

THE BOARD OF REGENTS
of the
NATIONAL LIBRARY OF MEDICINE

MINUTES OF THE 35TH MEETING

147

March 26-27, 1970 - San Francisco, California

MEMBERS PRESENT: Dr. William G. Anlyan, Mr. Bruno W. Augenstein, Dr. Harve Carlson,
Dr. Robert Ebert, Dr. Max Michael, Jr., Dr. Kathryn Smith,
Dr. George Teuscher, Mr. Alfred Zipf

MEMBERS ABSENT: Dr. William Baker, Dr. Jack Layton, Dr. Frederick Wagman,
Admiral George Davis, USN, Dr. Marc Musser, General Hal Jennings, USA,
Dr. L. Quincy Mumford, General Kenneth Pletcher, USAF,
Dr. Jesse Steinfeld

ALTERNATES: Colonel Gerrit L. Hekhuis, USAF represented Lt. Gen. Kenneth E. Pletcher,
USAF, both days

Dr. Harold M. Schoolman represented Dr. Marc Musser, Veterans
Administration both days

Brig. General Thomas A. Whelan, Jr., USA represented Lt. Gen. Hal B.
Jennings, USA, both days

GUESTS: Mr. Gerald Asbell, Computer Sciences Corporation
Mr. William Hoover, Computer Sciences Corporation
Mr. Alvin Nashman, Computer Sciences Corporation
Mr. Charles Williams, Computer Sciences

Mr. Bernard Butcher, Bank of America
Mr. Rod Foster, Bank of America

STAFF: Dr. Martin Cummings, Mr. Jerome Barnett, Dr. Ruth Davis,
Dr. Leroy Langley, Dr. Joseph Leiter, Dr. Peter Olch,
Mr. George Russell, Mrs. Ann Sabin, Mr. Ralph Simmons,
Mr. Robert Walkington

NOVEMBER 1969 MINUTES APPROVED, FORTHCOMING MEETINGS SCHEDULED

The minutes of the November 20-21, 1969 meeting were approved. The dates of June 18-19, 1970 and November 19-20, 1970 were reaffirmed. The dates of March 22-23, 1971 were tentatively selected for the second meeting in FY 1971.

OPENING REMARKS OF THE CHAIRMAN OF THE BOARD

Mr. Zipf welcomed the group to San Francisco and specifically welcomed Dr. John Sherman, Deputy Director, National Institutes of Health and Brig. General Thomas J. Whelan, USA, representing the Surgeon General of the Army who were attending the meeting for the first time.

REMARKS BY DEPUTY DIRECTOR, NATIONAL INSTITUTES OF HEALTH

Dr. John Sherman presented an overview of health activities on the Washington scene. He reported that there are two broad and significant areas of emphasis at the moment. First is an attempt to simplify the entire Federal activity and second is an effort to decentralize the nature of Federal activities. These efforts are particularly significant to DHEW as it is the largest domestic cabinet department, and its activities are almost exclusively people oriented. DHEW uses as its principle mechanism of implementation the grant-in-aid through a variety of programs in different forms. These efforts, though underway for years, have been accentuated by the present administration, and we are beginning to see results of the decentralization efforts.

Unfortunately, communication remains a problem within DHEW as well as with outside bodies. This is due in part to the size and complexity of the operation and the fact that a new administrative group has come in. It is important to realize that there is a real effort to push through improvements in communication at all levels.

The present Administration has two preoccupations in the health area. The first concerns the severe manpower shortages, whether due to insufficient numbers or faulty distribution. The second is a concern for health care costs. The concentration is on Title 18 and 19 of the Social Security Act, Medicare and Medicaid, and it seems safe to predict that both of these will be under careful scrutiny by both Congress and the Executive Branch with some changes almost certain to occur.

With the preoccupation with the above, NIH must exert vigorous effort to draw attention to the problems of the NLM and biomedical communications and the research component of NIH. In the case of the former, there is a need to create an atmosphere so that a "critical mass" can be obtained, particularly for the Lister Hill Center's operation, and in the case of the latter, there is a need to sustain the effort in biomedical research already established in the Institutes and Divisions of NIH.

There are difficulties with the legislative situation. The Administration is struggling with its position on the renewal of a large number of statutory authorities in the health field. The consequence is that we may see the Congress seizing the initiative and introducing health legislation.

The financial situation is familiar to most of the Board. The fight to stem inflation still dominates the atmosphere around DHEW's financial needs. NIH came out in the 1970 budget with slight increases over the Nixon Administration budget requests, chiefly in the National Cancer Institute and the National Heart and Lung Institute, particularly for contract work in targeted areas. In 1971, with one major exception, the budget looks considerably better. There are healthy increases for programs in manpower and education, particularly in institutional support though construction funds are held back.

The Administration has established priorities in the various manpower areas. Institutional support of veterinary medicine was removed from the budget, the concentration being on other health professional manpower institutions. Although

Congress may well change the priorities, it does represent some effort on the part of the Executive Branch to sort out what points of Federal leverage there are and what areas might prove most useful given limited resources.

In the research area there is an increase in support in four major areas. These are (1) viral oncology, (2) cardiovascular research, particularly the relationship of lipids to atherosclerosis, (3) population research, (4) the elimination of dental caries. Although not an "across the board" increase in research support, it is a brighter picture than the original 1970 budget. We have not been successful thus far in gaining support of research in biomedical communications. The budget for NLM in our opinion is not satisfactory. There is some hope for getting funds to start the construction of the facility to house the Lister Hill Center.

There are some interesting provisions in the 1971 budgets of various Federal agencies for student assistance. A major change in public policy appears to be under way. This was confirmed by the content of President Nixon's Education Message delivered to Congress on March 19, 1970. In effect, it changes the Federal role of providing student assistance through stipends or similar devices to an attempt to restrict such direct Federal aid to the underprivileged and require those of more affluent means to seek their financial assistance from private sources. This is of considerable concern to NIH where the involvement is primarily at the predoctoral or postdoctoral level and where it is felt that it is not known at this time what effect such a move would have on the training of sufficient numbers and the requisite quality of individuals in the health field. Fortunately, the Secretary of DHEW was able to successfully appeal to the Bureau of the Budget to exempt the NIH Training Grant Program in the 1971 Budget on the basis of its contributions to medical manpower through provision of faculty for our health professional schools. During this year of reprieve the NIH will conduct a study of the probable impact of loan programs substituting for the traditional fellowship and training grant stipend on health manpower.

This is in contrast to other science areas (other than medicine) as far as other Federal support agencies were concerned. With some variations agency to agency, restrictions have been placed on new training starts. An individual already in the pipeline will continue, but new training grants or fellowships are sharply curtailed.

Dr. Sherman then commented upon FAST (Federal Assistance Simplification Task), a Government-wide effort to decentralize and simplify Federal activities. DHEW has recently decentralized one program to regional DHEW offices at a level of \$800,000 a year.

Out of a recent examination of grant programs has come an expression of considerable interest in the peer review system. The role and degree of involvement of National Advisory Councils has particularly come under scrutiny. The unusual degree of authority invested in the hands of non-full-time Federal employees over public activities, frequently through statutory authorities, has aroused some concern among management analysts and political science theorists. After 25 years of operation, NIH Councils have concurred in 95 per cent of their reviews of study section decision. In pure management terms, this is probably inefficient and requires a six to nine week delay in the final decision making. As a result

of these observations there may be a real threat in the coincidence of the attitude of the political theorist and the management experts. The outcome is still in question, but the Administration had proposed in legislation renewing the Community Mental Health Council, though Congress overruled this decision and reinstated the role of the Advisory Council. This does illustrate that searching inquiry is going on into many activities with which we are involved.

Dr. Sherman was complimented on his presentation. The Board expressed concern over the shift in provision of financial assistance for predoctoral and postdoctoral training. It was felt that the number of postdoctoral fellows would definitely decrease. Even residencies may be affected in the subspecialty areas such as hematology and infectious diseases as they are essentially clinical fellowships. This may increase the number of primary physicians but will decrease the number of specialists. It is not unlikely that the support of staff under these circumstances might be shifted to third party payments and inflate health care costs.

REPORT OF THE DIRECTOR, NLM - DR. MARTIN M. CUMMINGS

Overview of Past Year's Activities at NLM

The NLM collection of 1.3 million items was made available to the needs of the biomedical community through 125,000 interlibrary loan requests and 86,000 requests from readers in the Library's reading rooms. The Library also produced 19,000 computer searches of the biomedical literature on request during the past year. In this same period 230,000 articles from health science periodicals were indexed and 14,000 books and monographs were cataloged. As the Library entered the decade of the '70's over one million bibliographic citations had been entered into MEDLARS, contained on 48 reels of magnetic tape.

The Abridged Index Medicus has been on the market for 90 days and has been enthusiastically received by physicians, medical librarians, and medical editors. Nearly 1,000 subscriptions have already been received and a prediction of 5,000 subscriptions by the end of the year seems quite reasonable.

The conversion of MEDLARS I to MEDLARS II has been a principle concern of the Library for the past two years. The new system will improve response and turn around time; will improve specificity of recall through an augmented vocabulary, and will create on-line capabilities. Whereas MEDLARS I is basically a bibliographic retrieval and publication system, MEDLARS II will be more of a total automated library system that will include such library processing capabilities as acquisition and ordering, cataloging, interlibrary loan activities and improved management information controls.

Dr. Cummings reminded the Board that restricted personnel ceilings in FY 1970 made it necessary to discontinue interlibrary loan services, MEDLARS searches, other reference services, and film loans to foreign countries not covered by the National Library of Medicine agreement with the Agency for International Development. Following a meeting of a subcommittee of the Board with Dr. Roger Egeberg, the Library was given two additional positions and these services are to be resumed July 1, 1970.

Dr. Cummings referred to the presentation by Mr. Russell on the National Medical Audiovisual Center (NMAC) reorganization to be heard the following day, and announced that Mr. Jerome Barnett, Assistant Director, NMAC, has been appointed as Project Officer for the implementation of the NMAC reorganization and will serve as Deputy Director of NMAC when the incumbent retires in June. He also presented statistics to demonstrate a decrease in film and videotape production following a recent recommendation of the Board. He informed the Regents that initial unsolicited comments from the academic community express considerable interest and excitement over the "university-on-loan" concept described by Dr. Ebert at the November 1969 Board meeting.

The Lister Hill National Center for Biomedical Communications continues to try to serve as the focal point in DHEW for biomedical communications systems despite a lack of financial support for its programs. Subsequent to a meeting of the Executive Committee of the Board with Dr. Egeberg, the latter called a meeting of the four major health agencies in DHEW concerned with biomedical communications for briefings on their programs. Dr. Egeberg unfortunately had to leave the meeting before NIH and NLM presented their programs, but he has asked that another meeting be scheduled in order that he can hear the Lister Hill Center presentation. Dr. Egeberg expressed the hope that these meetings will result in some means of coordination of these efforts within DHEW.

The Director reported that the Medical Library Assistance Extension Act of 1970 passed the Congress and has been signed by the President and is one of the few pieces of health legislation to be extended for more than one year. It renews the Act for three years. Under the original Medical Library Assistance Act of 1965, funds were provided to 62 health science libraries, 38 medical libraries, 16 dental libraries, and 30 libraries of pharmacy, as well as 194 hospital libraries in 49 of the 50 states. The funds provided have been used for the enrichment of their collections, strengthening of their professional staffs, and the subsequent improvement of reader and lending services.

Progress in the Toxicology Information Program has been slow. However, it included development of unique registry numbers and approved names for some 30,000 chemicals, the consolidation of toxicity information on approximately 1,000 drugs and chemicals, and the development of storage and retrieval software. An important and timely bibliography on environmental health is under development, and the first issue will hopefully be available for the Regents' critical examination at the next meeting.

Budget

In a review of budgetary matters, Dr. Cummings reported that in FY 1971, the Library has been permitted to ask for \$19,769,000, a decrease of \$194,000 from FY 1970. The decrease is felt chiefly in the Extramural Programs where a steady and damaging decline is seen in financial support. It was necessary to transfer \$300,000 from the Toxicology Information Program into the Regional Medical Library Program. Some serious problems in regard to priorities will undoubtedly face us in the immediate future. Direct Library Operations has fared reasonably well because of the priority given for funding MEDLARS II. Personnel needs outweigh monetary needs for Library Operations in the immediate future.

NMAC had 130 people on board when it joined the Library in 1968, but its budget could only support 105 positions. Therefore, NLM has been compelled to reduce NMAC positions to 109 and hopes to stabilize at about that point.

External Activities Involving NLM

Work continues constructively with the other Federal libraries for the development of a computer-based National Serial Record Data Bank.

NLM has had continued extensive relations with COSATI (Committee on Scientific and Technical Information) which has been reported at previous meetings of the Board. Since the November meeting of the Board, NLM has reexamined its relationship with the COSATI apparatus at the request of the Chairman of COSATI who asked for a critique of COSATI. The Library presented a candid critique which suggested the elimination of the numerous panels, subpanels, and task forces which took up considerable time of seven NLM professionals and further suggested the concentration of effort on several major communications issues. The result of this critical appraisal has been the resignation of two NLM staff members from their positions as Chairman and Executive Secretary of one panel. Dr. Cummings has recommended to NIH and Dr. Egeberg that he step down as DHEW representative on COSATI and a member of the scientific community be appointed in his place. Dr. G. Burroughs Mider is recommended as his successor.

Since the November meeting of the Regents, the NLM has had continued contact with the Department of Justice regarding the copyright case against NLM and the NIH Library. The Library was approached by a member of the Senate Subcommittee on Copyright to provide all the Minutes of the Board of Regents which dealt with the copyright issue. Dr. Cummings, after discussions with appropriate DHEW legal advisors, provided only the formal recommendations of the Board since 1956 on its review of interlibrary lending and the use of photocopy in lieu of lending the original documents. The data will only be used by the committee itself and will not be a matter of public record.

The results of a General Accounting Office study of NLM operations have been released. This two and one half year study will be reported in depth at a future meeting. Four points of immediate interest are: (1) The new Library building cost exactly what it was budgeted to cost. There were no overruns or add-ons, (2) The question of lease versus purchase of computer equipment was raised, (3) The question of fee for service for interlibrary loans was raised, (4) GAO has identified a need for better department-wide coordination for computer based information systems.

Finally, an anonymous staff member has presented to the Board a gift of \$500 to be used to recognize nonmanagement personnel within the Library for some intellectual or technical accomplishment over and above their normal duties. The money is to be placed in a trust account by the Board and be utilized for this purpose.

A lengthy discussion was held in reference to the best means of achieving coordination of DHEW health-related communications efforts. The Board discussed the possibility of placing a qualified person in the Office of the

Assistant Secretary for Health and Scientific Affairs for such coordination. It was finally decided that NLM must be willing and ready to provide such a qualified individual for this important position. It was stressed, however, that an individual in such a position must be supported with delegated authority and a chain of communication, or reporting mechanism with the various agencies of DHEW. It is also important to realize that a transfer of a professional from the Lister Hill National Center for Biomedical Communications (LHNCBC) to the Assistant Secretary's Office represents a 25 per cent cut in the Lister Hill Center staff. It was agreed that a resolution should be prepared for presentation to Dr. Egeberg reaffirming the Board's concern for the need for coordination of DHEW biomedical communication systems and expressing NLM's willingness to designate such a qualified person from the LHNCBC. (See Attachment I)

FEE FOR SERVICE FOR FOREIGN LOANS AND NMAC FEE FOR SERVICES -
MR. GEORGE RUSSELL

With the provision of two added positions at NLM, foreign service is to be reinstated. In order to recapture some of the cost of handling and mailing, fees will be charged as follows: Interlibrary loans, \$2.00; MEDLARS search, \$20.00; Film loans from NMAC, \$10.00. With the anticipated volume, this will realize approximately \$50,000 per annum and will be returned to the general Treasury. In the future, a revolving fund should be established which will allow NLM to use these funds to support these services. A coupon system and direct billing were both considered, but the latter was selected as it conforms better to the NIH financial system. A billing system is now being developed by NLM and the NIH Financial Management Branch. The Chairman of the Board suggested a prepayment plan for collecting fees rather than a postpayment (direct billing) system be considered. The \$2.00 fee for interlibrary loans in non-AID countries will begin on July 1, 1970. (AID reimburses NLM for services provided to AID countries.)

Last October the Assistant Secretary for Health and Scientific Affairs asked NLM to prepare a plan for fees for domestic services at NMAC. A plan was submitted in November 1969 which pointed out five actions that would be necessary in considering a fee system. The most important action was the development of a DHEW policy regarding fee for service for film loans for all agencies of the Department. NLM has not yet received a reply; no policy statement has been forthcoming. Another memorandum from NLM to the Assistant Secretary has been forwarded through Dr. Marston. This memorandum (Attachment IIa) again raises the policy question and offers a proposed solution (Attachment IIb).

Dr. Ebert suggested the Board develop a resolution urging an HEW-wide policy regarding fee for services and the development of a revolving fund in NLM to support the film loan program. (See Attachment III)

REPORT ON VISIT TO OVERSEAS PROJECTS - MR. ALFRED ZIFF

The Chairman reported on the trip taken with Dr. Cummings to the proposed subregional library in Hawaii; the libraries in Sydney, Canberra, and Melbourne, Australia; the National Library in New Delhi, India, and the Japanese Information Center for Science and Technology in Tokyo. The business conducted

in Australia related to the new international MEDLARS center scheduled for Australia. In New Delhi an effort was made to encourage the institution of interlibrary loans from the National Library. In Japan arrangements were made for payment of \$10,000 for NLM MEDLARS programs by JICST. Throughout the trip foreign scientists and librarians expressed general concern for the curtailment of NLM foreign services. Many offered to pay for the resumption of these services.

LISTER HILL NATIONAL CENTER FOR BIOMEDICAL COMMUNICATIONS

A. Association of American Medical Colleges Contract - Dr. Ruth Davis

This contract primarily deals with the subject content of LHNCBC programs, the parties responsible for their preparation, the means of evaluation, and the establishment of priorities for their development. This is an area of great interest to the Board as stated at the November 1969 meeting.

Progress to date includes the establishment of working groups within AAMC particularly through the Council of Academic Societies. A steering committee of thirteen members has met on three occasions and has set up an executive staff with Dr. Eugene Stead as Chairman, and Dr. Cheves Smythe, Dr. C. G. Gunn, and Miss Mary Littlemeyer as working members. The timetable for this contract allowed six months to gather background data, three months to analyze their data and five months to prepare, critique, revise, and finalize a report due for publication as a supplement to the Journal of Medical Education around September 1970. Meanwhile, interim recommendations have been prepared and submitted by three subcommittees of AAMC.

The first is the Audio-Visual-Didactic Subcommittee which considers the content areas of highest priority and decides who should be responsible in the medical community for providing the input, what is the best media, and what means of evaluation should be developed.

A Computers in Education Subcommittee has long-range goals and has not provided any reports as yet. The Resources and Utilization Subcommittee is concerned with organization for review within and without the Government. They have tentatively arrived at a plan for a National Advisory Council which will contain study sections concerned with particular substantive areas. They further recommend project teams to work with and develop these subject areas in conjunction with the NLM. Within Government they envision an advisory relationship with the Director, NLM as to the possible roles of LHNCBC and NMAC. The interim recommendations deal with initial content areas of high priority and are three in number. (1) Disciplines with a restricted curriculum such as Ob-Gyn which lend themselves to standardized treatment, (2) Remedial medical education, particularly in areas like biochemistry, physiology, and embryology, (3) Physical diagnosis because of the high faculty to student ratio.

**B. Report on Meeting with AMA Committee on Graduate Medical Education -
Dr. Max Michael, Jr.**

Dr. Michael met with the Committee on Graduate Medical Education of the American Medical Association (AMA) and described the LHCBC, the proposed biomedical communications network, and the "university-on-loan" concept involving NMAC and received enthusiastic support. This Committee unanimously voted to support this program and to participate in the input. Their recommendation now passes through channels to gain full AMA support.

C. Report on Discussions with Universities Associated for Research and Education in Pathology (UAREP) - Dr. Ruth Davis.

UAREP is a consortium of nine universities organized in 1964 primarily to work with the Armed Forces Institute of Pathology, but more recently concerned with the upgrading of research and education in pathology. They are interested in the development of core curricula.

When they contacted the LHCBC they were interested in utilizing the capabilities of the Lister Hill Center and NMAC in making their content development more applicable to more students via self-contained packages of audiovisuals. Three syllabi (Neoplasia, Acute and Chronic Cell Injury, and Inflammation) were completed but no audiovisuals were utilized. Nine other areas have been selected by UAREP for the development of core curricula. The LHCBC has provided assistance and guidance in developing self-contained teaching units including syllabi. A teaching unit would consist of a syllabus, a list of related audiovisuals and their location, and a bibliography. The primary purpose of these teaching units is to supply properly documented, readily usable and easily updated materials in those areas of pathology subject to rapid change and new developments.

Referring to the AAMC recommendations on priorities, Dr. Ebert questioned the selection of biochemistry for remedial teaching as most students had biochemistry before reaching medical school. It was pointed out that a survey of biochemistry professors in medical schools brought attention to this need for the student with marginal training in biochemistry. Dr. Ebert suggested changing the term "remedial" and expanding the teaching package to make it useful to all students.

It was pointed out that the anatomists are another group who could utilize the teaching packages as there is a shortage of teaching faculty throughout the country. Dr. Schoolman stressed the importance of getting individuals outside of the specific discipline involved in developing each of these teaching units in order to assure a broad view and avoid a narrow specialist approach.

**COMPUTER SCIENCES CORPORATION PRESENTATION ON MEDLARS II
Mr. C. D. Williams and Mr. G. M. Asbell**

Representatives of Computer Sciences Corporation (CSC) were Mr. W. Hoover, President, Mr. A. Nashman, Mr. C. D. Williams and Mr. G. M. Asbell. Mr. Ralph Simmons, NLM MEDLARS II Project Manager opened the session with an historical

review of the MEDLARS II contract before turning the meeting over to Mr. C. D. Williams and Mr. G. M. Asbell of Computer Sciences Corporation.

A detailed description of the MEDLARS II system was presented by Mr. Asbell, followed by a project status report which covered the schedule and the major tasks as they related to the schedule. Finally, a cost status report was presented which described in detail the cost sharing contract which has been negotiated.

Problem areas identified include format modules (Library Program Set), acceptance criteria, hardware requirements and training. Schedule slippage will result in a three months' delay in the operational date for the initial system (September 1, 1970) and an estimated overrun of 35 man months to complete the entire system.

If the initial system is not operational by September 1, 1970, NLM production will be affected. On inquiry, Mr. Williams gave a 70 per cent probability that the initial system would be operational September 1, 1970. He was 100 per cent confident that the initial system would be operational before October 1, 1970. The extended system is to be operational July 1, 1971. Costs through January 1970 were \$1,703,983. Estimated cost for completion of the initial system is \$2,311,000. Estimated cost for completion of extended or on-line system is \$3,060,000. This is still almost 1 million dollars below the estimate provided by other bidders.

Parallel operation of MEDLARS I and MEDLARS II is forecast for some three or four months beginning September 1, 1970.

The Board believed that CSC has made great improvement in its effort since the time of its last report.

NATIONAL MEDICAL AUDIOVISUAL CENTER REORGANIZATION - Mr. George Russell

In July 1967, NMAC joined the NLM. At this time the major activities were (1) production of motion pictures and other audiovisuals (60 per cent of manpower and 50 per cent of resources); (2) acquisition and distribution of these products (20 per cent of manpower and 20 per cent of resources); (3) consultation services (5 per cent of manpower and 10 per cent of resources); (4) activities of the Office of the Director (10 per cent of manpower and 20 per cent of resources).

Increasing requests for film loans surpassed the NMAC capability to fill these requests in 1969. In September 1969 a subcommittee of the Board recommended a shift of resources from production to acquisition and distribution. Fifteen NMAC staff were detailed for eight months (two 4-month details) to distribution and the backlog of loan requests was erased.

A new functional organization and staffing pattern has been developed. Approximately 90 per cent of the present NMAC staff have been placed in the reorganization. The other 10 per cent will stay on at a reduced grade in a new job or be separated. As instructed by the Board, the reorganization does not propose full scale film and videotape production as a major orientation. A 3-branch

structure below the Office of the Director (10 per cent of manpower and 20 per cent of resources) consists of (1) Educational Research and Training Branch (45 per cent of manpower and 40 per cent of resources); (2) Media Resources Branch, formerly Acquisitions and Distribution (35 per cent of manpower and 30 per cent of resources); (3) Audiovisual Systems and Application Branch, formerly the Consultation Service (10 per cent of manpower and 10 per cent of resources).

The functional statement reflects decreased audiovisual production, more research and development and more training and consultation.

Mr. Russell asked the Board to express their views regarding the evaluation of content of films acquired by the Center. Should the Media Resources Branch be responsible for deciding which films should be kept as single copy for archival purposes and which films should be duplicated in multiple copies for wide distribution? Should this evaluation be performed by outside groups? NMAC has technical competence; it does not have the subject competence to make such decisions. Audiovisual cataloging is to be coordinated by Library Operations at NLM, but the operation will remain in Atlanta. The small Audiovisual Systems and Application Branch might eventually move to Bethesda in a closer relationship to the Lister Hill Center.

Mr. Russell read a letter received from the American Federation of Government Employees inquiring about the reorganization. The Union obviously had received considerable misinformation, but was provided with correct information by NLM.

Dr. Smith urged that the term "health sciences profession" or a similar more general term be used consistently in the functional statement rather than the more limited term "medical."

The Board voted to accept the reorganization plan as presented. The plan will be submitted to NIH and the Assistant Secretary for Health and Scientific Affairs, DHEW for approval. It is urgent that this be cleared and approved by July 1, 1970 as problems are developing with the NMAC staff already on a second detail.

EXTRAMURAL PROGRAMS 1/ 2/ 3/REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS - Dr. Leroy Langley

Dr. Langley called to the attention of the Board the latest legislative developments and recent changes in the administration of grants as outlined in the DRG Administrative Report.

Field Trip on NLM Special Foreign Currency Program

Dr. Langley discussed the Library's PL 480 program in Israel and Poland. He recently visited those two countries in order to gain knowledge of the current efforts in each country and to evaluate the individual projects. In Israel there are three major components. One is under the aegis of the Israeli Journal of Medical Sciences, a second is the responsibility of the Hadassah Medical School and the third is under the Israel Program for Scientific Translations. The first is by far the largest and is directed by Dr. Moshe Prywes, who is Vice President of the University, Associate Dean of the Medical School, Professor of Medical Education at the Medical School and Editor-in-Chief, of the Israeli Journal of Medical Sciences. The success that this program has enjoyed in Israel is directly due to the remarkable ability of Dr. Prywes.

Dr. Langley reported that as a result of his visit to Israel, he was able to conclude that there is a well-organized, highly-competent group which can make this program of significant value to U.S. science. The products were found to be excellent with the major problem being one of prompt publication and adequate promotion and distribution in the U.S. Steps are being taken to achieve these goals. The weakest facet of the program is the audiovisual endeavor. The conclusion was reached that if adequate funds are available the program will be supported, at least in part, for an additional two years, but of all the programs in Israel this must have the lowest priority.

The situation in Poland is somewhat different because there is no one in that country who has assumed overall responsibility for the critical review program. Discussions were carried out with the key people in Poland, to point out the

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- 1/ Proceedings of meetings are restricted unless cleared by the Office of the Director, National Institutes of Health. The restriction relates to all material submitted for discussion at the meetings, the agenda for the meetings, the supplemental material, and all other official documents.
 - 2/ For the record, it is noted that members absent themselves from the meeting room when the Board has under individual discussion applications (a) from their respective institutions, (b) in which a conflict of interest might occur.
 - 3/ The Board of Regents when considering the Extramural Programs of the NLM, also consists of the Board of Regents Advisory Council for Extramural Programs and National Medical Libraries Assistance Advisory Board and concurrently discharges the responsibilities of all three bodies.

value of identifying an individual to have overall responsibility. The Polish authorities stated that they would attempt to find the proper individual. At the present time the critical review program is the responsibility of Dr. Konopka, who is Director of the Principal Medical Library. The scientific evaluation of the projects is the responsibility of the Coordinating Commission for Polish-American Scientific Collaboration. The Chairman of that Commission has recently finished his term and a new Chairman has not been appointed, but it will probably be Dr. Witold Rudowski, who is the new President of the Scientific Advisory Council.

As in Israel, translations are the overall responsibility of the National Science Foundation and the Library works through the National Science Foundation to prepare translations in the medical field. In Poland, the Institute of Documentation is the primary responsible organization, but the actual translation and publication is carried out by the State Medical Publishing House. At the moment, the National Library of Medicine is utilizing Polish zlotys equivalent to approximately \$350,000 per year to translate and publish ten Polish biomedical journals which are distributed free in the United States to medical libraries.

Dr. Langley stated that there is considerable potential in Poland for development of all the programs, the problems of rapid and adequate distribution must be resolved as in Israel, and much greater utilization of the translation capability in Poland should be utilized. In addition, the medical journals which have been translated and distributed for several years are currently being reviewed to ascertain the value to the U.S. scientific community.

The Board was interested and encouraged by Dr. Langley's comments re deriving mechanisms for better promotion and more rapid publication of the scholarly works funded in both Israel and Poland.

Dr. Cummings pointed out that there was no relationship between the amount of PL 480 funds available in a given country and the scientific competence of that country.

Evaluation of the Regional Medical Library Program - Mr. Robert Walkington

Mr. Walkington presented the goals, and the legislative and funding history of the program, an overview of the total program activities and an analysis of the services provided by the four regional libraries that have had from one and one-half to two and one-half years of operating experience. Among the several accomplishments and problems that were discussed, the most prominent was document delivery. The four libraries supplied over 100,000 inter-library loans during 1969; and over 70 per cent of these were put into the mails by the close of the day following receipt. However, the evaluation showed that approximately one-half of all interlibrary loans were to other libraries within the metropolitan areas in which each of the regional libraries was located. Mr. Walkington suggested that some limitation on volume of service to local institutions in the immediate proximity of the Regional Medical Library might be considered in order that the sphere of influence and

services of the Regional Medical Libraries (RML) can be widened. He further stated that reference services, training and consultative services in general lag far behind the interlibrary loan services.

In a discussion, several Board members expressed the view that enlarging the sphere of influence of the RML should not be at the expense of the metropolitan area in which the RML is located. It was further pointed out that the overlap with the consultative and training services of the Regional Medical Programs in the library field must be coordinated with the RML programs in this same field.

Because of the great importance of the RML program and the obvious need for further careful consideration, the Board members requested, and Mr. Walkington agreed to prepare, a written report of the results of the evaluation for their study, including staff suggestions of procedures which could reduce or eliminate the problems that have been delineated. The Board will consider the suggested procedures and make its recommendations at its next meeting in June 1970.

Review of Applications Needing Special
Consideration by the Board of Regents Subcommittee
for Extramural Programs

The Subcommittee met with the Extramural staff on March 25, 1970 to discuss certain regional, resource, research and publication grant applications which required special consideration, such as those applications requesting more than \$50,000 per year, all split vote recommendations from initial review, and where there were special questions relative to the recommendations.

Consideration of Pending Applications

The Board of Regents acting concurrently as the Board of Regents Advisory Council for Extramural Programs and as the National Medical Libraries Assistance Advisory Board, reviewed the following grant applications:

Regional Medical	Reviewed	3	\$287,898
Library Grants	Approved	1	181,000
	Disapproved	2	54,005
Resource Grants	Reviewed	25	
	Approved	25	
Research Grants	Reviewed	32	889,596
	Approved	13	364,788
	Disapproved	18	475,534
	Deferred	1	2,500

Dr. Langley called to the Board's attention the list of interim actions which were negotiated by staff subsequent to the November 1969 Board meeting.

Summaries of Board actions on all Extramural Grant Programs are appended to these minutes.

ACTIONS TAKEN BY THE BOARD

1. The Board adopted a resolution (Attachment I) reaffirming the urgency of the need for coordination of DHEW biomedical communication systems and suggesting that a member of the LHCBC staff be appointed as a staff assistant to the Office of the Assistant Secretary for Health and Scientific Affairs, DHEW.
2. The Board adopted a resolution (Attachment III) expressing their continuing displeasure at the institution of fee for rental service on film loans at NMAC, but urging the development of a uniform fee for service policy on film loans for all DHEW and a revolving fund in NLM to support the film loan program.
3. The Board accepted the proposed plan for NMAC reorganization.
4. The Board accepted the proposed plan for fee for service for foreign loans.

Respectfully submitted,



Martin M. Cummings, M.D.
Executive Secretary to the Board of Regents
National Library of Medicine

ATTACHMENT I

RESOLUTION PASSED BY THE BOARD OF REGENTS

March 27, 1970

Consonant with the letter of November 21, 1969 from the Board of Regents to the Assistant Secretary for Health and Scientific Affairs, the Board reaffirms the urgency of the need for coordination of DHEW biomedical communications systems. The Board suggests that this may be effected through the appointment of a staff assistant from the Lister Hill National Center for Biomedical Communications to the Office of the Assistant Secretary for Health and Scientific Affairs.

Such an appointment should include explicit delegation of authority for effective and orderly coordination. The Board recommends that the National Library of Medicine be willing to designate a qualified person to fulfill this important function should the Assistant Secretary accept this recommendation.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

April 1, 1970

NLM-OD

Fee-for-Service at NMAC

Through: Assistant Secretary for Health and Scientific Affairs
Director, NIH

1. In my meeting with you on March 3, 1970 we discussed the possible introduction of fees for the distribution of audiovisuals by the NMAC. You indicated that the NLM should proceed with its plans to implement fees on July 1, 1970. In the plan which we prepared for your review on November 12, 1969, we outlined the following actions to be taken as part of that implementation:

- a. Develop a policy statement on DHEW distribution and sale of biomedical audiovisuals for consideration of the Assistant Secretary for Health and Scientific Affairs.
- b. Conduct a "market survey" including consultation with producers of audiovisual materials among sponsoring agencies to determine as nearly as possible the reasonable range for audiovisual loan fees.
- c. Establish criteria for identifying recoverable costs and develop firm cost estimates for the audiovisual distribution activity.
- d. Submit a request through legislative liaison channels for an amendment of PL 84-941 authorizing the establishment of a revolving fund.
- e. Include in the 1972 budget request an estimate of the funds necessary to capitalize the revolving fund.

2. The first action listed--the development of a policy statement on DHEW distribution and sale of biomedical audiovisuals must be done in the near future if a successful program of charging for loans is to be implemented. The remaining four actions can be developed at a later date. Only the authority for a revolving fund requires legislative action.

3. If NMAC is required to charge a fee to distribute a motion picture while other program organizations of DHEW are allowed to make free loans to the public, the NMAC distribution program could not operate effectively. Therefore, the policy statement must centralize health film distribution or the same policy should be applied to other film distribution programs.

4. Some films require free distribution in order to assure the widest possible dissemination of important health information. "Stop Rubella," sponsored by NCDC and distributed by NMAC, is one example. NMAC should be reimbursed by the sponsoring program for distributing these films. It seems to us that this problem cannot be solved without a decision by your office either to accept the restrictions on the film distribution operations of other organizations which fee-for-service at NMAC make necessary or to allow the continued operation of the NMAC on an appropriation basis.

5. The suggested policy necessary to allow the implementation of a sound fee-for-service system at NMAC is attached for your signature.

/s/ Martin M. Cummings, M.D.

Martin M. Cummings, M.D.
Director

Attachments

AM:GFRussell:CEHerbert:pah 3/26/70

OS-ASH

Fee-for-Service at NMAC

Heads of Health Agencies

1. In order to conserve the resources of the Department, the Department is converting the audiovisual distribution program of the National Medical Audiovisual Center to a fee-for-service basis. Beginning July 1, 1970, all individuals or organizations requesting audiovisual loans from NMAC will be required to pay a standard fee to support the cost of the service. On or before July 1, 1971 all other agencies of the Public Health Service will be required to distribute all health films through the Center.
2. Where films will be distributed free of charge to the public, the sponsoring program will reimburse NMAC at the same rate charged for the distribution of other films by NMAC.
3. NMAC will be responsible for coordinating sales of all health films distributed by the Department.
4. I have authorized the Director, NMAC, with the approval of the Directors, NIH and NLM, to implement this action and establish the procedure required.

Roger O. Egeberg, M. D.
Assistant Secretary
for Health and Scientific Affairs

NLM:AM:GFRussell:CEHerbert:pah 3/30/70

Identical memos to: HSMHA, NIH, F&DA, EHS

ATTACHMENT III

RESOLUTION PASSED BY BOARD OF REGENTS

March 27, 1970

The Board of Regents continues to express concern for any library program which erodes the principle of the free library and it does not approve the policy of a fee for rental service for film loans. However, if such a policy is adopted, the Board believes that the same charges for similar services should apply throughout HEW and further that funds collected for such services should be placed in a revolving fund in NLM to support the film loan program.

NATIONAL LIBRARY OF MEDICINE

RESUME OF REGIONAL MEDICAL LIBRARY GRANT APPLICATION

REVIEW BY BOARD OF REGENTS

March 26-27, 1970

<u>APPLICATION NO.</u>	<u>INSTITUTION</u>	<u>REQUESTED</u>	<u>FRC</u>		<u>BOARD OF REGENTS</u>	
			<u>APPROVAL</u>	<u>DISAPPROVAL</u>	<u>PRIORITY</u>	<u>OTHER</u>
2 G04 LM 00554-03	Univ. of Washington Seattle, Washington	\$233,893 234,760 249,117	\$170,000 180,000 190,000	\$181,000 192,000 203,000	223	
3 G04 LM 00556-02S1	College of Physicians Philadelphia, Pennsylvania	\$ 16,610 58,847 10,469	DISAPPROVAL			DIS
3 G04 LM 00628-02S1	Wayne State University Detroit, Michigan	37,395 35,900	37,395 35,900			DIS

NATIONAL LIBRARY OF MEDICINE

RESUME OF BOARD OF REGENTS RECOMMENDATIONS
MARCH 26-27, 1970

<u>RESOURCE GRANTS</u>	<u>INSTITUTION</u>	<u>COMMITTEE RECOMMENDATION & PRIORITY</u>	<u>TENTATIVE ENTITLEMENT</u>	<u>BOARD RECOMMENDATION</u>
1 G01 LM 00858-01	Jacksonville State Hospital Jacksonville, Illinois	338	\$ 8,131	CONCURRENCE
1 G01 LM 00870-01	Methodist Hospital St. Louis Park, Minnesota	331	1,576	CONCURRENCE
1 G01 LM 00872-01	Jewish Memorial Hospital New York, New York	336	4,622	CONCURRENCE
1 G01 LM 00873-01	St. Vincent Hospital and Medical Center Toledo, Ohio	218	6,185	CONCURRENCE
1 G01 LM 00881-01	Touro Infirmary New Orleans, Louisiana	291	4,426	CONCURRENCE
1 G01 LM 00884-01	Eye & Ear Hospital Pittsburgh, Pennsylvania	309	2,458	CONCURRENCE
1 G01 LM 00885-01	Henrietta Eggleston Hospital for Children Atlanta, Georgia	318	1,685	CONCURRENCE
1 G01 LM 00886-01	St. Joseph Hospital Baltimore, Maryland	327	5,344	CONCURRENCE
1 G01 LM 00887-01	Montefiore Hospital Pittsburgh, Pennsylvania	400	7,222	CONCURRENCE
1 G01 LM 00888-01	Michigan Cancer Foundation Detroit, Michigan	378	3,295	CONCURRENCE

<u>APPLICATION NUMBER</u>	<u>INSTITUTION</u>	<u>COMMITTEE RECOMMENDATION & PRIORITY</u>	<u>TENTATIVE ENTITLEMENT</u>	<u>BOARD RECOMMENDATION</u>
1 G01 LM 00889-01	Coney Island Hospital Brooklyn, New York	309	\$ 8,722	CONCURRENCE
1 G01 LM 00890-01	Presbyterian-University Hospital Pittsburgh, Pennsylvania	400	3,862	CONCURRENCE
1 G01 LM 00891-01	Queen Hospital Center Jamaica, New York	317	11,255	CONCURRENCE
1 G01 LM 00892-01	American River Hospital Carmichael, California	391	1,600	CONCURRENCE
1 G01 LM 00893-01	St. Luke's Hospital Center New York, New York	309	8,125	CONCURRENCE
1 G01 LM 00894-01	Texas A&M University College of Veterinary Medicine College Station, Texas	227	9,434	CONCURRENCE
1 G01 LM 00895-01	St. Joseph Hospital Memphis, Tennessee	345	1,813	CONCURRENCE
1 G01 LM 00896-01	Case Western Reserve University Cleveland Health Sciences Library Cleveland, Ohio	158	56,017	CONCURRENCE
*1 G01 LM 00897-01	Minot State College Minot, North Dakota	292	(Est Max) 8,000	CONCURRENCE
*1 G01 LM 00898-01	Moraine Valley Community College Oak Lawn, Illinois	336	2,000	CONCURRENCE
*1 G01 LM 00900-01	Georgia State University Atlanta, Georgia	309	6,000	CONCURRENCE

*Group II libraries-See information regarding Board of Regents policy decision behind numerical list of pending applications.

<u>APPLICATION NUMBER</u>	<u>INSTITUTION</u>	<u>COMMITTEE RECOMMENDATION & PRIORITY</u>	<u>TENTATIVE ENTITLEMENT</u>	<u>BOARD RECOMMENDATION</u>
1 G01 IM 00901-01	St. Margaret Memorial Hospital Pittsburgh, Pennsylvania	355	\$ 1,619	CONCURRENCE
1 G01 IM 00903-01	Philadelphia State Hospital Philadelphia, Pennsylvania	355	5,062	CONCURRENCE
1 G01 IM 00904-01	Mary's Help Hospital Dale City, California	364	3,078	CONCURRENCE
1 G01 IM 00905-01	St. Luke's Methodist Hospital Cedar Rapids, Iowa	436	6,000	CONCURRENCE

NATIONAL LIBRARY OF MEDICINE

RESUME OF BOARD OF REGENTS RECOMMENDATIONS

March 26-27, 1970

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
2 R01 LM00495-07 (Publ) Romanoff, Alexis L. Cornell University N.Y. State College of Agriculture Ithaca, New York "Biochemico-Pathological Studies of the Avian Embryo"	BCM	71	07	\$ 14,000	\$ 14,000 (263)	\$ 14,000		263
3 R01 LM00636-02S1 (Publ) Aita, John A. University of Nebraska College of Medicine Lincoln, Nebraska "Neurological Manifestations of General Disease"	BCM	70	02S1 03S1	733 783	Disapproval	733	783	100
								(Conditional Approval- Agreement to refund from royalties until amount of supply is refunded)
1 R01 LM00864-01 Hicks, June I. Dartmouth College Hanover, New Hampshire "Computerized Instruction in a Medical Library"	BCM	70	01 02 03	25,558 21,335 20,338	Disapproval			Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 R01 IM NS 00865-01 (Publ) Adams, Raymond D. Harvard Medical School Boston, Massachusetts "Translate Poliakov's Brain Neuronal Organization"	BCM	70	01	\$ 2,500	Deferral			Def.
1 R01 IM MH 00876-01 (Publ) Demos, George D. Long Beach California State College Foundation School of Education Long Beach, California "Sigmund Freud: Bibliography of Periodical Literature"	BCM	70	01	9,783	Disapproval			Dis.
1 R01 IM GM 00878-01 Glaser, Edmund M. University of Maryland School of Medicine Baltimore, Maryland "Principles of On-Line Computation in Biology"	BCM	71	01	12,935	\$ 12,935 (390)	\$ 12,935		390
1 R01 IM MH 00879-01 (Publ) Mueller, Donald J. University of Wisconsin School of Social Welfare Milwaukee, Wisconsin "Behavior Therapy Bibliography"	BCM	70	01	4,435	4,435 (385)	4,435		385

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Recommendation Priority	Other	Dis.
1 RO1 IM MH 00880-01 (Pub1) Rafish, Ethelyn Reiss-Davis Child Study Center Los Angeles, California "Index to Multi-Author Books in Child Mental Health"	BCM	70	01	\$ 5,000	Disapproval				
			02	5,000					
			03	4,800					
1 RO1 IM00882-01 Borko, Harold University of California Institute of Library Research Los Angeles, California "Semantic Foundations for Question-Answering Systems"	BCM	70	01	18,894	\$ 18,894	\$ 18,894	188		
			02	18,894	18,894	18,894			
					(188)				
1 RO1 IM HS 00883-01 Trueswell, Richard W. University of Massachusetts School of Engineering Amherst, Massachusetts "Physician Information Processing Systems"	BCM	71	01	35,984	Disapproval				
			02	41,934					
			03	41,934					
			04	3,300					
1 RO1 PM 00063-01 Dual IM Shilling, Charles W. George Washington University Department of Medicine & Public Affairs Washington, D.C. "Information for Radiation Paramedical Personnel"	BCM	70	01	28,591	Disapproval				

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS	
						Approval	Recommendation Priority
1 R01 DH 00184-01 Dual IM Knutson, John W. University of California School of Dentistry Los Angeles, California "Computer Aided Instruction in Statistics"	BCM	70	01 02 03	\$ 33,644 44,842 45,894	\$ 33,644 44,842 45,894 (163)	\$ 36,644 47,842 48,894	163
2 R01 AM 06049-09 Dual LM Lazarow, Arnold University of Minnesota College of Medical Sciences Minneapolis, Minnesota "Diabetes Literature Retrieval Project"	BCM	70	09 10 11 12 13	238,009 224,622 237,350 249,300 264,100	200,000 200,000 (254)	200,000 200,000 200,000 200,000	254
1 R01 IM 00877-01 Garvey, William D. Johns Hopkins University Faculty of Arts and Sciences Baltimore, Maryland "Scientific Communication in Biological Sciences"	BCM (AHR)	70	01 02 03	51,830 114,837 123,294	Disapproval		Dis.
2 R01 LM00011-05 Siegel, Rudolph E. Research Foundation of State University of New York School of Medicine Albany, New York "Galen's System of Physiology and Medicine"	HLS	70	05 06	14,718 14,718	14,718 14,718 (162)	14,718 14,718	162

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Recommendation Priority	Other
2 R01 LM00046-09 Debus, Allen G. University of Chicago Division of the Social Sciences Chicago, Illinois "The Evolution of Chemistry in the Service of Medicine"	HLS	71	09	\$ 26,714	Disapproval			Dis.
			10	16,197				
			11	15,348				
			12	31,450				
2 R01 LM00050-04 Wangensteen, Owen H. University of Minnesota College of Medical Sciences Minneapolis, Minnesota "Pre-Listerian Antiseptic Surgery Practices"	HLS	70	04	17,910	\$ 17,910	\$ 17,910	200	
			05	18,582	18,582	18,582		
			06	19,270	19,270 (328)	19,270		
1 R01 LM00765-01A1 Mountjoy, Paul T. Western Michigan University School of Liberal Arts and Sciences Kalamazoo, Michigan "The History of Animal Behavior Technology"	HLS	70	01A1	20,961	Disapproval			Dis.
			02	20,724				
1 R01 LM00811-01 Coulter, Harris L. Individual Washington, D.C. "History of Nineteenth- Century Medicine"	HLS	70	01	14,000	Disapproval			Dis.
			02	14,000				

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Priority	Othe
1 R01 LM00861-01 Hahn, Roger University of California College of Letters and Sciences Berkeley, California "Origins and Background of Mendel's Laws"	HLS	70	01	\$ 15,135	Disapproval			Dis.
1 R01 IM00866-01 Blanco, Richard L. Research Foundation at State University of New York Albany, New York "History of the Royal Army Medical Corps, 1789-1898"	HLS	70	01 02	19,229 4,079	Disapproval			Dis.
1 R01 IM00867-01 Kuhns, William J. New York University Medical Center School of Medicine New York, New York "History of Blood Transfusion in 19th Century America"	HLS	70	01 02 03	6,150 22,472 5,878	Disapproval			Dis.
1 R01 IM00868-01 Belkin, Johanna S. The Ohio State University Research Foundation College of Humanities Columbus, Ohio "Study of Earliest German Medical and Chemical Works"	HLS	70	01	13,312	Disapproval			Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 RO1 LM00869-01 Berman, Leo H. Hall-Brooke Hospital Westport, Connecticut "Oral History of Connecticut Psychiatry"	HLS	70	01	\$ 22,976 23,632 29,001	Disapproval			Dis.
1 RO1 LM00874-01 Childs, St. Julien R. INDIVIDUAL Baltimore, Maryland "Influence of Disease on Society in South Carolina"	HLS	70	01	10,900	\$ 10,900 (100)	\$ 10,900	100	
1 RO1 HS 00402-01 Dual IM (Publ) Thomas, William C., Jr. Columbia University Faculty of Medicine New York, New York "Literature Survey and Research in Health Politics"	HSR	71	01	26,765	15,000 (331)	15,000	200	
1 RO1 LM GM 00817-01 Meites, Louis Clarkson College of Technology School of Arts and Science Potsdam, New York "Data Center in Polarography"	MCHB	70	01	25,463 24,733	Disapproval			Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG		BOARD OF REGENTS		
					Recommendation	Disapproval	Approval	Priority	Other
1 RO1 IM00875-01 Shilling, Charles W. George Washington University Washington, D.C. "Information Needs of Medicinal Plants Researchers"	MCHB	70	01	\$ 29,549	Disapproval				Dis.
			02	29,390					
1 RO1 PM 00068-01 Dual LM Wortman, Paul Duke University Graduate School of Arts & Sciences Durham, North Carolina "Diagnostic Problem Solving in Medicine"	SSS	70	01	13,664	\$ 13,664	\$ 13,664	163		
				13,940	13,940	13,940			
					(163)				
1 RO1 PM 00069-01 Dual LM Conklin, James L. University of Michigan Ann Arbor, Michigan "Instructional Media and Cognitive Aids: An Evaluation"	SSS	70	01	102,895	Disapproval				Dis.
			02	100,065					
			03	99,815					
1 RO1 HD 04605-01A1 Dual LM Handler, Paul University of Illinois Urbana, Illinois "Population Dynamics-Computer- Assisted Instruction"	SSS	70	01A1	22,404	Disapproval				Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
3 R01 LM00411-03S1 Anastos, George University of Maryland Graduate School College Park, Maryland "Ticks, Hosts, Distribution and Disease Transmission"	TMP	70	03S1	\$ 4,955	\$ 4,955 (161)	\$ 4,955	161	

COMPETING RESEARCH AND PUBLICATION GRANTS
SUMMARY OF COUNCIL RECOMMENDATIONS
TRADITIONAL PROJECT GRANTS

INSTITUTE OR DIVISION: NATIONAL LIBRARY OF MEDICINE

COUNCIL DATE: MARCH 1970

TYPE OF REQUEST	TOTAL REQUESTED		APPROVED		REDUCED		DISAPPROVED		DEFERRED	
	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT
FY 1970										
NEW	22	\$499,873	5	\$ 84,537	0	\$	16	\$412,836	1	\$ 2,500
RENEWAL	3	270,637	3	232,628	1	38,009	0		0	
SUPPLEMENT	2	5,688	2	5,688	0		0		0	
TOTAL	27	776,198	10	322,853	1	38,009	16	412,836	1	2,500
FY 1971										
NEW	3	75,684	2	27,935	1	11,765	1	35,984	0	
RENEWAL	2	40,714	1	14,000	0		1	26,714	0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	5	116,398	3	41,935	1	11,765	2	62,698	0	
FY 1972										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
FY 1973										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
GRAND TOTAL	32	892,596	13	364,788	2	49,774	18	475,534	1	2,500

THE BOARD OF REGENTS
of the
NATIONAL LIBRARY OF MEDICINE

MINUTLS OF THE 36TH MEETING

June 18-19, 1970 - Bethesda, Maryland

- MEMBERS PRESENT: Dr. William G. Anlyan, Mr. Bruno W. Augenstein, Dr. William O. Baker, Dr. Harve J. Carlson, Dr. Robert H. Ebert, Dr. Jack M. Layton, Dr. L. Quincy Mumford, Dr. Marc J. Musser, Dr. Kathryn M. Smith, Dr. George W. Teuscher, Lt. General Alonzo A. Towner, USAF, Mr. Alfred Zipf
- MEMBERS ABSENT: Vice Admiral George M. Davis, USN, Lt. General Hal B. Jennings, USA, Dr. Max Michael, Jr., Dr. Jesse L. Steinfeld, Dr. Frederick H. Wagman.
- ATTENDEES: Mr. Henry Dubester represented Dr. Harve Carlson, one day. Colonel Gerrit L. Hekhuis, M.C., USAF, represented Lt. General Alonzo A. Towner, one day. Dr. Paul Q. Peterson represented Dr. Jesse L. Steinfeld one day. Captain C. L. Waite, M.C., USN, represented Vice Admiral George M. Davis, USN, both days.
- ESTS: Dr. Robert Q. Marston, Director, NIH
Dr. H. Fernandez-Moran, Professor of Biophysics, University of Chicago
Dr. Harold Schoolman, Director, Education Service, Veterans Administration
Mr. John Sherrod, Director, National Agricultural Library
Dr. Fred Cole, President, Council on Library Resources, Inc.
Mr. William G. Ketterer, Office of the Secretary, General Counsels Office, DHEW
Mr. Robert C. Diefenbach, Assistant Director of Audio Visual Services, Office of Public Information, DHEW
Mr. Donald Chill, Office of Program Planning and Evaluation, NIH
Mrs. Ileen Stewart, Executive Secretary, History of Life Sciences Study Section and Biomedical Communications Study Section, DRG, NIH
Miss Cecelia Conrath, Chief, Continuing Education and Training Branch, Regional Medical Programs, HSMHA
Mr. Duke McCloud, DHEW Management Intern
- STAFF: Dr. Martin Cummings, Dr. Clifford Bachrach, Mr. Jerome Barnett, Dr. John Blake, Mrs. Ruth Bortz, Dr. Jeanne Brand, Mr. Arthur Broering, Mr. Raymond Brown, Mr. William Caldwell, Mr. Kenneth Carney, Mr. Peter Clepper, Mr. Lawrence Coffin, Miss Mary Corning, Dr. Ruth Davis, Mr. Joseph Foley, Miss Willerma Frazier, Mrs. Louise Gamage, Miss Frances Hasemeier, Dr. Wayne Herron, Mrs. Frances Howard, Dr. Ann Kaufman, Dr. Henry M. Kissman, Dr. Leroy Langley, Dr. Joseph Leiter, Dr. G. Burroughs Mider, Mr. Peter Monk, Dr. Jaroslav Nemeč, Dr. Peter Olch, Mrs. Rita Pusey, Mr. George Russell, Mrs. Ann Sabin, Mr. Ralph Simmons, Mr. Samuel Waters, Mr. Robert Walkington

MARCH 1970 MINUTES APPROVED, FORTHCOMING MEETINGS SCHEDULED

The minutes of the March 26-27, 1970 meeting were approved. The dates of November 19-20, 1970 and March 22-23, 1971 were reaffirmed. The dates of June 14-15, 1971 were tentatively selected for the third meeting in FY 1971.

OPENING REMARKS OF THE CHAIRMAN OF THE BOARD

Mr. Zipf welcomed Dr. Paul Peterson, Deputy Surgeon General, representing the Assistant Secretary for Health and Scientific Affairs and the Surgeon General, and Dr. Robert Marston, Director of NIH. He also introduced two new Board Members, Lt. Gen. Alonzo Towner, Surgeon General, Department of the Air Force, and Dr. Marc J. Musser, Chief Medical Director of the Veterans Administration. Congratulations were presented to Rear Admiral Charles L. Waite representing the Office of the Surgeon General, Department of the Navy, on his recent promotion. Dr. Cummings was asked to introduce Dr. Henry Kissman, newly designated Associate Director for Specialized Information Services.

REMARKS BY DIRECTOR, NIH

Dr. Marston referred to the joint meeting of former Secretary HEW, Robert Finch and incoming Secretary HEW, Elliot Richardson, with the senior management staff of the department. There was a true sense of loss with the departure of Mr. Finch joined with a true sense of anticipation for the future under the leadership of Mr. Richardson. Mr. Richardson stated that he was keenly aware of the problems facing HEW and felt it was imperative that there not be a polarization between those who are sensitive to the political issues of the country and the career health professionals. Mr. Richardson is to receive intensive briefings during the next month.

In brief, the picture at NIH, in spite of rumors, is healthy. NIH is almost fully staffed at the upper management levels and rumors of problems in hiring key people are greatly exaggerated. Considering budget and overall problems, NIH is better off than many other HEW programs and other health organizations outside of the government.

REMARKS BY DR. PAUL PETERSON, DEPUTY SURGEON GENERAL

Dr. Peterson first read a prepared statement from the Surgeon General in which Dr. Steinfeld acknowledged the important role of NLM in biomedical communications and commended the job being done by the Library. He will count on and welcome the assistance of the Board of Regents as still broader communications problems are faced.

In his personal statement, Dr. Peterson spoke highly of the administrative skills of Mr. Richardson. He felt that Mr. Finch will provide an important link between HEW and the Executive Office of the President. No precipitous changes in the Secretary's senior staff are foreseen.

Dr. Peterson foresees a stringent budget for HEW in FY '72. There is a desire to support research programs without further reductions; to provide increased support in health manpower areas and the support of medical education; to protect the budgets of FDA and other consumer protection areas with hopefully a modest increase; to continue emphasis and concern in the area of family planning. If it is possible to maintain this posture throughout the development of the FY '72 budget, we should have a worthy program in spite of stringent fiscal restraints.

Dr. Peterson next commented upon the Ash Committee Report, a study of the Executive arm of the Federal Government, responsible for the shift in role of the Bureau of the Budget. A second study on problems of the environment is rumored to recommend a new Environmental Protection Agency. Many PHS programs will undoubtedly be shifted to this new agency with the concomitant need for a reorganization of the PHS.

It is hoped the FY '72 budget will be out of Congress by August. Dr. Peterson was optimistic regarding the budget, stating that NLM can assume as an absolute base the FY '71 budget with annualization built in and more optimistically can assume for planning purposes, a 7% overall increase.

PRESENTATION OF REGENT'S AWARD FOR SCHOLARSHIP OR TECHNICAL ACHIEVEMENT

Dr. Cummings reported that after careful consideration of ten nominations, the committee and the Board judged that the work which best met the criteria of the Award was the published work International Bibliography of Medicolegal Serials by Dr. Jaroslav Nemeč of the RSD. Following Dr. Nemeč's introduction to the Board, Mr. Zipf presented him with a certificate and a check for \$100.

REPORT OF THE DIRECTOR, NLM - DR. MARTIN CUMMINGS

Report on the H.R. Budget Hearing

The hearings were friendly but relatively nonproductive. Mr. Hull of Missouri presided. He opened the questioning by noting that there were no new funds requested for new grants in FY '71 and asked whether this was due to fiscal constraints. This was confirmed. The Committee expressed an interest in the Regional Medical Library System, its organization and function. The Director's suggestion that the support of RML services could best be handled through the contract mechanism

rather than the grant mechanism was warmly received. Interest was expressed in the Lister Hill Center - University of Vermont and Dartmouth network to support undergraduate and continuing medical education. The Director was asked if NLM intended to take over and operate all other existing toxicological information systems, and he pointed out that NLM was trying to develop a coordinated effort through which toxicological information could be exchanged with compatible technologies and in standardized formats. An interest was also expressed in the progress of MEDLARS II development and especially in the cost sharing contract developed to fund this project. Congressman Michel asked if NLM was instituting a fee for service on interlibrary loans and was pleased to learn that this policy was to be started with foreign services.

Review of NLM Budget

Dr. Cummings reviewed the NLM budget from FY '68 through the proposed budget for FY '72, the latter reflecting a 5% reduction below FY '71 of some \$1,700,000. During the past five years there has been a steady decline both in fiscal resources and personnel available to the NLM. Concern was expressed by the Board over the increased contribution to the NIH Management Fund in FY 1970 (ca. 40%) in light of a decrease in NLM budget (ca. 17%).

Departmental Operational Planning System

DHEW will establish a department-wide operational management plan beginning July 1 to permit top level management to evaluate the performance of the agencies in meeting certain stated objectives. NLM asked to be included in this plan to provide an information channel to the Surgeon General and the Office of the Secretary. The NIH supported this move by including biomedical communications as a major element in the NIH Goals for Operational Planning. It was not retained in the final HEW listing of major objectives.

Review of NLM Grant Authorities

Pursuant to a Bureau of the Budget request for a review of granting authorities within DHEW with the view of consolidation, the Director, NLM volunteered to reduce the seven current granting authorities to four. A task force, however, recommended a reduction to two. Dr. Cummings objected and was supported by the Director, NIH. Subsequent negotiations with the Assistant Secretary for Health and Scientific Affairs led to a proposal that these three separate authorities be retained:

1. Construction
2. Regional Medical Library and Resource Grants
3. Research, Training and Publication Grants

The final Departmental judgement is not known at this time.

Fee for Service for Foreign Loans

NLM is now committed to this policy as of July 1, 1970. Money collected is to be returned to the U.S. Treasury. NLM seeks authority for a revolving fund in order to recapture this money for support of the NMAC.

Other Items

A joint effort to develop a national serial record data bank continues with the National Agricultural Library providing funding to the Association of Research Libraries to develop the basic framework of the system, the Library of Congress providing technical personnel, and NLM providing the computer facilities for the integration of files. Mr. Sherrod and Dr. Mumford commented briefly on the difficult and challenging nature of this endeavor.

Dr. Cummings stated that no new significant developments have occurred since the last Board meeting in the Williams and Wilkins copyright case. The hearings before the Court of Claims will probably begin in the Fall of 1970.

Dr. Cummings called attention to the new recurring bibliography produced as a pilot issue entitled Selected References on Environmental Quality as Related to Health. Dr. Mider stated that responses from selected users have been generally favorable. Bureau of the Budget authorization will be sought to permit publication by January 1, 1971.

Dr. Cummings commended the Acting Director, Mr. Jerome Barnett, for his handling of difficulties arising from the reorganization of NMAC.

He announced that Dr. Charles Bridgman currently head of the Office of Learning Resources, University of California, San Diego, has agreed to accept the position of Director of NMAC effective September 1, 1970. He will serve as a Consultant during the summer.

The Director closed his presentation with a presentation of his views on the merits of contracts as opposed to grants for the funding of Regional Medical Libraries. He stated the RMLs are service oriented activities and thereby are logically supported by contract. The grant mechanism was developed by NIH for the support of research and training and NLM merely applied an existing funding mechanism to a different kind of activity in which NIH had not previously been engaged, namely, the support of service. It is difficult to identify costs and reimbursement for service through the grant mechanism. It is a more permissive arrangement. A contract not only gives NLM a better opportunity to support the indirect costs the institutions bear, but also provides

a better management instrument through which to build a network. A department-wide philosophy in HEW has been expressed recently urging the use of contracts for the support of services.

Dr. Ebert, as a representative of an institution in which an RML is functioning, supported Dr. Cummings' views.

REPORT ON THE NATIONAL MEDICAL AUDIOVISUAL CENTER -
MR. JEROME BARNETT

Mr. Barnett reviewed the significant highlights of activities at the National Medical Audiovisual Center. There has been a major shift from the production of audiovisuals to activities which support medical and allied health sciences education, especially acquisition, organization and distribution. Beginning in January 1970 a series of seminar workshops on production and use of audiovisuals in support of education in medicine and the allied sciences have been held in Atlanta and have been well received. NMAC recently sponsored a conference attended by 26 full-time medical school directors of biomedical communication, the first opportunity they had had for an extensive exchange of ideas and discussion of problems and programs relating to development, organization, staffing, funding and resource sharing among medical schools.

A videotape duplication program has been developed which makes rapid access to the tapes possible for large numbers of users. The requestor provides a reel of blank videotape and NMAC duplicates from their master tape to the equipment specifications required by the requesting institution.

Under a cooperative media development program recently authorized by the Director, NLM, exploratory meetings have been held with representatives of several medical schools and professional organizations for cooperative efforts in the development of audiovisual media.

The International Index of Medical Film Data, containing approximately 24,000 titles of health related audiovisuals has been converted from a manual system to computerized tape files under contract with the Atlanta Data Processing Center (GSA). Plans for the next fiscal year include a review of the Index by an NMAC/NLM Library Operations team in order to convert the present data files to a form compatible with MEDLARS II, saving about \$30,000 per year.

A preliminary review of all films in the NMAC distribution system will eliminate those titles which are outmoded or are no longer in scope. New materials for the collection are being carefully reviewed and evaluated prior to acquisition.

These NMAC programs have proceeded in the face of consistently reduced personnel staffing since FY'67.

Mr. Augenstein inquired about storage facilities at NMAC stating that they were rather primitive at the time of his visit two years ago. Mr. Barnett reported that 25,000 square feet of storage space in a fireproof building is now being leased by NMAC.

On inquiry it was stated that there is little or no coordination of NMAC activities with Regional Medical Programs (RMP) in the south and southwest. Dr. Cummings stated that there is an honest difference of opinion on the national versus regional nature of audiovisual programs in the RMPs. Dr. Cummings expressed concern over the duplication of effort in the RMPs and stated that he hoped the increased publicity and the improved situation at NMAC with the reorganization would encourage the RMPs to utilize NMAC.

Mr. Barnett assured the Board that in the near future the turn around time on film requests would be greatly improved. Mr. Zipf expressed the appreciation of the Board for the superior job Mr. Barnett has done in instituting the reorganization plans at NMAC.

OVERVIEW OF MEDLARS USER ORIENTATION PROGRAMS -
MR. WILLIAM CALDWELL

Mr. Caldwell, Deputy Chief, Bibliographic Services Division, presented a review of the MEDLARS User Orientation Program that has been delivered in 102 orientation sessions throughout the country to 2,500 members of the biomedical community. This flexible orientation program has proved exceedingly useful to both NLM and MEDLARS users, as it exposes the latter to the intricacies of a controlled vocabulary, the concepts involved in indexing, and the logic of a MEDLARS computer search. When possible the potential user actually indexes a journal article and analyzes a MEDLARS search in his own field or specialty. The Board expressed interest in increasing the number of potential MEDLARS users who are exposed to this orientation program. It was suggested that this presentation should be presented to the large professional societies such as the American College of Surgeons, the American College of Physicians, and the American Nursing Association at the annual meetings. It was also suggested that some means be found to present this program to large numbers of housestaff and medical students. The latter can best be achieved by having an individual at each medical center trained to give such a presentation. The Federation of American Societies for Experimental Biology and the Society of Clinical Investigation meetings in Atlantic City in May would be an important concentration of potential users. The Chairman of the Board expressed concern over "beating the bushes" too thoroughly for potential MEDLARS users until MEDLARS II is

fully developed and able to handle the load. There was general agreement that the interns and residents are the most likely potential users of the system and any effort to reach this group should be encouraged.

ULTRAMINIATURIZATION AND INFORMATION STORAGE RETRIEVAL -
DR. H. FERNANDEZ-MORAN

Dr. Fernandez-Moran reviewed the development of electron optics and its application in electron microscopy. He then discussed the more recent use of the electron microscope for demagnifying, specifically to demagnify printed information and printed circuits by reversing the conventional use of the electron microscope. Demagnification by electron microscopy permits one to demagnify by factors of 10,000 up to 100,000; one might reduce the entire collection of NLM to an 8x10 inch sheet of paper. Ultraminiaturization of printed circuits permits a tremendous increase in computer memories. The most permanent information storage devices may be such electron microengraving devices as the films are refractory to extremely high temperatures and can withstand X-ray and neutron blasts.

He also discussed and demonstrated holography, wave front reconstruction microscopy, an imaging system developed by Dennis Gabor in 1948. The technique was not practical until the advent of the laser when holograms could be made using visible light. Holography gives one a true picture of an object unmatched by any other imaging system. It requires a coherent illuminating beam, divided so that one part lights the object (subject beam) while the other, called the reference beam, goes directly to the film. At the film the reference beam and the light from the object cause an interference pattern that contains all the information on the image in three dimensions. When the film is developed, it is viewed with a coherent light source. This provides substantial possibilities for information retrieval. The subject beam is specific in that a scanning apparatus contains the identifier of the item being sought and only when the subject beam finds its twin does the information emerge. Some feel the memory function of the brain is similar to holography.

Dr. Fernandez-Moran closed his presentation by urging that a concerted and centralized effort be made in this country to support further research in ultraminiaturization. He urged the Lister Hill Center to take a position of leadership among the Federal Agencies.

FURTHER DISCUSSION ON REGIONAL MEDICAL LIBRARIES
WITH SPECIAL REFERENCE TO THE NEW YORK ACADEMY OF MEDICINE -
DR. LEROY LANGLEY AND MR. SAMUEL WATERS

Dr. Langley referred the Board to The Regional Medical Library 1970-- a Status Report, a detailed evaluation prepared by Mr. Robert Walkington and Dr. Wayne Herron in response to the Board's request at the March meeting. He hoped it would be the basis for a continuing dialogue at future meetings.

He confined his remarks to those items that are particular problems and require the consultation and advice of the Board. These included the questions of who are qualified users of the system; what should be the make-up of the RML Advisory Committees and what should the Committees role be; should a member of NLM staff be on these Committees; what should be done to coordinate the activities of the RMLs with the RMPs; what is the appropriate administrative structure for RMLs, centralized or decentralized. Further questions include the concern for the concentration of services in the metropolitan area about each library; the variable degrees in educational and training functions from library to library; the slow progress in the preparation of the union list of serials; and finally the relationship between the Resource Grant Program and the Regional Medical Libraries Program.

Discussion by the Board and comments by Dr. Cummings stressed the fact that the problem of qualified users was not one of profit making institutions versus nonprofit making organizations, but rather one of the eligibility of access to the system and of loading and queuing problems. It was felt that the discrepancy in RML use was in significant part due to human nature and no amount of publicity in the outlying areas would greatly increase the user population from these areas.

Dr. Cummings believes that evaluations of RMLs at this point should be based only on the quality of service without regard to the ability of establishing training and educational programs.

Mr. Samuel Waters presented material on the Regional Medical Library for New York and Northern New Jersey as it was felt that the real problems this RML presented would provide a better framework on which to consider the questions raised by Dr. Langley.

This RML is a problem due to "internal politics" in NLM's view and not enough money in the RML's view. Mr. Waters presented a historical review of the negotiations and final selection of the New York Academy of Medicine as the RML for this region. It can best be summed up as a recurring disagreement on the amount of funding by NLM, internal operational and administrative problems at the New York Academy, a

prolonged delay in the onset of RML services after funding, and a decentralized program. Vigorous leadership has been lacking and a lack of flexibility in policies has led to poor performance of services in the few months of operational experience available for examination. It is hoped that the New York - Northern New Jersey RML can benefit from the experience of other decentralized RMLs when the latter have more experience. A critical review of this RML will be made before the November Board meeting in order that the grant may be terminated if necessary in May of 1971.

This RML reflects the following problems raised by Dr. Langley: There is no active advisory committee. There are still physicians in the immediate area who do not know of the public services available at the Academy. The decentralized versus the centralized issue is here seen in the worst way as the central institution has not made a true commitment to give service but wishes to act as an agent to get other local libraries to do the work. The question of qualified users is raised as the Academy gave services to its members at one level and charged non-members for the same services. The Board recommended that an alternative institution be identified in order that there not be a lag period if the grant with the Academy is terminated.

REPORT TO THE CONGRESS OF THE U.S. ON INFORMATION GATHERING AND
DISSEMINATION ACTIVITIES OF THE NLM/NIH/DHEW BY THE
COMPTROLLER GENERAL OF THE U.S. - DR. G. BURROUGHS MIDER

Following a 2-year visitation by a team of auditors from the General Accounting Office who reviewed all NLM programs except NMAC, a first draft report was received at NLM in April 1970 for review and comment. Three recommendations were issued by GAO.

1. "We recommend that the Secretary of HEW provide for adequate coordination on the departmental level, possibly through the Assistant Secretary for Health and Scientific Affairs, of the Library's improved MEDLARS operation with the health information requirements and activities of other HEW agencies charged with health program responsibilities."
2. "On the basis of our cost comparison for the initial equipment to be installed, we believe that it would be more economical for the Government to purchase the computer and related ADP equipment for MEDLARS II rather than to lease it. We therefore recommend that the Secretary provide for the Director of the Library to determine the most economical method of acquiring MEDLARS II equipment in its two stages of implementation and to the extent practicable, take action to secure the maximum savings to the Government in the acquisition of this equipment."

3. "We recommend that the Secretary of HEW require that a reappraisal be made of the Library's policy of not charging a fee for furnishing photocopies under the interlibrary loan program, with a view toward establishing a fair and equitable fee schedule for these services."

NLM Management agreed with items (1) and (2) but was vigorously opposed to item (3). Extensive discussions with the GAO auditors in April and in May produced some sympathy for the Library's position but no change in the recommendation. Photocopying is just that to the auditors, whether it be photographic reproduction of an historical document or picture for which a charge is made to cover costs, or a photocopy produced at the Library's initiative in lieu of providing the original as an interlibrary loan.

The NLM traced the history of the interlibrary loan service and the several recommendations of the Board of Regents, including the relevant stipulations in the original National Library of Medicine Act now codified as Part H of the Public Health Service Act. The missions and practices of the NLM and the Library of Congress and the National Agricultural Library were examined and compared, as were the complexities which would be introduced into the Regional Medical Library System by instituting fees for interlibrary loan service at the NLM which Part I of the Public Health Service Act (Sec. 398(c) (1) (B)) specifies shall be free.

The report went forward and NLM understands that the Office of the Secretary HEW has agreed to the position taken by the Library. It is anticipated that this report will go to Congress before the end of the year.

REPORT FROM HISTORY OF MEDICINE DIVISION WITH SPECIAL
REFERENCE TO THE PRINT COLLECTION - DR. JOHN B. BLAKE

Dr. Blake reviewed the development of the Print and Photograph Collection from Dr. Billing's original accession of a group of portraits in 1879 until more recently, when an emphasis has developed on the acquisition of graphic art of a medical interest, both Renaissance and Modern. The focus of the Print Collection is on portraits, on social, institutional and the artistic aspects of medical history. Slides were shown of representative material from the various segments of the Print Collection.

REGULATIONS MODIFIED BY THE GENERAL COUNSEL'S OFFICE -
MR. GEORGE F. RUSSELL

Draft regulations governing use of NLM facilities, collections, and related services were considered and endorsed by the Board in November 1967. Organizational changes have resulted in a new draft (See Attachment 1). The changes in the new draft are as follows:

1. A new subsection on audiovisual materials to reflect the addition of the National Medical Audiovisual Center in Atlanta to the NLM organization. See 4.4 (d) (2).
2. A new subsection on gifts and restricted materials. See 4.4 (d) (6).
3. A new subsection excluding the availability of facilities, collections and related services of the Regional Medical Libraries from coverage under these regulations. See 4.1 (b) (4).
4. A new subsection on the use and availability of MEDLARS tapes. See 4.5 (c).

Discussion ensued over the NLM's wish to insert the word "availability" in the first sentence, page 9 of the Draft in order that it would read "The availability and use of such tapes shall be subject to such further conditions as the Director may prescribe when in his judgement necessary to further the purpose of the Library." rather than "The use of such tapes...." (See Attachment 1). Mr. William Ketterer of the General Counsel's Office, NIH urged the Board to permit the Notice of Proposed Rule Making to be published as it stands. Lengthy discussion did not clarify the Board's understanding of the General Counsel's Office objection to this insertion, but it was recommended that the draft be approved as it was originally written (without the insertion) with the understanding that there would be another opportunity to review the proposed regulation.

PRESENTATION OF COMPLETED PORTION OF PLANNED NLM TV PROGRAM
SCHEDULED FOR NBC ON AUGUST 9, 1970

The Board reviewed the audiovisual portion of the program as photographed and planned by Mr. Rob Diefenbach and narrated by Mr. Peter Monk. All agreed it was a professional production and would be useful in a packaged format as an introduction to NLM.

EXTRAMURAL PROGRAMS 1/ 2/ 3/REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS - Dr. Leroy Langley

Dr. Langley first reviewed the EMP domestic programs. He opened his discussion with an examination of Medical Library Assistance Act of 1965 and some of the new elements in Medical Library Assistance Extension Act of 1970. The Extension Act of 1970 continues the authorization of the Extramural Programs for three years with an initial authorization of \$23.5 million and an annual increment of \$2 million for the second and third year. When the Construction funds (no longer administered by NLM) are subtracted, the authorization is \$12.5 million, \$13.5 million, and \$14.5 million. The Extension Act authorizes a limited transfer of funds (10%) from one program to another as long as the amount transferred does not exceed 20% of the amount in the recipient category. The Extension Act also eliminates the need to base Resource grants on the operating budget of the grantee library and places emphasis on the provision of services, rather than the acquisition of materials.

EMP Domestic ProgramsConstruction Program

Authority for the administration of this program has been transferred to the Bureau of Health Manpower and no funds have been appropriated by Congress.

Research and Development

Though \$3 million a year were authorized in its 1965 Act and in the Amendment of 1970, the funds appropriated have never approached this figure. The appropriation for 1970 and estimated for FY '71 is \$590,000, of which \$550,000 is already committed. The amendment also contains the authority for demonstration projects which enables evaluation of new techniques and procedures in the biomedical information field.

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- 1/ Proceedings of meetings are restricted unless cleared by the Office of the Director, National Institutes of Health. The restriction relates to all material submitted for discussion at the meetings, the agenda for the meetings, and supplemental material, and all other official documents.
 - 2/ For the record, it is noted that members absent themselves from the meeting room when the Board has under individual discussion applications (a) from their respective institutions, (b) in which a conflict of interest might occur.
 - 3/ The Board of Regents, when considering the Extramural Programs of the NLM, also consists of the Board of Regents Advisory Council for Extramural Programs and the National Medical Libraries Assistance Advisory Board and concurrently discharges the responsibilities of all three bodies.

The Associate Director for Extramural Programs believes that when there is a wide discrepancy between the cost of approved projects and funds to support the programs, the problem of relevance becomes most important. Accordingly, it is planned to ascertain the areas of research of primary importance to NLM's mission, to encourage research in these areas, and to fund only the most meritorious approved projects.

Dr. William Baker strongly supported a sharper focus on selection of those approved projects to be funded and felt it should have been done earlier, even when there were sufficient funds to support all approved projects.

Dr. Schoolman pointed out inherent dangers in that too sharp a focus may fail to support some highly creative work, merely because it appears less immediately relevant to the mission. It is important to remain as flexible as possible to reach a happy medium.

Dr. Baker felt that Dr. Schoolman's comments were well-taken; it should be possible to include the creative, seemingly nonrelevant research in this sharper focus, but the program director must be able to justify its eventual importance or relevance to Congress and the country.

Training Grants and Fellowships

In FY '67 and '68 the appropriation actually matched the authorization. This year the appropriation decreased. Dr. Langley stated that further evaluation of the focus of training programs was necessary. One concept would be to provide additional training for current library school graduates.

Special Scientific Projects

This program was designed to support unique projects that do not readily fit into other categories. The Associate Director for Extramural Programs suggests that these funds be used to support recognized experts in synthesizing the literature in their own field.

Regional Medical Libraries

(This program was discussed in detail earlier in the meeting.)

Resource Grants Program

Dr. Langley believes that this, the largest EMP program, requires close coordination with the Regional Medical Library (RML) program. There should be a master plan which considers Resource grant requests and RML plans in light of the needs of a region.

New policies for this program have been studied, discussed, rewritten, and are still under consideration. The Facilities and Resources Committee disagreed with staff recommendations a month ago. They

recommended that an ad hoc committee be called together to meet with the EMP staff to consider the problem. An ad hoc committee did develop a program for the expenditure of Resource funds which established three classes of libraries based on their size, budget, and service function and allocated grants of \$35,000, \$10,000, or \$3,000 depending on the category of Resource Library, Community or District Library, or Community Hospital Library. Dr. Schoolman felt the plan too rigid; it might be used for guidelines, but should not be a framework into which each grant request must fit. Particular concern and discussion was presented regarding the \$3,000 grant to community hospital libraries for the establishment of a core collection. Drs. Anlyan and Ebert pointed out that money for these libraries was legally recoverable as overhead costs in Medicare and Medicaid programs. NLM should provide the expertise and lists of what to buy, but not the money.

Dr. Cummings felt some formula must be found to support the community hospital library as it can provide a base for continuing medical education. The "core library" that has been identified and costs \$2,000-\$3,000 can respond to 70% of requests of practicing physicians according to its developers.

Publications Program

The same problem exists as in the Research Program, a continuing discrepancy between approved applications and available funds. A sharpened focus is therefore necessary here as well.

Dr. Langley next reviewed the Federal Assistance Streamlining Task Force (FAST) recommendations following their evaluation of EMP.

Recommendations for Training Program

1. Eliminate routine review of applications by the Board. Have the Board set up the criteria for determining those special applications it wants to review.
2. At present, the Associate Director for EP signs the award statements. The Director reviews applications over a certain dollar level. FAST recommended that the Director review applications on the basis of program criteria, rather than a dollar level.
3. New and renewal grants should be awarded as soon as funds are available. Type 5 awards should be made early in the 3rd quarter.
4. Eliminate the HEW expenditure control plan.
5. Decrease the requirements for prior approval.
6. Have the Training Committee review fellowship applications.

The Board concurred with these recommendations with the exception of items 1 and 2. It was felt that the Director, NLM would be abdicating his executive responsibility if he does not routinely review the training grants over \$50,000. It was also pointed out that the Board should routinely be provided with all grant applications for their information and the EMP staff should identify those grants with special problems.

Recommendations for Publications and Research Programs

1. Eliminate the HEW expenditure control plan.
2. Eliminate the necessity for Director's concurrence on grants over a certain dollar level; delegate complete authority to the Associate Director for EMP.
3. Reconsider carry-over; that is, press for two-year instead of one-year funds.
4. Grants should be made as early as possible; at the latest, immediately after the March Board meeting.

The Board concurred with these recommendations except for item 2, where again it was felt the Director, NLM would be abdicating his executive responsibility if he did not routinely review all grants over \$50,000.

Recommendations for Resource Grant Program

1. Eliminate Board review, unless staff identifies specific problems.
2. Eliminate Resources Committee review on small grants -- leave to staff.
3. Eliminate the HEW expenditure control plan.
4. Eliminate separate expenditure report; making reporting a part of the Type 5.
5. Consider consolidating the two primary review committees into one.
6. Reduce the requirement for prior approval.

The Board concurred with these recommendations, except for item 2. It was recommended that this statement be changed to indicate no routine Resources Committee review on grants of \$3,000 or less.

Review of Applications Needing Special
Consideration by the Board of Regents Subcommittee
for Extramural Programs

The Subcommittee met with the Extramural staff on June 17, 1970 to discuss certain regional, research, publications, and training grant applications

which required special consideration, such as those applications requesting more than \$50,000 per year, all split vote recommendations from initial review, and where there were questions relative to the recommendation.

Consideration of Pending Applications

The Board of Regents acting concurrently as the Board of Regents Advisory Council for Extramural Programs and as the National Medical Libraries Assistance Advisory Board, reviewed the following grant applications:

Regional Medical	Reviewed	3	\$294,265
Library Grants	Approved	3	221,538
Resource Grants	Reviewed	31	
	Approved	30	
	Disapproved	1	
Research and	Reviewed	27	946,479
Publication Grants	Approved	9	153,179
	Disapproved	14	544,371
	Deferred	4	217,683
Training Grants	Reviewed	5	335,980
	Approved	4	206,127
	Deferred	1	70,000

Dr. Langley called to the attention of the Board the latest legislative developments and recent changes in the administration of grants as outlined in the DRG Administrative Report.

He requested that the Board members bring their gray workbooks with them to future meetings, explaining that the preparation of duplicate sets of these books created a problem with a reduced staff. The Board members readily agreed to this.

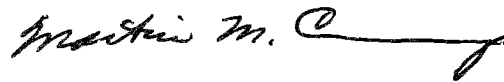
Dr. Langley called to the Board's attention the list of interim actions which were negotiated by staff subsequent to the March 1970 Board meeting.

Summaries of Board actions on all Extramural Grant Programs are appended to these minutes.

ACTIONS TAKEN BY THE BOARD IN GENERAL SESSION
June 18-19, 1970

1. The Board approved the proposed modification of NLM regulations as drafted by the General Counsel's Office for publication as Notice of Proposed Rule Making.
2. The Board reviewed the FAST recommendations for the Extramural Program and recommended several modifications.
3. The Board presented the first Regent's Award for Scholarship or Technical Achievement to Dr. Jaroslav Nemeč of the Reference Services Division, NLM.

Respectfully submitted,



Martin M. Cummings, M.D.
Executive Secretary to the Board of Regents
National Library of Medicine

Attachment

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ATTACHMENT 3 /

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

[42 CFR Part 4]

NATIONAL LIBRARY OF MEDICINE

Notice of Proposed Rule Making

Notice is hereby given that the Director, National Institutes of Health, with the approval of the Secretary, Department of Health, Education, and Welfare, proposes to amend Subchapter A of the Public Health Service regulations by adding a new Part 4 prescribing rules under which the facilities, library collections and related services of the National Library of Medicine shall be made available to public and private agencies, organizations, and institutions, and individuals. The proposed regulations were formulated after the advice and recommendations of ~~the~~ ^{the} Board of Regents of the Library.

The proposed regulations relate solely to the utilization of public property comprising the Library and to the availability of the benefits provided thereby and is therefore exempt from requirements of the Administrative Procedure Act (5 USC §553) pertaining to public participation in rule making. However, since a large number of public and private agencies, and individuals engaged in health related activities have a direct interest in such benefits, public participation in the formulation of such regulations is deemed appropriate.

Accordingly, inquiries may be addressed, and data, views and arguments relating to the proposed regulations may be presented in

writing, in triplicate, to the Director, National Institutes of Health, 9000 Rockville Pike, Bethesda, Maryland 20014. All relevant material received not later than 30 days after publication of this notice in the Federal Register will be considered.

Notice is also given that it is proposed to make any regulations that are adopted effective upon publication in the Federal Register.

It is therefore proposed to amend Subchapter A of Chapter I of Title 42 of the PHS regulations by adding immediately after Part 2, the following new Part 4:

PART 4--NATIONAL LIBRARY OF MEDICINE

Sec.

- 4.1 Applicability and scope.
- 4.2 Purpose of the Library.
- 4.3 Definitions.
- 4.4 Access to Library facilities and collections.
- 4.5 Reference, bibliographic, reproduction and consultation services; fees.
- 4.6 Publications of the Library and information about the Library.

Authority: The provisions of this Part 4 issued under sec. 215, 58 Stat. 690, as amended, sec. 382, 70 Stat. 960, as amended; 42 USC 216, 276.

§ 4.1 Applicability and scope.

(a) The regulations of this part relate to access to the facilities and library collections, including audiovisual materials, of the National Library of Medicine and the availability of its bibliographic, reproduction, reference and related services. Such services are those functions performed by the Library directly for the benefit of the general public or health sciences professionals as described in section 382(a)(3)-(5) of the Public Health Service Act.

(b) Such services do not include, and these regulations do not apply to:

(1) Functions which relate to the Library's internal processing activities, whether by manual, photographic, or electronic means, as required by section 382(a)(1) and (2) of the Act.

(2) The availability of "records" of the Library as defined in, and available in accordance with, rules and procedures set forth in 45 CFR Part 5 and 42 CFR Part 1.

(3) Federal assistance for medical library construction and other purposes authorized by sections 390-398 of the Act (See 42 CFR Parts 59a, 61, 63 and 64).

(4) The availability of facilities, collections and related services of Regional Medical Libraries established or maintained by grants authorized by ~~section 397~~ of the Act (See 42 CFR Part 59a, Subpart C).

§ 4.2 Purpose of the Library.

In order to assist the advancement of medical and related sciences and to aid the dissemination and exchange of scientific and other information important to the progress of medicine and the public health, the National Library of Medicine, established by section 381 of the Public Health Service Act, acquires and maintains library materials, including audiovisual materials, pertinent to medicine; compiles, publishes and makes available catalogs, indices and bibliographies of such materials as appropriate; provides reference and other assistance to research, and engages in other activities in furtherance of the Library's overall purpose.

§ 4.3 Definitions.

As used in this part:

- (a) "Act" means the Public Health Service Act, as amended.
- (b) "Library" means the National Library of Medicine, established by section 381 of the Act (42 USC 275).
- (c) "Director" means the Director of the Library.
- (d) "Collections" means all books, periodicals, prints, films, videotapes, recordings, manuscripts, and other resource materials of the Library, including audio and visual materials produced or developed by the National Medical Audiovisual Center located in Atlanta, Georgia, but excluding data processing tapes used solely for internal processing activities to generate reference materials. It does not include "records" as that term is defined in 45 CFR §5.5.
- (e) "Historical collection" means materials in the collections published or printed prior to including manuscripts and prints, 1871 and the archival film collection of the National Medical Audiovisual Center and other materials of the collections which, because of age, or unique or unusual value, require special handling, storage or protection for their preservation, as determined by the Director.
- (f) "Health sciences professional" means any person engaged in the administration of health activities, the provision of health services, or in research, teaching or education concerned with the advancement of medicine or other sciences related to health or improvement of the public health.
- (g) "Regional Medical Library" means a medical library established

or maintained as a regional medical library under section 397 of the Act (42 USC 208b-7).

§ 4.4 Access to Library facilities and collections.

(a) General. The Library facilities and collections are available to any person seeking to make use of the collections, subject to such reasonable rules, consistent with these regulations, as the Director may prescribe to assure the most effective use of such resources by health sciences professionals and to protect the collections from misuse or damage.

(b) Reading rooms. Public reading rooms are available for obtaining and reading materials from the collections, subject to rules of the Director designed to provide adequate reading space and orderly conditions and procedures for those using the collections.

(c) Study rooms. A limited number of study rooms are available for assignment to individuals requiring extensive use of the collections, or other Library resources. Priority shall be given to fellows engaged in "special scientific projects" under section 395 of the Act (42 USC 280b-5) and to health sciences professionals. Applications for use of study rooms shall be addressed to the Director.

(d) Use of materials from the collections.

(1) Materials generally. Except as otherwise provided in this paragraph, materials from the collections are available for use only in facilities provided by the Library for such purpose.

(2) Audiovisual materials. Audio and visual materials in the collections are available for loan upon application setting forth to

the Director's satisfaction that the material will be safeguarded from misuse, damage, loss or misappropriation, and will promptly be returned as required after use or upon request of the Library. Applications for such material may be made to the National Medical Audiovisual Center, Atlanta, Georgia 30333.

(3) Interlibrary loans. Materials from the collections, or copies thereof, not specified in subparagraph (2) above, may be made available for use through libraries of public or private agencies or institutions upon application by such libraries setting forth to the Director's satisfaction that the requesting party has exhausted all other reasonably available local or regional library resources (including Regional Medical Libraries) and, when so prescribed, providing satisfactory assurances that the requested material will be safeguarded from misuse, damage, loss, or misappropriation, and will be promptly returned to the Library as required after use or upon request of the Library. Libraries served by a Regional Medical Library are encouraged to file such applications through their Regional Medical Library.

(4) Loans to health sciences professionals. Except as provided in subparagraph (2) above, loans of materials, or copies thereof, from the collection may be made directly to health sciences professionals upon application to the Director setting forth to his satisfaction that the requesting individual is geographically isolated, in terms of distance or available transportation, from all medical literature resources likely to contain the desired material, and providing the assurances to the Director required in subparagraph (3), above.

(5) Historical collection. In addition to the rules specified above with respect to availability of the Library's collections generally, materials from the historical collection are available only in accordance with such other rules as the Director may prescribe to assure their maximum preservation and protection. Such materials may also be made available in the form of microfilm and paper print copies, for which reasonable fees may be levied.

(6) Gifts and restricted materials. In addition to the rules specified above, materials in the collections, whether acquired by the Library as the result of gift or purchase, shall be made available only in accordance with limitations imposed as a condition of such gift or purchase.

§ 4.5 Reference, bibliographic, reproduction and consultation services; fees.

(a) General. Reference, bibliographic, reproduction (in addition to those reproduction services discussed in §4.4(d) above) and consultation services provided by the Library, whether provided by professional medical librarians, through the use of computerized systems, or otherwise, are available upon request to the extent Library resources permit. In the provision of services not reasonably available through local or regional library resources, priority shall be given to health sciences professionals.

(b) Specialized bibliographic services.

(1) Requests for bibliographies on individually selected medical or scientific topics may be filled by use of a reference retrieval

system, upon determination by the Director, on the basis of information submitted with the request, that use of such system would be appropriate and effective in the circumstances. Requests must be made upon such forms and in such manner as the Director may from time to time prescribe. Searches determined by the Director to be of general interest may be published and made available for general distribution by the Library.

(2) A limited number of computerized bibliographies on topics of general interest to group users, such as public or nonprofit health related professional societies and research organizations, may be produced on a regularly recurring basis pursuant to contractual arrangements between the Library and public or nonprofit agencies, when determined in each case by the Director to be necessary to assure more effective distribution of the bibliographic information involved, in furtherance of the Library's special purposes.

(c) MEDLARS tapes. Where deemed necessary by the Director to further the dissemination of scientific and other information important to the progress of medicine and the public health, or to assist research and investigations in the field of medical library science, copies of all or part of the Library's magnetic tapes comprising the Medical Literature Analysis and Retrieval System (MEDLARS) may be made available to agencies, organizations and institutions upon application by such persons providing assurances that (1) such tapes will be utilized to provide reference or bibliographic services pertinent to medicine not otherwise available from the Library or a Regional Medical Library, or (2) such tapes are necessary to carry out such research or investigation.

The use of such tapes shall be subject to such further conditions as the Director may prescribe when in his judgment necessary to further the purpose of the Library.

(d) Fees for services. The Director may, in accordance with schedules available at the Library on request, charge fees reasonably designed to recover all or a portion of the cost to the Library, including the employment of personnel, of providing any of the above or other reference, bibliographic and reproduction services. Such fees shall be charged only where the nature of the service in question is beyond that normally provided to the general public or health sciences professionals or where Library resources are limited or unduly taxed.

§4.6 Publications of the Library and information about the Library.

Lists of bibliographies of Library publications sold by the Government Printing Office, and other information concerning the organization, operation, functions and services of the Library, including necessary application forms, are available from the National Library of Medicine, Bethesda, Maryland 20014.

Dated:

Director, National Institutes of
Health

Approved:

Secretary

NATIONAL LIBRARY OF MEDICINE

RESUME OF REGIONAL MEDICAL LIBRARY GRANT APPLICATION

REVIEW BY BOARD OF REGENTS

June 18-19, 1970

<u>APPLICATION NO.</u>	<u>INSTITUTION</u>	<u>REQUESTED</u>	<u>FRC APPROVAL</u>	<u>APPROVAL</u>	<u>BOARD OF REGENTS PRIORITY</u>	<u>OTHER</u>
3 G04 LM00555-02S1	New York Academy of Medicine New York, New York	\$ 31,608	\$ 28,500	\$ 28,500	200	
2 G04 LM00615-03	The John Crerar Library Chicago, Illinois	223,878 235,170	170,000 182,000	170,000 182,000	188	
3 G04 LM00718-01S2	Univ. of California Los Angeles, California	38,779	23,038	23,038	257	

NATIONAL LIBRARY OF MEDICINE

RESUME OF BOARD OF REGENTS RECOMMENDATIONS

JUNE 18-19, 1970

<u>RESOURCE GRANTS</u>	<u>APPLICATION</u>	<u>INSTITUTION</u>	<u>COMMITTEE RECOMMENDATION & PRIORITY</u>	<u>TENTATIVE ENTITLEMENT</u>	<u>BOARD RECOMMENDATION</u>
1 G01 LM 00899-01		Green Cross General Hospital Cuyahoga Falls, Ohio	338	\$1,954	CONCURRENCE
1 G01 LM 00902-01		Queen of the Valley Hospital Napa, California	371	\$1,000	CONCURRENCE
1 G01 LM 00906-01		Providence Hospital Seattle, Washington	325	\$1,935	CONCURRENCE
1 G01 LM 00922-01		Borgess Hospital Kalamazoo, Michigan	350	\$4,428	CONCURRENCE
1 G01 LM 00927-01		Community Hospital of Sonoma County Santa Rosa, California	363	\$2,972	CONCURRENCE
1 G01 LM 00929-01		St. Joseph's Hospital Paterson, New Jersey	338	\$3,289	CONCURRENCE
1 G01 LM 00930-01		Woodville State Hospital Carnegie, Pennsylvania	325	\$5,485	CONCURRENCE
* 1 G01 LM 00931-01		Carlow College Pittsburgh, Pennsylvania	400	\$5,000	CONCURRENCE
1 G01 LM 00932-01		Retreat State Hospital Hunlock Creek, Pennsylvania	388	\$2,182	CONCURRENCE

*Group II libraries; see information regarding Board of Regents' policy decision behind numerical list of pending applications.

<u>APPLICATION</u>	<u>INSTITUTION</u>	<u>COMMITTEE RECOMMENDATION & PRIORITY</u>	<u>TENTATIVE ENTITLEMENT</u>	<u>BOARD RECOMMENDATION</u>
1 G01 LM 00936-01	Santa Barbara Medical Library Foundation Santa Barbara, California	263	\$4,771	CONCURRENCE
*1 G01 LM 00937-01	Kirkwood Community College Cedar Rapids, Iowa	325	\$2,788	CONCURRENCE
1 G01 LM 00938-01	Counseling Center Bangor, Maine	Disapproval		CONCURRENCE
*1 G01 LM 00939-01	North Shore Community College Beverly, Massachusetts	375	\$1,705	CONCURRENCE
*1 G01 LM 00940-01	Lase11 Junior College Auburdale, Massachusetts	400	\$2,888	CONCURRENCE
1 G01 LM 00941-01	St. Mary's Junior College Minneapolis, Minnesota	338	\$15,213	CONCURRENCE
*1 G01 LM 00942-01	Rochester State Jr. College Rochester, Minnesota	400	\$7,345	CONCURRENCE
1 G01 LM 00944-01	St. Joseph Hospital Albuquerque, New Mexico	350	\$2,400	CONCURRENCE
*1 G01 LM 00946-01	Greenville Technical Education Center Greenville, South Carolina	375	\$3,836	CONCURRENCE
1 G01 LM 00947-01	Luther Hospital Eau Claire, Wisconsin	300	\$4,147	CONCURRENCE
*1 G01 LM 00948-01	Washington State University Pullman, Washington	371	\$16,859	CONCURRENCE

*Group II libraries; see information regarding Board of Regents policy decision behind numerical list of pending applications.

<u>APPLICATION</u>	<u>INSTITUTION</u>	<u>COMMITTEE RECOMMENDATION & PRIORITY</u>	<u>TENTATIVE ENTITLEMENT</u>	<u>BOARD RECOMMENDATION</u>
1 G01 LM 00949-01	Ravenswood Hospital Medical Center Chicago, Illinois	343	\$ 5,062	CONCURRENCE
1 G01 LM 00951-01	Waldemar Medical Research Foundation Woodbury, New York	400	\$3,060	CONCURRENCE
1 G01 LM 00953-01	Memorial Hospital of Martinsville and Henry County Martinsville, Virginia	413	\$1,327	CONCURRENCE
1 G01 LM 00954-01	Purdue University Hammond, Indiana	325	\$1,583	CONCURRENCE
1 G01 LM 00955-01	Ormond Beach Memorial Hospital Ormond Beach, Florida	400	\$2,000	CONCURRENCE
* 1 G01 LM 00956-01	Niagara University Niagara University, New York	375	\$5,249	CONCURRENCE
* 1 G01 LM 00957-01	Utah Technical College at Salt Lake Salt Lake City, Utah	425	\$1,098	CONCURRENCE
1 G01 LM 00958-01	St. Anthony Hospital Columbus, Ohio	338	\$1,494	CONCURRENCE
1 G01 LM 00960-01	Maryland State Department of Health and Mental Hygiene Baltimore, Maryland	388	\$11,650	CONCURRENCE
* 1 G01 LM 00961-01	Ball State University Muncie, Indiana	388	\$26,459	CONCURRENCE
1 G01 LM 00962-01	Columbus Hospital Great Falls, Montana	288	\$7,477	CONCURRENCE

*Group II libraries; see information regarding Board of Regents' policy decision behind numerical list of pending applications.

NATIONAL LIBRARY OF MEDICINE
RESUME OF BOARD OF REGENTS RECOMMENDATIONS

June 18-19, 1970

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS
 Recommendation
 Approval Priority Other

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Priority	Other
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2 R01 LM 00357-04 Michael, Max, Jr. Jacksonville Hospitals Educational Program Jacksonville, Florida "The Medical Library in Continuing Education"	BCM	71	04 05	\$ 13,116 13,548	Disapproval			Dis.
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2 R01 IM 00411-04 (Publ) Anastos, George University of Maryland Graduate School College Park, Maryland "Ticks, Hosts, Distribution and Disease Transmission"	BCM	71	04	43,427	Deferral			Def.
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3 R01 LM 00525-03S1 Thompson, David A. Stanford University School of Engineering Stanford, California "Computer Graphic Languages for Information Retrieval"	BCM	70	03S1	21,125	\$ 21,125 (288)	\$ 21,125		288
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RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG		BOARD OF REGENTS	
					Recommendation	Disapproval	Approval	Priority
1 R01 LM 00810-01A1 Paplanus, Samuel H. Johns Hopkins University School of Medicine Baltimore, Maryland "Synonym Dictionary for Diagnosis"	BCM	71	01	\$ 37,311	Disapproval			Dis.
			02	41,026				
			03	46,142				
1 R01 LM NS 00865-01 (Publ) Adams, Raymond D. Harvard Medical School Boston, Massachusetts "Translate Poliakov's Brain Neuronal Organization"	BCM	70	01	\$ 3,500	Disapproval			Dis.
1 R01 LM 00909-01 (Publ) Hershkovitz, Philip Field Museum of Natural History Chicago, Illinois "Monograph of New World Monkeys"	BCM	71	01	\$ 46,246	\$15,000		\$ 15,000	211
			02	40,500	(211)			
			03	45,000				
			04	52,000				
			05	57,000				
1 R01 LM 00911-01 Griffith, Belver C. Drexel University Philadelphia, Pennsylvania "Scientific Communication within Medical Research"	BCM	70	01	\$ 28,647	\$28,647		\$ 28,647	222
			02	45,051	45,051		45,051	
			03	30,465	30,465		30,465	
					(222)			

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 R01 LM AM 00912-01 Kopf, Alfred W. New York University Medical Center New York, New York "Biomedical Communication Network for Dermatology"	BCM	71	01	\$ 46,585	Disapproval			Dis.
			02	48,957				
			03	58,216				
			04	70,204				
1 R01 LM 00913-01 O'Connor, John J. Lehigh University College of Arts and Sciences Bethlehem, Pennsylvania "Text-Searching Retrieval of Biomedical Papers"	BCM	71	01	19,853	\$ 19,853	388		
			02	17,941	17,941		17,941	
					(388)			
1 R01 LM 00914-01 (Pub1) Rothenberg, Albert Yale University School of Medicine New Haven, Connecticut "Index to Scientific Studies of Creativity"	BCM	71	01	8,430	Deferral			Def.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 R01 LM 00915-01 (Pub1) Li, Hui-Lin University of Pennsylvania College of Arts & Sciences Philadelphia, Pennsylvania "A Bibliographic Study on Chinese Medical Botany"	BCM	71	01	\$ 15,439	\$ 15,439	15,439	266	
			02	15,880	15,880	15,880		
			03	14,521	14,521	14,521		
					(266)			
1 R01 LM 00916-01 (Pub1) Nathan, David G. Children's Hospital Medical Center Boston, Massachusetts "Bibliography of Thalassemia"	BCM	71	01	\$ 63,100	Deferral			Def.
1 R01 LM 00924-01 (Pub1) Jackson, Elizabeth C. Mercer University Southern School of Pharmacy Macon, Georgia "Annual Basic Booklist for Pharmacy Colleges"	BCM	71	01	\$ 3,475	Disapproval			Dis.
			02	3,091				
			03	3,332				
			04	3,548				
			05	3,764				
			06	4,005				
			07	4,221				
1 R01 LM 00925-01 (Pub1) Smith, Hobart M. University of Colorado College of Arts & Sciences Boulder, Colorado "A Synopsis of Mexican Herpetology"	BCM	71	01	\$ 26,270	\$ 26,270	26,270	200	
			02	27,755	27,755	27,755		
			03	29,095	29,095	29,095		
			04	30,595	30,595	30,595		
			05	32,130	32,130	32,130		
					(200)			

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 R13 LM 00926-01 Larson, Leonard A. Univ. of Wisconsin School of Education Madison, Wisconsin "Study of Information Retrieval in the Health Sciences"	BCM	71	01	\$ 5,782	Disapproval			Dis.
1 R01 LM 00934-01 (Publ) Muench, Eugene V. New York University Medical Center Medical Library, New York, New York "Bilingual Biomedical Library Classification Index"	BCM	70	01	\$ 17,021	Disapproval			Dis.
1 R01 PM 00076-01 Dual LM Reinecke, Robert D. Albany Medical College of Union Univ. Albany, New York "Computer Instruction & Information Retrieval"	BCM	71	01	\$102,726 111,208 133,059	Deferral			Def.
1 R01 LM 00917-01 Maron, M. E. University of California Institute of Library Research Berkeley, California "Expanded Utilization of Medical Library Materials"	AHR BCM	71	01	\$ 70,189 119,388 107,256	Disapproval			Dis.
1 R18 HS 00520-01 Dual LM Turner, E. Robert Southeast Michigan Council of Governments Detroit, Michigan "Compatible Information System"	HCS	71	01	\$ 61,400	Disapproval			Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Recommendation Priority	Other
2 RO1 LM 00802-02 Breedon, James O. Southern Methodist University School of Humanities & Sciences Dallas, Texas "State's Rights Medicine in the Old South, 1819-1861"	HLS	71	02	\$ 7,883	\$ 7,883 (186)	\$ 7,883	186	
1 RO1 LM 00910-01 Beecher, Henry K. Harvard University Medical School Boston, Massachusetts "Medicine at Harvard, History of Ideas"	HLS	71	01 02 03	\$ 28,855 28,430 28,930	Disapproval			Dis.
1 RO1 LM 00918-01 Pumphrey, Ralph E. Washington University School of Social Work St. Louis, Missouri "Michael M. Davis, Protagonist of Health Care"	HLS	71	01 02 03	\$ 74,863 47,830 10,075	Disapproval			Dis.
1 RO1 LM MH 00919-01 Carlson, Eric T. Cornell University Medical College New York, New York "The Psychiatric Thought of Benjamin Rush"	HLS	71	01 02 03 04 05	\$ 9,490 10,194 10,955 11,368 11,562	\$ 9,490 10,194 10,955 - - - (138)	\$ 9,490 10,194 10,955 - - -	138	

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS	
						Approval	Recommendation Priority Other
1 R01 LM 00920-01 Shapiro, Arthur K. Cornell University Medical College New York, New York "History and Development of the Double Blind Procedure"	HLS	71	01	\$ 9,472	\$ 9,472 (318)	\$ 9,472	318
1 R01 LM 00921-01 Eyzaguirre, Elena F. University of Utah Salt Lake City, Utah "Oral History of the University of Utah"	HLS	71	01	25,282	Disapproval		Dis.
			02	26,353			
			03	29,156			
1 R18 HS 00528-01 Dual LM Abrams, Lawrence Thomas Jefferson University Philadelphia, Pennsylvania "Comprehensive Health Careers Reference Manual for Students"	HSDG	71	01	84,278	Disapproval		Dis.
1 R01 LM 00923-01 Rees, Alan M. Case Western Reserve University School of Library Science Cleveland, Ohio "Definition of Health Sciences Library Manpower Goals"	NSS	71	01	72,714	\$ 72,714 (350)		Dis.

NATIONAL LIBRARY OF MEDICINE

RESUME OF BOARD OF REGENTS RECOMMENDATIONS

June 18-19, 1970

TRAINING APPLICATIONS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
2 T01 LM 00106-05 Bredman, Estelle Washington University School of Medicine St. Louis, Missouri	MT	71	05	\$ 45,602	\$ 40,502	\$ 40,502	143	
			06	46,421	41,321	41,321		
			07	48,014	42,914	42,914		
					(143)			
2 T01 LM 00111-10 Darling, Louise University of California Library School of Medicine Los Angeles, California	MT	71	10	46,270	\$ 46,270	46,270	133	
			11	50,218	50,218	50,218		
			12	51,296	51,296	51,296		
					(133)			
2 T01 LM 00127-03 Goldhor, Herbert University of Illinois Urbana, Illinois	MT	71	03	60,388	60,388	60,388	114	
			04	66,197	66,197	66,197		
			05	66,903	66,903	66,903		
			06	67,659	67,659	67,659		
			07	73,595	73,595	73,595		
					(114)			

TRAINING GRANTS (continued)

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	BOARD OF REGENTS		
					IRG Recommendation	Approval	Other Priority
1 T01 LM 00142-01 Benschoter, Reba A. University of Nebraska Lincoln, Nebraska	MT	71	01 02 03 04 05	\$ 58,967 84,415 89,094 91,173 92,684	\$ 58,967 84,415 89,094 (257)	\$ 58,967 84,415 89,094	257
1 T01 LM 00143-01 Bridgman, Charles F. University of California, San Diego School of Medicine La Jolla, California	MT	71	01 02 03 04 05	124,753 156,487 157,196 161,990 167,120	\$ 70,000 80,000 90,000 (233)		DEF

COMPETING RESEARCH AND PUBLICATION GRANTS
SUMMARY OF COUNCIL RECOMMENDATIONS
TRADITIONAL PROJECT GRANTS

INSTITUTE OR DIVISION: NATIONAL LIBRARY OF MEDICINE

COUNCIL DATE: JUNE 1970

TYPE OF REQUEST	TOTAL REQUESTED		APPROVED		REDUCED		DISAPPROVED		DEFERRED	
	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT
FY 1971										
NEW	23	\$860,928	7	\$124,171	1	\$31,246	13	\$531,255	3	\$174,256
RENEWAL	3	64,426	1	7,883	0		1	13,116	1	43,427
SUPPLEMENT	1	21,125	1	21,125	0		0		0	
TOTAL	27	946,479	9	153,179	1	31,246	14	544,371	4	217,683
FY 1972										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
FY 1973										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
GRAND TOTAL	27	946,479*	9	153,179	1	31,246	14	544,371*	4	217,683*

*Includes 3 Grants with LM as Second reviewer - requesting \$248,404.

2 were Disapproved and 1 was Deferred.

COMPETING TRAINING GRANTS
SUMMARY OF COUNCIL RECOMMENDATIONS
TRADITIONAL PROJECT GRANTS

COUNCIL DATE: JUNE 1970

INSTITUTE OR DIVISION: NATIONAL LIBRARY OF MEDICINE

TYPE OF REQUEST	TOTAL REQUESTED		APPROVED		REDUCED		DISAPPROVED		DEFERRED	
	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT
FY 1971										
NEW	1	\$ 58,967	1	\$ 58,967	0	\$	0	0	0	0
RENEWAL	3	152,260	3	147,160	1	5,100	0	0	0	0
SUPPLEMENT	0		0		0		0	0	0	0
TOTAL	4	211,227	4	206,127	1	5,100	0	0	0	0
FY 1972										
NEW	1	124,753	0		0		0	0	1	\$ 124,753
RENEWAL	0		0		0		0	0	0	0
SUPPLEMENT	0		0		0		0	0	0	0
TOTAL	1	124,753	0		0		0	0	1	124,753
FY 1973										
NEW	0		0		0		0	0	0	0
RENEWAL	0		0		0		0	0	0	0
SUPPLEMENT	0		0		0		0	0	0	0
TOTAL	0		0		0		0	0	0	0
GRAND TOTAL	5	335,980	4	206,127	1	5,100	0	0	1	124,753

BOARD OF REGENTS
NATIONAL LIBRARY OF MEDICINE

MINUTES OF EXECUTIVE SESSION
Friday, June 19, 1970

The Chairman called the meeting to order at 12:30 p.m. Prior to considering current Library problems, members of the Board discussed briefly and privately their concept of a "Regents Fund."

A discussion ensued of the NLM contribution to the NIH Management Fund which has increased by a factor of 40% while the NLM budget has decreased from \$19.7 million to \$18 million during the same period. Dr. Mider presented a history of the NIH Management Fund and indicated there was little logic in its continued high rate of increment in light of recent funding policies at NIH. All agreed a Management Fund was understandable and necessary and that NLM should pay its fair share. The figure for FY 1972 is in the process of being renegotiated. Dr. Ebert moved that the Board request from NIH a breakdown of how the Management Fund has been used and how the NLM contribution has been calculated from FY '69 through FY '71. This was seconded and passed by the Board.

Dr. Cummings previewed (on a strictly confidential basis) the proposed NLM budget allocation for FY '72 in light of a 5% reduction in the '71 level. In essence, it provides a modest increase in support of the Extramural Programs, chiefly for support of Regional Medical Libraries. A cut of approximately \$1 million is proposed for Library Operations, most of which will come out of the capitalization funds allocated previously to the development of MEDLARS II (as this contract will have terminated). The Lister Hill Center will receive a modest increase of ca. \$100,000 and NMAC a similar increase. A cut from \$1.2 million to \$488,000 is proposed for the Toxicology Information Program--it is the least successful of NLM's efforts because of inadequate personnel and funds. Upon the advice of an outside committee, Dr. Cummings made a fundamental decision to convert this program from its broad base to a more limited pesticide information file.

Dr. Anlyan expressed concern that Library Operations was cut to a bare minimum, but it was pointed out that the Regional Medical Libraries were picking up some of the load formerly carried only by NLM; service patterns are being decentralized in part.

Mr. Augenstein expressed concern for the continued poor support of the Lister Hill Center in spite of multiple efforts by the Director, NLM and the Board of Regents to impress upon the Office of the Secretary, HEW, the imperative need for a substantial increase in support. The Director commented that in the present environment, he sees little hope of doubling financial support for the Lister Hill Center, let alone the five-fold increase that is necessary to get the programs to a point where they can demonstrate their utility.

Dr. Baker suggested that with the move under way to eliminate duplication of effort by various agencies and programs, there would seem to be hope for a brighter picture. He felt that the Lister Hill Center must continue to be geared up for the latest and most advanced technologies in the information retrieval field for that time when it becomes obvious that NLM and the Lister Hill Center are the best suited to manage biomedical communications.

It was suggested that an approach be made to Secretary Richardson for a briefing at the appropriate time to present the Lister Hill Center's programs.

Dr. Anlyan reported the selections of the Nominating Committee as Dr. Robert Ebert for Chairman of the Board and Mr. Bruno Augenstein for Vice-Chairman of the Board. Both were elected unanimously.

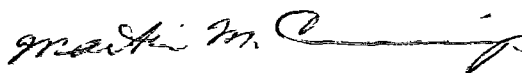
Dr. Ebert asked Dr. Jack Layton to serve on the Extramural Subcommittee of the Board and Dr. William Baker to serve on the Lister Hill Center Subcommittee.

The next meeting of the Board is to be held on November 19 and 20, 1970, at the Countway Library in Boston.

Actions Taken by the Board in Executive Session

1. The Board recommended that an annual donation of at least one day's honorarium (\$75.00) be voluntarily made by each member of the Board to the Regent's Fund in support of the Regent's Award for Scholarship or Technical Accomplishment.
2. The Board voted to communicate with NIH and request a breakdown of how the NIH Management Fund has been used and how the NLM contribution has been calculated from FY '69 through FY '71.
3. The Board elected Dr. Robert Ebert Chairman of the Board of Regents and Mr. Bruno Augenstein Vice-Chairman.

Respectfully Submitted,



Martin M. Cummings, M.D.
Executive Secretary, Board of Regents
National Library of Medicine

Bethesda, Maryland

AGENDA

Thirty-Seventh Meeting of the
BOARD OF REGENTS
National Library of Medicine

9:00 a.m., November 19-20, 1970
Francis A. Countway Library of Medicine
Boston, Massachusetts

- | | | | |
|-------|--|---------|---|
| I. | CALL TO ORDER AND INTRODUCTORY REMARKS | | Dr. Robert Ebert |
| II. | CONSIDERATION OF MINUTES OF LAST MEETING | TAB I | Dr. Robert Ebert |
| III. | DATES OF FUTURE MEETINGS
1971 Calendars in all books
Next Meeting - March 22-23, 1971
<u>Subsequent Meeting</u>
<u>June 14-15, 1971</u>
<u>Selection of Meeting Date - November 1971</u>
15-16 18-19 22-23 (Thanksgiving is on 11/25/71)
M-T T-F M-T | TAB II | Dr. Robert Ebert |
| IV. | REMARKS BY DEPUTY DIRECTOR, NIH | | Dr. John Sherman |
| V. | REPORT OF THE DIRECTOR, NLM | TAB III | Dr. Martin Cummings |
| VI. | PROGRESS REPORT FROM LISTER HILL CENTER | TAB IV | Dr. Ruth Davis |
| VII. | REPORT ON BIOMEDICAL COMMUNICATIONS
NETWORK STEERING COMMITTEE, AAMC | TAB V | Dr. C. G. Gunn
U. of Oklahoma |
| | LUNCH | | |
| VIII. | PRESENTATION ON THE COUNTWAY REGIONAL
MEDICAL LIBRARY (Including Tour) | | Mr. Harold Bloomquist |
| IX. | REPORT ON VISIT TO ALASKA HEALTH SERVICES
SUBREGIONAL LIBRARY | TAB VI | Gen. Thomas Whelan, USA |
| X. | PROGRESS OF THE MEDLARS II PROGRAM | TAB VII | Mr. Ralph Simmons
Mr. Bruno Augenstein |

ADJOURNMENT

DINNER - UNION CLUB - 8 Park Street, Boston, Massachusetts

Cocktails 6:15 p.m.

Dinner 7:15 p.m.

REGENT SPEAKER - Dr. Jack M. Layton

Subject: "Dr. Walter Reed in Arizona Territory"

RECONVENE - 9:00 a.m. - November 20, 1970

- | | | | |
|-------|---|-------------------------|---|
| XI. | REPORT ON THE PL 480 PROGRAM | TAB VIII | Dr. G. Burroughs Mider
Dr. Lee Langley |
| XII. | REPORT OF THE ASSOCIATE DIRECTOR FOR
EXTRAMURAL PROGRAMS | | Dr. Lee Langley |
| | a. Status of the Resources Program | TAB I
(gray book) | |
| | b. Revised Regulations for Resources
Grants for Extramural Programs
Necessitated by the Medical Library
Assistance Extension Act of 1970. | TAB II | |
| | c. Contract Guidelines Being Developed
for Regional Medical Libraries | TAB III | Dr. Harold Schoolman |
| | d. (1) Evaluation Report of the Kentucky-
Ohio-Michigan Regional Medical
Library
(2) Status Report of the New York-
Northern New Jersey Regional
Medical Library | TAB IV | |
| | e. FAST Task Force Recommendations | TAB V | |
| | f. Review of Council Procedures "Guidelines
for Adjustments by Staff in Time or
Amount of Grant Award" | TAB VI | |
| | g. DRG Administrative Report | TAB VII | |
| XIII. | CONSIDERATION OF PENDING APPLICATIONS | | Dr. Lee Langley |
| | RESEARCH AND PUBLICATION GRANTS | TAB VIII | |
| | TRAINING GRANT | TAB IX | |
| XIV. | PROGRESS REPORT FROM NATIONAL MEDICAL
AUDIOVISUAL CENTER | TAB IX
(orange book) | Dr. Charles Bridgman |
| | LUNCH | | |
| XV. | EXECUTIVE SESSION | | |
| | ADJOURNMENT | | |

THE BOARD OF REGENTS
of the
NATIONAL LIBRARY OF MEDICINE

MINUTES OF THE 37TH MEETING

- MEMBERS PRESENT: Mr. Bruno W. Augenstein, Dr. William O. Baker, Dr. Harve J. Carlson, Dr. Robert H. Ebert, Dr. John P. McGovern, Dr. Max Michael, Jr., Dr. George W. Teuscher
- MEMBERS ABSENT: Dr. William G. Anlyan, Vice Admiral George M. Davis, Dr. James C. Fletcher, Lt. General Hal B. Jennings, Dr. Jack M. Layton, Dr. L. Quincy Mumford, Dr. Marc J. Musser, Dr. Jesse L. Steinfeld, Lt. General Alonzo A. Towner, Dr. Frederick H. Wagman
- ALTERNATES: Dr. Paul Q. Peterson represented Dr. Jesse L. Steinfeld, one day. Captain Frank G. Steen, USN represented Vice Admiral George M. Davis, USN, Dr. Lyndon Lee represented Dr. Marc J. Musser, both days. Brig. General Thomas J. Whelan, USA, represented Lt. General Hal B. Jennings, USA, Colonel Gerrit L. Hekhuis, USAF, represented Lt. General Alonzo A. Towner, USAF,
- GUESTS: Dr. John F. Sherman, Deputy Director, NIH
Mr. Alfred Zipf, Consultant to the NLM from the Bank of America
Dr. C. G. Gunn, Associate Professor of Medicine and Physiology, University of Oklahoma
Mr. Harold Bloomquist, Librarian, Francis A. Countway Library of Medicine
Mr. Raymond Palmer, Assistant Librarian, Francis A. Countway Library of Medicine
Mr. Richard J. Wolf, Francis A. Countway Library of Medicine
Miss Elizabeth Feeney, Francis A. Countway Library of Medicine
Mrs. Marcia Ford, Francis A. Countway Library of Medicine
Miss Arlee May, Francis A. Countway Library of Medicine
- STAFF: Dr. Jeanne Brand, Dr. Charles Bridgman, Dr. Martin M. Cummings, Dr. Ruth Davis, Dr. Lee Langley, Mr. Dave McCarn, Dr. G. Burroughs Mider, Mr. George Russell, Mrs. Ann Sabin, Dr. Harold Schoolman, Mr. Ralph Simmons

JUNE 1970 MINUTES APPROVED, FORTHCOMING MEETINGS SCHEDULED

The minutes of the June 18-19, 1970 meeting were approved. The dates of March 22-23, 1971 and June 14-15, 1971 were reaffirmed. The dates of November 18-19, 1971 were tentatively selected for the first meeting in FY 1972.

OPENING REMARKS OF THE CHAIRMAN OF THE BOARD

The Chairman expressed the deep regret of the Board at the sudden tragic death on November 14 of Mrs. Jack Layton. Dr. Ebert then welcomed Dr. Paul Peterson, Deputy Surgeon General, representing the Assistant Secretary for Health and Scientific Affairs and the Surgeon General, and Dr. John F. Sherman, Deputy Director of the National Institutes of Health, representing the Director. He also introduced a new Board member, Dr. John P. McGovern, Professor of Allergy, Texas Graduate School of Biomedical Sciences, University of Texas. Another new member, Dr. James C. Fletcher, President of the University of Utah and the College of Eastern Utah, was not able to attend. The recent past Chairman, Mr. Al Zipf, was welcomed to the meeting as consultant to the NLM.

Dr. Cummings noted the following recent staff changes:

Dr. Harold M. Schoolman as Special Assistant to the Director, NLM, for Medical Program Development and Evaluation.

Dr. Charles Bridgman as the new Director of the National Medical Audiovisual Center.

Dr. Harold Wooster as the Chief of the Research & Development Branch of the Lister Hill Center for Biomedical Communications.

Dr. Ruth Davis is leaving NLM to join the National Bureau of Standards as the Director of the National Center for Computer Sciences.

Mr. George Russell, Jr., will become Executive Officer of the National Institute of Child Health and Human Development, NIH.

Mr. Samuel Waters, currently Deputy Associate Director of Library Operations, will join the National Agricultural Library as Deputy Director.

REMARKS BY DR. PAUL PETERSON, DEPUTY SURGEON GENERAL

Dr. Peterson brought to the Board of Regents the greetings of Dr. Egeberg and Dr. Steinfeld. He discussed the legislative calendar and pointed out that the HEW authorization bill is essentially complete; what remains is joint Congressional action on appropriation bills. Both houses have appropriated more than the administration requested, and it remains to be seen what action will be taken by the Conference Committee, usually a position somewhere between that of the House and Senate. Since this would be considerably more than requested by the administration, the possibility of a Presidential veto recurs. In any event, OMB will determine the amount apportioned which is unlikely to be much greater than the budget requested by the administration. Fiscal '71 funds

will probably not become available any earlier than some time in February, and conceivably even later. One additional point is that this Congress, much more than any other in our memory, has chosen, in many instances, to specify very completely the purposes for which funds are to be expended. The '72 budget is nearing the final stages of preparation. This will be another austere year with increases indicated by uncontrollable items such as annualization of wages and costs.

Of major interest is the creation of the Environmental Protection Agency to which will be transferred components of the Department of Agriculture, Department of Interior, Atomic Energy Commission and the Public Health Service. Mr. William D. Ruckelshaus has been nominated the new Administrator, and it is anticipated this reorganization will now proceed quickly.

Finally, at the request of the White House, many of the senior staff of the Department have been actively involved in the creation of a series of health options which have been submitted to the Secretary. These may ultimately form the basis of the administration's health program.

The Board expressed concern that optimal utilization of funds could be made if such funds were not available until nearly the last quarter of the fiscal year. Dr. Peterson and Dr. Sherman both assured the Board that plans were carefully made in order to meet this contingency which, in fact, occurred to some extent almost every year.

REMARKS BY THE DEPUTY DIRECTOR, NIH

Dr. John F. Sherman conveyed Dr. Marston's greetings to the Board. He discussed reorganizations in the Executive Branch of Government including the OMB, the Secretary's office in HEW, and the White House, and indicated that these inter-relationships within the Executive were being clarified. Secretary Richardson is trying to create a more effective follow-through and evaluation of HEW programs. The Secretary wishes to establish an increased contact with the agencies to improve communications and understanding between the political level of the Secretary's office and the operating level of the agencies administering the programs.

Concern with health programs is assuming a higher priority as some of the education and welfare issues, which have occupied the Department's major attention, are clarified.

The history of the NIH '71 appropriation bill was described, amplifying the general discussion of Dr. Peterson. Some of the major authorities of the Bureau of Health Manpower Education expire on June 30, 1971. An operational philosophy about the support of training and health manpower is being developed. The relative use of limited funds in the support of increased student enrollment, and the deficit financing of financially embarrassed medical schools create an unfortunate conflict which needs to be resolved. The Carnegie Commission Report is of importance in the resolution of this conflict. Members of the Board of Regents requested that copies of the Carnegie Commission Report be distributed to them before the next meeting.

Dr. Sherman described studies of the NIH training grant and fellowship programs to assay the needs of an optimal biomedical research program, and to provide a basis for determining the rate of training which needs to be supported by Federal funds. They are concerned also with the mechanisms of Federal funding, and their potential influence both on the individuals being trained, and the institutions concerned with the training. These studies may be completed next year in time to be of prime importance to the '73 budget development.

REPORT OF THE DIRECTOR, NLM

NLM shared in Fiscal Year '71 budget increases recommended by the Senate Committee. The President's request for 1971 was \$19,769,000 or \$194,000 less than the amount available for obligation in FY 1970. The House made no change in this request, but the Senate allowance was \$22,233,000 or \$2,464,000 above the House allowance. \$1.4 million of the increase is for "restoration of the 1970 program level." An additional \$1 million was added to the Lister Hill Center for increased program activities. Dr. Cummings called attention to the complimentary language in the Senate report, with particular reference to the Lister Hill National Center for Biomedical Communications, taking cognizance of the prototype programs.

The Director reported briefly on the following external relationships of NLM:

The three National Libraries National Serials Data Programs have been supported through a \$100,000 one-year grant from the National Agricultural Library to the Association of Research Libraries. NLM contributed the equivalent of \$50,000 in computer and staff time. A preliminary design has been developed, but the data base so far is almost entirely limited to NLM input. For the rest of this fiscal year, each of the three national libraries will support this project with equal contributions of \$2,000 per month, with the anticipation that the Library of Congress will support the system with Congressional appropriations beginning July 1, 1971.

The DHEW operational planning system was briefly described.

A vigorous effort is underway to appoint members to the National Commission on Libraries and Information Sciences. Congress has authorized a budget of \$750,000, but no money has yet been appropriated.

Dr. Henry Kissman, NLM, heads the Committee for the Study of Environmental Quality Information Programs of COSATI, and has completed the first draft of their report on a Directory of Environmental Protection Information and Data Programs. The report is now circulating in other Federal agencies and will eventually be issued by COSATI.

Mr. Burt Lampkin, formerly of the National Agricultural Library, has assumed the new role of Associate Commissioner of Education for Libraries and Educational Technology, OE.

The President's new science advisor, Dr. Edward David, comes from the communications and information field. It appears that he intends to influence the coordination of Federal activities in this area.

Dr. Burt Atkinson, Office of Scientific Information Services, NSF, will retire in January; his replacement should be active and aggressive in this national role.

US/Japan Cooperative Study Group met for three days at NSF immediately prior to the Board of Regents meeting. Problems of mutual interest in the field of library and information sciences were discussed.

The Clearinghouse for Scientific and Technical Information has been moved from the Bureau of Standards to a new office within the Department of Commerce and renamed. Mr. William Knox from McGraw-Hill is expected to head this new office.

The Williams & Wilkins suit has been heard in the United States Court of Claims and we now await the judgment of that court. It is likely that the case will be pursued to the Supreme Court by whichever party is dissatisfied with the judgment of the Claims Court.

REPORT ON THE LISTER HILL NATIONAL CENTER FOR
BIOMEDICAL COMMUNICATIONS - DR. RUTH M. DAVIS

Dr. Davis, first Director of the Lister Hill Center, reviewed the program of the Lister Hill National Center for Biomedical Communications. She began her presentation with a reiteration of the functions of the Center: Development of a Biomedical Communications Network; application of information technology to improve biomedical research, medical education and health care delivery; and provision of a focal point for DHEW biomedical communications and network projects. The present efforts of the Center were related to these specific functions. The BCN is being approached by developing demonstration projects. The AIM-TWX project provides such a demonstration in the Library Services component of the network. Some 33 medical institutions have used the system, and overall utilization has been growing at a rate of 11 percent per week.

The New England interactive TV network is a prototype of the Specialized Educational Services component. The initial black-and-white link from Mary Hitchcock Memorial Hospital to Claremont Hospital will allow development of procedures and experience. A total network, designed by Jansky & Bailey, would provide full two-way, double-loop, interactive color television along the path from Durham, New Hampshire to Burlington, Vermont with spurs to Portland, Maine and Plattsburg, New York respectively. The plans are under review by responsible New England medical groups.

The development of content for medical education is being pursued through medical groups who can represent the needs of several medical schools. The existing contract with the Universities Associated for Research and Education in Pathology (UAREP) will produce syllabi and audiovisual materials in four critical areas of pathology. Collaboration between UAREP and Upjohn should result in a set of products of very high quality.

The application of information technology is illustrated by the Center's efforts in satellite communications. Initial experiments were run in April and May of this year. New equipment is now being installed at the NIH campus and planning with the National Aeronautics and Space Administration and with interested universities and Alaska is nearing completion for a broad range of experimental efforts. A second experiment in the use of tape recorders by medical students at George Washington University Medical School was also described.

Finally, the focal-point function was illustrated by the briefings that the Center has arranged for Dr. Egeberg, the special inventory of scientific publications prepared for the Public Information Officer of the Department, and the now operational Medical Resources File.

The Regents endorsed a formal expression by the Board in appreciation of Dr. Ruth Davis' contributions to the development of the Lister Hill Center. They were particularly impressed by the potentials of the New England Interactive TV Network and expressed hope that the various elements inside and outside the Library required to further this endeavor would be supported to the fullest. They hoped that the combination of the AAMC report and the accomplishments in the last year of the Lister Hill Center would now allow the reestablishment of a more reasonable balance in the Center's activities between concern for content and network development. They believe that the Library should be able to maintain an overall concern with content development and that the Lister Hill Center should now spend a greater proportion of its resources on network development.

A REVIEW OF THE AAMC STEERING COMMITTEE REPORT ON THE BIOMEDICAL COMMUNICATIONS NETWORK - DR. C. G. GUNN

The NLM contract with the Association of American Medical Colleges, effective on January 2, 1969, called for the AAMC to plan and conduct a conference on Potential Education Services from a National Biomedical Communications Network and a report containing the guidance and recommendations resulting from the conference. The conference was held in February 1969 and the report completed by June 1969.

The second phase of the contract became effective in July 1969. Its purpose was to produce a report which dealt with a clear definition of restricted objectives in an area where technological systems, communications, and the whole of medical sciences intermesh in a complex and confusing fashion. To avoid getting lost in global generalizations or the specificities of technology or medicine, the following queries concerning the future role of a biomedical communications network, centered in the National Library of Medicine, were agreed upon as of first priority:

1. Identify problems and content-oriented needs in medical education and medical schools which might be abetted by media and communications services which are potentially capable of tapping the total national educational and professional resources.
2. Estimate what can and should be done toward organizing a centrally-based national resource for the better application and transmission of communication media and techniques to solve problems facing medical schools in the education of physicians, medical scientists, and allied health professionals.
3. A brief assessment of the current state of the art of electronic communications application to medical education.
4. Estimates of the impact and applicability of newer communications and technology, especially computer technology, on medical education will be attempted.
5. A brief estimate of the role of communications technology in medical education a decade or more hence.

Dr. Gunn reviewed briefly in this interim report the tentative conclusions of the committee on the following main subject headings, each of which will be a separate chapter in the final report:

1. Need for a Biomedical Communications Network
2. Current State-of-the-Art
3. A Biomedical Communications Network
4. Content
5. Feasibility and Economics
6. Catalogs, Indexes and Network Functions
7. Evaluation
8. Computers
9. Manpower
10. Organization and Administration

The Board received Dr. Gunn's preliminary report with enthusiasm. Although they believe that administrative details may need to be modified, the fundamental approach of the relationship of the Lister Hill Center to the scientific community in support of education appears sound. The Board expressed the hope that it would now be possible for the Lister Hill Center to more rapidly approach its true potentials.

PRESENTATION ON THE COUNTWAY REGIONAL MEDICAL LIBRARY
FOLLOWED BY A TOUR

Mr. Harold Bloomquist welcomed the Regents to the Countway Library. After a brief history of the development of the Library, he introduced some of his staff, Mr. Raymond Palmer, Mr. Richard J. Wolfé, Miss Elizabeth Feeney, Mrs. Marcia Ford and Miss Alene May. Members of the staff described various aspects of the Library's operations, including its History of Medicine Division, reference Services and its role as a Regional Medical Library. During the tour of the Library that followed, members of the Board were most impressed by the beautiful new facilities as well as the remarkable contents, particularly in the History of Medicine Division, which they had an opportunity to inspect. The Regents expressed their gratitude to Mr. Bloomquist and his staff.

A REPORT ON THE ALASKA HEALTH SCIENCES LIBRARY
GENERAL THOMAS J. WHELAN, JR.

General Whelan reported on his trip to Alaska, an outgrowth of discussions at the Board of Regents meeting in April 1970. The trip started in Anchorage on June 14, 1970, and ended in Seattle on June 19. The Alaska Health Sciences Library is a subregional medical library serving Alaska, the only medical library worthy of the name in the State. It opened in February 1968, and has been supported by multiple funding.

The area served is huge, equal to about one-third of the total area of the United States. There are numerous remote areas where physicians practice in virtual, if not absolute, professional isolation. There are 384 physicians in Alaska (August 1969) with an average age of 40 years. There has been a three-fold increase in physicians in the past ten years.

Mrs. Ursula Strash, a most gracious, courteous, dedicated and innovative medical librarian, became the librarian for the Alaska Native Medical Center, transferring from the Artic Research Center Library when it moved from Anchorage to Fairbanks. She is training a small but dedicated staff of two other full-time librarians and three part-time helpers.

The Alaska Health Sciences Library is a vital, vigorous institution despite its cramped space in three rooms in the Alaska Native Medical Center.

There is a group of physicians in Alaska who either are accustomed to using libraries, or are so isolated that library services represent a significant contribution to direct patient care. Physician usage of the Alaska Health Sciences Library is now 133 of 228 physicians in the Anchorage area, or 59 percent and 69 of 167 physicians in the remainder of the State, or 41 percent user percentage. This percentage has increased in both areas significantly in the past year.

The State Legislature has been contacted in Juneau by mail and personal visit by Mrs. Strash. She is hopeful of State support in the future, pointing out quite correctly that this service in Alaska is most intimately correlated with direct patient care.

The Alaska Native Medical Center intends to support the Library as in the past, but will be unable to increase this aid with present financial constraints.

The Board was pleased with the progress that has been made in the support of health service delivery in the Alaska area, and was hopeful that this support might be increased through the application of some of the experimental programs in satellite biomedical communications being conducted by the Lister Hill Center.

MEDLARS II PROGRESS REPORT - MR. BRUNO AUGENSTEIN

Mr. Augenstein introduced the MEDLARS II progress report with a brief review of the Computer Science Corporation Report to the Executive Committee of the Board of Regents given on September 4, 1970. He then requested Mr. R. Simmons, NLM MEDLARS II Project Officer, to bring the Board up to date on the project.

Mr. Simmons reviewed briefly the report presented to the Board of Regents by CSC in March 1970 and used that report as a baseline from which to report further actions. The Board was reminded that at that meeting CSC estimated completion of the INITIAL phase of the system by September 1970 and the EXTENDED phase by July 1971. The cumulative cost for these phases was estimated at \$2,311,000 and \$3,060,000 respectively.

An NLM evaluation was given to the Board in March, and included the identification of such major problems as inadequate coordination in CSC, excessive reliance on a single individual, the lack of CSC evaluation of software performance, inadequate presentation of performance and hardware requirements, the lack of integration of the parts of the INITIAL design, inadequate communication with NLM on the software testing and inadequate attention to the preparation of the acceptance and operational test specifications. During the spring and summer of 1970, NLM examined the progress of the software development in detail. Prior to this review, the CSC software progress reports had been taken at face value, but this review discovered serious slippages so that the projected dates could not be met.

A series of management actions followed that included a series of letters to CSC expressing the Library's concern and requesting additional information about the project. Solutions were also suggested along with requests for further NLM participation. The September report by CSC to the Executive Committee of the Board of Regents was incomplete and inadequate. Further information was provided on October 1 at the request of the Board and this report was evaluated by the NLM staff. It included a revised date of March 1

for the INITIAL phase of the system and a cost estimate of \$2,800,000. It did not include the requested information required to establish creditability of the new schedule. The NLM evaluation indicated that the INITIAL system could not possibly be completed before August 1, 1971.

Following this review by the Board and subsequent discussions between NLM and CSC, the CSC MEDLARS project manager was replaced, and the firm began a technical audit of the project. The results of this audit are to be made known to NLM about November 30, 1970.

The Director, NLM, met with the senior management staff of CSC to discuss the project. Mr. Nashman, Vice President of the Eastern Region of CSC, reiterated the firm's desire to satisfy NLM. He referred to the complexity of the job and the need for a stronger systems staff. He underscored again the importance of the acceptance test specifications and promised a revised schedule with supporting data by November 30. He informally forecast a new date for the availability of the INITIAL system for testing of October 1971 at a cost of about \$3.5 million.

The Director expressed his disappointment and dissatisfaction to CSC. It was stated in positive terms that the Library wished the delivery of the INITIAL system at the earliest possible time, and that the position on the EXTENDED system would be reexamined as soon as the results of the CSC technical audit were made known to the Library.

The Board discussed this report extensively and suggested that NLM consider engaging outside consultants to review the present and future status of the project. The Board felt that this contract had reached a critical stage and that important decisions would have to be made very soon.

REPORT OF THE PL 480 PROGRAM
DR. G. BURROUGHS MIDER AND DR. LEROY LANGLEY

Dr. Mider and Dr. Langley discussed the field trip they took with Dr. Anlyan in September to Poland, Yugoslavia and Israel. Dr. Mider noted the general high caliber of the scientists involved in this program, but he expressed concern relative to the value of the Polish and Yugoslav journals which are translated cover to cover utilizing PL 480 funds. These journals are sent to the NLM and then distributed free to various libraries throughout the country. Dr. Mider noted that a study made by the Franklin Institute revealed that although the caliber of the scientists and of the articles published in these journals is high, the journals are not utilized in the United States to any significant extent.

Dr. Langley stated that a preliminary analysis by his staff provided data which leads to the same conclusion. In this respect, the key question is "What impact elimination of the journal translation part of the program would have on the rest of the program, and what affect it would have on the relationships this country has with Poland and Yugoslavia?" There was agreement that this should be carefully ascertained before any change is made.

Dr. Langley noted that there are now approximately 58 projects supported in the PL 480 Program, and that between 18-20 publications will come out of the program during the next 12 months.

The NLM has been attempting for many years to establish programs in India and Pakistan, but as yet no significant progress has been made. Dr. Langley stated that, in his opinion, the scientific competency in India and Pakistan is such that one should not anticipate many critical review or scientific monographs. On the other hand, he did find a plethora of ancient original manuscripts which could provide a series of histories of medicine. He thought that worthwhile projects could and should be supported by this program.

Considerable discussion centered about a means of effectively utilizing the scientific competence in India and Pakistan, particularly with regard to the contributions to the history of medicine. Prior experience has been disappointing in those countries. The Board, however, felt that the potential was so great that new and more effective means should be sought to realize this potential. On the other hand, they cautioned that simply the availability of the PL 480 funds should not become a basis for NLM's becoming involved in nonproductive enterprises. Dr. Carlson was one of the more optimistic members of the Board, and offered to assist Dr. Langley in the pursuit of productive arrangements.

EXTRAMURAL PROGRAMS 1/2/3/
REPORT OF THE ASSOCIATE DIRECTOR - DR. LEE L. LANGLEY

a. Status of the Resources Program - Dr. Langley noted that the new Extension of the Medical Libraries Assistance Act signed by the President in March markedly changed the Resources Program. New regulations and documents had to be prepared.

Under the original Act, funds could be used only to improve or expand libraries. The new Act permits establishment of new libraries. Under the original Act, the Program was tied to a formula which was based on the annual operating expense. This formula no longer applies.

While the new Act provides grants to improve or expand or establish a library, there must be a commitment from the applicant institution that there will be continuing nonfederal funds to support the program.

Two types of grants will be made in the Medical Library Resource Grants Program:

Resource Improvement Grants to establish libraries and assist small libraries in improving and expanding resources. This is a one-year, nonrenewable \$3,000 grant. The applicant must agree to provide space and at least one half-time person on a library staff. Additional funds up to \$3,000 may be requested for the training of staff.

Resource Projects Grants to improve and expand the methods and scope of library services. This may be a one to three year grant for each discrete project for improvement and/or expansion of library services. Under this particular grant, there is a minimum of \$1,000 award, with a maximum of \$200,000 total support per year to each library.

- 1/ Proceedings of meetings are restricted unless cleared by the Office of the Director, National Institutes of Health. The restriction relates to all material submitted for discussion at the meetings, the agenda for the meetings, and supplemental material, and all other official documents.
- 2/ For the record, it is noted that members absent themselves from the meeting room when the Board has under individual discussion applications (a) from their respective institutions, (b) in which a conflict of interest might occur.
- 3/ The Board of Regents, when considering the Extramural Programs of the NLM, also consists of the Board of Regents Advisory Council for Extramural Programs and the National Medical Libraries Assistance Advisory Board, and concurrently discharges the responsibilities of all three bodies.

Dr. Langley stated that the Extramural Programs are now moving along with the implementation of this program. Information has been sent to all possible applicants, the new regulations have been published in the Federal Register, applications are being received, and the first group of applications will be reviewed by the Board of Regents at its next meeting.

b. Revised Regulations for Resources Grants for Extramural Programs Necessitated by the Medical Library Assistance Extension Act of 1970

1. Authorized the establishment of libraries.
2. Deletes definition of "annual operating expenses."
3. Deletes definition of "improvement and expansion" and
4. Requires assurance for adequate nonfederal support.
5. Requires grant amount to be determined on basis of library services, taking into account:
 - (a) users
 - (b) library staff
 - (c) faculty characteristics of affiliated schools
 - (d) staff of affiliated hospitals
 - (e) geographic area served and other libraries in area.

c. (1) Evaluation Report of the Kentucky-Ohio-Michigan Regional Medical Library

Dr. Michael reported on the site visit which he, members of the NLM Advisory Committee and NLM staff made to the East Central Regional Medical Library on October 7-8, 1970. The Region seems well organized with great emphasis on workshops and consultations. It has evolved a complicated fee schedule, but one which does make some sense. The evaluation group made the following recommendations: (1) Wayne State should set up a separate account for its photocopying service, (2) the pertinent allowance for each document transaction should be revised, (3) baselines should be clarified and simplified, (4) the RML should coordinate more completely with MEDLARS Center.

(2) Status Report of the New York-Northern New Jersey Regional Medical Library

The status report was prepared and included in the materials in the workbook for this meeting. Dr. Langley reported that a decision has now been made to suspend evaluations pending contract negotiations with the Regional Medical Libraries.

d. FAST Task Force Recommendations At the June meeting of the Board of Regents, Dr. Langley presented the recommendations of the FAST Task Force. The NLM formally responded to the recommendations after discussion with the Board. Subsequently, members of the Task Force visited Dr. Langley to reconcile remaining differences. There was general concurrence on most of the recommendations. The recommendations which involve NIH as a whole, or the PHS, were deferred until action on the recommendations could be taken by the larger units. Recommendation No. 1 states that

"It is recommended that routine Board of Regents review of all new, renewal, and supplemental applications be eliminated." The Board questioned the legality of this recommendation and requested that a legal opinion be obtained.

- e. Policy for the Support of Publications. Dr. Langley reported that the problem of defining the scope of the publications program, and the consideration of priority subject areas for support from this program, had been discussed by the Board of Regents Subcommittee for Extramural Programs. Priority areas for support might be identified for projects related to biomedical communications and medical libraries. Dr. Michael affirmed that the subcommittee generally agreed that it might be useful to earmark a portion of publication funds for such projects, before other projects are considered for support. Dr. Cummings noted that the NLM has the only clear PHS publications authority, and that the Board of Regents in the past has emphasized the need to support specialized publications projects such as those related to military medicine in order to accommodate such special needs. It may be desirable to keep program definitions open. The problem of the comparability of priorities from one study section to another was also noted. Further information on DRG and institute procedures to normalize priorities was requested for the Board. Dr. Langley suggested that it would be helpful to have the Subcommittee for Extramural Programs look at all the applications which may be considered for publications program support, and make recommendations to staff on program priorities. It was agreed that this subject requires further consideration by the Board.
- f. Review of Council Procedures. The "Guidelines for Adjustments by Staff in Time or Amount of Grant Award" were reviewed and reaffirmed by the Regents at the November meeting.

Review of Applications Needing Special
Consideration by the Board of Regents Subcommittee for
Extramural Programs

At the Subcommittee meeting on November 18, 1970, a publication grant was brought up for consideration because it had a split vote. The Subcommittee also reviewed: (1) the status of the Resources Program; (2) the revised regulations for resources grants as necessitated by the Medical Library Assistance Extension Act of 1970; (3) the proposed contract guidelines being developed for Regional Medical Libraries; (4) the FAST Task Force recommendations; (5) Council Procedures; and (6) Interim Actions made by staff since the June 1970 meeting. The Subcommittee was also requested to establish a policy for the support of publications.

Consideration of Pending Applications

The Board of Regents acting concurrently as the Board of Regents Advisory Council for Extramural Programs, and as the National Medical Libraries Assistance Advisory Board, reviewed the following grant applications:

Research and Publication Grants	Reviewed	23	\$779,369
	Approved	9	240,304
	Disapproved	12	474,725
	Deferred	2	64,340
Training Grants	Reviewed	1	\$134,257
	Disapproved	1	134,257

Summaries of Board actions on all Extramural Grant Programs are appended to these minutes.

The Regents expressed the belief that the new legislation and regulations governing resource grants would be a beneficial change. They approved the overall policy guidelines governing grant review procedures.

REPORT ON THE NATIONAL MEDICAL AUDIOVISUAL CENTER
DR. CHARLES F. BRIDGMAN

NMAC has three concerns--first, to improve communications between the National Medical Audiovisual Center and its parent, the National Library of Medicine; second, to establish credibility and confidence in a new leadership, and to develop internal lines of communication for successful management and productivity; and third, to establish production goals for cooperative media development projects taking fullest advantage of production capacity. Considerable progress has already been made in the first two, and he presented his approach to fulfilling the third as follows: The NMAC may best serve the needs of professional health sciences teaching by first identifying areas in the very large information matrix making up health science fields, and identifying with disciplines those supporting concepts or key learnings which are the foundations of each field. Teaching packages which have already been developed must be identified to avoid redundancy of effort. For successful application, teaching units should be composed of building blocks of information which can be assembled in many patterns to meet instructional goals. These building blocks must be put together utilizing a variety of learning strategies that take advantage of learning principles as we know them today. The building block concept may involve a base of primary information with superimposed interpretations which can be changed and updated as progress of new knowledge dictates. Modular design would incorporate mechanisms that allow the student to test himself on information content, manipulative skills and cognitive skills. To be effectively designed, teaching units must illustrate the concepts upon which they are based, and be defined by peer groups in content areas. The final product resulting in effective teaching packages needs to be evaluated with the following criteria: Media content, learner acceptance, instructional design, production quality, and technical quality.

The accomplishment of these instructional materials must be shared with the private sector and with education institutions having production capabilities. The enormity of the task could occupy private industry, teaching institutions, media facilities and those of NMAC for generations to come. The need is so great that without systematic cooperative effort, little will be accomplished. The NMAC can offer a model by which efforts of industry and educational institutions can expedite their productivity. Teachers must be encouraged to come to the NMAC, leaving behind daily distractions, and devote their effort to the development of instructional materials. This may come about via sabbatical leaves with partial support from a University-on-Loan Program. The teacher must possess high teaching skills as recognized by his peers and students, and be abreast of new knowledge in his field. He should have the use of laboratory tools for displaying primary information originating from the professional environment.

The expert at media production must have lightweight, flexible tools that can be transported to the source of information. Recording technology has changed greatly in the last five years with the advent of using combination motion picture and television camera systems which allow editing of presentations as they are being photographed. Other skills, such as the production of demonstration models and embedded specimens in plastic, are

required for effective information display in three dimension. A new kind of library is emerging called the "learning resources center" which houses a variety of teaching materials that can be programmed and put into self-instructional carrels located in the vicinity of the library. Study materials are made available according to the ongoing curriculum. Cataloging and retrieval may be quite similar to that of books. All of these teaching materials must be highly filtered by previously described criteria before being admitted into distribution.

One of the hazards of putting the teacher on videotape or film is that he is often overwhelmed with the medium. He finds himself lacking in confidence as to information flow utilizing these tools. Therefore, simple tools must be utilized which encourage the teacher to adapt to new performance requirements, and give him the opportunity to explore the use of various media.

There are approximately 40 proposals in various stages of gestation in the cooperative media development program. Few have been approved and many of these may be combined. The final result will be perhaps 10 or 12 major projects that will continue for a period of time and involve the efforts of numbers of educational institutions which have similar or analogous needs and teaching goals.

The Regents complimented Dr. Bridgman on both the substantive clarity and the technical excellence of his presentation. They expressed their satisfaction with the apparent convergence of the NMAC's goals and those described in the AAMC report. They urged the pursuit of the university-on-loan concept and the development of the learning resources approach described by Dr. Bridgman.

TOXICOLOGY INFORMATION PROGRAM
REPORT BY DR. G. BURROUGHS MIDER

Dr. Mider reported on the status of the Toxicology Information Program (TIP). The new Director was characterized as a vigorous, imaginative and technically proficient realist.

The overall objective of the TIP is still the implimentation of the recommendations embodied in the 1966 President's Science Advisory Committee Report on "Handling of Toxicological Information." The TIP has taken as its first priority, the establishment of a "query-response" service for the scientific community in the area of toxicology. To support this service, the TIP is organizing and building a variety of specialized data banks containing information derived from both the literature and the files of other government organizations. In particular, they have been working with the Food and Drug Administration to incorporate data from their pesticide petitions files into a computerized storage and retrieval system. The TIP has also begun in-house studies on building other information systems and services. One such study is considering the enrichment of NLM's AIM-TWX data base with a core set

of toxicology journals. Software development includes the storage and retrieval of the pesticides petitions data, the drug-interaction project, and the storage-retrieval-formatting of information derived from a study of the information use habits and requirements of toxicologists.

The Regents expressed satisfaction with the excellent progress being made in this program under Dr. Kissman's leadership.

POLICY GUIDELINES FOR CONTRACTS

In the discussion of Policy Guidelines for Contracts, the Regents expressed concern that those educational activities critical to the improved delivery of service be supported. There ensued a clarifying discussion about the various means of support of RML programs besides contract for service, namely grants that might be made under the RML aegis, resource improvement and project grants and research grants. (Policy Guidelines for Contracts is attached)

The following Policy Guidelines for Contracts Negotiated with Regional Medical Libraries were approved as presented by the BOARD OF REGENTS:

POLICY GUIDELINES FOR CONTRACTS

Contracts will be negotiated individually and modified according to the special considerations of each regional library. The following broad policy will be applied:

1. The intent of the conversion to contracts is to use this as a mechanism for a more controlled and coordinated allocation of resources to insure maximum service.

2. The contract will be specifically limited to the provision of services, currently interlibrary loan, MEDLARS search formulation and general reference services.

3. All RMLs will be informed that R&D projects desired by NLM for immediate program development will be separately contracted for by NLM.

In addition, all RMLs will have access to the grant route for support of other innovative and experimental activities.

4. Contracts for information analysis or R&D may be negotiated with anyone in the country determined to be best qualified to solve problems and are not limited to Regional Medical Libraries.

5. We plan to strive for an integrated administrative and operational structure for RML. Under these circumstances, we are willing to pay a negotiated charge based on realistic estimates of cost if the services are independently provided. Although a program director for regional activities may indeed be desirable, this should be a decision of the Director of the RML. Contracts will be negotiated with the Director of the library or institutional director not the program director, if there is one. In most instances, NLM will negotiate contracts with the parent organization of which the library is a part e.g., the university. This would allow access to talents and resources that although available in the university might not be available in the library itself.

6. Where decentralized operations are in effect, senior management staff will determine the nature and number of contracts required to carry out the services in the region.

7. The administrative super-structure supported by the service contract should be held to a minimum.

8. Regional union book catalogs will not be permitted to be part of the basis of contract negotiations.

9. Intrinsic to all contracts will be the requirement to provide data required by NLM for program evaluation and management.

NATIONAL LIBRARY OF MEDICINE

RESUME OF BOARD OF REGENTS RECOMMENDATIONS

November 19-20, 1970

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year Requested	IRG Recommendation	BOARD OF REGENTS		
					Approval	Priority	Other
2 R01 LM 00411-04 (Pub1) Anastos, George University of Maryland Graduate School, Dept. of Zoology College Park, Maryland "Ticks, Hosts, Distribution and Disease Transmission"	BCM	71	\$ 43,427	\$ 43,427 (279)	\$ 43,427		279
2 R01 LM 00557-04 (Pub1) Schweitzer, Morton D. American Public Health Association, Inc. New York, New York "Current Bibliography of Epidemiology: A Publication"	BCM	71	25,000 20,000 15,500 8,000	Deferral			Def.
2 R01 LM 00704-03 Salton, Gerard Cornell University Arts & Engineering School Ithaca, New York "Automatic Document Retrieval for Medical Literature"	BCM	71	49,745 63,054 63,054	49,745 63,054 63,054 (200)	49,745 63,054 63,054		200

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 R01 LM PM 00835-01A1 Bryan, Gordon H. University of Montana School of Pharmacy Missoula, Montana "Drug Comparison and Selection"	BCM	71	01A1 02 03	\$ 25,292 26,782 27,716	Disapproval			Dis.
1 R01 LM 00914-01 (Pub1) Rothenberg, Albert Yale University School of Medicine New Haven, Connecticut "Index to Scientific Studies of Creativity"	BCM	71	01	8,430	Disapproval			Dis.
1 R01 LM 00916-01 (Pub1) Nathan, David G. Children's Hospital Medical Center Boston, Massachusetts "Bibliography of Thalassemia"	BCM	71	01	63,100	Disapproval			Dis.
1 R01 LM 00965-01 Butler, Francine K. University of Colorado Medical Center, Dept. of Psychiatry Denver, Colorado "Optimum Document Retrieval System for Individual Use"	BCM	71	01	5,000	Disapproval			Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Priority	Other	Def.
1 R01 LM 00966-01 (Publ) Williams, Stanley C. California Academy of Sciences San Francisco, California "Classification of North American Scorpions"	BCM	71	01	\$ 39,340 35,417 32,177	Deferral				
1 R01 LM 00967-01 (Publ) Levine, Norman D. University of Illinois College of Veterinary Medicine & Center for Human Ecology Urbana, Illinois "Publication of Translated Russian Ecology Book"	BCM	71	01	8,000	8,000 (225)	8,000			225
1 R01 LM 00968-01 Krantz, David L. Lake Forest College Dept. of Psychology Lake Forest, Illinois "Information Exchange Behavior of a Cohesive Scientific Group"	BCM	71	01 02	13,756 10,700	Disapproval				Dis.
1 R01 LM 00969-01 Levine, Jerrold M. American Institutes for Research Silver Spring, Maryland "Parameters of Information Seeking Behavior"	BCM	71	01 02	33,199 31,587	Disapproval				Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	Approval	Recommendation Priority	Other
1 R01 LM 00970-01 (Publ) Navarro, Vicente The Johns Hopkins University School of Hygiene and Public Health Baltimore, Maryland "Methods Used for Planning Health Services in Sweden"	BCM	71	01	\$ 20,470	20,470 (314)	20,470	314	
1 R01 LM HD 00971-01 Robb, John H. Foundation for Improvement in Research and Education, Inc. Bethesda, Maryland "Development of Information Services on Down's Syndrome"	BCM	71	01 02 03	59,900 56,900 55,200	Disapproval			Dis.
1 R01 LM 00973-01 Meyers, Philip R. The Research Foundation of State University of New York Health Sciences Center Stony Brook, New York "Simulation of a Structured Generalized Library"	BCM	71	01 02 03	86,973 103,960 160,515	Disapproval			Dis.
1 R01 LM 00974-01 Borko, Harold University of California Institute of Library Research Los Angeles, California "Evaluation of Medical Libraries-- Determination of Service Functions"	BCM	71	01	30,644	Disapproval			Dis.

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS	
						Approval	Priority Other
1 R01 LM 00975-01 (Pub1) Grun, Paul The Pennsylvania State University College of Science University Park, Pennsylvania "Synthesis of Information on Extra-Chromosomal Genes"	BCM	72	01	\$ 13,830	13,830 (233)	13,830	233
1 R01 PM 00076-01 Dual LM Reinecke, Robert D. Albany Medical College of Union University Albany, New York "Computer Instruction & Information Retrieval"	BCM	71	01 02 03	102,726 111,208 133,059	Disapproval		Dis. with Communication
1 R01 AM 15071-01 Dual LM Oddie, Thomas H. University of Arkansas Medical Center Little Rock, Arkansas "Quantitation of Thyroid Diagnosis"	END	71	01 02	28,727 23,510	28,727 23,510 (447)	28,727 23,510	447
1 R01 LM GM 00817-01A1 Meites, Louis Clarkson College of Technology School of Arts and Sciences Potsdam, New York "Polarographic and Related Electrochemical Data"	MCHB	71	01A1 02 03 04 05 06 07	30,356 39,168 39,452 40,932 44,571 47,036 50,947	\$ 30,356 39,168 39,452 (239)	30,356 39,168 39,452	239

RESEARCH & PUBLICATION GRANT APPLICATIONS - BY STUDY SECTION

BOARD OF REGENTS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG		BOARD OF REGENTS		Dis.
					Recommendation	Disapproval	Approval	Priority	
1 R01 IM 00976-01 Weiss, Paul A. The Rockefeller University New York, New York "An Integrative Treatise on Neuroplasmic Flow"	NEUB	71	01 02	\$ 31,300 25,800					
2 R01 IM 00489-04 Lutzker, Edythe INDIVIDUAL New York, New York "Waldemar M. Haffkine: Public Health Pioneer"	SSS	71	04 05 06	6,645 6,695 6,695	6,645 6,695 6,695 (220)		6,645 6,695 6,695	220	
1 R01 IM 00877-01A1 Garvey, William D. The Johns Hopkins University Faculty of Arts and Sciences Baltimore, Maryland "Scientific Communication in Biological Sciences"	SSS	71	01A1 02 03	39,104 72,606 80,459	39,104 72,606 80,459 (217)		39,104 72,606 80,459	217	
1 R01 LM HD 00972-01 Veith, Ilza University of California, San Francisco School of Medicine San Francisco, California "A Study on the Changing Concepts of Longevity"	SSS	71	01 02 03	14,405 14,125 14,622		Disapproval			

NATIONAL LIBRARY OF MEDICINE

RESUME OF BOARD OF REGENTS RECOMMENDATIONS

November 19-20, 1970

TRAINING APPLICATIONS

Application No., Investigator and Institution	Initial Review Group	FY	Year	Requested	IRG Recommendation	BOARD OF REGENTS		
						Approval	Priority	Other
1 T01 LM 00144-01 Skolnick, Malcolm H. State University of New York Stony Brook, New York	BLR	71	01	\$134,257	Disapproval with Communication			Dis. with Communication
			02	185,341				
			03	194,258				
			04	190,396				

COMPETING RESEARCH AND PUBLICATION GRANTS
SUMMARY OF COUNCIL RECOMMENDATIONS
TRADITIONAL PROJECT GRANTS

INSTITUTE OR DIVISION: NATIONAL LIBRARY OF MEDICINE COUNCIL DATE: NOVEMBER 1970

TYPE OF REQUEST	TOTAL REQUESTED		APPROVED		REDUCED		DISAPPROVED		DEFERRED	
	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT
FY 1971										
NEW	18	\$640,722	5	\$126,657	0		12	\$474,725	1	\$ 39,340
RENEWAL	4	124,817	3	99,817	0		0		1	25,000
SUPPLEMENT	0		0		0		0		0	
TOTAL	22	765,539	8	226,474	0		12	474,725	2	64,340
FY 1972										
NEW	1	13,830	1	13,830	0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	1	13,830	1	13,830	0		0		0	
FY 1973										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
FY 1974										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
GRAND TOTAL <u>1/</u>	23	779,369	9	240,304	0		12	474,725	2	64,340

1/ Includes 2 Dual IM Secondary Assignee requesting \$131,453, 1 Disapproval of \$102,726 and 1 Approval of \$28,727.

COMPETING TRAINING GRANTS
SUMMARY OF COUNCIL RECOMMENDATIONS
TRADITIONAL PROJECT GRANTS

COUNCIL DATE: NOVEMBER 1970

INSTITUTE OR DIVISION: NATIONAL LIBRARY OF MEDICINE

TYPE OF REQUEST	TOTAL REQUESTED		APPROVED		REDUCED		DISAPPROVED		DEFERRED	
	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT
FY 1971										
NEW	1	\$134,257	0		0		1	\$134,257	0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	1	134,257	0		0		1	134,257	0	
FY 1972										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
FY 1973										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
FY 1974										
NEW	0		0		0		0		0	
RENEWAL	0		0		0		0		0	
SUPPLEMENT	0		0		0		0		0	
TOTAL	0		0		0		0		0	
GRAND TOTAL	1	134,257	0		0		1	134,257	0	

BOARD OF REGENTS
NATIONAL LIBRARY OF MEDICINE

MINUTES OF EXECUTIVE SESSION
Friday, November 20, 1970

The Board of Regents of the National Library of Medicine met in executive session in the Countway Library, Boston, Massachusetts, at 1 p.m. on November 20, 1970.

The Chairman appointed new members to the Board's subcommittees, which will now have the following composition:

Lister Hill National Center for Biomedical Communications

Dr. Max Michael, Jr., Chairman
Dr. William G. Anlyan
Mr. Bruno W. Augenstein
Dr. William O. Baker
Dr. James C. Fletcher
Surgeon General, United States Air Force

Extramural Programs

Dr. George W. Teuscher, Chairman
Dr. Max Michael, Jr.
Dr. Frederick H. Wagman
Dr. Jack M. Layton
Dr. John P. McGovern
Surgeon General, United States Army

National Medical Audiovisual Center

Dr. William G. Anlyan, Chairman
Dr. Jack M. Layton
Mr. Bruno W. Augenstein
Dr. George W. Teuscher
Surgeon General, United States Navy

The Chairman of the Board is an ex-officio member of all subcommittees.

Regulations

Proposed regulations governing the activities of the National Library of Medicine were published in the Federal Register on August 25, 1970. Thirty days were provided for submission of comments by interested parties. Two were received, neither of which required revision of the document. However, the following sentence in Section 4.5(c) referring to MEDLARS tapes poses a dilemma:

"The use of such tapes shall be subject to such further conditions as the Director may prescribe when in his judgment necessary to further the purpose of the Library."

The NLM staff proposed to insert "and availability" after use in the above statement, but the General Counsel objected on the grounds that further restrictions were not required. The staff countered that additional control was indeed necessary because the release of tapes was or could be a drain on the Library's limited resources. Further discussion between the parties led the General Counsel to agree in principle to the Library's position providing appropriate wording was developed to express the constraint more explicitly. The Board of Regents instructed the NLM to develop the proper wording and approved the final publication of the amended regulations.

Cost of MEDLARS II

Mr. Simmons presented cost data for the development of MEDLARS II as projected in the contract with Computer Sciences Corporation (CSC). The Initial system was expected to cost \$2,155,000 and the contractor's fee would be \$100,000 if that cost were not exceeded. Overrun would require a reduction in the fee of 20 percent so that the entire fee would be lost at a cost of \$2,655,000. The Extended system was estimated (including cost of the Initial system) to cost \$2,960,000. The entire contractor's fee of \$102,000 would be earned if the cost did not exceed \$3,060,000. Above that cost the contractor's fee would be reduced at a rate of 25 percent so that the entire fee would be lost if costs rose to \$3,460,000.

The cost-sharing provisions in the contract require CSC to pay 25 percent of costs between \$3,460,000 and \$3,600,000 and 10 percent of costs from \$3,600,000 to \$3,800,000. The contract terminates when costs reach \$3,800,000, or August 31, 1971, whichever comes first. However, Mr. Simmons, having consulted with Mr. Styers, believes that the cost-sharing provision requires delivery of the Initial system. Therefore if the Initial system is not delivered to the NLM prior to August 31, 1971, the contractor has no obligation to share any costs.

That interpretation was contrary to the general opinion of both the Board and others of the staff. Consequently the terms of the contract must be reviewed and perhaps legal interpretation sought. An internal audit of the MEDLARS II activity has recently been completed by CSC whose president has agreed to provide results of the study to Mr. Zipf late in November. Mr. Augenstein moved that further action await results of the technical assessment and, depending on the "severity" of the anticipated information on progress or lack thereof in the development of MEDLARS II, that a meeting of the Board or of a subcommittee review the actions leading to the award of the contract to CSC and then determine a course of action in light of the legalities of the situation. The proposal was accepted.

Sale of MEDLARS tapes

The Board reviewed the minutes of the meeting on September 4, 1970, of its Executive Committee (Attachment 1) and the summary of the deliberations transmitted to the Secretary, DHEW, by the Director, NLM, on September 29 (Attachment 2). No response was given to the latter memorandum which, inter alia, sought concurrence of the Secretary in the recommended sale of MEDLARS tapes at a price of \$15,000-\$30,000 until the morning of November 20 when Dr. James Cavanaugh called the Director to ask for the action of the Board of Regents on the Executive Committee's recommendation.

The full Board, on motion offered by Dr. Michael and seconded by General Whelan, congratulated the Executive Committee on the excellence of its study and recommendation, thereby unanimously supporting its action.

It then developed that the Westwood Medical Communications had asked the Office of Science and Technology to intercede with the NLM to procure MEDLARS tapes. The commercial organization was told that the disposition of such informational materials was properly at the discretion of the Federal agency which originated them.

The Executive Officer had just learned that copy of a memorandum from the General Counsel, DHEW, to the Secretary, DHEW, had been received at the Library (Attachment 3). This reaffirmed the legal authority of the Board of Regents to recommend sale of MEDLARS tapes to a profit-making organizations and that the Secretary might legally accept such a recommendation. The memorandum closes:

"It is my recommendation that (1) we should establish a reasonable user charge in the recommended range, reflecting some ad hoc recovery of a portion of the collection costs; (2) we should announce the general commercial availability of the tapes; and (3) we should await the full Board meeting, before announcing."

As the Board had already endorsed the need for public announcement of the salability of MEDLARS tapes, no further obstacles toward implementation could be recognized other than the required information for publication in the Federal Register.

General Whelan then asked the reason for reversal of the Board's 1965 action which denied sale of MEDLARS tapes to profit-making organizations of which, incidentally, the General Counsel's memorandum took cognizance. The prior action reflected the experimental nature of MEDLARS in 1965 which required substantial control of the entire effort until the Medical Literature Analysis and Retrieval System could prove its worth both at the NLM and perhaps in a decentralized mode shared with other interests. Utility has been established.

Moreover, Bureau of the Budget (BoB) Circular A-25, issued during the interim, has been important in suggesting that agencies developing products of commercial value recover all or part of their costs in such enterprises by sale. Mr. Zipf

explained that pricing of the tapes within the context of the BoB circular should discourage frivolous applications but encourage bona fide effort in the public interest to facilitate information transfer. The price should take into account the element of risk involved in a particular application.

Director, NLM, said that most inquiries concerning sale of MEDLARS tapes for commercial ventures had been answered with the Board of Regents' 1965 decision and the reasons therefor, which had satisfied most parties. However, the Institute for Scientific Information in Philadelphia had been more persistent than most but had eventually abandoned its quest. Perhaps an initial skepticism by the interested commercial organizations as to the utility of MEDLARS tapes has been replaced by realization of their actual value.

NMAC Products

Some of the problems generated by the MEDLARS tapes are implicit in the audiovisual materials produced by the Library's National Medical Audiovisual Center. One problem concerns the ownership of copyrights of products resulting from collaborative efforts. Dr. Schoolman preferred to develop all-inclusive guidelines rather than deal piece-meal with a number of academic institutions, professional organizations and the like. He thought that the Association of American Medical Colleges might be helpful in resolving these issues. The Chairman demurred. Most universities, as such, do not become involved in copyright problems by the Deputy Assistant Secretary for Grants Administration Policy which may develop useful guidelines.

International Activities

The Director spoke of the improved quality and diversity of NLM program supported by P.L. 480 accounts. A continuing need exists for seeking new opportunities for investment and to monitor and evaluate current programs. Therefore he asked Drs. Ebert and Michael to visit programs in Poland, Yugoslavia and possibly Israel during the late spring of 1971 so that a report can be made to the Board in June 1971.

The Director also asked Messrs. Augenstein and Zipf, or perhaps Dr. Baker as an alternate, to visit the six foreign MEDLARS centers in the spring of 1971. Delicate international relationships involving the Library are threatened by delays in MEDLARS II development. When development of the initial system is complete, the quid pro quo arrangements that form the basis for sharing in the use of the tapes must be renegotiated. Each of the centers represents an investment of up to \$200,000 and 5 to 8 people from local resources. Reprogramming in anticipation of MEDLARS II has put a few of the centers in a somewhat stronger position than the NLM although all of them depend upon NLM for data input. Five of the centers have sent technically qualified personnel to Bethesda to participate in the development program. They have made important contributions, will return home shortly, and can be expected to be somewhat skeptical of projected milestones in the further development process. A trip report should be made to the Board in June 1971.

The Board endorsed Dr. Cummings' proposals enthusiastically. Mr. Augenstein said that the Board must come to grips with the MEDIARS II problem at its next meeting (March 1971); hence the visit to the MEDIARS centers should take place between March and June.

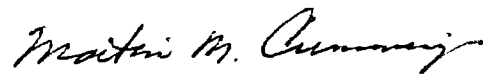
Miscellany

The Director announced changes in basic legislation affecting certain administrative practices of DHEW which would permit members of the Board to receive larger honoraria in the future.

Mr. Augenstein, supported by all members of the Board, expressed a desire to make some tangible expression of appreciation for the superior accomplishments of Dr. Ruth M. Davis during her tenure as Director of the Lister Hill National Center for Biomedical Communications. Similar expressions were voiced concerning the contributions of Mr. George F. Russell, Jr., who will leave the NLM soon to become Executive Officer of the National Institute of Child Health and Human Development. This led to a proposal that another type of award be established under the control of the Board of Regents, and a suggestion that the Board play a more active role in selection of the recipient of the Regents' Award, which has been given only once. Interest in exploring a series of options was expressed, but no resolution of the problem was reached.

The meeting adjourned at 2:10 p.m.

Respectfully submitted,



Martin M. Cummings, M.D.
Executive Secretary, Board of Regents
National Library of Medicine

Boston, Massachusetts

MINUTES

Meeting of Executive Committee, Board of Regents
Friday, September 4, 1970, National Library of Medicine

In attendance: (Board of Regents) Mr. B. Augenstein, Dr. R. Ebert
(Consultant) Mr. A. Zipf
(NLM) Dr. M. Cummings, Dr. H. Schoolman,
Dr. J. Leiter, Mr. G. Russell
Mr. R. Simmons, Dr. P. Olch

MEDLARS Tape Sales Policy

The meeting was called to order at 9:00 a.m. by the Chairman of the Board, Dr. Robert Ebert. The first order of business was a consideration of the MEDLARS tape sales policy.

Dr. Cummings and Dr. Leiter reviewed the circumstances requiring a reconsideration of the MEDLARS tape sales policy. Dr. Cummings also added that someone in DHEW has apparently promised MEDLARS tapes to the Westwood Medical Communications without prior consultation with NLM.

After discussion, it was agreed that the sale of MEDLARS tapes for commercial purposes was inevitable, and was legal under the NLM regulations as modified in the proposed regulations listed in the Federal Register of August 25, 1970. The in-depth discussion revolved around consideration of the responsibilities of the NLM to the present MEDLARS network and what steps might be necessary to prevent the erosion of this network by increasing numbers of "repackaged" MEDLARS programs provided on a commercial basis. There was also extensive discussion of how to arrive at a reasonable cost figure for the provision of MEDLARS tapes to a commercial firm.

Alternate cost estimates for establishing a fee for MEDLARS tapes for use by commercial firms were discussed at length. They ranged from an annual fee of \$15,000 to \$40,000.

In summary, it was agreed that the legality of sale to commercial firms, at the Director, NLM's discretion, is established. The terms of such a sale, the conditions under which such a sale will be made, and the price for this service would be negotiated under a contract. The immediate course of action agreed upon is as follows:

1) A specific and more detailed proposal is to be requested from the Westwood Medical Communications Company before the Board is prepared to agree to this particular request.

2) The results of the deliberations of this meeting of the Executive Committee are to be communicated to the Secretary, DHEW and the Congressional figures who have expressed an interest, as well as to the Westwood Medical Communications Company (See Attachment I).

3) The Committee will report its recommendations to the full Board of Regents at the November 1970 meeting.

Review of Computer Sciences Corporation (CSC) Contract

At 10:45 a.m., Mr. Augenstein took over the Chairmanship as Dr. Ebert had to leave shortly thereafter to return to Boston. In addition to the attendees already listed, the group was joined by: (NLM Staff) Dr. R. Davis, Mr. J. Droz, and Mr. K. Styers; (CSC Staff) Mr. A. Nashman, Mr. C. Williams, Mr. G. Asbell, Mr. G. Conklin, Mr. R. Bradley, Mr. Kasick, and later Mr. R. Barger.

For the remainder of the morning, CSC staff presented an overview of the MEDLARS II project which stressed accomplishments and minimized problems.

During lunch the Executive Committee expressed its disappointment on the lack of progress made by the contractor. Upon return from lunch the program listed by the CSC staff was set aside and Chairman Augenstein suggested that Project Officer Ralph Simmons present his view of the major problems with this contract in order that adequate time could be devoted to a hard and detailed look at these problems by all parties concerned. The purpose of this session was to generate information that can be presented to the full Board at the November meeting.

Mr. Simmons examined the project in three broad areas: the functional design of the system, the software development in response to that functional design, and the planning and conduct of acceptance and operational testing.

Functional Design: This has been a serious problem throughout. Since the renegotiation of the contract, a joint CSC-NLM team has devoted a great deal of time in attacking the problem. The completion of the initial detailed design has been delayed well past the planned completion date. Though there have been delays in the area of functional design, these are not the most significant delays in the project. The most significant delays are in the software development.

Software Developments: There are two areas of concern. One is the planning, scheduling, and estimation of completion of these pieces of the package and the second is the quality of the software that has been developed. In the area of planning and scheduling, our experience, based on in-depth examination of the format module, has given us a cause for alarm in that it seems most unlikely that this portion of the project will be completed on schedule. Certain key pieces are far behind schedule and it is impossible to predict with any confidence the completion dates of various tasks within the project.

The small amount of material available for judgment of the quality of the software makes a definitive judgment difficult. Our limited experience, however, suggests serious problems in timing, i.e., the length of time for certain pieces to perform their tasks.

Finally, Mr. Simmons pointed out that the current CSC projection date of November 1 for operational testing of the initial system is of grave concern as NLM should have the system in operational use by that time. He also stressed the difficulty in obtaining comparable figures to permit accurate comparison from report to report from CSC.

CSC staff was then asked to respond to Mr. Simmons' observations. Mr. Asbell admitted that original planning was "macroplanning," functionally oriented and only recently has become "microplanning," or user oriented. He felt that it was an error not to begin the microplanning earlier.

Mr. Simmons questioned this statement. He felt by contract and common understanding the difference between systems testing and operational testing was clear to all parties as long ago as June 1969 at the time of renegotiation of the contract.

As the CSC staff continued to present their case, Mr. Simmons interjected the problems associated from NLM's point of view. It soon became clear that NLM participation and initiative in parts of the project often outweighed the CSC contribution; it became increasingly clear that the missing pieces in the various portions of the project made projected dates of completion by CSC practically meaningless; it became very clear that information necessary for good management planning, in many instances, just does not exist. It was clear that additional resources must be added to improve management control and planning.

Repeated requests for percent completion data for some of the major tasks as listed in February 1970 and August 1970 were continually answered by "broken field running" on the part of the CSC staff.

The Director, NLM pointed out another problem area. The poor estimates of completion dates and the resulting slippage and the questionable validity of most of the dates presented by CSC has been responsible for NLM's investing sizeable sums of money in hardware and acquiring it prior to its actual need. He, therefore, insisted on adequate documentation as back-up for the projected dates of completion and percent completion as presented prior to the November Board meeting.

CSC is to provide the following information to the Board of Regents (through Mr. Ralph Simmons) by October 1, 1970 in order that the Board may study the information prior to its November meeting.

CSC is to provide:

1) The estimated completion dates for those major tasks in the MEDLARS II project designated in their presentation of September 4, 1970 as tasks 3, 4, 5, 6, 7, 8, 10, 11, and 12. The estimated completion dates will be presented as of June 1969, February 1970, and September 1970.

2) The percent completion of those major tasks in the MEDLARS II project, enumerated in the above paragraph as estimated in February 1970, and September 1970.

3) The man months expended on each of the major tasks in the MEDLARS II project, enumerated in paragraph (1) as of June 1969, February 1970, and September 1970 with the estimated requirements to complete the task as listed at each of these reporting dates. Any manpower shifts or changes should be noted for each report period.

4) Adequate documentation is to be provided to support all of the figures in paragraphs (1) through (3) to assure a reasonable degree of confidence in the validity of these figures.

5) CSC is to include in the October 1 report any methods for buying back some time on the marked slippage in the critical areas such as the addition of personnel, and is to candidly report those areas where a decrease in delay is unobtainable.

6) The report is to include a description of additional testing planned between October 1 and November 1, 1970.

CSC is to place all priority and emphasis on the initial system.

Mr. Ralph Simmons is to prepare a letter listing all of the requirements for the October 1, 1970 report for transmittal to CSC. He is also to prepare a letter for Mr. Zipf to transmit to the President of CSC.

The meeting was adjourned at 3:00 p.m. by Chairman Augenstein.

Respectfully submitted,

Martin M. Cummings, M.D.
Executive Secretary, Board of Regents
National Library of Medicine

SEP 29 1970

Secretary, DHEW
 THROUGH: Director, NIH
 Assistant Secretary for Health & Scientific Affairs
 Director, NLM

Sale of MEDLARS Data System to Profit Making Organizations

1. Following the correspondence between you and Senator Cranston, dated July 1, 1970, concerning the sale of MEDLARS tapes to the Westwood Medical Communications, a member of the Executive Committee of the Board of Regents of the National Library of Medicine¹ was convened on September 4, 1970 to reconsider the policy of the Board established at its meeting in June 1965.
2. The Executive Committee of the Board recommended to the Director, National Library of Medicine, that the policy of the Library be revised to permit the sale of MEDLARS tapes to profit making organizations. The question of fee level was discussed at length. While no final recommendation was forthcoming, the Committee suggested that a price between \$15,000 and \$30,000 for an annual subscription would seem reasonable. The Committee further recommended that any agreement for the provision of tapes should not hold the Library responsible for technical operations and products produced by the purchaser.
3. The Library is currently reviewing the practices of other federal agencies which sell computer data base tapes to the public. If you concur with the recommendation that MEDLARS tapes be sold to the public, I will forward a copy of this memorandum or similar report to Senator Cranston for his information and to Congressman Michel, who has also had correspondence with me on this matter. The National Library of Medicine will then prepare the necessary policies and procedures to implement the recommendation of the Board of Regents.

/s/ Martin M. Cummings, M.D.

Martin M. Cummings, M.D.
 Director

Enclosures:
 1965 Board of Regents Policy
 Westwood correspondence

¹ Dr. Robert Ebert, Dean, Harvard Medical School (Chairman)
 Mr. Bruno W. Augenstein, Vice President for Research, Rand Corporation
 Mr. Alfred G. Zipf, Executive Vice President, Bank of America (Past
 Chairman and Consultant to the Board)

AM:GFRussell:pah 9/28/70

Memorandum

(2)

TO : The Secretary

DATE:

FROM : Wilmot R. Hastings
General Counsel

SUBJECT: Sale of Medlars Data Systems to Profit-Making Organizations

Reference is made to the memorandum to you of September 29, 1970 from Dr. Marston subject as above.

The question whether the Medlars tapes from which the Index Medicus is printed should be sold or otherwise released has been before the National Library of Medicine and the Department for some time. (See attached memorandum dated May 21, 1965, Hiller to Simpson, Tab A.)

The Board of Regents in June of 1965 disapproved sale of Medlars tapes for profit-making purposes.

The Executive Committee of the Board of Regents of the National Library of Medicine has now made the recommendation that the tapes be sold to a profit-making organization, Westwood Medical Communications of Los Angeles. The price of between \$15,000 and \$30,000 a year would be charged. The recommendation that the Medlars tapes be sold and that they be sold to a profit-making organization is within the legal authority of the Board of Regents to make and you may legally accept the recommendation.

Section 382 of the PHS Act (formerly Section 372, amended by P.L. 91-212), 42 U.S.C. 276, authorizes the Secretary to prescribe rules for the National Library of Medicine for making material available to private organizations and to make a charge therefor. This section reads in pertinent part as follows:

"(c) The Secretary is authorized, after obtaining the advice and recommendations of the Board to prescribe rules under which the Library will provide copies of its materials, to public and private agencies and organizations, institutions, and individuals. Such rules may provide for making available such publications, materials, facilities, or services (1) without charge as a public service, or (2) upon a loan, exchange, or charge basis, or (3) in appropriate circumstances, under contract arrangements made with a public or other non-profit agency, organization, or institution."

The legislative history indicates that the National Library of Medicine may sell material to private, profit-making institutions or decline to do so. ^{1/}

The Executive Committee of the Board of Regents has approved sale of the tapes. Apparently it is assumed that the Board of Regents will approve the recommendation of the Executive Committee in its meeting on November 19-20, 1970.

The proper charge for a copy of a tape has been a recurring problem. There is little precedent material in the Government to aid in determining the proper charge. The Office of Management and Budget circular on "User Charges" (A-25) is repeated in the Department's material on user charges. The principle is stated that: "As a rule services . . . which provide special benefits to identifiable recipients . . . should be charged for at levels which recover the full cost to the Federal government." General Administration Manual, Chapter h:18-20, Section h:18-20-10(b)(1). The question becomes, what part of the cost of the collecting the material should be charged to a purchaser of a copy of the tape?

The file indicates that the proposed fee of between \$15,000 and \$30,000 a year would be acceptable to the purchaser. A fee within the recommended range would cover part of the cost of collection.

The recommendation that the tapes be released, though made under the authority of the National Library of Medicine contained in the PHS Act, is wholly in keeping with the Freedom of Information Act and the Department's regulation and procedures thereunder. The Department's policy is stated to be "the fullest possible disclosure of records consistent with those obligations of confidentiality and administrative necessities which are recognized by the Act." 45 CFR, Part 5 (Preamble). There is, we understand, nothing in the Medlars tapes proposed to be released which is confidential and copies of the tapes can apparently be made without undue interference with administration of the National Library of Medicine's use of the tapes.

It is my recommendation that (1) we should establish a reasonable user charge in the recommended range, reflecting some ad hoc recovery of a portion of the collection costs; (2) we should announce the general commercial availability of the tapes; and (3) we should await the full Board meeting, *before announcing*

^{1/} Senate Report 2071, 84th Cong., 2nd Sess., May 29, 1956, p. 3.

Attachment

Tab A - 5/21/65 memorandum, Hiller to Simpson