions.

Cancer Motion Picture Guide. The Cancer Control Branch in the Division of Chronic Diseases, PHS Bureau of State Services, joined with the Library in preparing the publication Cancer Motion Picture Guide, a listing of some 1,100 U. S. and foreign motion picture films dealing with cancer. The Guide followed the general format of the Film Reference Guide in giving distributor information and providing subject and title listings.

CHAPTER V

I N D E X I N G

It is difficult to conceive that all the events here recorded have occurred in the span of just a single year. One year ago the Index Division was merely getting its feet wet in the new mechanized system for the preparation of the Index Medicus; the assembly of the first volume of the Cumulated Index Medicus was still a half year away; the writing of the final report of the National Library of Medicine Index Mechanization Project was a long way from completion; the idea of a cumulation of the Bibliography of Medical Reviews had not even been considered; composition of the material for the final two volumes of the Fifth Series of the Index-Catalogue had not been started; most significant of all, the imminent prospect of a tremendous computer-based bibliographic publication and retrieval system was hardly discernible at that point.

Twelve months later the picture had altered radically. Having prepared monthly issues of the Index Medicus containing references to about 200,000 articles, the staff was well beyond the shakedown stages of the no longer new and unfamiliar system; the impressive three-volume set of the first Cumulated Index Medicus is in being and has been subjected to heavy use in libraries throughout the world. Volumes 2 and 3 of the Fifth Series of the Index-Catalogue are about to appear, and as the year ends a contract is about to be signed which will bring closer to reality the Medical Literature Analysis and Retrieval System (MEDLARS).

MEDLARS

It is difficult to state precisely the point in time when MEDLARS was born. The continuing NLM interest in all facets of information retrieval endeavor kept to the fore the idea of utilizing a computer as an integral part of a bibliographical retrieval system. Later, as the Library became involved in the studies which formed a part of the Index Mechanization Project, the whole concept was brought into increasingly sharper focus. The Terminal Report of the Project predicted that "far more sophisticated machines than typewriters which are fed bits of tape piece by piece, and sorters which pass cards column by column at relatively slow speeds" would be required before an effective retrieval system could be achieved. Further evidence of the Library's early and active interest in computers is attested to by the contract signed with Dr. Robert L. Ledley in April 1959, "to conduct a study to investigate the feasibility of using electronic digital computers for the publication of the Index Medicus and also as a basis for the construction of an efficient reference and bibliographic service."

Encouraged by the support received from the Board of Regents and from the National Heart Institute, the Library began exploring the feasibility of such a system in earnest. In the fall of 1960 the National Library of Medicine made a formal proposal to the National Heart Council to underwrite the development of a system with a computer base that would " have profound effects in the direction of substantially reducing the bibliographical tangles of the literature problem." The assent of the Heart Council signaled the beginning of a period of activity to inaugurate the development of the system which has not yet abated.

In November 1960 the Division obtained the temporary services of a Systems Analyst to assist in mapping out the problem. On February 2, 1961, specifications and a covering letter of invitation were mailed to 40 selected commercial and non-profit organizations as prospective contractors; before the deadline arrived several months later some 72 companies had officially indicated their interest in the project.

The purpose of the invitation was to obtain proposals for the study, design, installation, and trial operation of an electronic data processing capability for the organization, storage, and retrieval of bibliographical citations to the medical literature. The objectives of the new system were divided into two categories: those considered to be of primary importance, and a secondary group of longer range significance to the Library. Initially the proposers were given until April 10 to submit their proposals to the Public Health Service; a letter of March 13 amended this date to April 24. This letter also deferred the target date for the award of the contract from June 1 to June 14.

On February 20 a public briefing was held in the Department's Auditorium at which the Deputy Director and the Chief of the Index Division answered many questions posed by the representatives of the prospective proposing organizations. In the next week several additional briefings were held in the Library to provide further information about the nature of the MEDLARS project. To assist the Library in appraising the proposals, arrangements were made for the consultative services of technical experts at the National Bureau of Standards, the National Institutes of Health, and the Army Signal Corps; in addition, the firm of Forbes and Waite of Boston was retained for assistance on special assignments relating to the project.

Twenty-five proposals were received in the Library before the deadline had passed on April 25. The Director and the Chief of the Index Division independently read all of the material; the Deputy Director and the Executive Officer also participated in the in-house appraisal procedure. Simultaneously, the consultants were performing their own reviews; members of the staff of the Executive Officer of the Public Health Service also reviewed the proposals.

The General Electric Company's proposal was the final selection and the Library received authorization from the Service to enter into contract negotiations with this firm. On May 25 the negotiation conference was held in the Library and within two weeks the contract was ready for the Contracting Officer's signature. At this point a delay ensued as a result of a disagreement regarding procedural aspects of the appraisal and contracting mechanisms. The fiscal year ended as a massive reappraisal effort was being mounted. There is little doubt that a contract will eventually be agreed upon, perhaps during the first quarter of the next fiscal year.

INDEX MEDICUS

In its second year the Index Medicus operation settled down to a pattern that has now come to be regarded as normal. The most persistent and critical problems were those arising from the malfunctioning of the Collator and the Listomatic Camera. Elsewhere, although there were crises at different times and at different work stations, the picture was encouraging.

The number of items indexed in the twelve monthly issues in FY 1961 came to 130,000, which is 5,000 more than were included in the first volume of Index Medicus in calendar year 1960. The number of articles included in each of the twelve issues was fairly stable, with a range of from 9,666 items in the May 1961 issue to the high of 12,980 in January. The level for the calendar year 1961 will be about 135,000, and will reach approximately 140,000 in the next fiscal year.

There was a marked improvement in the backlog situation this year over the first year. The Index Medicus backlog at the end of last year was 14,298 articles; this year it was down to 6,094 articles. A comparison of backlogs at the various work stations shows the following apportionment of this load:

	<u>30 June 1960</u>	<u>30 June 1961</u>
Indexing and Revision	1,819	2,441
Indexing Assistant	2,502	515
Input Typing	1,010	1,253
Proofreading	1,882	322
Keypunch	2,174	657
Output Imprinting	2,665	180
Inspection	<u>2,246</u>	<u>726</u>
	14,298	6,094

In future months this figure is expected to drop further until it levels off in the neighborhood of 4,000 articles. This would be acceptable as a working backlog.

Only one month in the year was free of problems with the Listomatic Camera; this was during the filming of the May issue. Continuous efforts were made to improve the performance of the camera; conferences were held with top technical and administrative personnel in the Recordak Corporation; in June Recordak made arrangements to loan the Library another machine. The 083 Sorter and the 087 Collator were not without their own unique pathology, due mainly to the special modifications and gadgets required for the Listomatic system. Production levels at the Composition and Keypunching stations have become stabilized and more attention may now be directed to the improvement of the physical appearance of the issues and to other areas of quality control. Downtime from machine malfunctioning diminished, largely as a result of charging the operators with the responsibility for preventive maintenance checks. In the case of the 026 Printing Punches the decrease in downtime, coupled with improvement in production, made it possible to return one of three machines.

The Output Imprinting operation continues to be the "Achilles' heel" of the Index Medicus system. The rigid tolerances required by the Listomatic Camera, the damaging effect of constant wear on the card-holding platens, the intricacies of handling the 8-point type escapement, and the consequent problems of obtaining satisfactory production levels are factors responsible for a pessimistic appraisal of this operation. Experimentation with the simultaneous use of two machines by a single operator was followed by the adoption of the dual set-up as a regular procedure. This has been a successful innovation that has produced an improvement in output levels.

Other highlights of the year's activity in this area are the following: transfer of the processing of the Listomatic film from New York to Washington; elimination of the use of the photographic masks for stripping the film with the acquisition of a custom-built stripping box; acquisition of a tabulating card design that includes satisfactory registration guides; modifications in programming the Collator which eliminated the problem of the appearance of certain non-entry cards at the bottom of a column and also simplified the reconstitution of the decks for subsequent re-use; typographic changes in the "see" references that improved the appearance of the Subject Index; preparation of two complete non-entry decks for use in the monthly issues and also in the Cumulated Index Medicus.

The increase in indexing is reflected in the List of Journals Indexed by the rise in number of journals included. During the fiscal year 149 new titles were added, bringing the total to 1,775. The largest single source was the United States (33), followed by Japan (24) and the Soviet Union (13). This upward trend will probably continue next year and be even sharper as the indexing level is raised; American and Japanese journals are again expected to be at the top, quantitatively.

CUMULATED INDEX MEDICUS

Throughout the first half of the year the Library and the American Medical Association were in frequent contact regarding the arrangements for publication of the first Cumulated Index Medicus. The general situation prevailing in the Index Division during that period presented severe problems in the merging of the cards for the Cumulated Index Medicus. Little progress was made until well into the year; several schedules were devised and discarded before a final one, incorporating features of optimum staff and machine utilization, was accepted and work began.

There were many problems during the assembly of this first cumulation of the Index Medicus, most of which stemmed from the necessity of processing the entire year's material in about half that period. Because of changes in Medical Subject Headings made during the year there were some 6,000 cards to be altered and filed manually. At last, on December 30, the film for the entire 2,374-page Subject Index was ready for shipment to the American Medical Association; on January 6 eleven rolls of film containing the Author Index and List of Journals Indexed were also dispatched. Inadequate inspection of the film before shipment made it necessary to refilm large sections of the Cumulated Index Medicus several weeks later; this was accomplished and the new film was sent to Chicago.

By April 7, when the Board of Regents of the National Library of Medicine met, the Library had received advance copies of the cumulation; the actual publication date occurred shortly thereafter. It is hoped that next year the publication schedule can be shortened by a month or more. The American Medical Association published 4,372 sets; by the end of the fiscal year, less than three months after publication, 1,496 sets were on hand; slightly more than 10% of the sets distributed went to destinations outside of the United States.

A comparison of the number of pages in the monthly issues of Index Medicus and Cumulated Index Medicus reveals interesting data:

	<u>Index Medicus</u>	<u>Cumulated Index Medicus</u>
Author	1,472 p.	1,412 p.
Subject	<u>3,232</u>	<u>2,374</u>
	4,704 p.	3,786 p.

The difference of 858 pages of subject entries is the result of the arrangement of entries under one set of headings rather than under twelve; the gain of 60 pages in author entries stems from the elimination of duplicate joint author cross-references before the filming for the cumulated edition. This 25% saving in page consumption in the Subject Index is considerably more than was predicted, and this will have to be studied further.

Plans for Volume 2 were formulated on the basis of experiences with the first volume. The issues of Index Medicus are being reviewed monthly as they are published and errors corrected on a continuing basis. The final machine assembly is also being refined to smooth further the voluminous terminal operations.

SUBJECT ANALYSIS

The first edition of the new NLM subject heading authority list, entitled Medical Subject Headings, was published at the end of August. Although many copies were submitted for review and comment, virtually no professional reaction to the work has been encountered; this contrasts with the substantial number of reviews generated by the 1954 Subject Heading Authority List. During the first ten months of its existence 1,718 copies of Medical Subject Headings were sold by the Superintendent of Documents, with 1,314 on hand for future sales. Plans for publishing a revised second edition have not yet crystallized pending the further development and refinement of the schedule and objectives of MEDLARS.

One of the noteworthy achievements in the whole area of subject analysis was the addition to the staff this year of a full-time subject heading specialist. Miss Winifred E. Sewell, formerly Librarian of the Squibb Institute for Medical Research, and 1960-61 President of Special Libraries Association, joined the Index Division in that capacity in May. She will be responsible for the revision of Medical Subject Headings, the coordination of Library-wide medical subject activities, and the integration of the subject aspects of MEDLARS.

SPECIAL PROJECTS UNIT

In September 1960 a staff group which had been closely identified with the work of the Bibliographic Unit of the Reference Division was transferred to the Index Division as a Special Projects Unit, along with the responsibility for the compilation and publication of long bibliographies. At that time the transfer was known to be premature, anticipating the advent of MEDLARS; other considerations argued for the move, which was consummated. The passage of time soon proved the transfer too premature to be viable. Some personnel have been reabsorbed by Reference Division activities; some have been integrated into the regular work of the Index Division, and one has been detailed to the Extramural Program.

During its short life the Special Projects Unit completed several works already under way, and prepared others. The Bibliography of Medical Reviews, originally prepared in the Index Division, then transferred briefly as a Reference Division operation, became once more a responsibility of the indexing staff.

BIBLIOGRAPHY OF MEDICAL REVIEWS

A study was undertaken to explore the feasibility and value of a cumulation of the five previous volumes of Bibliography of Medical Reviews along with the material already collected for the sixth volume. Also included in the investigation was the exploration of techniques that would enable the Library to assemble future annual volumes as a true by-product of the Index Medicus operation. By November a decision had been reached to proceed with the cumulation in December; the methodology for the annual volumes had also been evolved.

There were many large problems to be conquered in order to produce a cumulation of material that had been prepared originally in accordance with at least three different systems of citation style. The new Index Medicus system of abbreviating journal titles introduced the necessity of adapting the five years' supply of material from the former Current List-Index-Catalogue system to the new style. Criteria for inclusion were sharpened and the entire mass of references was screened according to the newly devised criteria. The longer time interval embraced by the cumulation brought new problems associated with serial review articles originally cited in individual annual volumes of the BMR. Due to the use of two different subject heading authority lists during the period from the first volume to the sixth, all of the material had to be re-headed according to Medical Subject Headings.

By March the stage was reached where all the subject headings had been completed, editing of the 1960 file of unpublished material was nearing an end, and about 50% of the material previously published in the annual volumes had been edited. Arrangements for composition on contract were initiated in May. Much progress was recorded on other phases of the work, especially in the listing of approximately 1,000 title abbreviations for periodicals not regularly indexed in Index Medicus. In the last two months of the fiscal year the staff, headed by Mrs. Thelma G. Charen, performed nobly and overcame a variety of obstacles to complete the project. Publication is expected later in the calendar year.

FIFTH SERIES, INDEX-CATALOGUE

The "extremely bright" picture reported last year proved to be a true appraisal of the Fifth Series situation. As this fiscal year ends the Library stands on the threshold of the closing out of this entire historic operation. Copy for the first volume of the Subject Section (Volume 2 of the Series) went to the Government Printing Office in April; several weeks later the manuscript for the second volume of the Subject Section was sent. The finished books are scheduled for publication early in FY 1962.

At the time in 1950 when the decision was reached to terminate the Index-Catalogue, editorial work on the 11th and last volume of the Fourth Series was well along; the Fifth Series existed only in the form of a fantastic, heterogeneous collection comprising millions of cards. Five years later, in 1955, Volume 11 appeared, some seven years after Volume 10. About six months before its publication the newly created Index Division was charged with responsibility for supervising the completion of the Supplementary Series of the Index-Catalogue (now the Fifth Series).

By May 1957 the first lot of 3,336 manuscript cards was ready for shipment to the Government Printing Office; the last shipment was made at the end of January 1958. Between July 1957 and June 1958 galley proof was being delivered to the Library; proofreading and review were performed concurrently until February 1959. The reading of page proof was completed in July 1959 and the Author-Title volume (Volume 1, Fifth Series) actually appeared on November 13, 1959. To date 112 of the 300 copies available at the Government Printing Office have been sold.

Meanwhile the subject editing, begun in 1957, had been completed; stylistic conversion had reached about 70% of completion and 15% of the copy had been submitted for composition. At that point, however, upon receipt of the invoice with unexpectedly high charges for Volume 1, it was decided to change the plans for publishing the Subject Section. With a loss of only six months for restudying fiscal and contractual problems and adjustment of the manuscript file, the project moved again on the basis of the new arrangement. Bids were invited for a contract to provide for composition, page layout, and proofreading of material preliminary to photo-offset publication instead of the letter press technique used for all previous volumes of the Index-Catalogue. When the contract negotiations were completed on July 19, 1960, about 90,000 cards were ready for the contractor.

Editing continued until October when the final group of the entire 132,000 manuscript cards was delivered. Serious operational difficulties were encountered by the contractor; the first shipment of pages, twelve only, was not delivered until September 12, and this tardiness proved to be characteristic of the general situation for the duration of the project. By November the probability of completing both volumes of the Subject Section during the current fiscal year appeared dim, and by the end of the calendar year the picture had become even darker. At that point only 466 of the 894 pages of Volume 2 had been completed; however, conditions began improving in January, and by February 24 all of the pages for the second volume were in hand. This created a tremendous review backlog that was ultimately eliminated through the highly commendable efforts of the staff involved, most notably Mrs. Katharine M. Ahlbers.

In the "Letter of Transmittal" published in Volume 11 of the Fourth Series the following statement was made: "When the Supplementary Series is eventually completed, sometime within the next decade, the Index-Catalogue will be at an end." The end has now come, less than six years later, and the Library at last has a complete and current printed record of its monographic holdings.

SPECIAL ACTIVITIES

The types of program here categorized will undoubtedly be subject to much growth and development in the next several years, due to the imminent inauguration of the MEDLARS project. The Occupational Health Abstracting Project was the major innovation in FY 1961; the other programs continued along lines similar to those of previous years.

Occupational Health Abstracting Project. In August arrangements between NLM and the Bureau of State Services, PHS, were completed, and the Occupational Health Abstracting Project got underway. During the ensuing eleven months 654 abstracts gathered from 192 journal issues have been prepared. This new service met with highly laudatory reactions from the sponsors and will probably be continued next year on a similar basis.

NLM Index Mechanization Project Report. One year ago the Index Mechanization Project, supported by the Council on Library Resources, Inc., ended and the terminal report was being written. Mrs. Helen F. Rich had done a substantial amount of preliminary work in gathering and organizing data, but much remained to be done. It had been decided earlier to publish this report as a supplement to the Bulletin of the Medical Library Association to give it the widest possible distribution. Arrangements were made with the Bulletin's editor, with agreement to time the report for appearance in the October issue; later this had to be changed to January 1961. The writing of this report and preparation of numerous graphic aids to accompany the text was a very large chore. By the end of summer of 1960 the manuscript was in the hands of the printer.

When the report appeared, as Part 2 of the January issue of the Bulletin, it created an immediate stir. There were a goodly number of favorable reviews in professional publications. In addition to the 2,200 copies for Bulletin subscribers, the Library provided itself with 800 copies, and this supply was quickly exhausted. A second printing of 1,300 copies was promptly authorized; about 300 copies from this printing have been distributed, and requests for copies of the report are being received nearly every day. The printed report was of much value also in the MEDLARS proceedings, serving as excellent background material for the prospective proposers.

Most gratifying were comments from several library schools with the information that the report would be required reading material for their students, and the observations of information and library people that it could well serve as a model for future reports in this field.

East European Project. This year the number of articles processed from East European journals rose sharply. From last year's level of 13,655 articles the total rocketed 25% higher, to 17,165. Most of the increase came from Russian material; in FY 1961 there were 10,353 Russian articles, compared with 7,511 in FY 1960. The increase in number of articles from other East European countries was not quite so marked: 6,812 this year compared to 6,144 for FY 1960.

Russian Drug Index. Composition of the Russian Drug Index, by Stanley Jablonski, commenced in the Library in September and was completed in November. The finished book arrived on April 4 and has been the subject of much publicity. About a third of the 1,620 copies stocked by the Superintendent of Documents has been sold.

Russian Surgical Staplers. Another Jablonski work will soon make its appearance, possibly by November 1961. Russian Surgical Staplers is a bibliography, with accompanying abstracts, of 136 references. Editorial work is almost finished and composition for photo-offset publication will be done in the Index Division within the first two months of FY 1962.

Russian Neurochemistry Project. This year 121 articles were selected, duplicated, and shipped to Dr. W. A. Himwich in Galesburg, Illinois.

"American Documentation" Project. During the fourth year of NLM participation in this activity, 125 abstracts were prepared for publication in the "Literature Notes" section of American Documentation.

Portraits. Cards for 701 portraits were sent to the Art Section of the Reference Division during the year.

PERSONNEL

After a year of almost constant trial and change, the Index Division organization settled into a simple two-part structure. The Subject Analysis Section, shorn of the Special Projects Unit, reverted to its former status. The Processing Section was established in June 1961 and includes all the machine operations formerly in the Composition Section and Special Operations Section as well as the non-mechanized operations performed in the former Editorial Section. Most of the job descriptions for personnel in the Processing Section have been written, approved, and implemented; those for the Assistant Head, the Tabulating Card Equipment-Listomatic Camera operators, and several other job actions remain to be completed.

This year there was a great deal of personnel activity involving key people in the Index Division. Mr. Edward A. Miller was an invaluable Assistant Chief on countless occasions, moving as a trouble-shooting "roving center" from one critical assignment to the next, in and out of the Division. Mr. Lloyd L. Wommack now heads the new Processing Section, with Mrs. Lillian H. Washington as Assistant Head in charge of the Machine Operations Unit of the Section.

The importance of staff training to the MEDLARS program was recognized early in the planning stages. Later, when data processing experts advised that the labor situation in this field would dictate the need for staffing the computer program from within NLM's own organization, the training program was given an added impetus. Nineteen members of the Index Division staff took a total of thirty courses at the IBM Education Center, the USDA Graduate School, American University, Remington-Rand Univac, the Government Printing Office, and the Civil Service Commission, in basic machine operations, computer programming, graphic arts and design, and related subjects. In the previous fiscal year the Library sponsored a computer programming aptitude test administered to about forty members of the staff by Remington-Rand Univac. This year the Index Division took the initiative in conducting another test, utilizing materials furnished by IBM. The results of the two tests were of great value in identifying the talent possessed by members of the NLM staff in this direction. Another test of a similar nature was sponsored by the Office of Personnel, PHS, at the end of the year.

Staff turnover was minimal this year; the implications of the move to the new building on staffing are difficult to analyze. The major personnel activity next year will be the continued planning of the organization and staffing requirements for MEDLARS. New skills will be needed which will, in the main, have to be developed internally over an extended period of time; this will have a most profound significance to the success of the MEDLARS program. Much thought and action must be channeled into this area to assure the availability of a staff of proper size and caliber.

CHAPTER VI

H I S T O R Y O F M E D I C I N E

The History of Medicine Division is awaiting an angel not to trouble but to quiet the water of Bethesda. In less figurative language, while the vagaries of builders and of the weather continue to retard construction, the Division anticipates a move the date of which is still uncertain, and it must accordingly defer various matters which can be adjusted only when it returns to the parent library. In particular, some details of cataloging which cannot be arranged easily by mail are being postponed for discussion and action at Bethesda.

Personnel. The staff, numbering nine and a half on July 1, 1960, was struck twice by death in less than six months. This angel which comes by night took on August 3, 1960, Mary Elizabeth Low, whose devoted and cheerful service over thirteen years had been a part of almost every activity of the Division, and on January 18, 1961, Jean C. Eschmann, who with great distinction had served as hand binder during most of the period from 1943 to his death. The staff rallied around; Miss Sheila M. Parker was dispatched from NLM's Art Section and pluckily assumed most of Miss Low's duties, and Mr. Angelo Paradiso was re-appointed to do a small amount of hand binding, but no one at the History of Medicine Division has ever expected that the two beloved and departed members could in any true and full sense of the word be replaced.

During the academic year Mr. Roger J. Trienens, Cataloger, studied Second Year Greek at Western Reserve University under the authorization for training in non-government facilities which is conferred by P.L. 85-507. Mr. Francis E. Sommer, Special Consultant from the Cleveland Public Library, devoted some time in May and June to cataloging Indonesian material which had been shipped to Cleveland by NLM.

Staff Activities. Dr. Schullian continued as a member of the Council of the American Association for the History of Medicine and also of the Council of the Bibliographical Society of America and of its Supervisory Committee for the Third Census of Fifteenth Century Books in American Libraries. She was the representative of the latter society on the Council of the American Association for the Advancement of Science. The Division was represented at meetings of the Bibliographical Society of America in Baltimore, October 7-8, 1960, and in New York, January 27, 1961; the Sesquicentennial Anniversary of the Founding of the Medical Institution at Yale College, which was held in New Haven, October 28-29, 1960; the meeting of the Northern Ohio Technical Services Librarians at Baldwin-Wallace College Library at Berea on November 5, 1960, where on a panel of five which discussed

Seymour Lubetzky's Code of Cataloging Rules Miss May G. Hardy introduced the subjects of forms of corporate entries and of the use of standard filing titles; the meeting of the Medical Library Association of Northern Ohio at the Freiburger Library of Western Reserve University on January 28, 1961, where Miss Sheila M. Parker discussed "The Picture Collections of the National Library of Medicine"; the Symposium on the History of Byzantine Science at The Dumbarton Oaks Research Library and Collection, Washington, D.C., May 4-6, 1961; the convocation in honor of Dr Emmet Field Horine at the Rankin Amphitheatre of Louisville General Hospital, Louisville, Kentucky, May 10, 1961; the Thirty-Fourth Annual Meeting of the American Association for the History of Medicine, Chicago, May 18-20, 1961, where Dr. Schullian gave the tribute to Dr. John Farquhar Fulton (died May 29, 1960); and the Fifty-Sixth Annual Meeting of the American Association of Museums, Detroit, May 24-25, 1961.

ACQUISITION

An eminent librarian on the Eastern seaboard recently reminded the readers of his annual report that if an undue proportion of accessions were works of authors unknown to them, or the lesser known works of known authors, it was because the better known ones were already on the shelves of the library or were simply not available. This is in large extent the situation which prevails also at the History of Medicine Division. In the opinion of one reviewer, the eminent librarian might have added that some of the better known works which he did not have were on private shelves from which they might possibly come to the library in the future by gift or bequest; this is a point which the Division will bear in mind and on which it will try to act. The Division is in cautious sympathy with the statement, quoted by the same reviewer from Richard Heber (1773-1833), that "no gentleman can be without three copies of a book, one for show, one for use, and one for borrowers." Although there is no intention of spending funds for the purchase of duplicates as such, those already by one circumstance or another in the Library's possession are often found useful, especially when a copy in a battered binding can be sent on loan in place of one newly restored or rebound in full morocco and so particularly vulnerable to the perils of packing and travel.

European Imprints of the Sixteenth, Seventeenth, and Eighteenth Centuries. Editions of Hippocrates continue to trickle in; there were three replacements for imperfect copies, and fourteen editions previously lacking were purchased, eight of which had not been entered on the Hippocrates Want List issued in 1954. Acquisitions in the sixteenth century, if Hippocrates items are excluded, totaled more than thirty and included an edition of Alfonso Ferri, De ligni sancti multiplici medicina . . . , Parisii, 1539, which contains Fracastoro's Syphilis as an added item and which had not been seen by Baumgartner and Fulton when they issued their bibliography on Fracastoro in 1935. The seventeenth century was well represented by numerous dissertations and other items;

among these may be mentioned three rather pleasant English productions, which arrived duly emanating the aura of bibliographical importance which listing in Donald Wing's catalogue has for a decade and more made natural to them, and a broadside printed in Pesaro in 1680 which sets down severe regulations concerning the practice of medicine, surgery, pharmacy, and allied professions and trades in the papal territory of Urbino. Numerous dissertations and editions were acquired also from the eighteenth century. It is an indication of the enormous output in dissertations in the seventeenth and eighteenth centuries that although John Shaw Billings was buying them in huge quantities, there are still many which the Library does not have. One glaring lacuna in eighteenth century editions was filled when a 1785 Leipzig text of Lancisi requested on loan in vain by Dr. Paul Dudley White in 1958 was finally added to the collections.

Americana. For printed Americana, this report can only repeat the statement carried last year, that "it becomes increasingly difficult ... to find editions which the Library does not already possess in one or more copies." A few replacements were made for poor or imperfect copies; one variant issue was acquired, and one new edition, compiled by the Reverend Mason L. Weems of cherry tree fame and provided with a recommendation by George Washington, was added.

With American manuscripts of early or later periods the situation is different. These, each one of which is of course unique, still appear with some frequency on the market, whether very openly at auction and in catalogs of dealers who specialize in manuscripts or buried in listings of printed items. They can often be acquired at relatively low prices and they provide unpublished source material in American medicine. Two purchases were made in this field during the year; one is a receipted bill for medical services rendered to William Augustine Washington and his wife by Dr. Walter Jones for the periods March 1785 to August 1787 and February-March 1791, and the other is a ledger into which are pasted some sixty documents covering the service of Dr. Edward B. Dalton with the U. S. Volunteers from the State of New York during the Civil War.

European Manuscripts. The History of Medicine Division also obtained a sheaf of twenty-seven letters written by sixteen individuals in the period 1701-1737 to Dr. Philippe Hecquet (1661-1737), who holds an important place in the history of French and Parisian medicine. They are for the most part medical in content, bearing on his publications or on consultations, and they constitute a splendid example of correspondence between learned men across nations in the early eighteenth century. Some of the writers were outstanding figures in the medicine of their day. Italy is represented by Giorgio Baglivi, Giovanni Battista Bianchi, Carlo Ricca, Francesco Torti, and Antonio Vallisneri; Britain by Archibald Pitcairne and John Thomas Woolhouse;

Spain by Mariano Seguer; Germany by Michael Friedrich Lochner von Hummelstein; Belgium by Hendrik Joseph Rega; and France herself by Nicolas Andry de Boisregard and Jean Bouillet, in addition to Hecquet. The letters have accessory and special appeal because Hecquet's edition of the Aphorisms of Hippocrates is mentioned in them.

CATALOGING

In a recent article in an American journal some fun was again poked at catalogers who "are divinely constituted to be unable to let anyone else's cataloguing work alone" and even "to be unable to accept their own work--after a sufficient lapse of time." These statements are open to argument. In the first place, the mechanics of scholarship change through the years; no historian or bibliographer of medicine today, much as he admired Albrecht von Haller's contributions, would throw his footnotes into the exact form which Haller used, and the cataloger too adapts his mechanical methods to the march of progress. In the second place, source material newly discovered and published can often correct or amplify an entry, and of such material the conscientious cataloger must take account. It is nonetheless desirable that recataloging be kept to a minimum; this is the policy which must and does obtain at the History of Medicine Division if the desired advance is to be made on volumes not yet cataloged at all.

Hippocrates. Mr. Trienens continued his work on the Division's outstanding collection of Hippocrates. In November 1960 he completed the original cataloging of items to be included in the forthcoming printed catalog, in book form, of the collection. Cataloging of new acquisitions must of course continue, additional items not previously recognized as eligible for inclusion may be discovered, sheet descriptions already prepared are being reviewed and edited, standard filing titles and information cards are being prepared.

Sixteenth Century Editions. Meanwhile the other catalogers, apart from some slight attention to dribblets of Americana remaining from FY 1960, have been occupied with the sixteenth century. It is slow going for the reasons set forth in last year's report, but mats are regularly dispatched to NLM and long boxes of printed cards reach the Division with equal regularity.

REFERENCE

Reference work continued a course which is in large measure charted by the requests which come to it and is therefore not always predictable. The course has a certain degree of quiet when queries sent by mail can be answered steadily and in good time. Interlibrary loans, which at the History of Medicine Division have never been separate from Reference work, can complicate matters considerably when they arrive

in greater number than is usual. Patrons who come in person must receive priority treatment, but the other reference work of the Division is impeded if they require an undue amount of personal attention. The reference librarian, in sum, must be an individual who can put first things first and who also knows how to spell the word tact.

Interlibrary Loans. Loans were at a high level and were filled either with the original or in photocopy. In the former instance the usual difficulty of improper wrapping for return was encountered all too often. Libraries which do not handle rare books sometimes fail to realize the importance of following carefully the Division's wrapping instructions. One seventeenth century item was photographed without permission while on loan and was returned mended with Scotch tape.

Reference Assistance. Queries reached the Division from places as far distant as Baile Atha Cliath, Freiburg im Breisgau, and the Vatican City and as near as the Cleveland Clinic. Patrons came from Nebraska, Iowa, Wisconsin, New York, and Germany. The German patron, distinguished director of the Institute of the History of Medicine at the University of Bonn, was overwhelmed at the range of the Library's holdings of Gersdorff's Feldtbuch der Wundtartzney. Reference requests were both bibliographically and medically pointed and necessitated searching in all classes of the Division's holdings--editions of the fifteenth, sixteenth, seventeenth, and eighteenth centuries, Americana, manuscripts, and archives.

History of the Library. The press of other work left little time for attention to the History, and in August 1960 the schedules on it were deferred.

* * * * *

And so the History of Medicine Division awaits Bethesda. Perhaps there its copy of the Reverend Claudius Buchanan's address, The Healing Waters of Bethesda; a Sermon Preached at Buxton Wells, to the Company Assembled There for the Benefit of the Medicinal Waters. On Whitsunday, June 2, 1811, can be put on exhibit at least briefly. This Americanum, dated 1812 and reprinted in Boston from the London edition of 1811, was in 1957 defined as near-medical; it sets forth parallels between waters which restore bodily health and the living waters to which the Gospel invites for purification of the soul. "There is nothing here of real medical significance," says the scope note which was written in 1957, "but tracts such as this do lend some flavor to medical history." The item should be peculiarly appropriate at Bethesda.

ACQUISITION ACTIVITIES

	<u>1959</u>	<u>1960</u>	<u>1961</u>
SEARCHING			
Prospects considered for acquisition, not in Library	21,879	22,699	29,275
Prospects considered for acquisition, Library has	<u>21,842</u>	<u>23,028</u>	<u>19,763</u>
Total	43,721	45,727	49,038
<hr/>			
ORDERS PLACED	17,391	18,057	19,800
SERIAL RECORD			
New titles added	1,296	1,090	1,336
Titles currently received* (as of end of year)	12,862	13,835	14,082
PUBLICATIONS ADDED			
Serial pieces	68,532	69,103	69,968
Other	11,690	16,028	16,951
OBLIGATIONS FOR PUBLICATIONS			
(Included for rare books	\$81,500 9,699	\$85,560 9,396	\$85,300 8,323)

*Titles of which at least one issue has been received
since January 1955

GROWTH OF COLLECTIONS

	<u>CURRENT YEAR</u>			<u>COLLECTION TOTALS</u>	
	<u>Added</u>	<u>With- drawn</u>	<u>Net Gain</u>	<u>30 June 60</u>	<u>30 June 61</u>
BOOK MATERIAL					
1. Bound Monographs					
a. HMD	417	54	363	33,747	34,110
b. 1801-1913	124	1,979	-1,855	91,452	89,597
c. 1914-	<u>9,129</u>	<u>394</u>	<u>8,735</u>	<u>146,464</u>	<u>155,199</u>
Subtotal (1)	9,670	2,427	7,243	271,663	278,906
2. Bound Serials	<u>7,133</u>	--	7,133	259,066	266,199
Total Bound Vols.(1-2)	<u>16,803</u>	<u>2,427</u>	<u>14,376</u>	<u>530,729</u>	<u>545,105</u>
3. Theses	281	--	281	283,725	284,006
4. Pamphlets	<u>1,192</u>	--	<u>1,192</u>	<u>161,416</u>	<u>162,608</u>
Subtotal (3-4)	<u>1,473</u>	--	1,473	445,141	446,614
TOTAL BOOK MATERIAL	<u>18,276</u>	<u>2,427</u>	<u>15,849</u>	<u>975,870</u>	<u>991,719</u>
NON-BOOK MATERIAL					
1. Microfilms	221	--	221	2,094	2,315
2. Portraits & Pictures	<u>737</u>	--	737	56,297	57,034
TOTAL NON-BOOK MATERIAL	958	--	958	58,391	59,349
BOUND VOLUME EQUIVALENTS	---	---	---	15,000	15,000
GRAND TOTAL	<u>19,234</u>	<u>2,427</u>	<u>16,807</u>	<u>1,049,261</u>	<u>1,066,068</u>

CATALOGING STATISTICS

	<u>1959</u>	<u>1960</u>	<u>1961</u>
<u>COMPLETED CATALOGING</u>			
New titles	12,850	11,298	12,284
Recataloged titles	<u>7,907</u>	<u>11,097</u>	<u>14,902</u>
Total	20,757	22,395	27,186
Volumes reclassified and/or transferred	895	1,133	1,348
Catalog cards filed	148,241	115,817	135,683
Volumes shelved	25,944	31,412	43,663
Volumes withdrawn	1,839	2,486	1,855
<u>WORK IN PROCESS</u> - Pieces	3,894	3,567	4,300

NATIONAL LIBRARY OF MEDICINE CATALOG
(Annual)

	<u>1958</u>	<u>1959*</u>	<u>1960</u>
<u>NUMBER OF ENTRIES</u>			
Main	21,272	18,168	18,219
Added	4,618	5,338	4,614
Name cross-references	4,133	2,320	3,644

*The 1959 entries were not published separately, but were included in the 1955-1959 cumulated edition

BINDING STATISTICS

	<u>1959</u>	<u>1960</u>	<u>1961</u>
Volumes sent to binder	12,799	13,345	13,855
Volumes returned from binder and processed	11,888	14,090	11,518
New volumes	(9,743)	(9,517)	(8,018)
Rebinds	(2,145)	(4,573)	(3,500)
Volumes bound at NLM	3,685	2,688	2,624
Volumes repaired at NLM	3,897	2,669	2,360
Volumes and pieces lettered	25,364	26,383	34,591
Pictures mounted	667	1,021	116

ART SECTION STATISTICS

	<u>1959</u>	<u>1960</u>	<u>1961</u>
Materials added to collection	958	2,302	813
Pictures	(935)	(2,250)	(738)
Other (e.g., lantern slides)	(23)	(52)	(75)
Pictures cataloged/indexed	1,955	1,435	555
Reference use of material (total of pictures supplied)	866	560	1,214
Reference questions answered	322	302	307
By telephone	(106)	(113)	(118)
By mail	(102)	(105)	(98)
In person	(114)	(84)	(91)

CIRCULATION STATISTICS

	<u>1959</u>	<u>1960</u>	<u>1961</u>
Requests received	129,321	154,245	174,781
Requests filled	111,822	135,366	152,768
Requests unfilled	17,499	18,879	22,013
Rejected	(3,455)	(2,873)	(4,198)
Unavailable	(14,044)	(16,006)	(17,815)
Percentage of requests filled	86.4	87.8	87.4

ITEMS USED, BY MAJOR CATEGORY

Readers' requests in Library	39,094	39,768	43,510
Interlibrary loans	72,728	95,595	109,258
Photocopy	(67,069)	(88,618)	(102,463)
Original - Government	(2,958)	(3,719)	(3,130)
- Non-Government	(2,701)	(3,258)	(3,665)

UNAVAILABLES

	<u>By percentage of total unavailables</u>			<u>By percentage of total requests accepted</u>	
	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1960</u>	<u>1961</u>
Already on loan	11.9	9.4	8.2	1.0	0.8
Not in collection	30.8	30.4	32.8	3.2	3.3
At bindery	33.9	28.0	18.1	2.9	2.7
Missing	5.7	5.9	10.3	0.6	1.0
Does not circulate	6.6	7.4	6.1	0.8	0.6
Not identified	8.7	11.8	11.6	1.2	1.1
In process	1.2	5.8	11.4	0.6	1.1
At HMD	<u>1.0</u>	<u>1.1</u>	<u>1.5</u>	<u>0.1</u>	<u>0.1</u>
Total	99.8	99.8	100.0	10.4	10.7

PHOTOGRAPHIC SERVICES

TABLE I - EXTERNAL ORDERS

	<u>1959</u>	<u>1960</u>	<u>1961</u>
<u>EXTERNAL ORDERS COMPLETED</u>	69,595	90,984	104,943
By type of order:			
Interlibrary loan	(67,069)	(88,618)	(102,463)
Coupon, paid, and special	(2,526)	(2,366)	(2,480)
By type of service:			
Microfilm	(58)	(55)	(42)
CopyFlo	(65,093)	(86,698)	(97,353)
Photostat	(3,988)	(3,633)	(3,507)
Xerox 914 Copier	-----	-----	(3,204)
Photoprints*	-----	-----	(176)
Photographs and slides	(456)	(598)	(661)
<hr/>			
<u>PAGES DUPLICATED FOR ORDERS</u>			
Microfilm:	1,449,660	2,040,951	2,072,119
For CopyFlo orders	(1,435,343)	(2,009,855)	(2,037,757)
For microfilm orders	(14,317)	(31,096)	(34,362)
CopyFlo (from film file)	-----	10,934	13,760
Photostat	30,432	27,236	16,475
Xerox 914 Copier	-----	-----	31,644
Photoprints*	-----	-----	1,526
Photographs and slides	<u>446</u>	<u>524</u>	<u>1,359</u>
Total	1,480,538	2,079,645	2,136,883
<hr/>			
<u>CARDS</u>			
Microfilm	5,821	246	750
CopyFlo	33,780	240	11,250
Photostat	<u>-----</u>	<u>42</u>	<u>-----</u>
Total	39,601	528	12,000

*Reported under "Photostat" in 1959 and 1960

PHOTOGRAPHIC SERVICES

TABLE II - INTERNAL ORDERS

	<u>1959</u>	<u>1960</u>	<u>1961</u>
Microfilm pages	1,667,187	1,216,092	703,433
For film file	(298,030)	(309,398)	(-----)
For poor paper program	(1,335,459)	(891,520)	(689,954)
For interoffice orders	(33,698)	(15,174)	(13,479)
Paper reproduction pages	58,959	45,981	29,919
Photostat	(7,621)	(7,458)	(3,133)
CopyFlo	(51,338)	(38,523)	(19,186)
Photoprints	(-----)	(-----)	(116)
Xerox 914 Copier	(-----)	(----)	(7,484)
Photographs and slides	1,336	2,386	1,975
Cards - Microfilm	48,547	246,921	267,097
CopyFlo	313,002	370,919	297,642
Photostat	- - -	82	-----

TABLE III - TOTAL PRODUCTION

	<u>1959</u>	<u>1960</u>	<u>1961</u>
Microfilm pages	3,112,527	3,257,043	2,775,552
CopyFlo pages	1,486,681	2,059,312	2,070,703
Photostat pages	38,053	34,694	19,608
Xerox 914 Copier	----	----	39,128
Photoprints	-----	----	1,642
Photographs and slides	1,782	2,910	3,334
Cards - Microfilm	54,368	247,167	267,847
CopyFlo	346,782	371,159	308,892
Photostat	- - -	124	-----

TABLE IV - ORDERS COMPLETED AS INTERLIBRARY LOANS

	<u>1961</u>		
	<u>Government</u>	<u>Non-Government</u>	<u>Total</u>
Metropolitan Washington	13,805	7,421	21,226
Outside Washington (U.S.A.)	17,305	44,084	61,389
Overseas	<u>6,017</u>	<u>13,831</u>	<u>19,848</u>
Total	37,127	65,336	102,463

REFERENCE SERVICES

	<u>1959</u>	<u>1960</u>	<u>1961</u>
Requests by telephone	5,574	5,049	5,740
Government	(4,015)	(3,618)	(3,736)
Non-Government	(1,559)	(1,431)	(2,004)
Requests by mail	842	2,121	1,215
Government	(53)	(423)	(145)
Non-Government	(789)	(1,698)	(1,070)
Readers assisted	2,974	1,876	3,135
Government	(833)	(570)	(797)
Non-Government	<u>(2,141)</u>	<u>(1,306)</u>	<u>(2,338)</u>
Total	9,390	9,046	10,090
Government	(4,901)	(4,611)	(4,678)
Non-Government	(4,489)	(4,435)	(5,412)

Readers registered	8,877	9,270	9,984
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HISTORY OF MEDICINE

	<u>1959</u>	<u>1960</u>	<u>1961</u>
<u>ACQUISITION</u>			
Editions searched	6,296	5,507	5,012
Editions recommended for purchase	669	503	495
Editions added to collection	828	420	388
In book form	(780)	(406)	(382)
In microfilm	(48)	(14)	(6)
<hr/>			
<u>CATALOGING</u>			
Editions cataloged	724	488	357
Card mats produced	1,701	1,958	1,650
Catalog cards filed	9,243	6,806	5,789
<hr/>			
<u>BINDING</u>			
At commercial bindery	45	35	38
At hand bindery	<u>391</u>	<u>372</u>	<u>56</u>
Total books bound	436	407	94
<hr/>			
<u>REFERENCE</u>			
Reference questions	198	195	164
Visitors	198	317	138
Interlibrary loan and Photo- duplication orders	419	447	545
Original material loaned	(230)	(219)	(282)
Photocopies	(189)	(228)	(263)
<hr/>			
<u>PAGES FILMED</u>			
For loan and special orders	4,476	12,595	17,720
For security	94,579	90,322	21,963
For acquisition	<u>8,971</u>	<u>4,328</u>	<u>749</u>
	108,026	107,245	40,432

INDEX MEDICUS DISTRIBUTION

	<u>1959*</u>	<u>1960</u>	<u>1961</u>
<u>Paid Subscriptions</u>			
United States	1,955	2,014	2,473
Foreign	<u>1,216</u>	<u>1,178</u>	<u>1,591</u>
Total	3,171	3,192	4,064
 <u>Gift and Exchange</u>			
United States	728	728	786
Foreign	<u>914</u>	<u>938</u>	<u>900</u>
Total	1,642	1,666	1,686
 GPO single copy sales and stock			
	220	250	1,047
 Depository libraries			
	270	285	289
 NLM internal use and stock			
	<u>158</u>	<u>134</u>	<u>114</u>
Total	<u>648</u>	<u>669</u>	<u>1,450</u>
Total Distribution	5,461	5,527	7,200
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Journal titles indexed	1,633	1,626	1,775
Citations published	119,321	112,304	130,000
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*Current List of Medical Literature

INDEX MEDICUS

SCHEDULE OF COMPLETED ISSUES

Issue	FY 1960		FY 1961		Date Received	Date Shipped	Date Received	Date Shipped	Date Received
	No. of Items	Date Shipped	No. of Items	Date Shipped					
<u>CIML</u> Vol. 36, No. 1-6									
July	10,312	June 10	10,572	June 10	July 20	July 10	July 7	July 10	July 7
August	12,557	July 10	10,280	July 8	Aug. 25	July 8	Aug. 3	July 8	Aug. 3
September	11,615	Aug. 10	10,407	Aug. 9	Sept. 22	Aug. 9	Aug. 26	Aug. 9	Aug. 26
October	9,330	Sept. 10	11,455	Sept. 8	Oct. 8	Sept. 8	Oct. 4	Sept. 8	Oct. 4
November	7,329	Oct. 21	10,663	Oct. 7	Nov. 18	Oct. 7	Nov. 2	Oct. 7	Nov. 2
December	CUMULATION	Jan. 22	10,471	Nov. 9	Apr. 5	Nov. 9	Dec. 1	Nov. 9	Dec. 1
<u>IM</u> Vol. 1, No. 1-6									
January	6,216	Oct. 14	12,980	Dec. 13	Jan. 18	Dec. 13	Jan. 25	Dec. 13	Jan. 25
February	9,985	Jan. 12	10,387	Jan. 12	Feb. 4	Jan. 12	Feb. 7	Jan. 12	Feb. 7
March	8,317	Feb. 10	10,790	Feb. 10	Mar. 16	Feb. 10	Mar. 14	Feb. 10	Mar. 14
April	10,388	Mar. 10	10,016	Mar. 10	Apr. 1	Mar. 10	Apr. 7	Mar. 10	Apr. 7
May	10,427	Apr. 11	9,666	Apr. 7	Apr. 28	Apr. 7	May 1	Apr. 7	May 1
June	15,828	May 16	12,313	May 9	June 20	May 9	June 2	May 9	June 2
Total	112,304		130,000						

PERSONNEL STATISTICS

TABLE I - PERSONNEL ON DUTY

	<u>1960</u>	<u>1961</u>
Personnel authorized	224	224
Personnel on duty (at end of year)	216	216
Average number of persons employed	216	218
<u>PERSONNEL ON DUTY</u>		
Office of the Director	24	27
Extramural Program		3
Circulation Division	53	52
History of Medicine Division	10	9
Index Division	40	46
Reference Division	24	13
Technical Services Division	<u>65</u>	<u>66</u>
Total	<u>216</u>	<u>216</u>
Productive man-hours*	381,916	380,539
Non-productive man-hours*	68,131	73,606

*Non-productive man-hours are considered to be those hours expended on annual and sick leave, paid holidays, jury duty, off-the-job training, administrative leave, and excused time (i.e., weather conditions, visiting dignitaries, etc.). All other man-hours, including paid overtime, are considered to be productive. Leave without pay and maternity leave are not reported in either category.

TABLE II - PERSONNEL ACTIONS

	<u>1960</u>	<u>1961</u>
<u>APPOINTMENTS</u>		
Career Conditional	9	7
Temporary	27	32
Reinstatements	9	3
Transfers (to NLM)	9	12
<u>SEPARATIONS</u>		
Resignations	25	22
Expiration of appointment	5	10
Transfer	15	9
Retirement	2	1
Death	2	3
CONVERSION TO CAREER - CAREER CONDITIONAL	24	21
PROMOTIONS	44	57
REASSIGNMENTS	25	37

FINANCIAL STATISTICS

OBJECT CLASSES	<u>1959</u> <u>Obligation</u>	<u>1960</u> <u>Obligation</u>	<u>1961</u> <u>Obligation</u>
01 - Personal Services	\$1,146,123	\$1,154,626	\$1,285,179
02 - Travel	10,971	11,150	18,756
03 - Transportation of Things	317	1,627	970
04 - Communications	14,675	18,165	23,846
05 - Rents and Utility Services	23,193	23,230	20,355
06 - Printing, Binding, and Reproduction	80,656	97,432	131,681
07 - Other contractual services	26,108	32,543	49,092
08 - Supplies and Materials	41,336	48,981	46,652
09 - Equipment (Books)	114,403 (81,503)	89,672 (85,077)	94,277 (85,655)
11 - Contribution to retirement	69,200	69,250	75,300
13 - Awards	519	151	193
15 - FICA	1,255	2,020	3,750
Appropriation Transfer to Library of Congress	<u>5,000</u>	<u>----</u>	<u>8,000</u>
ESTIMATED TOTAL OPERATING COST	<u>\$1,533,756*</u>	<u>\$1,548,847*</u>	<u>\$1,758,051**</u>
<hr/>			
Obligations for Construction of New Library Building	\$4,734,231	\$ 313,775	\$ 379,382
Obligations from Council on Library Resources Fund	39,191	33,793	373
Obligations from Strause Fund	14,026	-----	-----
Collections from Photo- duplication Service	946	1,025	1,225

*Includes \$11,088 reimbursement from Veterans Administration (ICMTA)

**Includes \$34,600 in reimbursements

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- National Library of Medicine Catalog, 1960. Washington, Library of Congress, 1961. \$20
- National Library of Medicine Annual Report, Fiscal Year 1960. 62 p. (Multilithed)
- National Library of Medicine News. (Monthly)
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- Bibliography of Medical Reviews. Volume 5. Washington, 1960. 233 p. (GPO; \$1.25)
- Cancer Motion Picture Guide, 1961. 162 p. (GPO; \$1)
- Chinese Mainland Journals: Current NLM Holdings, January 1961. Washington, 1961. (14 p., 69 titles) (Multilithed)
- Film Reference Guide for Medicine and Allied Sciences. 1961 ed. 200 p. (GPO; \$1)
- Index Catalogue of the Library of the Surgeon-General's Office. Fifth Series, Volume 2, 1961. 894 p. (GPO; \$6)
Fifth Series, Volume 3, 1961. 941 p. (GPO; \$5.75)
- Index Medicus. (Monthly) (GPO; annual subscription, \$20)
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- Medical Aspects of the Civil War; References and Notes to Accompany an Exhibit at the National Library of Medicine ... Washington, 1961. 24 p. (Multilithed)
- [MacDonald, M. R.] The National Library of Medicine. The Surgeon General's Bulletin, No. 4, January-February 1961
- [Rogers, F. B., and Taine, S. I.] The National Library of Medicine Index Mechanization Project. 96 p. (Published as Part 2, Volume 49, No. 1, 1961, Bulletin of the Medical Library Association)
- Bulletin of the Medical Library Association, Volume 49, No. 3, July 1961. "The National Library of Medicine Anniversary Issue, 1836-1961." Edited by F. B. Rogers. Contains articles by E. Brodman; C. A. Roos; J. Doe; M. L. Marshall; E. G. Moseley; K. D. Metcalf; W. H. Kilham, Jr.; G. N. Schiffmann; M. E. Kennedy; M. R. MacDonald; L. K. Falk and S. Lazerow; D. M. Schullian

- Bocker, Dorothy. Salmonella; salmonella infections ... Washington, 1960. 40 p. (PHS Publication No. 803; PHS Bibliography Series No. 33)
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- Davis, Anne C. Bibliography of readings in psychiatry for the non-psychiatric physician. Psychosomatics 2:212-218, May-June, 1961. (Revision of Psychiatry for the non-psychiatric physician, compiled by Jeannette Barry. Washington, 1960. 29 p.)
- Jablonski, Stanley. Russian Drug Index. Washington, 1961. 103 p. (PHS Publication No. 814) (GPO; 60 cents)
- Nemec, Jaroslav. Bibliographic sources of Russian medicine. Washington, 1960. 16 p. (Multilithed)
- Parker, Sheila M. War and its aftermath--some medical aspects. Bulletin of the Medical Library Association 49:100-1, 1961
- Rogers, F. B. Facilities and services of the National Library of Medicine. Bulletin of the Millard Fillmore Hospital 7(2):32-8, 1960
- Rogers, F. B. Storing and retrieving information. [Review article] College and Research Libraries 21:489-92, November 1960
- Zarechnak, Galina V. Academy of the Medical Sciences of the USSR; History and Organization, 1944-59. Washington, 1960. 48 p. (PHS Publication No. 702; Public Health Monograph No. 63)

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