DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE Bethesda, Maryland

AGENDA

60th Meeting of the

BOARD OF REGENTS

9:00 a.m., January 25-26, 1979

Board Room National Library of Medicine

<u>IEETING OPEN:</u> All day on January 25 and from 9:00 to 10:45 a.m. on January 26. <u>IEETING CLOSED</u>: From 10:45 a.m. to adjournment on January 26 for the review of grant applications.

. CALL TO ORDER AND INTRODUCTORY REMARKS

I. REMARKS BY THE DEPUTY DIRECTOR, NIH

- II. CONSIDERATION OF MINUTES OF LAST MEETING TAB I (Orange Book)
- V. DATES OF FUTURE MEETINGS 1979 and 1980 Calendars <u>TAB II</u> <u>Next Meeting</u>: May 24-25, 1979 (Th-F) <u>Fall Meeting</u>: October 4-5, 1979 (Th-F) Winter Meeting: January 24-25, 1980 (Th-F)

COFFEE BREAK

*. REPORT OF THE DIRECTOR, NLM TAB III Dr. Martin M. Cummings

Dr. Thomas E. Malone

Dr. Kelly M. West

genda,	Board	of	Regents'	Meeting,	January	25-26,	1979

Ι.	REPORT ON THE OFFICE AND MEDICAL APPLICAT	ES OF HEALTH TECHNOLOGY TIONS OF RESEARCH	TAB IV	Dr. Seymour Perry
	LUNCHEON CATERED IN	CONFERENCE ROOM "B"		
Π.	INTERIM REPORT ON IN HILL CENTER AND NATI AUDIOVISUAL CENTER		TAB V	Dr. Harold M. Schoolman Dr. S. Richardson Hill, J. Discussant
[11.	SPECIALIZED INFORMAT	ION SERVICES	TAB VI	Dr. Henry M. Kissman Dr. Nicholas E. Davies, Discussant
	COFFEE BREAK			
	DISCUSSION OF VIRAL	HEPATITIS DATA BASE	TAB VII	Dr. Lionel Bernstein Dr. Thomas C. Chalmers, Discussant
	CLOSING OF NLM CARD	CATALOG	TAB VIII	Dr. Joseph Leiter Mr. James F. Williams and Mr. William J. Welsh, Discussants
	IMPRESSIONS OF SCIEN EDUCATION IN CHINA	NCE AND		Dr. Eloise E. Clark
	RECESS	* * * * * * *	* * *	
	DINNER	ar): 6	5:30 p.m.	esda Naval Officers' Club "Patio Room"
	(List of dinner trar	nsportation arrangements,	where appropr	iate, in agenda folder.)
	SPEAKER:	Dr. Thomas C. Chalmers President, Mount Sinai M Dean, Mount Sinai School of the City University of Member of the Board of R	of Medicine of New York, ar	d
	TOPIC:	'So What Happens To Prope And Transmitted Medic		
		* * * * * * *	* * * *	
	RECONVENE:	9:00 a.m., January 26, 1	979	

REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS	TAB IX	Dr. Ernest M. Allen
A. Progress Report on New Investigator and Research Career Development Programs	Tab A	
B. Review of Board Operating Procedure	es <u>Tab B</u>	
STATUS REPORT ON SUPPORT OF MAJOR STUDIES IN COMPUTER-BASED MEDICINE	TAB X	Dr. Dorothy A. Stroup
REGIONAL MEDICAL LIBRARY PROGRAM - RECENT DEVELOPMENTS	TAB XI	Mr. Arthur J. Broering
COFFEE BREAK		
	IENT FOR GRANT APPI	_ICATION REVIEW
SPECIAL APPLICATIONS		
<pre>SPECIAL APPLICATIONS A. Publication B. Resource C. Special Scientific Project D. Conference</pre>	(Gray Workbook) TAB I TAB II TAB III TAB IV	Dr. Jeanne L. Brand Dr. Roger W. Dahlen
 A. Publication B. Resource C. Special Scientific Project 	TAB I TAB II TAB III	
-	 FOR EXTRAMURAL PROGRAMS A. Progress Report on New Investigator and Research Career Development Programs B. Review of Board Operating Procedure STATUS REPORT ON SUPPORT OF MAJOR STUDIES IN COMPUTER-BASED MEDICINE REGIONAL MEDICAL LIBRARY PROGRAM - RECENT DEVELOPMENTS COFFEE BREAK 	FOR EXTRAMURAL PROGRAMSTAB IXA. Progress Report on New Investigator and Research Career Development ProgramsTab AB. Review of Board Operating ProceduresTab BSTATUS REPORT ON SUPPORT OF MAJOR STUDIES IN COMPUTER-BASED MEDICINETAB XREGIONAL MEDICAL LIBRARY PROGRAM - RECENT DEVELOPMENTSTAB XI

VII. ADJOURNMENT

Dr. Kelly M. West

DEPARTMENT OF HEALTH, EDUCATION

AND WELFARE

NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE

BOARD OF REGENTS

MINUTES OF 60th MEETING January 25-26, 1979

BOARD ROOM NATIONAL LIBRARY OF MEDICINE BETHESDA, MARYLAND

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

THE BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

Minutes of Meeting $\frac{1}{2}$

January 25-26, 1979

The Board of Regents of the National Library of Medicine was convened for its sixtieth meeting at 9:00 a.m. on Thursday, January 25, 1979, in the Board Room of the National Library of Medicine, Bethesda, Maryland. Dr. Kelly M. West, Professor of Biostatistics and Epidemiology, College of Health, University of Oklahoma Health Sciences Center, and Chairman of the Board of Regents, presided. In accordance with P.L. 92-463 and the Determination of the Director, NIH, and as announced in the Federal Register on December 20, 1978, the meeting was open to the public from 9:00 a.m. to 5:00 p.m. on January 25, and from 8:45 a.m. to 10:45 a.m. on January 26, and closed from 10:45 p.m. to 1:00 p.m. on January 26 for the review, discussion, and evaluation of grant applications. A Board roster is included under Attachment "A."

Board members present were:

Dr. Ismael Almodovar Vice Admiral Willard P. Arentzen (January 25) Dr. Thomas C. Chalmers Dr. Eloise E. Clark Dr. Nicholas E. Davies Dr. Emmet F. Ferguson, Jr. Dr. S. Richardson Hill, Jr. Dr. Doris H. Merritt Dr. Cecil G. Sheps Dr. Kelly M. West Mr. James F. Williams II

Alternates to Board members present were:

Dr. Faye G. Abdellah, representing Dr. Julius B. Richmond Rear Admiral Stephen Barchet, representing Vice Admiral Willard P. Arentzen (January 26) Brig. General Murphy A. Chesney, representing Lt. General Paul W. Myers Dr. William D. Mayer, representing Dr. James C. Crutcher Col. John C. Richards, representing Lt. General Charles C. Pixley Mr. William J. Welsh, representing Dr. Daniel J. Boorstin

Unable to attend:

Ms. Martha E. Williams

1/ For the record, it is noted that members absent themselves from the meeting when the Board is discussing applications from their respective institutions (interpreted to mean the entire system of which a member's institution is a part) or in which a conflict of interest might occur. Only when an application is under individual discussion will the Board member absent himself. This procedure does not apply to "en bloc" actions.

2/ The Board of Regents, when considering the extramural programs of NLM, also constitutes and serves as the National Medical Libraries Assistance Advisory Board.

National Library of Medicine staff members attending this meeting included:

Dr. Martin M. Cummings, Director Mr. Kent A. Smith, Acting Deputy Director Dr. Harold M. Schoolman, Deputy Director for Research and Education Dr. Myron J. Adams, Jr., Director, National Medical Audiovisual Center Dr. Ernest M. Allen, Associate Director for Extramural Programs Dr. Clifford A. Bachrach, Head, Medical Subject Headings Section, LO Mr. James W. Barry, Deputy Associate Director, LO Mr. Harry D. Bennett, Director for Computer and Communications Systems Dr. Lionel Bernstein, Director, Lister Hill National Center for Biomedical Communications Mr. Albert H. Berkowitz, Chief, Reference Services Division, LO Dr. John B. Blake, Chief, History of Medicine Division, LO Dr. Jeanne L. Brand, Chief, International Programs Division, EP Dr. Charles F. Bridgman, Assistant Director for Educational Resources Development Mr. Arthur J. Broering, Deputy Associate Director for Extramural Programs Mr. Kenneth B. Carney, Acting Executive Officer, Office of Administration Miss Mary E. Corning, Assistant Director for International Programs Dr. George J. Cosmides, Deputy Associate Director, SIS Dr. Roger W. Dahlen, Chief, Division of Biomedical Information Support, EP Dr. Dean Darby, Chief, Educational Training and Consultation Branch, NMAC Mr. Benjamin Erdman, Deputy Director, LHNCBC Mr. Carl Flint, Chief, Materials Utilization Branch, NMAC Dr. Henry M. Kissman, Associate Director for Specialized Information Services Dr. Richard Lasco, Chief, Educational Research and Evaluation Branch, NMAC Dr. Joseph Leiter, Associate Director for Library Operations Mrs. Grace McCarn, Chief, Bibliographic Services Division, LO Mr. Robert B. Mehnert, Chief, Office of Inquiries and Publications Management Dr. Stewart H. Rowberry, Chief, Materials Development Branch, NMAC Mr. Melvin L. Spann, Chief, Biomedical Information Service Branch, SIS

Mr. Daniel Tonkery, Chief, Technical Services Division, LO

Mr. Richard T. West, Chief, Office of Program Planning and Evaluation, EP

Others present included:

Dr. Thomas E. Malone, Deputy Director, NIH

Dr. Richard A. Farley, Director, National Agricultural Library

Dr. Saul Jarcho, New York Academy of Medicine - - Consultant, NLM

- Dr. Seymour Perry, Associate Director for Medical Applications of Research, NIH,
- and Acting Director, Office of Health Technology, Office of the Assistant Secretary for Health

Mrs. Ileen E. Stewart, Executive Secretary, Special Study Section, DRG, NIH

Mr. Alfred R. Zipf, Executive Vice President and Senior Administrative Officer (Retired), Bank of America - - Consultant, NLM

Members of the public present:

Mr. Jeffrey Christy, Assistant Editor, "The Blue Sheet"

I. OPENING REMARKS

Dr. Kelly M. West, Chairman, welcomed the Regents, ex officio members, alternates, consultants, and guests to the 60th meeting of the Board of Regents. He noted especially the presence of three new members: Dr. Ismael Almodovar, Dr. Emmet F. Ferguson, Jr., and Brigadier General Murphy A. Chesney (ex officio). New Regent Martha E. Williams was unable to attend because of the midwest's inclement weather. Dr. West offered the congratulations of the Board to Dr. Faye G. Abdellah who received an honorary degree from the University of Akron and a distinguished service award from the American Public Health Association.

II. REMARKS BY THE DEPUTY DIRECTOR, NIH

Dr. Thomas E. Malone, NIH Deputy Director, noted that NIH is in a period of fiscal austerity. Although the 1979 NIH budget contains an increase of \$350 million, the 1980 budget (as recently released) projects a net decrease of \$17 million. Disregarding several nonrecurring items in the 1979 budget (certain construction costs, for example), there will be an actual increase (before inflation) of about \$10 million in 1980. Dr. Malone said that the level of support for research projects will remain fairly constant. NIH predicts being able to fund about 3,000 new and competing projects in 1980.

The principles being distilled from the Secretary's Conference on Health Research Principles, held at NIH last fall, will be integrated into the budgetary process. The report of the conference is now being reviewed by the participants and also by the Institute of Medicine. The NIH Director and the directors of the NIH Bureaus, Institutes, and Divisions have been reviewing the BID programs to set priorities and decide on future directions. An important part of NIH's approach to research is the collaboration of several BIDs on an important subject—the "trans-NIH issues" approach. In the area of diabetes, for example, there is an NIH Diabetes Coordinating Committee on which all Institutes are represented. The Committee decides how NIH should distribute its resources in order to bring about an economical, efficient, and coordinated diabetes research effort. NIH and the National Science Foundation are exploring together how to deal with the problem of diminishing amounts of money available for new equipment.

There are a number of new initiatives in the Federal health community, Dr. Malone said. Technology transfer, utilization of research results, international health (an NIH Task Force will issue a final report in about three weeks on the Forgarty International Center and what its role should be), toxicology testing and research, and nutrition are all examples of new initiatives. We are faced with tough choices if we are to move ahead in these areas in a time of fiscal constraint. Advisory bodies, like the Board of Regents, will play an important role in helping to determine priorities.

Dr. Malone reported that recombinant DNA research and the regulations governing it continue to occupy the attention of the NIH Director and his staff. The regulations have been revised to soften the effect in certain areas of research. The next area of NIH involvement will be to develop policies concerning the biological effects of radiation.

There is continuing concern by HEW about the quality of management of its programs, including the instrumentalities of funding grants and contracts. The staff of the Office of Science and Technology Policy has been very supportive of NIH in the area of training

grants and in helping to reduce the amount of required paperwork for grants. The present prospects for innovation at NIH are high—for example, new modalities for information transfer (with the new Lister Hill Center Building) and the new emphasis on international health.

Dr. Cummings commented that Dr. Malone has been most helpful to the Library, especially in intervening to effect high-level NLM appointments that were being delayed.

Dr. Sheps noted that there has not been much visible action following the Secretary's conference on research strategies. Dr. Malone replied that there in fact has been much activity in assembling reports from various working groups and circulating them to the participants for comment. The Institute of Medicine is also reviewing these reports. The HEW Steering Committee will assess the reports and deliver them to the Secretary this fall. The principles contained in them will be intergrated into the 1982 budget. Most of this activity is being done without fanfare or public announcement.

III. CONSIDERATION OF MINUTES OF PREVIOUS MEETING

The Board of Regents approved the minutes of the October 12-13, 1978, meeting.

IV. DATES FOR FUTURE MEETINGS

The Board will meet next on May 24-25, 1979. The dates of October 4-5 were selected for the following meeting. Next winter's meeting was tentatively set for January 24-25, 1980.

V. REPORT OF THE DIRECTOR, NLM

Dr. Cummings brought to the attention of the Regents the January 26, 1979, issue of JAMA. It contains an article on the history of <u>Index Medicus</u> (1879-1979) written by Dr. Jeffrey Kunz, an editorial on the same subject by Dr. Susan Crawford and, on the cover, a portrait of John Shaw Billings.

The Director reviewed the Library's budget and personnel situation. The new 1980 budget recently released by the President contains \$42.4 million for NLM, the same amount as the current 1979 budget. Although this will present some difficulties, NLM will be able to accommodate to this level funding. More serious, however, is a reduction in manpower by eight positions. This may have some damaging consequences for NLM services. Dr. Cummings noted that NLM has been assessed \$300,000 in both 1979 and 1980 to support the new National Center for Health Care Technology in the Office of the Assistant Secretary for Health. NLM's assessment is part of an overall contribution of \$4.5 million from NIH. About 10 percent of NLM's budget now goes for various NIH and PHS levies. In a time of fiscal constraint this amount places more of a burden on NLM's resources than it has in years past.

A level budget for the Library actually means a decrease of about \$2 million (5-6 percent) after taking into account inflation and certain mandatory increases. Workload statistics continue to climb; for example, cataloging is up from 10,800 to 14,200, and reader

services and interlibrary loans continue to rise. These are labor-intensive and very costly activities. So far NLM has been able to maintain the quality of these and other services. The fill rate for interlibrary loans, for example, remains over 86 percent; but it will be extremely difficult, if not impossible, to maintain this fine record in the face of a decrease in staff. Dr. West interjected that NLM's fill rate of over 86 percent is especially impressive because NLM receives the hard-to-fill requests from other libraries. Mr. Williams commented that the Regional Medical Libraries fill between 65-70 percent. The number of computerized searches of NLM's data bases, Dr. Cummings continued, has risen dramatically. In FY 1978 about 1.1 million searches were performed—more than 50 percent of all online searching in the U.S.

The Director presented figures that illustrated the dramatic rise in the cost of journals. This increase has averaged 14.5 percent over the last five years and the cost now stands at \$66.49 per journal. The toal NLM budget for literature acquisition has risen from \$690,000 in 1974 to an estimated \$1.87 million in 1979. If we are successful in our protest of the \$300,000 assessment, this money would be applied to literature acquisition. Overseas expenditures to acquire material are also a problem because of the decline in the purchasing power of the U.S. dollar.

Dr. Cummings noted with pleasure that the construction of the Lister Hill Center Building is proceeding ahead of schedule and under budget projections. The current schedule is for completion by July 1979 (original projection: December 1979) at a cost of \$14.8 million (original estimate: \$19.9 million). The total appropriation of \$26 million includes funds for interior offices, exterior landscaping, and renovation of the present building.

The Director reported on a meeting he attended at the Office of Scientific and Technical Policy, representing the Assistant Secretary for Health. Several proposed studies were discussed: 1) the integration of the National Technical Information Service and the Smithsonian Science Information Exchange; 2) Federal/private sector relationships in library and information services; 3) possible overlap of functions among the three national libraries; and 4) international information exchange, both in its competitive aspects and its use as tool of foreign policy.

The last item the Director reported on was his recent trip to the Peoples Republic of China as part of a delegation from the American Association for the Advancement of Science. The group received high-level treatment, including a meeting with Fang Yi, fifth-ranking member of the Chinese Politburo. Fang Yi told the group that China has four major priorities to bring the country up to the level of the advanced countries by the year 2000. These are the modernization of agriculture, industry, defense, and science/technology. Under the last, eight priorities have been established: energy, agriculture, computers, materials, lasers, space, high-energy physics, and genetic engineering. These all require a sophisticated science base. The group was also told that manpower development and scientific communication would receive the highest attention.

Dr. Cummings said the group deliberately chose to visit places that did not appear in the trip reports of previous visitors, including the remarkable "underground city" in Peking, an extensive underground facility built for civil defense purposes. Dr. Cummings visited the Chinese Academy of Medical Sciences, housed in what was formerly the Peking Union Medical College. The institution was closed during the cultural revolution and the collection of its fine library reflects this 10-year gap. As part of a quid pro quo arrangement, the Chinese will provide professional staff to come to NLM to catalog the Library's collection of Chinese medical literature. NLM, in turn, will provide training for the visiting Chinese, and provide sets of <u>Cumulated Index Medicus</u> and other important NLM bibliographies to fill the gaps in the collection of the library of the Chinese Academy of Medical Sciences resulting from the cultural revolution. NLM has also been asked by the World Health Organization to provide consultants for construction of a new medical library in China. In response to a question from Mr. Williams, the Director said NLM held about 1000 Chinese monographs and manuscripts that have not been adequately cataloged.

VI. <u>REPORT ON THE OFFICES OF HEALTH TECHNOLOGY AND MEDICAL</u> APPLICATIONS OF RESEARCH

Dr. Seymour Perry, NIH Associate Director for Medical Applications of Research (and Acting Director of the HEW Office of Health Technology), elaborated on one of the new initiatives mentioned by Dr. Malone—that of NIH being responsible for assessing the applicability of research results to medical practice (technology assessment). This activity was prompted by rising health care costs and by the belief that there was an inadequate connection between biomedical research and health care delivery. NIH has developed a "technical consensus development" process in order to give researchers, practitioners, and the public a voice in assessing new technologies that are controversial or about which there is confusion.

There are a number of critical elements in this process, Dr. Perry noted. It must be carefully structured; allow open participation, presentation of facts must be clear and represent different shades of opinion and degrees of agreement; there must be a clear record of the deliberations; the results must be transmitted to the public and to the scientific and practicing communities; and the process must be timely. It is also important to recognize that consensus sometimes <u>cannot</u> be achieved. This is a signal that the science base is deficient. There are several hazards in the process, Dr. Perry cautioned. NIH must avoid giving a "bureaucratic stamp" to the procedure. Similarly, we must not appear to be dictating to medical practice.

To implement the consensus development activity, each NIH Institute appointed a representative to a Committee on the Medical Applications of Research. Dr. Lionel Bernstein is NLM's representative on the group. The first consensus development meeting was on breast cancer detection (1977); this was followed by 11 meetings on other topics in 1978. Some 20 conferences are scheduled for 1979. Several formats have been tried for these meetings: a neutral panel, an adversary format, and a procedure in which a draft document is modified by discussion and then sent to other experts for comment (and then a final document is issued). All these formats seem to work.

The dissemination of the results of consensus development meetings, however, has been a continuing problem. The public press is not always interested in covering the meetings. JAMA, which had agreed to publish the outcome of these meetings, has chosen not to report on several occasions. Specialty journals, alerted to each upcoming meeting and invited to publish the outcome, generally refuse to publish the results. In some instances the full proceedings have been published by an independent publisher or as a journal supplement. Dr. Perry also reported on the new National Center for Health Care Technology, established in the Office of the Assistant Secretary for Health. This Center replaces an earlier organization—the Office of Health Technology—established by the Secretary. The new National Center for Health Care Technology is responsible for assessing health technology (including its economic and social impact), disseminating information derived from technology assessment (using NLM's assistance), awarding grants and contracts for assessment studies, creating centers in the U.S. for health policy issues, and establishing an 18-member National Council on Health Care Technology (with both an advisory and an operational role).

Dr. Mayer asked how the cost/benefit aspects of technology transfer are dealt with. The NIH consensus development process, which can deal with the efficacy of treatment modalities, cannot address their cost/benefits. Dr. Perry replied that when the consensus development activity was begun, it was decided that NIH would not deal in any formal way with the question of cost/benefits. NIH does not have competence in this area and there are other PHS organizations better equipped to deal with this aspect, especially the National Center for Health Care Technology. Responding to a question from Dr. Chalmers about how topics are chosen for consensus meetings, Dr. Perry said that they are selected by the NIH Institutes (except the first, on breast cancer detection, which was chosen by the NIH Director).

Dr. Cummings commented on NLM's being identified in the new Center's authorizing legislation as a dissemination mechanism for the Center. There is no legislative history to elucidate this requirement. A member of the Senate staff who was working on the legislation did visit NLM for discussions. NLM's position was that we should in no sense "practice medicine" by issuing a journal, but that we should be prepared to support the existing apparatus. NLM's position should be a passive, i.e., library role, not an active disseminator. This latter activity would require additional funds. In the consensus development process NIH should obtain a commitment from a series of journals to publish the consensus outcome. It is also possible for NIH to subsidize the publication of the results of a consensus meeting.

VII. REPORT ON THE PROCUREMENT OF COMPUTER EQUIPMENT

This part of the Regents' meeting was chaired by Dr. Hill, Dr. West absenting himself from the presentation and ensuing discussion. Mr. Kent A. Smith, NLM Acting Deputy Director, presented an overview of NLM's efforts to procure a new computer. The process dates back to November 1974 when, as a condition of receiving the approval of the General Services Administratin (GSA) for a second IBM 370/158 computer, NLM agreed to initiate a competitive procurement for an entirely new computer system. In insisting on this proviso, GSA was reflecting a government-wide effort to install computer equipment from manufacturers other than just IBM. In September 1976 the Board of Regents recognizing the importance of the procurement, directed NLM to consult closely with the Regents in the procurement process. The Board was concerned that the new system should be (1) efficient and effective, (2) obtained at the lowest cost to the government, (3) procured in a timely fashion, and (4) that all bidders be dealt with equitably. Mr. Alfred R. Zipf, expert in computer procurement and management, has served as a consultant to the Regents in this matter. In addition, NLM was assisted by consultants from the Department of the Navy, the National Bureau of Standards, and the Air Force's Federal Simulation Center. A final Request

for Proposal (RFP) was issued in November 1977 and NLM anticipated awarding a contract in December 1978, with installation of new computer equipment in the Lister Hill Center Building scheduled for December 1979.

Two proposals were received in June 1978--from IBM and UNIVAC. A technical evaluation team reviewed the proposals. IBM's was found to be fully responsive and, in October 1978, IBM performed a benchmark test of their proposed system. In December of 1978 IBM also demonstrated an alternate system. IBM is now negotiating with the government prior to submitting a "best and final" offer. In December 1978, the technical evaluation team found the UNIVAC proposal to be nonresponsive to the mandatory requirements of the RFP, since UNIVAC was unable to perform certain functional demonstrations at the benchmark test. In addition, UNIVAC had made unauthorized changes to the ELHILL software that runs MEDLARS. (IBM had requested to make changes to the software, but was denied.) GSA officials in mid-January urged NLM to reconsider the UNIVAC proposal and make one last attempt to resolve the difference. NLM officials met again with UNIVAC representatives, but the matter of the unauthorized alterations to the software could not be resolved. UNIVAC has indicated that it will protest to the General Accounting Office (GAO). It sent copies of letters to this effect to DHEW and Congress. We have no indication yet if GSA will agree with NLM's position in this matter.

Mr. Zipf said that with the delays now being encountered in the procurement action it is unlikely that NLM will have a new computer system ready for installation when the new building is finished. There will undoubtedly now be a need for transitional equipment, whose costs were not foreseen. UNIVAC has consistently refused to change its procedures for the benchmark tests, saying that its ELHILL alterations can improve and speed up the processing operation. Mr. Zipf emphasized, however, that the manner in which UNIVAC proposes to conduct the benchmark tests would have an unknown effect on the rest of the programs. It is reasonable to expect a bidder to accede to the requirements of the purchaser of the system. Mr. Zipf presented a draft resolution to the Regents for consideration. After considerable discussion the Regents approved the resolution in Attachment B.

VIII. CLOSING THE NLM CARD CATALOG

Dr. Joseph Leiter, NLM Associate Director for Library Operations, presented to the Regents the various courses of action open to NLM in response to recent substantial changes in the <u>Anglo-American Cataloging Rules</u> (AACR). These changes mandate a large number of changes in existing entries in the card catalog. Thus, this is an opportune time to consider closing the card catalog and entering all cataloging entries into a computerized file. Besides the AACR rules, other factors to be considered are the costs associated with maintaining the catalog, physical deterioration of the card catalog, availability of a viable alternative to the catalog, and the problem of maintaining consistency between manual and automated files. For the last 12 years, NLM has maintained an automated catalog file which can be readily updated. The real problem is with pre-1966 materials which are cataloged only in the card catalog. The present annual maintenance cost of the card catalog is about \$180,000. To make the changes in our card catalog called for by the new AACR rules would mean a one-time cost of about \$360,000. If the card catalog is closed, Dr. Leiter said, NLM would want to (1) maintain or improve present service, (2) use the year of publication to determine inclusion in the card catalog, (3) update current CATLINE (computerized cataloging information) records to reflect most recent AACR changes, and (4) make manual file entries consistent with machine files.

Four basic alternatives were considered in closing the card catalog: closing it by year of publication (either 1980 or 1966, when machine readable record begins); by year of cataloging; or retrospectively convert all manual records (about 315,000) to machine-readable form. The last option, which staff feels is most desirable, would cost an additional \$725,000 over three years. It would meet the four specifications mentioned as minimum criteria (preceding paragraph). The implementation schedule outlined by Dr. Leiter calls for keyboarding of materials to begin in July 1979.

Following Dr. Leiter's presentation, Mr. Welsh of the Library of Congress noted that NLM has a great opportunity to retrospectively convert its catalogs. The Library of Congress faces problems much greater than NLM's. Mr. Williams also supported NLM's proposal to close its card catalog and convert its cataloging data to machine-readable form. He had conferred at length with Dr. Leiter's staff and he feels that their analysis of the problem and the recommended actions are sound.

IX. REPORT ON THE INTEGRATION OF THE LISTER HILL NATIONAL CENTER FOR BIOMEDICAL COMMUNICATIONS AND THE NATIONAL MEDICAL AUDIOVISUAL CENTER

Dr. Harold M. Schoolman, NLM Deputy Director for Research and Education, described progress being made on the amalgamation of the functions of the Lister Hill National Center for Biomedical Communications (LHNCBC) and the National Medical Audiovisual Center (NMAC). He said that it is important to conceptualize the new LHNCBC as an institute for research and development. This will allow the Center to have visiting scientists, to hire staff as scientists, to have young investigators, students, etc. The research and development will be directed broadly at biomedical communications (informationa management) for the support of the health science community. One division in the Center would identify problems in the health science community, create solutions based on communication modalities, determine the effectiveness of the proposed solutions, and promote their use.

Several technologies would be used in this process: communications engineering, computer sciences, educational technology, and information science. The existing competencies in the present LHNCBC and NMAC are in computer sciences, communications engineering, and R & D in education (including audiovisual competency). Dr. Schoolman then described how these functions would be distributed among the new LHNCBC's operating divisions. Each division would support, through its technical expertise, the creation of solutions to identified problems. Each division would also conduct research within its own discipline. This research would follow the principles laid out at the last Board meeting, namely, applied research in areas where there is need but where there was not adequate market-place incentive or interest on the part of academia or the commercial sector. The four relationships between the LHNCBC and academia/industry, also described at the last meeting, would as follows: competitive, cooperative, supportive, and passive. To integrate the application of the various technologies to the problems, an internal Scientific Directorate would be created. This would be made up of the division heads, the Deputy Directors and Director of the LHNCBC, and the NLM Deputy Director for Research and Education. An external Board of Scientific Counselors would review ongoing and proposed LHNCBC programs. All existing LHNCBC and NMAC programs are represented in the proposed organizational structure, with the exception of NMAC's audiovisual loan program which would be transferred to Library Operations.

Dr. Hill expressed his agreement with the proposed principles under which the new Lister Hill National Center for Biomedical Communications would operate and with the basic organization of functions of the Center, as presented by Dr. Schoolman. Dr. Hill expressed concern, however, about some of the confusing language in the written functional statements. There is also a need for clear titles of the LHNCBC's proposed operating divisions. The Regents agreed with Dr. Hill's comments, both on the acceptability of the proposed organization and the need for clearer language.

X. REPORT ON THE AUDIOVISUAL LOAN PROGRAM

Dr. Charles F. Bridgman, NLM Associate Director for Educational Resources Development, reported on a recently completed contractor study of NMAC's audiovisual loan program. The same contractor made a similar report in 1974. The present NMAC distribution activity encompasses some 20,000 prints of about 1200 motion picture and videotape titles. The largest user of the loan program is the nursing profession. Some 50,000 loans are now being sent out each year; in 1970 this figure was 110,000. The larger figure reflected non-health professional use (e.g., elementary and high school teachers). NMAC has since purged its loan collection of materials directed to non-health professionals.

A related program is that of the National Audiovisual Center of the General Services Administration to sell audiovisual materials. Many titles in the NMAC collection are available on sale from the National Audiovisual Center. Some 3000 to 6000 such items are sold each year by the Center, representing about 700 titles.

Following Dr. Bridgman's presentation, Dr. Schoolman pointed out that the Regents' subcommittee which studied the audiovisual programs concluded that with the rapidly changing technology it was difficult to determine the most effective and appropriate means of distributing audiovisual materials. It is an important service, as can be seen from the 50,000 loans per year, but it is labor-intensive and requires much equipment and space. With charges now being considered for interlibrary loan perhaps it is also appropriate to consider charging for loans of audiovisual materials. NLM staff who have studied the program feel that a prudent present course would be to continue to operate the loan program under contract, either by a commercial contractor or by GSA's National Audiovisual Center. This will allow us time to study the problem further without investing present manpower, equipment, or space. Dr. Hill said that the subcommittee of the Board agrees with this position.

XI. SPECIALIZED INFORMATION SERVICES

Dr. Henry M. Kissman, NLM Associate Director for Specialized Information Services, outlined briefly the range of programs within SIS's Toxicology Information Program. He then described in some detail progress made in 1978 in developing the Toxicology Data Bank (TDB) as an online service. In contrast to TOXLINE, which contains bibliographic information, the TDB is composed of evaluated data describing chemical and biological properties and the usage of selected hazardous chemicals to which populations are exposed. The data are extracted from 80 secondary sources such as textbooks and handbooks. Before being entered into the TDB, the data are evaluated by a task group of the NIH Toxicology Study Section. Public access to a file of 1100 complete records, via NLM's online network, was begun in October 1978. One problem that is inherent in the present method of constructing the TDB relates to the question of copyright as applied to the extracted portions of the secondary sources. These portions are usually small in comparison to the original source, and all extracts carry references to the sources. One of the publishers whose works are represented in the TDB has questioned the propriety of NLM's activity. NLM believes that its practice falls within "fair use" and that its extraction procedures are not different from those of the publishers of textbook who take numeric and verbal statements from other copyrighted works.

Another online retrieval system being developed by the Toxicology Information Program is the Laboratory Animal Data Bank (LADB). LADB aims to make available baseline values from animals used in experimental control groups. The ability to retrieve and analyze such data in an online system would be useful in designing and evaluating experiments involving laboratory animals. LADB was developed through a contract with Batelle Columbus Laboratories. A committee of the Institute of Laboratory Animal Resources of the National Academy of Sciences was engaged to provide advice on the project. The committee's final evaluation report contained ten recommendations which touched on the need for improved leadership, enrichment of the data bank, better peer review, improved use of advisory groups, and more input from government-supported projects. Dr. Kissman detailed TIP's efforts to comply with these recommendations.

A third activity described by Dr. Kissman was the Chemical Data Base Directory (CDBD) project and, related to it, the interagency effort to develop a Chemical Substances Information Network (CSIN). The CDBD is proposed as an online file to direct users to data within a collection of online files. The collection—or system of files would be known as the Chemical Substances Information Network. The report that recommends the building of the CDBD and CSIN also recommends that NLM assume the function of network administrator. Dr. Cummings and Dr. Fredrickson believe that NLM could not fulfill this responsibility without additional manpower and funds—an estimated 10 positions and \$5 to \$10 million per year. In a recent letter to Dr. Cummings from the Deputy Assistant Administrator, Office of Toxic Substances, EPA, it was proposed that EPA become the network administrator, with NLM as a co-administrator. Dr. Cummings and NLM staff believe that this would not be a workable arrangement.

Following Dr. Kissman's presentation there was discussion by the Regents on several of the points raised. Several Regents believe that NLM's practice of excerpting from copyrighted works for the Toxicology Data Bank was not a violation of copyright.

Dr. Bernstein, Director of the Lister Hill Center, noted a parallel situation in building the viral hepatitis data base (see XII, following), in which no copyright problem is anticipated. Dr. Davies, who has studied NLM's progress in building the Laboratory Animal Data Bank, assured the Regents that NLM was taking appropriate steps to respond to the criticisms of LADB by the Institute of Laboratory Animal Resources. He strongly supported Dr. Cummings' position that NLM should not become a co-administrator of the Chemical Substances Information Network and that, if NLM were to become sole administrator, it could only be with additional staff and financial resources. The sense of the discussion, as summed up by Dr. West, was to agree with Dr. Davies and to support NLM's and NIH's position.

XII. REPORT ON THE VIRAL HEPATITIS DATA BASE

Dr. Lionel Bernstein, Director of the Lister Hill National Center for Biomedical Communication, presented a progress report on the Hepatitis Data Base—a prototype information transfer system for practitioners. An overview of the system was presented to the Regents in May 1978. The Hepatitis Data Base (HDB) contains evaluated and synthesized information taken from previously published source documents. It is now undergoing updating and consensus validation by a group of subject experts. When the updating is complete, the data base will be published as a supplement in the <u>Annals of Internal Medicine</u> with a request that readers provide comment. This should indicate the extent of errors or omissions in the knowledge base. Dr. Bernstein, assisted by his staff, demonstrated on an intelligent terminal the browsing capability inherent in the HDB. He also showed some of the of the derivative products including multi-speed options for a 12-minute animated videotape describing the morphology and antigenic structure of the hepatitis B virus, and audiotaped responses to questions likely to be asked by practitioners which are accessible by dial telephone without a human intermediary.

Dr. Chalmers commented that the Hepatitis Data Base holds an exciting potential for practitioners and health science students. To be able to turn quickly to an authoritative data base to back up their decision-making would be of inestimable value in certain situations. Bringing about its widespread acceptance and use by the health community will be a formidable problem, however. Perhaps recertification could be based on information contained in such data bases. Dr. Sheps noted that one of the impressive features of the HDB was that it contained information ranging from basic science aspects of the subject to information that can be used in clinical decision-making, and that the information can be retrieved selectively depending on the level of knowledge required by the user. The issue of "elitism," raised by others as an objection to a government-sponsored "authoritative" data base, was discounted by Dr. Sheps. In medicine, he said, it is the knowledgable expert whose view should be given most weight. If the experts are carefully and wisely chosen, if they are provided with the most recent research findings on which to base their judgments, and if their judgments are frequently reviewed and kept up-to-date, then we should not apologize for making their consensus findings available as an "authoritative" data base. Dr. Bernstein noted that the Lister Hill National Center for Biomedical Communications has worked closely with professional societies in selecting experts for building the data bases.

XIII. OTHER BUSINESS

Dr. Eloise Clark and Dr. Faye Abdellah made individual observations on their recent trips to the Peoples Republic of China. The points of view expressed encompassed an overview by Dr. Clark of the levels of education and a slide presentation by Dr. Abdellah on her observations with emphasis on medicine—its practice and teaching.

XIV. REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS

Dr. Ernest M. Allen, NLM Associate Director for Extramural Programs, introduced Mr. Sheldon Kotzin as the new Regional Medical Libraries Coordinator. As required annually, Dr. Allen then presented for review the Board Operating Procedures— "Guidelines for Adjustments by Staff in Time or Amount of Grant Award"—which were adopted originally in 1964. The Board reaffirmed the guidelines without revision. (Attachment C)

Dr. Allen pointed out that, for applications recommended by the Board at its last two meetings, NLM would be able to pay all approved applications in FY 1979 through priority 175. It is expected that priority 175 can be reached as well, following the final Board meeting this fiscal year.

XV. REPORT ON SUPPORT OF STUDIES IN COMPUTER-BASED MEDICINE

Dr. Dorothy A. Stroup, EP Program Officer, brought the Board up to date on NLM's three new extramural grant programs—the "New Investigator Research Grant Program," the "Research Career Development Award Program," and the "Program Project Grant for Research in Biomedical Information Systems." The New Investigator and the Career Development Programs had been discussed at length by Dr. Allen during the Board's October meeting, and Dr. Stroup concentrated her discussion on the third programthe Program Project Grant. NLM decided to use the research program project mechanism since it seemed best suited to "initiate a small number of major studies in computer-based medicine." The program is being developed as a collaborative effort between the Lister Hill National Center for Biomedical Communications and the Extramural Programs. The LHNCBC has earmarked \$1.0 million in support of the program, while EP will furnish the necessary staff; and the Biomedical Library Review Committee, aided by consultants, will conduct the initial review. Announcements of the three programs appeared in the NIH GUIDE FOR GRANTS AND CONTRACTS on November 27, 1978. In order to make awards from FY 1979 funds, February 1 was selected as the final date for receiving applications. The initial review will take place at a special Biomedical Library Review Committee meeting on May 1-3, so that the applications can be presented to the Board for final review on May 25.

XVI. REGIONAL MEDICAL LIBRARY PROGRAM

Mr. Arthur J. Broering, NLM Deputy Associate Director for Extramural Programs, gave a brief introduction of the Regional Medical Library (RML) Program to new Board members. He stated that this program, consisting of eleven Regional Medical Libraries, is the largest and most far-reaching of the assistance programs administered by the Library's Extramural Programs. It is a cost-sharing program, with the financial contributions of the private sector toward the objectives of the RML network exceeding by far the Federal dollar input. The Program's principal aim is "to foster sharing and cooperation among health libraries and to make all health information readily available to all who need it." Mr. Broering described current and future services and levels of RML expenditures for training and continuing education, documentdelivery, online service and training activities, program planning and administration.

Mr. Sheldon Kotzin, the Library's RML Coordinator, identified areas of RML development in 1979. Among these are: stabilization of funding for the document-delivery component of the network, closer examination of network structure and strengthening network operation through new and expanded programs and future development. These initiatives will be reported at future Board meetings.

MEETING CLOSED FOR REVIEW OF GRANT APPLICATIONS

XVII. RESEARCH, RESOURCE, TRAINING, SPECIAL SCIENTIFIC PROJECT, PUBLICATION, AND IMPROVEMENT GRANT APPLICATIONS

Before proceeding with the consideration of pending applications, Dr. Dahlen informed the Board members and consultants of confidentiality and conflict-of-interest procedures and reminded all Regents and consultants to sign, at the conclusion of the grant review, the statement certifying that they had not participated in the discussion of any application where conflicts of interest might occur.

The Board concurred with the recommendations of the Extramural Programs' Subcommittee. A total of 60 applications was reviewed, of which 34 were recommended for approval, 22 for disapproval, and four for deferral. Grant applications recommended for approval by the Board are listed in the summary actions (Attachment E). Interim actions taken by EP staff since the October 1978 Board meeting were noted.

XVIII. ADJOURNMENT

The meeting was adjourned at 1:00 p.m. on Friday, January 26, 1979.

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Wednesday, January 24, 1979, 2:00 to 3:15 p.m. (EP Subcommittee—List of Attendees under Attachment D) Thursday, January 25, 1979, 9:00 a.m. to 5:30 p.m. Friday, January 26, 1979, 8:30 a.m. to 1:00 p.m.

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-14-

- 1. The Board unanimously passed a resolution on the procurement of a new computer for the Library. The resolution was forwarded to the Secretary, HEW. (Attachment B)
- 2. The Board approved in principle the proposed organizational alignment of the new Lister Hill National Center for Biomedical Communications with the understanding that clearer language for the functional statements and for the names of the Center's component organizations will be developed by NLM staff and submitted to the Board for consideration.
- 3. The Board reaffirmed the "Guidelines for Adjustments by Staff in Time or Amount of Grant Award" (Attachment C).
- 4. The Board concurred with recommendations of the Extramural Programs Subcommittee. Grant applications recommended for approval are listed in the summary actions (Attachment E).
- 5. The Chairman appointed a Nominating Committee for the selection of next year's Board chairman, consisting of Dr. William D. Mayer, Chairman, Dr. Faye E. Abdellah, and Rear Admiral Stephen Barchet.

I hereby certify that, to the best of my knowledge, the foregoing minutes and attachments are accurate and complete.

Kellyh West 3 Martin M. Cummings, M.D. Date Kelly M. West

Executive Secretary

Chairman/

Robert M. Mehnert Chief, Office of Inquiries and Publications Management

BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

CHAIRMAN

	WEST, Kelly M., M Professor of Bios and Epidemiolog College of Health University of Okl Health Sciences C P.O. Box 26901 Oklahoma City, OK	tatistics ly ahoma	
ALMODÓVAR, Ismael, Ph.D. President University of Puerto Rico San Juan, Puerto Rico 00936	(8/3/82) <u>809-765-5955</u>	MERRITT, Doris H., M.D. Dean, Office of Research Sponsored Programs Indiana-Purdue University at Indianapolis	and
<u>CHALMERS</u> , Thomas C., M.D. President Mount Sinai Medical Center	(8/3/79)	355 Lansing Street Indianapolis, IN 46202	<u>317-264-8287</u>
Dean, Mount Sinai School of Medicine of the City University of New York One Gustave L. Levy Place		SHEPS, Cecil G., M.D. Professor of Social Medic University of North Carol	ine
New York, NY 10029 DAVIES, Nicholas E., M.D.	<u>212-650-6233</u> (8/3/81)	at Chapel Hill Chase Hall 132A Chapel Hill, NC 27514	<u>919-966-5011</u>
Attending Physician Piedmont Hospital Piedmont Professional Building	())))	<u>WILLIAMS</u> , James F., II Medical Librarian	
35 Collier Road, N.W. Atlanta, GA 30309	404-355-1690	Vera P. Shiffman Medical Wayne State University 4325 Brush Street	Library
FERGUSON, Emmet F., Jr., M.D. 1515 May Street	(8/3/82)	Detroit, MI 48201	<u>313-577-1163</u>
Jacksonville, FL 32204	904-353-5921	WILLIAMS, Martha E. Research Professor	(8/3/82)
HILL, S. Richardson, Jr., M.D. President	• • • •	Coordinated Science Labor College of Engineering University of Illinois	atory
University of Alabama in Birmin University Station Birmingham, AL 35294	gnam 205-934-3493	Urbana, IL 61801	217-333-1074

EX OFFICIO MEMBERS

Primary

ARENTZEN, Willard P., Vice Adm., MC, USN Surgeon General Department of the Navy Washington, DC 20372 202-254-4153

Alternate

BARCHET, Stephen, Rear Adm., MC, USN Special Assistant for Education and Training, and Commanding Officer Naval Health Sciences Education and Training Command National Naval Medical Center Bethesda, MD 20014 <u>301-295-0203</u> 1/25/79

<u>OORSTIN</u> , Daniel J., Litt.D. Librarian of Congress Library of Congress 10 First Street, S.E. Washington, D.C. 20540 <u>202-426-5205</u>	<u>WELSH</u> , William J. Deputy Librarian of Congress Library of Congress 10 First Street, S.E. Washington, D.C. 20540 <u>202-426-5215</u>
RUTCHER, James C., M.D. Chief Medical Director Ne Veterans Administration Thington, D.C. 20420 <u>202-389-2596</u>	MAYER, William D., M.D. Assistant Chief Medical Director for Academic Affairs (14) Department of Medicine and Surgery The Veterans Administration 810 Vermont Avenue, N.W. Washington, D.C. 20420 <u>202-389-5093</u>
ARK, Eloise E., Ph.D. sistant Director for Biological Behavioral, and Social Sciences ational Science Foundation 1800 G Street, NW Washington, D.C. 20550 <u>202-632-786</u> 7	none
<u>RICHMOND</u> , Julius B., M.D. Surgeon General, PHS, and Assistant Secretary for Health, HEW 200 Independence Avenue, S.W., Room 716G Vashington, D.C. 20314 <u>202-245-7694</u>	ABDELLAH, Faye E., Ed.D., Sc.D. Assistant Surgeon General Chief Nurse Officer, USPHS and Chief Advisor Long-Term Care Policy OASH/DASH P.R.S Parklawn Building, Room 17B09 5600 Fishers Lane Rockville, MD 20857 <u>301-443-6497</u>
MYERS, Paul W., Lt. Gen., USAF, MC Surgeon General Department of the Air Force Forrestal Building Nashington, D.C. 20314 <u>202-767-4343</u>	CHESNEY, Murphy A., Brig. Gen., USAF, MC Deputy Surgeon General for Operations HQ United States Air Force, AFMSC/SG Office of the Surgeon General Brooks AFB, TX 78235 <u>512-536-3855</u>
<u>'IXLEY</u> , Charles C., Lt., Gen., MC, USA The Surgeon General Department of the Army Washington, D.C. 20310 <u>202-697-1295</u>	RICHARDS, John C., Col., MC, USA Chief, Graduate Medical Education Branch Education and Training Division U.S. Army Medical Department Personnel Support Agency Washington, D.C. 20314 <u>202-693-5455</u>

EXECUTIVE SECRETARY

CUMMINGS, Martin M., M.D. Director National Library of Medicine Bethesda, MD 20014 <u>301-496-6221</u>

1/25/79

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH BETHESDA, MARYLAND 20014

NATIONAL LIBRARY OF MEDICINE

January 26, 1979

The Honorable Joseph A. Califano, Jr. Secretary of Health, Education and Welfare Washington, D. C. 20201

Dear Mr. Secretary:

As Chairman of the Board of Regents of the National

Library of Medicine, I am pleased to transmit to you

an important resolution passed at our January 26,

1979 meeting.

Sincerely yours,

in m

Kelly M. West, M.D. Chairman, Board of Regents National Library of Medicine

Enclosure

RESOLUTION

The Board of Regents of the National Library of Medicine reviewed the status of the NLM computer procurement and is disturbed by the fact that the granting of a series of waivers and extensions of time to one vendor is jeopardizing both the competitive aspects of the procurement and the efficiency of any transition to new equipment.

On a previous occasion, the Board pointed out that it would be most economic to have the new equipment installed and operating in the Lister Hill Center facility when it is completed this year. Continued delay in this procurement will require the NLM to move its present system and then replace it at a later date. This is an important consideration involving the use of transitional equipment at substantial cost.

The Board recommends that NLM make no further concessions to one of the bidders in the belief that they are forcing unwarranted changes to the benchmark tests. Specifically, the Board urges that no compromise be allowed with respect to ELHILL, the software program which drives the entire MEDLARS system. ELHILL was developed with great care and at high cost and has been demonstrated through extensive operational use to be a most efficient and versatile program. Any single vendor's effort to alter the benchmark tests will result in unfair competition and could, if sanctioned, damage the future operation of the NLM computer-based services.

The Board recalls that the General Services Administration attempted to disadvantage one competitor and the taxpayer by disallowing \$600,000 in government-earned lease purchase credits. This decision was reversed after strong objection was made by the HEW Assistant Secretary for Management and Budget.

The Board believes it would be a disservice to the medical community and the tax-paying public if the continued pressure to distort the competitive process leads to a procurement which does not provide the most efficient and effective system available to perform the tasks required by NLM.

> National Library of Medicine January 26, 1979

- 1. Staff is authorized to exercise its responsibility to negotiate downward from the Board recommendation:
 - (a) Where activities or items can be adequately accomplished at a smaller cost than that recommended by the Board;
 - (b) Where statute, regulation, or policy requires elimination of certain items of expenditure; or
 - (c) Where the applicant voluntarily restricts the scope of his project to less than that recommended by the Board.
- 2. Staff is authorized to exercise its judgment and responsibility for upward revision in the dollar amount of award whenever such revision is for the purpose of carrying out the objectives of the proposal within the scope recommended by the Board.
 - (a) This authorization will cover those factors which deal with administrative adjustments in budget, such as orderly termination, institution-wide salary increases, and pro-rata adjustment of budgets to accommodate changes in project period dates.
 - (b) This authorization is not to be limited to any specific set of circumstances, but extends to any adjustment of the budget that is not for the purpose of altering scientific content or scope of the project.
 - (c) There should be no arbitrary limitation, either as a dollar amount or percentage of approved grant, on staff negotiation. Rather, the purpose of the budget adjustment should be the limitation on staff authorization.
- 3. Staff will report all budget adjustments in excess of \$500 to the Board at the next available meeting to permit review of the effect of these guidelines. Board confirmation of each administrative action will not, however, be required.

Adopted:	11/ 6/64
Reaffirmed:	6/24/66
Reaffirmed and	
amended:	6/20/68
Reaffirmed:	11/21/69
Reaffirmed:	11/20/70
Reaffirmed:	11/23/71
Reaffirmed:	11/21/72
Reaffirmed:	11/30/73
Reaffirmed:	12/ 6/74
Reaffirmed:	11/26/75
Reaffirmed:	1/28/77
Reaffirmed:	5/26/78
Reaffirmed:	1/26/79

BOARD OF REGENTS

Extramural Programs Subcommittee Meeting

January 24, 1979

ATTENDEES

Subcommittee Members Present:

Dr. Faye G. Abdellah Dr. Saul Jarcho (Consultant) Dr. Doris H. Merritt Mr. James F. Williams II

NLM Staff Present:

Dr. Ernest M. Allen, Associate Director for Extramural Programs Mrs. Helen S. Bennison, Grants Management Specialist, EP Mr. Arthur J. Broering, Deputy Associate Director for Extramural Programs Dr. Jeanne L. Brand, Chief, International Programs Division, EP Mr. Peter Clepper, Program Officer, EP Mrs. Karin K. Colton, Committee Management Assistant Dr. Roger W. Dahlen, Chief, Division of Biomedical Information Support, EP Miss Annette B. Green, Grants Data Clerk, EP Mrs. Rose Marie Holston, Program Technical Assistant, EP Mrs. Frances E. Johnson, Program Officer, EP Mr. Sheldon Kotzin, RML Program Coordinator, EP Mrs. M. Kathleen Nichols, Grants Management Specialist, EP Mrs. Marguerite Pusey, Grants Management Specialist, EP Dr. Dorothy A. Stroup, Program Officer, EP Mr. Richard T. West, Chief, Office of Program Planning and Evaluation, EP Mr. Randall Worthington, Program Officer, EP Dr. Galina V. Zarechnak, Program Officer, EP

	000	COUNCIL DATE: JANUARY 19/9
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		AMOTINES
APPLICATION NUMBER SHORT TITLE		RECOMMENDED
2 RO1 LM 00824-10	10	5,600
INTERNATIONAL MAMMALIAN HISTOLOGICAL NOMENCLATURE		
2 ROI LM 02708-02	02	25 ° 055
FIVE YEAR SUPPLEMENT TO "MUSCA DOMESTICA"		
1 RO1 LM 03245-01	01	20,080
THE CHANGING CONCEPT OF FEVER IN THE 19TH CENTURY	03	21,441
1 RO1 LM 03246-01 DUAL: RR	10	57,920
LIVING NEW WORLD MONKEYS (PLATYRHINI) VOLUME 2	03	
1 R13 LM 03248-01	01	14,782
CONFERENCE ON EDUCATION FOR MEDICAL LIBRARIANSHIP		
1 RO1 LM 03260-01	10	10,513
BISTABLE VISUAL PIGMENTS		
1 RO1 LM 03264-01	10	78,698 84, 373
FACILITATING TRANSFER OF KNOWLEDGE ON DYSLEXIA	70	1.7.640
1 RO1 LM 03266-01	01	14,585 20,081
THE EMERGENCE OF BRITISH FORENSIC MEDICINE	70	100°01
1 RO1 LM 03268-01	10	25,239 23,775
INSECTA DIRECTORY: FLIES OF MEDICAL IMPORTANCE	20	C 116 C 7

APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL <u>1</u> / (Arranged numerically by program)	COUNC	COUNCIL DATE: JANUARY 1979
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		SHALLON V
APPLICATION NUMBER SHORT TITLE	8	RECOMENDED
1 RO1 LM 03271-01	10	12,050
CALCUMPTOT HUND 3 DEGRET O LEADER & TALVA MANA	02	12,350 13,600
CANDITATION & CARACA START A TAKEN IND	S	000 .
1 RO1 LM 03276-01	01	28,030
ANIMALS AND SOCIETY: AN ANNOTATED BIELIOGRAPHY		
1 RO1 LM 03278-01	01	23,635
PSYCHOENDOCRINOLOGY: A SERIES OF PUBLICATIONS		
1 RO1 LM 03289-01	01	26,980 35,053
A DICTIONARY AND GLOSSARY FOR PRIMARY CARE RESEARCH	70	7/c ⁶ /7

<u>1</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL <u>1</u> / (Arranged numerically by program)	COUNC	COUNCIL DATE: JANUARY 1979
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		AMOTINES
APPLICATION NUMBER . SHORT TITLE	μ 4	RECOMMENDED
1 GO8 LM 03240-01	10	12,100
SENSE OF SERVICE IN LIBRARIES		
1 GO8 LM 03244-01	01	98,871 50,210
LIBRARY MICROFICHE CONVERSION PROJECT	03	49,690
1 GO8 LM 03249-01	01	50,000
ALTERATION: CENTRAL DUPAGE HOSPITAL LIBRARY		
1 GO8 LM 03251-01	01	29,351 36,607
HEALTH SCIENCES LIBRARY DEVELOPMENT PROGRAM	03	36,258
1 GO8 LM 03253-01	01	50,000
RENOVATION AND ALTERATION FOR HEALTH SCIENCES LIBRARY		
1 GO8 LM 03256-01	01	65,136
EXPANSION OF SERVICES IN AN EDUCATIONAL RESOURCE CONSORTIUM		
1 GO8 LM 03257-01	01	35,035 36,035
GERIATRICS LEARNING RESOURCES DEVELOPMENT	70	070 °00
1 GO8 LM 03261-01	01	19,879 20,017
YORK HOSPITAL HEALTH INFORMATION DELIVERY SYSTEM	03	15,780
$\underline{1}$ /Approval recommendations are not final but are the basis upon which subsequent Bl negotiations will determine final awards.	BID deter	determinations and

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APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL <u>1</u> / (Arranged numerically by program)	COUNCIL DATE: JANUARY 1979
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	
APPLICATION NUMBER SHORT TITLE	RECOMMENDED
1 GO8 LM 03269-01	01 50,000
ALTERATION AND RENOVATION OF HEALTH SCIENCES LIBRARY	
<u>l</u> /Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.	it BID determinations and

APPLICAT	APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL $\underline{1}$ (Arranged numerically by program)	COUN	COUNCIL DATE: JANUARY 1979	ARY 1979
INSTITUTE/DIVISION: NATIONAL LIBRARY	RY OF MEDICINE		AMOINTS	
APPLICATION NUMBER	SHORT TITLE		RECOMMENDED	
1 KIO LM 00028-01		10	28,162	
A CRITIQUE OF EPIDEMIOLOGY				
1 KIO LM 00030-01		01	39,799 51 701	
MONOGRAPH: EPIDEMIOLOGY OF CANCER	R IN CHILDREN	70	10/110	
1 KIO LM 00031-01		010	35,069 35,429	
REVIEW OF DYNAMICS OF DENTAL HEALTH	TH POLICY - MAKING			
1 KIO LM 00032-01		10	42,877 32 236	
SPECIAL SCIENTIFIC PROJECT: INFORMED	MED CONSENT	1		
1 KIO LM 00033-01		10	33 , 000	
LIFE CIRCUMSTANCES AND PHYSICAL ILLNESS, A BOOK	LLNESS, A BOOK			

<u>[</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL 1/ (Arranged numerically by program)	COUNC	COUNCIL DATE: JANUARY 1979	IANUARY 1
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	AMO	AMOTINES	
APPLICATION NUMBER SHORT TITLE	RECOM	RECOMMENDED	
1 GO7 LM 03199-01	10	3,600	
SINGLE-INSTITUTION GRANT			
1 GO7 LM 03228-01A1	0 1A 1	4 , 000	
SINGLE-INSTITUTION GRANT			
1 GO7 LM 03238-01	01	3 ° 995	
SINGLE-INSTITUTION GRANT			
1 GO7 LM 03239-01	10	2,950	
CONSORTIUM IMPROVEMENT GRANT			
1 GO7 LM 03275-01	10	4 , 000	
CONSORTIUM IMPROVEMENT GRANT			
1 GO7 LM 03283-01	10	3,995	
SINGLE-INSTITUTION GRANT			
1 GO7 LM 03285-01	10	4 , 000	
SINCLE-INSTITUTION GRANT			

<u>1</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE Bethesda, Maryland

AGENDA

61st Meeting of the

BOARD OF REGENTS

8:30 a.m., May 24, 1979 Board Room and 9:00 a.m., May 25, 1979 History of Medicine Reading Room

National Library of Medicine

IEETING OPEN: IEETING CLOSED: From 8:30 a.m. to 2:45 p.m. on May 24 and from 9:00 a.m. to adjournment on May 25. From 2:45 p.m. to 5:00 p.m. on May 24 for the review of grant applications.

- . CALL TO ORDER AND INTRODUCTORY REMARKS
- I. REMARKS BY THE ASSISTANT SECRETARY FOR HEALTH AND SURGEON GENERAL
- II. CONSIDERATION OF MINUTES OF LAST MEETING

TAB I (Orange Book) Dr. Kelly M. West

Dr. Julius B. Richmond

Dr. Kelly M. West

V. DATES OF FUTURE MEETINGS 1979 and 1980 Calendars <u>TAB II</u>

Next Meeting: October 4-5, 1979 (Th-F)

<u>Winter Meeting</u>: January 24-25, 1980 (Th-F)

Spring Meeting: May 22-23, 1980 (Th-F)

<u>Please note</u>: American Society for Information Science Annual Meeting, October 14-18, 1979 - Minneapolis AAAS Annual Meeting - San Francisco January 3-8, 1980

5/1/79

Agenda, Board of Regents Meeting, May 24-25, 1979

۷.	REPORT OF THE DIRECTOR, NLM	TAB III	Dr. Martin M. Cummings
	COFFEE BREAK		
VI.	REGIONAL MEDICAL LIBRARY PROGRAM:	TAB IV	
	A. Evaluation and Performance Standards of RMLs	Tab A	Mr. Kent A. Smith
	B. Report on April RML Planning Meeting	Tab B	Mr. James F. Williams II
	C. Discussion		Board Members
VII.	HEALTH EDUCATION FOR THE PUBLIC	<u>TAB V</u>	Dr. Nicholas E. Davies Ms. Martha Petkas Mr. Horace G. Ogden
	Discussion		Board Members
	(Photograph of Board members on front steps	of Library)	
	LUNCH CATERED IN CONFERENCE ROOM "B"		
VIII.	AUDIOVISUAL PROGRAMS AND PLANS	TAB VI	Dr. Harold M. Schoolman Dr. Nicholas E. Davies
	Discussion		Board Members
IX.	REPORT OF THE NOMINATING COMMITTEE		Dr. William D. Mayer
Χ.	DIRECTOR'S AWARD PRESENTATION		Dr. Martin M. Cummings
	COFFEE BREAK		
	MEETING CLOSED FOR THE REVIEW OF GRA	ANT APPLICATIO	2NS
XI.	SPECIAL APPLICATIONS A. Publication B. Resource C. Training	Gray Workbook TAB I TAB II TAB II TAB III) Dr. Jeanne L. Brand Dr. Roger W. Dahlen

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(II. SUMMARY STATEMENTS

RECESS

Α.	Publication	ΤΑΒ Ιν	Dr. Jeanne L. Brand
Β.	Research	TAB V	Dr. Roger W. Dahlen
с.	Resource	TAB VI	-
D.	Special Scientific Project	TAB VII	
Ε.	Training	TAB VIII	
F.	Improvement	TAB IX	

III. SUMMARY STATEMENTS (New Programs)

		(Green Workbook)		
Α.	Program Project Support	ΤΑΒ Ι	Dr. Roger W.	Dahlen
Β.	New Investigator Research Grants	TABII	•	
C.	Research Career Development Awards	TAB III		

> SPEAKER: William B. Bean, M.D., Kempner Professor and Director, Institute for the Medical Humanities University of Texas Medical School at Galveston

> <u>TOPIC</u>: "A Sampler of Medical Libraries: Some Notes on the Care and Feeding of Books and Readers"

R E C O N V E N E: 9:00 a.m., Friday, May 25, 1979

CENTENARY CELEBRATION OF INDEX MEDICUS

FRIDAY - May 25 9:00 a.m. to 4:00 p.m. History of Medicine Reading Room Main Level of the Library

V. WELCOMING REMARKS

MEDICINE AND BIBLIOGRAPHY

A. Between Two Worlds: American Medicine in 1879

Dr. Martin M. Cummings

Dr. Kelly M. West Moderator

Dr. Charles Rosenberg Professor of History University of Pennsylvani

Ageno	da, I	Board of Regents Meeting, May 24-25, 1979	4
	Β.	The Nineteenth Century Medical Press	Dr. Genevieve Miller Director, Howard Dittrick Museum of Historical Medicine, Cleveland
	C.	Billings and Before: Nineteenth Century Medical Bibliography	Dr. John B. Blake Chief, History of Medicine Division, NLM
	D.	Twentieth Century Medical Bibliography	Dr. Frank B. Rogers Former Director, National Library of Medicine
	LUN	CH BREAK (No formal arrangements.) 12:30-2:00	
XVI.	THE	PHYSICIAN AND HIS BOOKS	Dr. William B. Bean Moderator
	Α.	Medical Books in Eighteenth Century Philadelphia	Mr. Edwin Wolf II Librarian, The Library Company of Philadelphia
	Β.	The Physician as Bibliographer and Bibliophile	Dr. K. Garth Huston Los Angeles
	C.	The Physician as Scholar	Dr. Saul Jarcho New York City
XVII.	ADJ	OURNMENT 4:00	Dr. Martin M. Cummings

DEPARTMENT OF HEALTH, EDUCATION,

AND WELFARE

NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE

BOARD OF REGENTS

MINUTES OF 61ST MEETING MAY 24-25, 1979

BOARD ROOM NATIONAL LIBRARY OF MEDICINE BETHESDA, MARYLAND

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

THE BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

Minutes of Meeting $\frac{1}{2}$

May 24-25, 1979

The Board of Regents of the National Library of Medicine was convened for its sixty-first meeting at 8:30 a.m. on Thursday, May 24, 1979, in the Board Room of the National Library of Medicine, Bethesda, Maryland. Dr. Kelly M. West, Professor of Biostatistics and Epidemiology, College of Health, University of Oklahoma Health Sciences Center, and Chairman of the Board of Regents, presided. In accordance with P.L. 92-463 and the Determination of the Director, NIH, and as announced in the Federal Register on April 12, 1979, the meeting was open to the public from 8:30 a.m. to 2:45 p.m. on May 24, and from 9:00 a.m. to adjournment on May 25, and closed from 2:45 p.m. to 3:30 p.m. on May 24 for the review, discussion, and evaluation of grant applications. A Board roster is included under Attachment "A."

Board members present were:

Dr. Ismael Almodovar Dr. Thomas C. Chalmers Dr. Nicholas E. Davies Dr. Emmet F. Ferguson, Jr. Dr. S. Richardson Hill, Jr. Dr. Doris H. Merritt Dr. Julius B. Richmond Dr. Kelly M. West Mr. James F. Williams II Ms. Martha E. Williams

Alternates to Board members present were:

Rear Admiral Stephen Barchet, representing Vice Admiral Willard P. Arentzen Major General Murphy A. Chesney, representing Lt. General Paul W. Myers Dr. William D. Mayer, representing Dr. James C. Crutcher Mr. William J. Welsh, representing Dr. Daniel J. Boorstin

Unable to attend:

Dr. Faye G. Abdellah Dr. Eloise E. Clark Colonel John C. Richards Dr. Cecil G. Sheps

1/ For the record, it is noted that members absent themselves from the meeting when the Board is discussing applications from their respective institutions (interpreted to mean the entire system of which a member's institution is a part) or in which a conflict of interest might occur. Only when an application is under individual discussion will the Board member absent himself. This procedure does not apply to "en bloc" actions.

2/ The Board of Regents, when considering the extramural programs of NLM, also constitutes and serves as the National Medical Libraries Assistance Advisory Board. National Library of Medicine staff members attending this meeting included:

Dr. Martin M. Cummings, Director Mr. Kent A. Smith, Deputy Director Dr. Harold M. Schoolman, Deputy Director for Research and Education Dr. Ernest M. Allen, Associate Director for Extramural Programs Mr. James W. Barry, Deputy Associate Director, LO Mr. Harry D. Bennett, Director for Computer and Communications Systems Dr. Lionel Bernstein, Director, Lister Hill National Center for Biomedical Communications Dr. Jeanne L. Brand, Chief, International Programs Division, EP Dr. Charles F. Bridgman, Assistant Director for Educational Resources Development Mr. Arthur J. Broering, Deputy Associate Director for Extramural Programs Mr. Kenneth B. Carney, Acting Executive Officer, Office of Administration Miss Mary E. Corning, Assistant Director for International Programs Dr. Roger W. Dahlen, Chief, Division of Biomedical Information Support, EP Mr. Benjamin Erdman, Deputy Director, LHNCBC Mr. Charles Farmer, Acting Director, NMAC Dr. Henry M. Kissman, Associate Director for Specialized Information Services Dr. Joseph Leiter, Associate Director for Library Operations Mrs. Grace McCarn, Chief, Bibliographic Services Division, LO Mr. Robert B. Mehnert, Chief, Office of Inquiries and Publications Management Dr. Donald Merritt, Chief, Health Professions Applications Branch Mr. Richard T. West, Chief, Office of Program Planning and Evaluation, EP

Others present included:

Mrs. Bernice M. Hetzner, Professor of Library Science, University of Nebraska Mrs. Priscilla Holman, Editor/Writer, Bureau of Health Education, Center for Disease Control

Dr. Saul Jarcho, New York Academy of Medicine - - Consultant, NLM

Dr. Marco Montoya, Executive Secretary, Health Services Research Study Section, National Center for Health Services Research, PHS

Ms. Martha Petkas, Extramural Liaison, Office of Disease Prevention and Health Promotion, HEW

Mrs. Ileen E. Stewart, Executive Secretary, Special Study Section, DRG, NIH

Members of the public present:

None

I. OPENING REMARKS

Dr. Kelly M. West, Chairman, welcomed the Regents, ex officio members, alternates, consultants, and guests to the 61st meeting of the Board of Regents. He noted especially the presence of new Regent Martha E. Williams.

II. REMARKS BY THE ASSISTANT SECRETARY FOR HEALTH

Dr. Julius B. Richmond reported briefly on the ongoing World Health Assembly in Geneva, from which he just returned. There was intense political activity at the meeting, centered around attempts (unsuccessful) to deprive Israel of its right to vote in the Assembly. When speaking with representatives of other countries, he and the Secretary were impressed by how highly others value their associations with the National Library of Medicine. Dr. Richmond mentioned the recent visit to NLM by a Soviet delegation; he spoke in Geneva with Soviet Minister of Health Petrovsky and Soviet Deputy Minister for International Affairs, Dr. Venedictov, both of whom were greatly interested in how the meeting at NLM went.

The Assistant Secretary discussed briefly Senator Kennedy's bill on national health sciences promotion. This bill would have a direct impact on HEW and especially on the National Institutes of Health. Secretary Califano, Dr. Fredrickson, and Dr. Richmond have been concerned with developing plans and projections for long-range support of NIH that would provide stability for its programs. Last fall the Secretary held a confeience at NIH to develop principles of research planning. From this conference a set of research principles and budgetary projections have been developed. The Institute of Medicine, asked to provide a critique of the conference report, generally supported the principles enunciated and recommended the establishment of a board or commission to continue the planning process. Senator Kennedy's bill, which calls for a national health sciences plan, is being opposed by the Administration. One reason is that the bill calls for the creation of a broadly-based board which would annually prepare a research plan. The Administration feels this is premature—the NIH Director already has ample opportunity to solicit advice from NIH advisory bodies, and there already exists a public advisory committee to the Director which could be used more actively in the planning process. Organizations like the Institute of Medicine are also called on to provide advice. Another part of the bill to which the Administration objected was a sunset provision which would require the authorization for all NIH components to expire in 1983. Dr. Richmond concluded by saying that the introduction of the bill and the subsequent testimony have stimulated a constructive discussion of the issues involved.

III. DATES FOR FUTURE MEETINGS

The Board will meet next on October 4-5, 1979. The dates of January 24-25, 1980, were selected for the following meeting. Next spring's meeting was set for May 22-23, 1980. Dr. Cummings noted that there will be a half-day program to dedicate the Lister Hill Center Building on the afternoon of the Board's meeting on May 22, 1980.

IV. CONSIDERATION OF MINUTES OF PREVIOUS MEETING

The Board of Regents approved the minutes of the January 25-26, 1979, meeting.

V. REPORT OF THE DIRECTOR, NLM

Dr. Cummings reported that he testified before the House and Senate subcommittees concerned with appropriations. The President's budget requested no increase in funds for NLM (\$41,431,000) and a decrease of eight positions (to 495). Mandatory increases in certain expenditures because of inflation mean that the level budget will result in budget decreases for some NLM programs. Dr. Cummings reported that the HEW levy on NLM for \$300,000 to support the National Center for Health Care Technology (discussed at the last Board meeting) has been successfully resisted by the Library and NIH. Looking ahead, the Director said that he did not expect any significant budget increases for the programs that he identified in his testimony as high priority. Paradoxically, there may be additional money for NLM to develop a National Chemical Information System, without additional staff positions. Dr. Cummings pointed out that it would be difficult for NLM to undertake this. We are hopeful that the 1981 budget will contain increases that will allow NLM to engage in several new initiatives.

The most critical concern to NLM management at this time is the reduction of 30 staff positions. This cut is NLM's share of a general reduction throughout the Department and is in addition to the cut of eight positions in the 1980 budget. This reduction has a potential for devastating consequences at the Library, particularly on the service component. NLM has instituted management controls to deal with the reduction, including critical analysis of all existing and anticipated vacancies, review of existing staff assignments, high-level review of positions other than full-time permanent, and the judicious use of NLM's new authority to engage consultants for periods of one to two years. The Director said that he believed NLM had been treated fairly in the distribution of the reduction by NIH. Significant recent personnel actions at NLM include the appointments of Donald Merritt, M.D., as Chief of the Lister Hill Center's Health Professions Applications Branch, and Mrs. Phyllis Mirsky as Chief of the Reference Section, and the promotions of Yvonne Scott to head the MEDLARS Management Section and Brenda Swanson as head of the Selection/Acquisition Section. Mr. Charles Farmer, a long-time member of the staff of the National Medical Audiovisual Center, has agreed to serve as Director of the Center until its move to Bethesda. The most notable loss over recent months was the resignation of Dan Tonkery as Chief of the Technical Services Division.

The Director reported that he is deferring action on the integration of the National Medical Audiovisual Center and the Lister Hill Center. To avoid any adverse effects on NMAC's staff, the Center will be moved to Bethesda intact and will be under the direction of the NLM Deputy Director for Research and Education. This course will be in line with the reorganization plan approved by the Board in 1976. Integration of the two organizations will take place after the move, allowing a period of time to study at close range their programs and how they might be restructured organizationally.

The Regents were brought up to date on the computer procurement, a subject discussed at some length at the Board's January meeting. The resolution sent to Secretary Califano by the Regents has not been formally answered. The protest by UNIVAC is still unresolved and NLM has no way of knowing how long the delay in the procurement will continue. The Library delivered an extensive set of documents to the General Services Administration on May 23, responding to and refuting UNIVAC's allegations. NLM has asked GSA to proceed with the procurement and to accept the hardware configuration proposed by the other vendor—IBM. The construction of the Lister Hill Center Building is entering its final stage—ahead of schedule. Several improvements are being negotiated with the contractor, but these will not delay the completion of the building and occupancy. The General Services Administration, with advice from the National Endowment for the Arts, has commissioned two distinguished artists to create artwork for the building. Kenneth Snelson will design a sculpture for the podium area and Alfred Jensen will create a mural in the main lobby.

There have been two delegations from the Peoples Republic of China (PRC) to visit the Library since the last Board meeting. The first was led by Dr. Huang, President of the Chinese Academy of Medical Sciences. Dr. Huang will send three senior Chinese experts to work with NLM's collection of Chinese medical literature. The second delegation, representing the PRC Science and Technology Commission, was a return visit for the AAAS delegation that traveled to China last year. Half of this group, including four health professionals, visited NLM; the other half visited the Library of Congress. A USSR delegation also visited NLM this spring to work out a cooperative program in biomedical information. Although agreements were reached in several areas during the visit, we have not had any communication from them since their return to the Soviet Union. A final item on the international scene reported by Dr. Cummings was an offer from the World Health Organization to allocate \$20,000 to NLM to conduct MEDLARS searches and provide interlibrary loans to developing countries. NLM's position is that guid pro guo in the form of staff, not money, would be needed before the Library could undertake this service. NLM will identify qualified people whom WHO could engage to provide these services.

Dr. Cummings reported that the names of potential nominees to fill vacancies on the Board have been sent to the Secretary. These are now being examined in the Office of the Secretary and we hope to have new appointments in time for the Board's next meeting. NLM is also proposing a change in the Library's legislation that would increase the number of appointed Regents from 10 to 13. The functions of NLM have been considerably expanded since the Board was created in 1956, and we believe there is a need for broadened representation on the Board. It is being recommended that nine Regents be selected from among leaders in the health professions, biomedical sciences, and library and information science, and that four be selected because of their prominence in public affairs.

In response to a question from Dr. Davies, the Director said that NLM was proceeding with plans to close its card catalog and that a request for contract proposals would soon be issued as a first step in retroconversion. Concurrently with this, Dr. Leiter, Associate Director for Library Operations, will head a task force to begin planning for MEDLARS III. This will be a 16-month effort and will involve many senior Library staff members.

VI. REGIONAL MEDICAL LIBRARY PROGRAM

Before beginning his briefing on the Regional Medical Libraries, Mr. Kent A. Smith, NLM Deputy Director, brought to the attention of the Board a related matter requiring its action. In May 1978 the Regents approved amendments to existing regulations to permit the Regional Medical Library network to recover part or all of the costs of providing photocopies of biomedical materials. Previous regulations had called for free loans. The NIH is in the process of recodifying its regulations and therefore the NIH Director requested the Board to review these changes. The Board unanimously reaffirmed its 1978 amendments.

A. Evaluation and Performance Standards of RMLs:

Mr. Smith reported that several RML contracts would undergo a competitive process over the next year. In part this stems from Secretary Califano's directive calling for improved scheduling of grant and contract awards and for a major reduction in noncompetitive procurement actions. As a result of this, NLM has a goal to make 60 percent of all procurement actions competitive. Since the RML contracts account for about 30 percent of NLM's annual contract budget (\$3 million of \$10 million), NLM must make the RML contracts competitive if the Library is to come close to the goal. Since the program began 12 years ago, only two of the RMLs have had to undergo the rigors of competitive renewal. Mr. Smith added that making all these contracts competitive would not only be good management practice, but might also lead to revitalizing the RML programs.

In conjunction with recompeting the RMLs, Mr. Smith said, NLM should take this opportunity to establish performance standards for the network. Currently NLM only measures throughput time; we should also establish fill rate standards for serials and monographs and tabulate data on why a particular loan is not completed. Although throughput time has remained good across the nation (nearly 90 percent of interlibrary loan requests are processed within four days), statistics reveal that the fill rate has declined from an average of 81 percent in 1971 to 75 percent in 1978. In 1971 seven RMLs achieved fill rates of over 80 percent, while in 1978 there were only two (including NLM as the RML for Region IV). In 1966, the Library's long-range plan called for a fill rate of 90 percent by each RML. Mr. Smith noted several possible reasons for this decline in performance by the RMLs: Stronger local libraries mean only the more difficult requests reach the RMLs; monograph requests are increasing; decreasing collection budgets mean fewer items are acquired; collections are deteriorating; online bibliographic systems result in more requests for esoteric titles; and NLM has not set performance requirements. Despite these shortcomings, the RML program has been most successful and the \$25 million expended by NLM over 12 years has done much to improve the dissemination of information to the biomedical community.

The national standards that NLM will prescribe in competitive RML contracts are:

- 1. Collect data on throughput for 4, 7, and 10 days for both filled and unfilled loans. The standard indicates that 85 percent of the filled loans should be processed in four calendar days, while 85 percent of non-available items should be processed in seven calendar days. This determination can be made on a sampling basis.
- 2. Collect data on fill rates and identify reasons for not filling requests. The actual fulfillment standard will be 85 percent for serials and 70 percent for monographs.
- 3. A capability index will be established that combines both fill rate and throughput in one index. This will also be done on a sampling basis.

The first three Regions to compete for new contracts are Region I (Countway Library at Harvard), Region VII (Crerar Library in Chicago), and Region X (University of Washington, Seattle). The remaining Regions will follow over the next year. NLM plans to use an ad hoc technical evaluation team of consultants to assist in reviewing the competing proposals. Following a request by Mr. Smith, the Board Chairman appointed three Regents to serve as a subcommittee of the Board to review the recommendations of the technical evaluation team: Dr. Merritt, Mr. Welsh, and Dr. West.

The Deputy Director concluded his presentation by describing the need for an evaluation of the RML network by an external group. This study would be undertaken as part of the FY 1980 NLM evaluation plan and be funded by a central pool of NIH funds for evaluation projects. The purpose of the study would be to determine if the presently constituted RML network provides the most effective and efficient system for health information transfer to the biomedical community. The study would address such questions as decentralized versus centralized operations, number and boundaries of the Regions, relationship between NLM and the network, and impact of user charges and performance standards on the network.

Mr. Smith then introduced Mr. Sheldon Kotzin, NLM's Regional Medical Library Coordinator. Mr. Kotzin reported that he and other Extramural Programs staff were asked by the Board Chairman to discuss some management and administrative concerns relating to the RML Program. The Chairman invited Regent James F. Williams II to join them. Many of the topics mentioned by the Chairman at the meeting—responsibilities of the RML Directors, staffing patterns, document delivery cost sharing, services to hospital libraries—were discussed at the RML Planning Meeting in April and by Mr. Smith today.

B. Report on a Planning Meeting held by the RMLs:

James F. Williams II, Regent, and Medical Librarian at Wayne State University (the RML for Region V), before reporting on the meeting, commented that dropping fill rates by the RMLs are, in a sense, an indication of success in improving local collections so that they can handle routine requests; only the more difficult requests reach the resource libraries and the RMLs. As to the RML Planning Meeting, held on April 19-21, Mr. Williams described its purpose as a critical self-assessment of the RML Program-its mission and goals, how well these are being met, needed planning and evaluation mechanisms, and future directions for the program. Dr. Cummings had opened the planning meeting by raising a number of basic questions as to the adequacy of the present RML configuration and the need for standards of performance. Mr. Smith and Mr. Kotzin had discussed plans for opening up the RML contracts to competition. Following these presentations, the RML Directors formulated a revised mission statement for the RML program: "To continue the operation and development of an interactive, national network for information access and transfer to support health services delivery, education, and research." To support this mission, the RML Directors devised five goals: to achieve greater resource sharing; to promote network participation; to provide regional management, coordination, and leadership; to publicize the activities and services of the network; and to provide ongoing evaluation of the program. The RML Directors identified seven major issues and formed task groups to address each. The issues are: measurement of performance, network configuration, future RML directors' meetings, RML services and priorities, communications, funding, and NLM/RML responsibilities. Mr. Williams described briefly the reports of the task groups. The issues discussed and the reports of the task groups will serve as agenda items at future meetings of the RML Directors.

In response to a question from Dr. Merritt, Mr. Kotzin said that the RMLs, in general, are satisfied with the level of funding they receive under contract to NLM. Replying to another query, Mr. Kotzin responded that in recent years advisory committees within

the Regions have become much more broadly based and more involved in administrative and policy decisions. It was his opinion, however, that this increased involvement has not been at the expense of the RML Directors, who still retain primary responsibility for decision making within the Regions.

VII. HEALTH EDUCATION FOR THE PUBLIC

Board member Nicholas E. Davies, M.D., introducing the topic of health education for the public, said that this is one of today's most important health issues. He quoted Dr. Theodore Cooper's statement: "Health education for the public has become a popular notion. Its impact is far from determined, but the appeal is that one can teach people to do the things that will minimize their exposure to disease and reduce their dependency on the physician in the hospital." Dr. Davies defined four subsets of health education for the public: school health education, patient education, health information in the media, and industrial health education. Associated with these many activities is an ephemeral literature that is difficult to identify, acquire, and classify. What responsibility does NLM have in this area—especially as it concerns public and school libraries? Dr. Davies emphasized that he recognizes the importance of the Lister Hill Center's projects to improve communications to health professionals, and that it would be unwise to dilute these efforts by redirecting activities toward solving the problems of health education for the public. Nevertheless, there are serious problems associated with the ephemeral literature of health education for the public, and there may be a proper role for the NLM in assisting in this area.

Following Dr. Davies' presentation, Ms. Martha Petkas of HEW's Office of Disease Prevention and Health Promotion described activities of that organization. Within the Office is the Office of Health Information and Health Promotion, created three years ago with three mandates: to coordinate health information and health promotion within the Department; to coordinate HEW's activities in these areas with those in the private sector; and to establish a national clearinghouse for health information. In 1978, Congress added physical fitness and sports medicine to the Office's charge. The Office is concerned with health information and health promotion in (1) schools (working closely with the Office of Education), (2) worksite (sponsored a national conference in January, 1979), (3) home (a media campaign is planned using television), (4) community (sponsoring 8 regional forums for local and regional leaders, and providing technical assistance for 18 community health promotion projects), and (5) medical treatment (planning to work with HMOs). The Office of Disease Prevention and Health Promotion is responsible for coordinating the preparation of the Surgeon General's report on disease prevention, soon to be released. The Office is also setting up a national health information clearinghouse to facilitate access by the public to existing health information. The clearinghouse will not establish a new data base but will publish directories and catalogs of available information. Eventually the clearinghouse will have a toll-free number to provide citizens with a convenient source of referral information.

In response to a question from Dr. Davies, Ms. Petkas said that the Office of Disease Prevention and Health Promotion has a staff of about 35 and its FY 1980 budget is projected to be about \$5 million. Dr. Cummings commented that NLM has an important role as a resource for clearinghouses rather than as a repository for this ephemeral literature or as a point of direct contact for the consumer.

Following Ms. Petkas' presentation, Ms. Priscilla Holman described the role of the Bureau of Health Education, located at the Center for Disease Control in Atlanta. The Bureau, established in 1974, has responsibilities for consultation, technical assistance, program

development, and information dissemination. It is divided into a State and Community Programs Division, Research and Evaluation Division, and School Health and Patient Education Division. In the area of school health education the Bureau has developed model curricula for use at different levels; in research and evaluation the emphasis is on sex education programs and on developing valid and reliable measures of health education methodology; a grant program to state and city health departments assists them to develop prevention programs; and patient education activities have been an important part of the Bureau's activities since its beginning. The Bureau's information dissemination program supports the contract and grant activities and also serves health information providers (health professionals, allied health workers, cooperative extension agencies, etc.). In cooperation with the Office of Health Information and Health Promotion, the Bureau of Health Education is developing a data base (eventually to be computerized) of literature resources and program descriptions. An abstract bulletin is published, Current Awareness in Health Education, and a newsletter. Focal Point. In addition, a series of manuals on patient education has been published in cooperation with the American Hospital Association. Ms. Holman believes that NLM can help forge a link between resource and Regional Medical Libraries and hospital/local facilities, so that there will be an awareness of what patient/public health education materials exist and how they may be accessed.

Following Ms. Holman's presentation, Dr. Cummings noted previous discussions by the Board of Regents where it was concluded that the terms of NLM's charter did not encompass a responsibility for the acquisition or distribution of consumer health education materials. However, we have been helpful to Federal agencies concerned with health education of the public and insofar as our specialized collections and bibliographic apparatus are pertinent to their missions, NLM has cooperated with them.

VIII. AUDIOVISUAL PROGRAMS AND PLANS

Dr. Harold M. Schoolman, NLM Deputy Director for Research and Education, reviewed the development of AVLINE (Audiovisuals Online), NLM's apparatus for the bibliographic control of audiovisual materials used for education in the health sciences. Individual purchase orders and blanket purchase orders with the major producers of biomedical audiovisuals result in NLM's receiving some 1200 items a year. For each item received, a preliminary cataloging entry for AVLINE is made within 15 days. Following this, the item is sent to two reviewers (this is done in cooperation with the Association of American Medical Colleges) who write an abstract and critical review that are then added to the AVLINE entry. There are two classes of material: that which is simply a recording of an educational event (e.g., lecture, grand rounds), and that which is designed with a specific educational purpose. The former class of material (about 20 percent of the total) is not peer-reviewed, a descriptive abstract being entered into the system to complete the bibliographic record. The latter class is peer-reviewed, the review being completed and entered into AVLINE within 100 days of receipt of the audiovisual material at NLM. Cataloging and reviewing of audiovisuals are current—no backlogs exist at present for materials produced in the last year. The cost per item entered into the data base, including purchase and cataloging (but not evaluative review) is about \$147. The technical processing costs for audiovisuals are virtually identical to those for published material. The number of items in AVLINE has grown steadily, from 230 items in December 1975 to 6,565 in December 1978. The composition of AVLINE has also changed, from 70 percent pre-1970 materials in 1975 to 19 percent in 1978. Items that are not recommended under the peer review mechanism are not retrievable by the subject in an AVLINE search; they are, however, included in the data base under author and title. Similarly, materials that

become outdated are removed from the subject search file but remain available by title and author. AVLINE usage on the network has increased from about 40 hours per month (1977) to about 80 hours in recent months. A number of printed products have been derived from AVLINE, the most recent being the quarterly <u>NLM Audiovisuals Catalog</u>, begun in 1978.

Although NLM does not have hard data to support it, it is believed from anecdotal evidence that in the academic setting the teacher is rarely involved in decisions to acquire material for the school's learning resource center. AVLINE does not seem to play a significant role in AV acquisitions for academic health centers, as NLM had originally intended it to do. Faculty resistance to AV materials and unwillingness by teachers to take the time to review audiovisual productions are possible reasons for this. However, now that there are a substantial number of items in the data base, AVLINE is being increasingly used for cataloging audiovisual materials in the health science centers. We believe this to be largely responsible for the recent increase in network use of AVLINE. Thus, AVLINE as a bibliographic instrument is highly successful.

The cost of the peer review process, Dr. Schoolman said, has been significantly lowered in recent years. The original system (pre-1976) cost about \$182 per item. Today the peer review cost is about \$118. Peer review was instituted largely to increase the acceptability of the contents of AVLINE to faculty members; since faculty members do not often use AVLINE, however, the need for continuing the expensive peer review process may be called into question. In addition, only about 10 percent of reviewed items are rejected by the reviewers. Another reason originally set forth for critical peer review was that it would exert an influence on the quality of materials being produced. Although there has been some improvement in the quality of AV productions, AVLINE can claim little credit. However, NLM is about to embark on a more aggressive program for this purpose. NLM will undertake to direct feedback to producers comparable to that which has already been accomplished in the bibliographic area. Dr. Schoolman noted that he was raising these issues that touch on problem areas without offering definitive explanations or solutions. He emphasized that AVLINE has now reached a "critical mass" in terms of the number of items in the data base, and that evaluative data may be forthcoming on which judgments can be based.

In response to a question raised by Dr. Davies, Dr. Schoolman estimated that NLM receives perhaps 85 percent of all health-science audiovisual materials produced for national distribution. Dr. Chalmers commented that NLM should not be discouraged at the cost of reviewing AV materials only to reject 10 percent if, in fact, we are able to demonstrate that the quality of material being produced is improved by NLM's review process and inclusion in AVLINE.

Dr. Cummings raised for discussion the problem of a lack of trained staff in the Technical Services Division to catalog materials in certain languages, such as Polish and Russian. The sizable backlog that has developed means that other libraries who look to NLM for this cataloging do not have the information available to them. At the same time this backlog has been accumulating, the Library has been more and more aggressive in acquiring and cataloging audiovisual materials. The Director raised the question of where our priorities should lie: Is it more important to American Medicine that NLM maintain currency in cataloging certain foreign printed works or in cataloging audiovisual materials? Mr. Williams commented that since the audiovisuals are used primarily in teaching and the foreign publications primarily in research and scholarship, the question could be reduced to these elements—which is more worthy of support? Mrs. Hetzner noted that cataloging of printed scholarly material constitutes a permanent bibliographic record, whereas audiovisual materials for teaching have a limited lifespan and are, eventually, removed from the portion of the computerized file that is searchable by subject. Mr. Welsh said that it is important for NLM to maintain its continuity in cataloging the monographic literature and that this should take priority over acquiring and cataloging audiovisual materials. Although not all Regents agreed with this position, the sense of the Board's comments was to favor the cataloging of published foreign monographs over the audiovisuals. Dr. Cummings said that a full report on this problem would be presented to the Regents at a future meeting.

IX. NLM DIRECTOR'S AWARD

The 1979 NLM Director's Award was presented by Dr. Cummings to Mr. James J. Hartman, the Library's Personnel Officer. Mr. Hartman was cited for managing a sound personnel program at NLM. "His sincere interest in our employees combined with his outstanding administrative skills have resulted in improved personnel planning in our operations."

MEETING CLOSED FOR THE REVIEW OF GRANT APPLICATIONS - 2:45 P.M.

X. EXTRAMURAL PROGRAMS

Dr. Ernest M. Allen, NLM Associate Director for Extramural Programs, briefly discussed extramural funds remaining for FY 1979 under the Medical Library Assistance Act. With the exception of NLM's three new programs, the priority score cutoff has been tentatively set at 177. The New Investigator Research Grants and the Career Development Awards to which approximately a quarter of a million dollars has been allocated to get the programs started, will have a higher priority cutoff of 227. The Program Project Grants, which are being paid from \$1.0 million of Lister Hill Center funds, will have a cutoff priority of 263.

Mr. Peter A. Clepper, EP Program Officer of the Division of Biomedical Information Support, reviewed the status of the three new programs and noted that the response from the community concerned with the application of computers in medical science (the Program Project Grants) was greater than anticipated. The initial review of grant applications for the three new programs took place on May 1-3 at a Special Biomedical Library Review Committee meeting. A large number of complex proposals was reviewed with great care. At the conclusion of the meeting, the following comments and suggestions were made by the reviewers: NLM should continue support for computer-based medicine, even though it is limited, since no other Federal government agency can be currently identified as having primary responsibility; major studies should be emphasized in any further announcement rather than restrict the support to Program Projects; immediate and most beneficial returns will be derived from the New Investigator Research Grants; the computers-in-medicine community needs visibility, cohesiveness, and a unifying organization to make its needs known and the current NLM initiative is likely to stimulate progress toward this end. Before proceeding with the consideration of pending applications, Dr. Jeanne L. Brand, Chief, EP International Programs Division, informed Board members and consultants of confidentiality and conflict-of-interest procedures and reminded all Regents and consultants to sign, at the conclusion of the grant review, the statement certifying that they had not participated in the discussion of any application where conflicts of interest might occur.

The Board concurred with the recommendations of the Extramural Programs Subcommittee. A total of 122 applications was reviewed, of which 57 were recommended for approval, 57 for disapproval, and eight for deferral. Grant applications recommended for approval by the Board are listed in the summary actions (Attachment B). Interim actions taken by EP staff since the January 1979 meeting of the Board were noted.

XI. CENTENARY OF INDEX MEDICUS

The second day of the Board of Regents' meeting, May 25, was given over to a ceremony honoring 100 years of the publication of <u>Index Medicus</u>. The ceremony, attended by Regents, NLM staff, and invited guests, was held in NLM's History of Medicine Reading Room. In his welcoming remarks, Dr. Cummings said that <u>Index Medicus</u> has proved so socially and scientifically useful that it has been able to overcome many adversities in its hundred years. When Dr. John Shaw Billings and his co-editor Dr. Robert Fletcher issued the first volumes, <u>Index Medicus</u> contained references to about 20,000 articles taken from 570 medical journals; today <u>Index Medicus</u> lists each year some 250,000 references from 2,500 journals. Dr. Cummings praised the work of those who, over the years, have indexed the literature on which <u>Index Medicus</u> is based.

At the morning session, entitled "Medicine and Bibliography," Regents, guests, and staff heard the following presentations: "Between Two Worlds: American Medicine in 1879," by Charles Rosenberg, Ph.D., Professor of History at the University of Pennsylvania; "The Nineteenth Century Medical Press," by Genevieve Miller, Ph.D., Director of the Howard Dittrick Museum of Historical Medicine, Cleveland; "Billings and Before: Nineteenth Century Medical Bibliography," by John B. Blake, Ph.D., Chief of NLM's History of Medicine Division, and "Index Medicus in the Twentieth Century," by Frank B. Rogers, M.D., former NLM Director. The moderator for the morning session was Dr. West.

In the afternoon, William B. Bean, M.D., Kempner Professor and Director of the Institute for the Medical Humanities at the University of Texas Medical Branch at Galveston, presided over a session entitled "The Physician and His Books." Presentations in this session were on "The Physician as Bibliographer and Bibliophile," by K. Garth Huston, M.D., of Los Angeles, and "The Physician as Scholar," by Saul Jarcho, M.D., of New York City.

ADJOURNMENT

After the conclusion of the special program in celebration of the INDEX MEDICUS Centenary, the meeting was adjourned on Friday, May 25, 1979, at 3:15 p.m.

* * * * * * * * * * * * *

Wednesday, May 23, 1979, 1:30 to 3:15 p.m. (EP Subcommittee—List of Attendees under Attachment C) Thursday, May 24, 1979, 8:30 a.m. to 3:30 p.m. Friday, May 25, 1979, 9:00 a.m. to 3:15 p.m.

ACTIONS TAKEN BY THE BOARD OF REGENTS

- 1. The Regents sent the following telegram to Dean Conrad Henry Rawski: "Recognizing a kinship of spirit in practical humanism, the Board of Regents of the National Library of Medicine offers hearty congratulations to the School of Library Science of Case Western Reserve University on the occasion of its seventy-fifth anniversary."
- 2. The Board of Regents unanimously reaffirmed its resolution of May 1978 permitting the Regional Medical Libraries to recover part or all of the costs of providing photocopies of published biomedical materials. This reaffirmation is necessary because NIH has been directed by HEW to recodify the regulations pertaining to its components, including the NLM.
- 3. The Chairman of the Board of Regents appointed a Subcommittee to review the recommendations made by the ad hoc technical evaluation group concerning the awarding of competitive RML contracts. Dr. Merritt, Mr. Welsh, and Dr. West agreed to serve.
- 4. The Board of Regents unanimously elected J. Richardson Hill, Jr., M.D., Chairman of the Board of Regents for 1979-1980, replacing retiring Chairman Kelly M. West, M.D.
- 5. The Board concurred with recommendations of the Extramural Programs Subcommittee. Grant applications recommended for approval are listed in the summary actions (Attachment B).

I hereby certify that, to the best of my knowlege, the foregoing minutes and attachments are accurate and complete.

Martin M. Cummings, M.D. (Date) Executive Secretory

Executive Secretary

Kelly h Mest 7/11/79 Kelly M. West, M.D. (Date)

Chairman

Robert M. Mehnert Chief, Office of Inquiries and Publications Management

BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

CHAIRMAN

	WEST, Kelly M., M Professor of Bios and Epidemiolog College of Health University of Okl Health Sciences C P.O. Box 26901 Oklahoma City, OK	itatistics ly ahoma	
ALMODÓVAR, Ismael, Ph.D. President University of Puerto Rico San Juan, Puerto Rico 00936	(8/3/82) 809-765-5955	MERRITT, Doris H., M.D. Dean, Office of Research Sponsored Programs	and
CHALMERS, Thomas C., M.D. President Mount Sinai Medical Center	(8/3/79)	Indiana-Purdue University at Indianapolis 355 Lansing Street Indianapolis, IN 46202	
Dean, Mount Sinai School of Medicine of the City University of New York One Gustave L. Levy Place		SHEPS, Cecil G., M.D. Professor of Social Medic University of North Carol at Chapel Hill	ine
New York, NY 10029 <u>DAVIES</u> , Nicholas E., M.D. Attending Physician	<u>212-650-6233</u> (8/3/81)	Chase Hall 132A Chapel Hill, NC 27514 WILLIAMS, James F., II	<u>919-966-5011</u> (8/3/81)
Piedmont Hospital Piedmont Professional Building 35 Collier Road, N.W. Atlanta, GA 30309	404-355-1690	Medical Librarian Vera P. Shiffman Medical Wayne State University 4325 Brush Street	
<u>FERGUSON</u> , Emmet F., Jr., M.D. 1515 May Street	(8/3/82)	Detroit, MI 48201 <u>WILLIAMS</u> , Martha E. Research Professor	313-577-1168
Jacksonville, FL 32204	<u>904-353-5921</u>		(8/3/82)
HILL, S. Richardson, Jr., M.D. President		Coordinated Science Labor College of Engineering University of Illinois	alory
University of Alabama in Birmir University Station Birmingham, AL 35294	<u>205-934-3493</u>	Urbana, IL 61801	217-333-1074

EX OFFICIO MEMBERS

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Primary

ARENTZEN, Willard	P., Vice	Adm., MC,	USN
Surgeon General			
Department of the	Navy		
Washington, DC	20372	202-2	254-4153

Alternate

BARCHET, Stephen, Rear Adm., MC, USN Special Assistant for Education and Training, and Commanding Officer Naval Health Sciences Education and Training Command National Naval Medical Center Bethesda, MD 20014 <u>301-295-0203</u>

5/24/7C

SOORSTIN, Daniel J., Litt.D. WELSH, William J. Librarian of Congress Deputy Librarian of Congress Library of Congress Library of Congress 10 First Street, S.E. 10 First Street, S.E. Washington, D.C. 20540 202-426-5205 Washington, D.C. 20540 202-426-5215 CRUTCHER, James C., M.D. MAYER, William D., M.D. Chief Medical Director Assistant Chief Medical Director The Veterans Administration for Academic Affairs (14) 'ashington, D.C. 20420 202-389-2596 Department of Medicine and Surgery The Veterans Administration 810 Vermont Avenue, N.W. 202-389-5093 Washington, D.C. 20420 CLARK, Eloise E., Ph.D. none Assistant Director for Biological Behavioral, and Social Sciences National Science Foundation 1800 G Street, NW ashington, D.C. 20550 202-632-7867 ICHMOND, Julius B., M.D. ABDELLAH, Faye G., Ed.D., Sc.D. Assistant Surgeon General urgeon General, PHS, and Chief Nurse Officer, USPHS Assistant Secretary for Health, HEW 200 Independence Avenue, S.W., Room 716G and Chief Advisor Long-Term Care Policy OASH/DASH P,R,S Washington, D.C. 20314 202-245-7694 Parklawn Building, Room 17809 5600 Fishers Lane Rockville, MD 20857 301-443-6497 MYERS, Paul W., Lt. Gen., USAF, MC CHESNEY, Murphy A., Major Gen., USAF, MC irgeon General Deputy Surgeon General for Operations partment of the Air Force HQ United States Air Force, AFMSC/SG rrestal Building Office of the Surgeon General Brooks AFB, TX 78235 shington, D.C. 20314 202-767-4343 **512-536-38**55 RICHARDS, John C., Col., MC, USA PIXLEY, Charles C., Lt., Gen., MC, USA The Surgeon General Chief, Graduate Medical Education Branch Education and Training Division epartment of the Army U.S. Army Medical Department 202-697-1295 Washington, D.C. 20310 Personnel Support Agency 202-693-5455 Washington, D.C. 20314

EXECUTIVE SECRETARY

CUMMINGS, Martin M., M.D. Director National Library of Medicine Bethesda, MD 20014 <u>301-496-6221</u> 2

	COUNC	COUNCIL DATE: MAY 1979
THIS TRANSPORTED AND INTERNAL OF MEDICINE		
APPLICATION NUMBER SHORT TITLE	AMOI	AMOUNTS BFCOMVENTED
1 GO7 LM 03110-01A1		THE DECK
CONSORTIUM IMPROVEMENT GRANT	01A1	15,690
1 GO7 LM 03294-01		
SINGLE-INSTITUTION GRANT	10	4,000
1 GO7 LM 03297-01		
CUNSORTIUM IMPROVEMENT GRANT	10	5,953
1 GO7 LM 03298-01	;	
CONSORTIUM IMPROVEMENT GRANT	10	4,000
1 GO7 LM 03302-01		
SINCLE-INSTITUTION GRANT	10	3,795
1 GO7 LM 03305-01		
CONSORTIUM IMPROVEMENT GRANT	10	23,500
1 GO7 LM 03314-01	:	
CONSORTIUM IMPROVEMENT GRANT	10	15,436
1 GO7 I.M 03316-01	2	
CONSORTIUM IMPROVEMENT GRANT	10	8,500
1 GO7 LM 03317-01		
COLLORTIUM IMPROVEMENT GRANT	01	20,044
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(Arranged numerically by program)	COUNC	COUNCIL DATE: MAY 1070
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		
APPLICATION NUMBER SHORT TITLE	AMC	AMJUNTS RECOMMENDED
1 GO7 LM 03320-01	6	3 5/0
CONSORTIUM IMPROVEMENT GRANT	4	
1 GO7 LM 03321-01	10	1 2 0 2
SINGLE-INSTITUTION GRANT	10	1/6 °C
1 GO7 LM 03323-01	6	22 120
CONSORTIUM IMPROVEMENT GRANT	5	72, 120
1 GO7 LM 03324-01	5	22 200
CONSORTIUM IMPROVEMENT GRANT	10	002,02
1 GO7 LM 03325-01	5	
SINCLE-INSTITUTION GRANT	70	4,000
1 GO7 LM 03326-01	5	16 610
CONSORTIUM IMPROVEMENT GRANT	10	016,01
1 GO7 LM 03327-01	10	
SINGLE-INSTITUTION GRANT		, voo
1 GO7 LM 03328-01	5	
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1 GO7 LM 03329-01	5	
SINGLE-INSTITUTION GRANT	10	000**
1 GO7 LM 03332-01	5	
CONSORTIUM IMPROVEMENT GRANT		

COUNCIL DATE: MAY 1979

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		
APPLICATION NUMBER SHORT TITLE	RECC	RECOMMENDED
1 Pol LM 03373-01	01	175,450
MEDICAL DATABASES AND CLINICAL INVESTIGATION	03	175,090
	04 05	179,257 189,724
1 Pol LM 03374-01	01	309,351
	02	335,913
ARTIFICIAL INTELLIGENCE AND CLINICAL PROBLEM SOLVING	0.40	354 ,220 378,610
	05	405,475
1 PO1 LM 03393-01	01	100,000
PATIENT COUNSELING BY COMPUTER	02	100,000
1 POI LM 03395-01	10	141,946
RESEARCH PROGRAM: BIOMEDICAL KNOWLEDGE REPRESENTATION	03 03	147,253 163,171
	04 05	171,193 184,165
1 Pol LM 03396-01	10	98,568
STUDIES IN CLINICAL REASONING & INFORMATICS THEORY	02 03	116,944 71,010
1 Pol LM 03401-01	10	235,582
INVESTIGATIONS IN CLINICAL DECISION MAKING	03	268,035
	04 05	290,706 306,449
1 POI LM 03416-01	10	88,571
RESEARCH CENTER IN BIOMEDICAL INFORMATION SCIENCE	03 04 04	94,419 101,068 102,677
	05	106.333

<u>[</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

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A	APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL 1/ (Arranged numerically by program)	COUN	COUNCIL DATE: MAY 1979	79
INSTITUTE/DIVISION: NATIONAL LIBRARY	IBRARY OF MEDICINE	AA	AMULTAR	
APPLICATION NUMBER	SHORT TITLE	RECO	RECOMMENDED	
1 K04 LM 00042-01		10	32,382	
		02	32,382	
DATA ANALYSIS OF CARDIOVASCULAR	LAR INFORMATION SYSTEMS	03	32,382	
		04	32,382	
		05	32,382	
1 KO4 LM 00044-01		10	29,647	
		02	29,647	
MEDICAL DECISIONMAKING WITH COMPUTER ASSISTANCE	COMPUTER ASSISTANCE	03	29,647	
		04	29,647	
		05	29,647	
1 K04 TW 00048-01		10	36,375	
		02	36,375	
SYMBOLIC COMPUTATION METHODS FOR	FOR CLINICAL REASONING	03	36,375	
		04	36,375	
		05	36,375	

<u>1</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

	MAY 1979								
	COUNCIL DATE: MAY 1979		OUNTS	AMOUNTS RECOMMENDED 01 25,649 02 24,609			25,649 24,609 23,200 14,890 22,637		
	coul		RECO	10	07	01	07	10	
APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL 1/	tion the state of the second state of the seco	INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	APPLICATION NUMBER SHORT TITLE	1 K10 LM 00034-01	THE EVOLUTIONARY AND FUNCTIONAL BIOLOGY OF LANGUAGE	1 K10 LM 00038-01	ENVIRONMENTAL HAZARDS OF SMALL CHILDREN	1 KIO LM 00039-01	

 $[\]underline{1}$ Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final avards.

APPLICATIONS RECORPRIDED FOR APPROVAL BY COUNCIL 1/ (Arranged numerically by program)	COUN	COUNCIL DATE: MAY	Y 197
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	Å	STAINAA	
APPLICATION NUMBER SHORT TITLE	RECO	RECOMMENDED	
1 R23 LM 03363-01	01	25,209 28,610	
DEVELOPMENT OF A PROCESS MODEL OF THE MEDICAL RECORD	03	31,305	
1 R23 LM 03366-01	10	28,541	
SINGLE-PEAKED FUNCTIONS AND MEDICAL DECISIONS	03	30,205 31,254	
1 R23 LM 03370-01	10	19,783	
INTEGRATING MEDICAL KNOWLEDGE AND CLINICAL DATA BANKS	03	34,993	
1 R23 LM 03371-01	10	27,862	
AN INTELLIGENT SYSTEM FOR KNOWLEDGE ACQUISITION	03 03	31,316 31,700	
1 R23 LM 03376-01	10	22,472	
COMPUTER AIDED MEDICAL DIAGNOSIS PROJECT	70	CCT • 17	
1 R23 LM 03379-01	10	30,640	
MEDICAL INFORMATION SYSTEM WITH CLINICAL DATA CAPTURE	03	30,076	
1 R23 LM 03387-01	10	24,450	
COMPREHENSIVE DATA BASE FOR INTERNAL MEDICINE	02 03	24,950 24,950	
1 R23 LM 03392-01	10	29,948 20,357	
REPRESENTING KNOWLEDGE ABOUT DYNAMIC CLINICAL SETTINGS	03	30,798	

<u>[/Approval recommendations are not final but are the basis upon which subsequent BID determinations and</u> negotiations will determine final avards.

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APPLICATIONS RECOMMENDED FOR APPROVAL BY COUNCIL $\underline{1}$ (Arranged numerically by program)	cou	COUNCIL DATE: MAY 1979
INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		
APPLICATION NUMBER SHORT TITLE	REC	AMOUNTS RECOMMENDED
2 ROI LM 03001-03	03	18,458
A HISTORY OF MEDICAL CARE IN RURAL FRANCE, 1800-1915		
2 RO1 LM 03036-03 DUAL: CA	03	30,027
WRITING OF "CHEMICAL INDUCTION OF CANCER" VOL IIC	* 0	32,465
1 RO1 LM 03259-01	01	23, 534
LESS THAN FULLTEXT INDEXING USING THE INDIRECT METHOD	02	25,253
1 RO1 LM 03296-01	01	8,996
HEALTH REFORM AGITATION: N. Y. CITY (1840-50)		
1 RO1 LM 03299-01	10	35,479
PREPARE BOOK ON BACTERIAL INFECTIONS OF HUMANS		
1 RO1 LM 03300-01	10	19,980
J. ABEL AND THE DEVELOPMENT OF AMERICAN PHARMACOLOGY	03 03	0,0/2 6,855 1 7,840
1 RO1 LM 03303-01	01	34,031
THE AMERICAN SIGN LANGUAGE OF THE DEAF: 1760 TO TODAY	07	176,60
1 RO1 LM 03304-01	10	48,868 52,520
STANDARDIZATION OF OBSTETRIC-GYNECOLOGIC TERMINOLOGY	70	620,20

<u>1</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

COUNCIL 1/ COUNCIL DATE: MAY 1979	AMOUNTS	RECOMMENDED	01 17,373 02 16.125		01 25,627 02 12,203		enheednent RID determinstions and
APPLICATIONS RECOMMENDED FOR APPROVAL BY (Arranged numerically by program)	INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	APPLICATION NUMBER SHORT TITLE	1 RO1 LM 03307-01	TRANSLATION OF MORCAGNI'S CONSULTI, WITH COMMENTARY	1 RO1 LM 03354-01	PREPARATION OF A BOOK: THE PREGNANT THERAPIST	1/1

<u>1</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

BOARD OF REGENTS

Extramural Programs Subcommittee Meeting

May 23, 1979

ATTENDEES

Subcommittee Members Present:

Mrs. Bernice M. Hetzner (Consultant) Dr. Saul Jarcho (Consultant) Dr. Doris H. Merritt Mr. James F. Williams II Ms. Martha E. Williams

NLM Staff Present:

Dr. Ernest M. Allen, Associate Director for Extramural Programs Mrs. Helen S. Bennison, Grants Management Specialist, EP Mr. Arthur J. Broering, Deputy Associate Director for Extramural Programs Dr. Jeanne L. Brand, Chief, International Programs Division, EP Mr. Peter Clepper, Program Officer, EP Mrs. Karin K. Colton, Committee Management Assistant Dr. Roger W. Dahlen, Chief, Division of Biomedical Information Support, EP Mrs. Doris Doran, Program Officer, EP Miss Annette B. Green, Grants Data Clerk, EP Mrs. Rose Marie Holston, Program Technical Assistant, EP Mrs. Frances E. Johnson, Program Officer, EP Mrs. M. Kathleen Nichols, Grants Management Specialist, EP Dr. Harold M. Schoolman, Deputy Director for Research & Education Dr. Dorothy A. Stroup, Program Officer, EP Mrs. Jacqueline B. Watley, Secretary to Associate Director for EP Mr. Richard T. West, Chief, Office of Program Planning and Evaluation, EP Mr. Randall Worthington, Program Officer, EP Dr. Galina V. Zarechnak, Program Officer, EP

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE Bethesda, Maryland

AGENDA

61st Meeting of the

BOARD OF REGENTS

9:00 a.m., October 4-5, 1979

Board Room National Library of Medicine

EETING OPEN: All day on October 4 and from 9:00 to 11:00 a.m. on October 5. EETING CLOSED: From 11:00 a.m. to adjournment on October 5 for the review of grant applications

CALL TO ORDER AND INTRODUCTORY REMARKS

I. REMARKS BY THE DIRECTOR, NIH

II. CONSIDERATION OF MINUTES OF LAST MEETING TAB I (Orange Book)

V. DATES OF FUTURE MEETINGS 1980 Calendar <u>TAB II</u>

<u>Next Meeting</u>: January 24-25, 1980 (Th-F)

Spring Meeting: May 22-23, 1980 (Th-F)

Fall Meeting: October 9-10, 1980 (Th-F) or October 2-3, 1980 (Th-F)

COFFEE BREAK

Dr. Nicholas E. Davies

Dr. Donald S. Fredrickson

Agenda, Board of Regents' Meeting, October 4-5, 1979

۷.	REPORT OF THE DIRECTOR, NLM	TAB III	Dr. Martin M. Cummings
VI.	WHITE HOUSE CONFERENCE ON LIBRARY AND INFORMATION SERVICES	TAB IV	Miss Mary E. Corning
VII.	PRACTITIONER INVOLVEMENT IN INFORMATION TRANSFER TECHNOLOGY	<u>TAB V</u>	Dr. Nicholas E. Davies Dr. Lionel Bernstein Dr. Emmet F. Ferguson, Jr.,
	Discussion		Discus <mark>sant</mark> Board Members
	LUNCHEON IN CONFERENCE ROOM "B"		
VIII.	PLANNING FOR THE DEVELOPMENT OF MEDLARS III	TAB VI	Dr. Joseph Leiter Ms. Martha E. Williams, Discussant
	Discussion		Board Members
IX.	PROFESSIONAL AWARENESS OF NLM'S PROGRAMS AND SERVICES	TAB VII	Dr. Nicholas E. Davies Mr. Robert Mehnert Dr. Edward J. Huth,
	Discussion		Discussant Board Members
Х.	STATUS OF LISTER HILL CENTER BUILDING AND TOUR OF BUILDING	TAB VIII	Mr. Kenneth G. Carney
	COFFEE BREAK		
XI.	REVIEW OF SELECTED TECHNICAL SERVICES	TAB IX	
	A. Cataloging Problems		Mr. James W. Barry Mr. James F. Williams II, Discussant
	B. Demonstration of New Retrieval SystemsCITE and AID		Dr. Tamas E. Doszkocs
	Discussion		Board Members
XII.	NINTH REGENTS' AWARD FOR SCHOLARSHIP OR TECHNICAL ACHIEVEMENT		Dr. Nicholas E. Davies

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Cocktails (Cash Bar) 6:30 p.m. "Salon A" "Salon B" (List of dinner transportation arrangements, where appropriate, in agenda folder.) SPEAKER: Cecil G. Sheps, M.D. Professor of Social Medicine University of North Carolina at Chapel Hill and Member of the Board of Regents TOPIC: "Science and the New Health Imperatives" * * * * * * * * * * * * * * R E C O N V E N E: 9:00 a.m., Friday, October 5, 1979 XIII. REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS TAB X Dr. Ernest M. Allen A. Continuation of Computers-In-Medicine Program Tab A Support of Information Retrieval Β. System for Bioethics Tab B XIV. REGIONAL MEDICAL LIBRARY PROGRAM--TAB XI Mr. Kent A. Smith Mr. Sheldon Kotzin Dr. Doris H. Merritt CONTRACT COMPETITION Board Members Discussion XV. SUGGESTED MODIFICATION IN ALTERATION AND RENOVATION POLICY Mr. Arthur J. Broering TAB XII Board Members Discussion COFFEE BREAK PROGRESS REPORT ON IMPROVEMENT GRANTS TAB XIII Mrs. Frances E. Johnson XVI. Discussion Board Members MEETING CLOSED FOR THE REVIEW OF GRANT APPLICATIONS FROM 11:00 A.M.

XVII.	SPECIAL APPLICATIONS	(Curry Hankbook)	
	A. Special Scientific Project B. Resource C. Research	(Gray Workbook) TAB I TAB II TAB III	Dr. Roger W. Dahlen
XVIII.	SUMMARY STATEMENTS		
	A. Publication B. Special Scientific Project C. Resource D. Research E. New Investigator F. Improvement	TAB IV TAB V TAB VI TAB VII TAB VIII TAB VIII TAB IX	Dr. Jeanne L. Brand Dr. Roger W. Dahlen

XIX. ADJOURNMENT

Dr. Nicholas E. Davies

DEPARTMENT OF HEALTH, EDUCATION

AND WELFARE

NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE

BOARD OF REGENTS

MINUTES OF 62ND MEETING OCTOBER 4-5, 1979

BOARD ROOM NATIONAL LIBRARY OF MEDICINE BETHESDA, MARYLAND

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

THE BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

Minutes of Meeting $\frac{1}{2}$

October 4-5, 1979

The Board of Regents of the National Library of Medicine was convened for its sixty-second meeting at 9:00 a.m. on Thursday, October 4, 1979, in the Board Room of the National Library of Medicine, Bethesda, Maryland. Dr. Nicholas E. Davies, Attending Physician at Piedmont Hospital in Atlanta, acted as Chairman for Dr. S. Richardson Hill, Jr., who was unable to attend. In accordance with P.L. 92-463 and the Determination of the Director, NIH, and as announced in the Federal Register on August 29, 1979, the meeting was open to the public from 9:00 a.m. to 5:00 p.m. on October 4, and from 9:00 a.m. to 11:00 a.m. on October 5, and closed from 11:00 a.m. to 12:15 p.m. on October 5 for the review, discussion and evaluation of grant applications. A Board roster is enclosed under Attachment "A."

Board members present were:

Dr. Ismael Almodovar Dr. Eloise E. Clark Dr. Nicholas E. Davies Dr. Emmet F. Ferguson, Jr. Dr. Edward J. Huth Dr. Doris H. Merritt Dr. Cecil G. Sheps Dr. John L. Townsend Mr. James F. Williams II Ms. Martha E. Williams

Alternates to Board members present were:

Dr. Faye G. Abdellah, representing Dr. Julius B. Richmond Mr. Edmond Applebaum, representing Dr. Daniel J. Boorstin Rear Admiral Stephen Barchet, representing Vice Admiral Willard P. Arentzen Dr. Donald L. Custis, representing Dr. James C. Crutcher

Unable to attend:

Colonel John C. Richards Major General Murphy A. Chesney

1/ For the record, it is noted that members absent themselves from the meeting when the Board is discussing applications from their respective institutions (interpreted to mean the entire system of which a member's institution is a part) or in which a conflict of interest might occur. Only when an application is under individual discussion will the Board member absent himself. This procedure does not apply to "en bloc" actions.

2/ The Board of Regents, when considering the extramural programs of NLM, also constitutes and serves as the National Medical Libraries Assistance Advisory Board. National Library of Medicine staff members attending this meeting included:

Dr. Martin M. Cummings, Director Mr. Kent A. Smith, Deputy Director Dr. Harold M. Schoolman, Deputy Director for Research and Education Dr. Ernest M. Allen, Associate Director for Extramural Programs Mr. Philip D. Amoruso, Executive Officer Mr. James W. Barry, Deputy Associate Director, LO Mr. Harry D. Bennett, Director for Computer and Communications Systems Dr. Lionel Bernstein, Director, Lister Hill National Center for Biomedical Communications Mr. Albert Berkowitz, Chief, Reference Services Division, LO Dr. John Blake, Chief, History of Medicine Division, LO Dr. Jeanne L. Brand, Chief, International Programs Division, EP Mr. Arthur J. Broering, Deputy Associate Director for Extramural Programs Dr. William Cooper, Associate Director for Planning Miss Mary E. Corning, Assistant Director for International Programs Dr. George J. Cosmides, Deputy Associate Director, SIS Mr. John Cox, Deputy Director, OCCS Dr. Roger W. Dahlen, Chief, Division of Biomedical Information Support, EP Dr. Tamas E. Doszkocs, Chief, Technical Services Division, LO Mr. Benjamin Erdman, Deputy Director, LHNCBC Mr. Charles Farmer, Director, NMAC Dr. Henry M. Kissman, Associate Director for Specialized Information Services Dr. Joseph Leiter, Associate Director for Library Operations Mrs. Grace McCarn, Chief, Bibliographic Services Division, LO Mr. Robert B. Mehnert, Chief, Office of Inquiries and Publications Management Dr. Donald Merritt, Chief, Health Professions Applications Branch, LHNCBC

Others present included:

Dr. Donald S. Fredrickson, Director, NIH

- Mrs. Bernice M. Hetzner, Professor of Library Science, University of Nebraska -Consultant, NLM
- Dr. Richard A. Farley, Director, National Agricultural Library
- Dr. Saul Jarcho, New York Academy of Medicine - Consultant, NLM
- Mrs. lleen E. Stewart, Executive Secretary, Special Study Section, DRG, NIH

Members of the public present:

Mr. Jeff Christy, Reporter, "The Blue Sheet"

I. OPENING REMARKS

Dr. Nicholas E. Davies, Acting Chairman in the absence of Dr. S. Richardson Hill, Jr., welcomed the Regents, ex officio members, alternates, consultants, and guests to the 62nd meeting of the Board of Regents. He noted especially the presence of new Regents Dr. Edward J. Huth and Dr. John L. Townsend.

II. REMARKS BY THE DIRECTOR, NIH

Dr. Donald S. Fredrickson noted that NIH is in the midst of "Phase 2" of its health research planning effort. This was begun over a year ago by Secretary Califano as an attempt to develop principles for apportioning funds in health research and for long-range planning. A set of such principles has been developed and we are now (Phase 2) trying to convert them into specific recommendations. By the end of this month a document prepared by a committee representing all researchrelated HEW agencies will be sent to the Secretary. One of the most important recommendations in this report is that there should be greater stability in the funding of research in order to protect NIH's ability to respond to investigatorinitiated proposals.

The NIH Director reported on the status of the 1981 HEW budget proposal which is now being reviewed in the Office of Management and Budget. He anticipates an austere budget and Dr. Fredrickson is particularly concerned about the vulnerability of NLM's grant programs and diminished purchasing power for medical literature. He has made a number of pleas to maintain NLM's budget at an appropriate level.

NIH has suggested that the Freedom of Information Act be altered by adding two very narrow exemptions to protect certain trend data accumulated in clinical trials and epidemiologic studies. Premature exposure of such data might influence the behavior of participants in randomized clinical trials, thus affecting the validity of the outcome. NIH is proceeding very cautiously in its effort, however, for it is mindful of the importance of the Act and its laudable role in making government records available to the public.

Addressing a question by Dr. Almodóvar about how to link NLM's programs and medical research efforts, Dr. Fredrickson emphasized the importance of the Library in information transfer—making sure that the published research findings are disseminated throughout the health community so that they may be put to practical use. Dr. Sheps praised NIH's consensus development efforts but expressed concern as to how widely they were being distributed and whether there was any attempt to monitor change in practitioner behavior resulting from the consensus development activity. Dr. Fredrickson responded that there has been a problem in getting good quality summary reports from the consensus development conferences, and that distribution of these has also been a problem. Dr. Cummings noted that NLM has assisted in publicizing and distributing the summaries and is also considering indexing them in <u>Index Medicus</u>.

Following the discussion of NLM's role vis-a-vis the research effort, Dr. Cummings presented the results of a recent NLM-supported survey that related expenditures on biomedical communication to overall expenditures for medical research. In 1968 (when NLM became a part of NIH), an estimated \$2.6 billion was spent for U.S. biomedical research. This rose 139 percent to over \$6 billion by 1978. The increase in NIH's expenditures was about 200 percent, from \$0.86 billion (1968) to \$2.5 billion (1978); NLM's expenditures, however, had risen by only 85 percent—from \$20 million to \$37 million. NLM, a vital element in supporting U.S. biomedical science, has not fared as well in the competition for resources as science itself. Dr. Fredrickson commented that these data are revealing and that they will be useful in justifying increased support for the Library. NLM should be put in a special class, he said, so that a strong case can be made that certain mandatory expenses be met to preserve the essential services which NLM provides to the entire biomedical research effort.

IIL CONSIDERATION OF MINUTES OF PREVIOUS MEETING

The Board of Regents approved the minutes of the May 24-25, 1979, meeting.

IV. DATES FOR FUTURE MEETINGS

The Board will meet next on January 24-25, 1980. The dates of May 22-23 have been set for the following meeting, the afternoon of the first day of that session to be devoted to the dedication of the Lister Hill Center Building. The dates of October 9-10, 1980, were tentatively selected for the fall meeting.

V. WHITE HOUSE CONFERENCE ON LIBRARY AND INFORMATION SERVICES

Miss Mary E. Corning, NLM Assistant Director for International Programs, reported about plans for the White House Conference on Library and Information Services. Authorized by P.L. 93-568 in 1974, it will be held November 15-19, 1979, in Washington, D.C. The Conference is being planned and conducted under the direction of the National Commission on Libraries and Information Science (NCLIS); Congress provided a \$3.5 million appropriation for the Conference. The stated purpose of the Conference is to "develop recommendations for the further improvement of the Nation's libraries and information centers and their use by the public. ..." The more than 1,000 participants will be 2/3 lay and 1/3 library and information specialists and will be drawn from providers of information services to the public at the Federal, state, and local levels; educational institutions; specialists in the field; and individuals from government and the general public.

The Conference has as its objectives to establish and accomplish missions of libraries and information services of all kinds, set realistic goals and the means of achieving these goals, clarify issues and priorities, establish an agenda for action, and inform the public about all of the foregoing. At 77 "pre-conferences" over 3,000 resolutions and recommendations were generated. Miss Corning, who has analyzed some of these resolutions, has identified several that pertain to the National Library of Medicine. One was to extend the Medical Library Assistance Act to include consumer health education. Another was that NLM should continue to receive support for its computerized activities. A third was that the NLM Act should be modified to have NLM provide information services for patients, health care consumers, and the general public. Also there was a resolution that all Federal libraries should be accessible by the general public and serve as local resources for the District of Columbia. A number of other resolutions would affect NLM indirectly: the creation of a National Library Agency, support for the National Periodicals Center, free information services from all publicly supported libraries. Rather than address each of the 3,000 resolutions, the conferences planners distilled from five themes—library and information services for (1) meeting

personal needs, (2) enhancing life-long learning, (3) improving organizations and the professions, (4) effectively governing our society, and (5) increasing international understanding and cooperation. Miss Corning was invited to participate in working groups for two of the themes: improving organizations and the professions, and increasing international understanding. Fact sheets will be prepared and distributed to Conference participants on the issues identified by working groups for the five major themes. There is no assurance that any funding will be available to implement the Conference's final recommendations. The Federal Library Committee is recommending that similar White House Conferences be held every 10 years.

VI. REPORT OF THE DIRECTOR, NLM

Dr. Cummings introduced two new senior members of the NLM staff: Dr. William G. Cooper who has been named NLM Associate Director for Planning, and Mr. Philip D. Amoruso, who has been appointed Executive Officer. The Director then reported on the President's FY 1980 budget which requests 495 positions and \$41,431,000 for NLM. This is a decrease of eight positions and a constant dollar level. The House of Representatives and the Senate have considered the President's budget and are recommending a larger budget for NLM: \$44,000,000. Part of this increase would provide support for NLM's role in the interagency effort to build the Chemical Substances Information Network (CSIN). Because the appropriation bill has not yet been passed, however, NLM is operating in the new fiscal year without a budget. NLM has prepared its FY 1981 budget; current projections do not call for any program increases for new initiatives but would maintain NLM programs at their FY 1980 levels. NLM will be able to accommodate to this austere budget, Dr. Cummings said, but continued loss of staff positions poses a serious threat to the Library's ability to provide high-quality information services to the biomedical community. In 1968, when NLM became a part of NIH, the Library had over 530 positions. That was soon reduced to 470, a level which was maintained until 1977 when Congress raised the budgeted positions to 495. This has since been reduced again, and today our administrative ceiling (as opposed to the ceiling authorized by Congress) is 468. This low ceiling, coupled with an NIH-wide freeze on hiring, will make it extremely difficult, and perhaps impossible, to maintain indexing, cataloging, and other essential services. To attempt to cope with the reduced ceiling, NLM has critically analyzed all existing and anticipated vacancies to identify positions which could be eliminated without adverse effects on services. NLM is reviewing existing staff capabilities to make maximum use of the skills it possesses and is also reviewing other than full-time-permanent positions and the 14 allocated "special expert" consultants so that optimum use can be made of these.

Later in the meeting, after discussion, the Regents approved a resolution to be sent to the HEW Secretary expressing their concern about the effect of staff cuts on the quality of services provided by the Library (Attachment B).

Dr. Cummings described the National Periodicals Center (NPC), proposed by the National Commission on Libraries and Information Science (NCLIS). The NCLIS plan calls for a three-level National Periodicals System to handle all requests for periodical literature. The plan designated existing and future network arrangements as level 1; level 3 would be major research collections that would handle the one or two percent of the requests for very old or esoteric periodicals. Level 2 would be a new entity—the National Periodicals Center, that would back up existing sources and ensure coverage of 20 percent of the traffic. NLM supports the development of a National Periodicals System, but has reservations about the advisability of creating a National Periodicals <u>Center</u> with a large collection that would duplicate existing resources. Developing networks with automated interlibrary loan and document delivery systems should increase the speed and reduce the cost of loan transactions and draw traffic away from largenet lending libraries in the near future, regardless of the NPC. Although the needed library staff and resource costs may continue to be somewhat higher for interlibrary loan transactions, the direct cost of purchasing document surrogates from a Center will be significant, since all NPC models call for payment of copyright royalties on all transactions. Creation of a Center may also serve to undermine the development of strong local resource-sharing arrangements, which are the best guarantee for rapid document delivery. Given these concerns, subsidies to existing collections may be a better method for developing improved access. Mr. Applebaum, representing the Library of Congress, added to Dr. Cummings' report that a recent consultant study was quite negative, saying that the NPC was "an idea whose time had come and gone." He also noted that within the last few weeks legislation supporting the National Periodicals Center had been introduced into Congress.

The Director brought the Regents up to date about the prolonged attempt to purchase computer equipment to replace the current IBM 370/158 computer configuration. Sperry Univac, one of the firms bidding, filed a protest with the General Accounting Office following the determination by NLM that the company had not responded adequately to NLM's specifications. There has been a considerable volume of correspondence generated by the protest, among NLM, the General Accounting Office, the General Services Administration (the government agency handling the procurement), Sperry Univac, and IBM (the other firm bidding for the contract). The fears of considerable delays in this procurement are now being realized. It is difficult to say how much longer these delays will be continued. NLM is awaiting a GAO ruling on the UNIVAC protest.

A bill titled the "Public Printing Reorganization Act of 1979" has been introduced in the House of Representatives and the Senate. The bill is intended to replace the existing law concerning the Government Printing Office and the Superintendent of Documents. Dr. Cummings said that he and others in the scientific community have serious concerns about the bill, and that, as a private citizen, he wrote an editorial in Science (20 July 1979) expressing these concerns. The bill would establish the Government Printing Office (GPO) as an independent governmental agency, governed by a Presidentially appointed Board of Directors. The seven-member Board of Directors (which does not have representation from science or education) would establish policies, regulations, and standards on the manner in which the Federal Government prints and disseminates information. The bill would require all public documents, including printed and microfilm matter, computer data bases, audiovisual materials, and public affairs notices to be disseminated through the Superintendent of Documents. In addition, the bill would require each agency to establish an Information Resources Manager reporting directly to the agency head. Dr. Cummings expressed regret that several library organizations, including the American Library Association, have supported the bill. There have been a number of well-considered protestations, however, on the part of government agencies and professional societies in education and science. In addition, many prominent individuals (including Board member Dr. Sheps) have written letters to Congressmen about the dangers posed by the bill. A revised draft of the bill recently received by Dr. Cummings shows that it has been partially rewritten as a result of these protests. It now exempts science publications and there is no longer a threat that the bill might apply to the publication of grant-supported work.

The last item reported by Dr. Cummings was the status of a proposed amendment to the NLM Act that would increase the number of appointed Regents from 10 to 13. If the proposal becomes law, the membership of the Board will include nine Regents to be selected from among leaders in the various disciplines of the health professions, biomedical sciences, and library and information sciences, and four from public affairs. The proposal has received all necessary Departmental approvals. Following review and approval by the Office of Management and Budget, the proposed amendment will be submitted to the Congress.

VII. PRACTITIONER INVOLVEMENT IN INFORMATION TRANSFER TECHNOLOGY

Dr. Davies, introducing the topic, noted that although NLM has evolved as a "research resource center," the Library today is becoming more involved in developing information services for the individual health practitioner. He believes that this community-physicians, nurses, and others directly involved in patient care--should assist the Library in planning, testing, and evaluating these information transfer services.

Dr. Lionel Bernstein, NLM Director of the Lister Hill Center, addressed the topic by providing background information derived from studies supported by the Center. The studies summarize data about the fiscal scope of information transfer activities in biomedicine. Dr. Bernstein presented several graphic depictions of biomedical information flow, including both formal channels (books and journals) and informal channels (consultation, correspondence, peer interchange, etc.). A contract study supported by the National Science Foundation estimated that, for the formal aspects of communication in all of science and technology, the cost in 1977 was \$11.6 billion. The largest portion of this was connected with the time spent by scientists (researchers and educators) in using the literature. The Lister Hill Center subsequently asked the contractor (King Research, Inc.) to separate the data specifically related to biomedicine, refine them, and do some additional studies to complete them. Approximately \$4.7 billion were related to the formal information activities of biomedical researchers, educators, and practitioners (physicians). From the study's sample (addmittedly small) it was estimated that researchers and educators devote 605 hours per year to reading the literature and that physicians devote 192 hours. If nonphysician practitioners are added to this, the total expenditure rises to considerably higher levels.

It is difficult to anticipate the specific needs of practitioners because these needs are determined by the problem of the individual patient who is being managed. A given medical situation requires certain knowledge, independent of the setting of the practitioner.

Dr. Ferguson commented that many practitioners are ignorant of the NLM and its services. He feels that national medical journals should be encouraged to run items about the Library, including the breadth and depth of its collections and the ways to access the information. Also, NLM could provide speakers to the various professional societies to explain the NLM and its programs.

Dr. Huth noted that too often we offer products and services without knowing if anybody wants them. NLM and others are investing in costly systems without knowing in advance exactly what information the practitioner needs in his day-to-day activities. In fact, this knowledge does not exist. He believes that the Lister Hill Center's activity in developing knowledge bases (like the Hepatitis Data Base) is a proper direction and holds much promise for the future. Parallel with this, however, NLM should undertake to find out what it is practitioners need to know for decision-making in their practice. Dr. Abdellah commented that it would be useful to have a nurse practitioner appointed (perhaps as an expert consultant) to advise the Lister Hill Center in developing its programs. Nurses make up the largest body of health practitioners and they and other allied health professionals should be represented. Expanding on Dr. Huth's remarks, Dr. Sheps said that we need to investigate various theories about the relationship between practitioner knowledge and practitioner behavior. NLM could aid in this by supporting such investigations through its research grant mechanism.

VIII. PLANNING FOR THE DEVELOPMENT OF MEDLARS III

Dr. Joseph Leiter, NLM Associate Director for Library Operations, reported on the Library's efforts to develop MEDLARS III, an integrated system that will provide a broad spectrum of automated library functions and services. Major enhancements to present MEDLARS II capabilities will be the development of efficient computerization of record creation, maintenance and control of internal library processes in indexing, cataloging, acquisitions, serial processing, inventory control and document delivery, and the integration of these processes through a single authoritative master bibliographic record. MEDLARS III will build on in-house operational and prototype enhancements to provide greatly improved bibliographic retrieval systems and simpler search techniques for the end-user. An online catalog is being developed to replace the current manual catalog which will be closed in 1981. Greatly improved publication systems will provide for better quality control of current publications and ease the development of new publications and reference tools in a wide variety of formats.

A MEDLARS III Task Force, headed by Dr. Leiter, is developing functional specifications for the new system. A draft report of the Task Force's recommendations may be ready by next spring. An important issue which has been identified is the future role of NLM in providing expanded network services for the health sciences community. Stated simply, the fundamental issue is whether MEDLARS III is planned only to improve NLM's internal processing and services within their present scope, or is it planned to improve the efficiency and effectiveness of technical processing and service delivery by all health sciences libraries as well.

There are four basic network services which are or would be of great value to the health sciences library community and which would be reflected as major systems in MEDLARS III. These are: First, standardized bibliographic control and support for centralized record creation and maintenance; second, bibliographic retrieval; third, centralized national locator information with automated linkages to a nationally distributed document delivery system; and fourth, the delivery system itself. At present, the NLM provides two major network services. The first, bibliographic retrieval, is highly automated. The second is document delivery, which is essentially a manual interlibrary loan service.

Dr. Leiter outlined in some detail how it is proposed to implement and integrate services for health sciences libraries. He used two examples: (1) larger libraries, such as medical school libraries, which represent a major resource in the RML network and which already use MEDLARS services, and (2) smaller hospital libraries which have limited access, if any, to NLM services. The former do not suffer from any lack of bibliographic resources, but from an inability to transfer data efficiently from one system to another. For example, although the MEDLARS retrieval system is a powerful tool, there is no link between citations retrieved and available automated data on the location of actual documents. For the smaller hospital libraries, on the other hand, NLM could develop a set of services that would assist in capturing and creating bibliographic data and establish links, so these data could be used by local and regional cooperative (or commercial) processing centers to provide the kinds of products needed by hospital libraries.

For example, NLM would be able to gather local holdings information which could be used in the automatic routing of document requests throughout the RML network and in producing union lists useful in local resource sharing.

Dr. Leiter summarized the implications of NLM's undertaking to provide improved and expanded network services under MEDLARS III:

- 1. MEDLARS III will establish an authoritative master bibliographic record for all files generated at NLM.
- 2. MEDLARS III will provide an enhanced bibliographic retrieval system with greatly improved user aids for search and retrieval.
- 3. MEDLARS III record formats will conform to the Library of Congress's MARC II format.
- 4. MEDLARS III will conform to the Anglo-American Cataloging Rules (AACR 2) and to the interpretations established by the Library of Congress.
- 5. MEDLARS III will integrate its network functions with the Regional Medical Library network and develop an active role for the network in providing access to holdings data for institutions within each region.
- 6. MEDLARS III will provide an automated document delivery system which will optimize the use of bibliographic and holding information and provide an expeditious system for traffic flow in the Regional Medical Library network.
- 7. MEDLARS III will provide a centralized bibliographic data creation function.

Professor Martha E. Williams, responding to Dr. Leiter's presentation, said that producing a single master bibliographic record for use in multiple data bases, as called for in MEDLARS III, is a <u>sine qua non</u> for any data base producer. Development of a resource locator or union lists with holdings information is definitely needed for the medical literature. It should be used as an online tool, however, and not to generate local card catalogs. Document delivery, historically a bottleneck in information retrieval, is an extremely critical aspect of the plans. More advanced technology, such as videodisc and electronic transmission, should be investigated for this. The planned capabilities of MEDLARS III, Professor Williams said, require no more than existing technology. She had hoped to see recommendations that would take advantage of such advances as improved retrieval techniques, linkages from citations to text, full-text retrieval, and retrieval of numeric data. Following her presentation, Dr. Leiter noted that the Lister Hill Center's experts were involved in the development of plans for MEDLARS III and that the advanced technology now being applied in the Center's Integrated Library System project would also be used in MEDLARS IIL He emphasized, however, that MEDLARS III is not being built from scratch but is being built on the foundation of an existing system. It is therefore important, at least in the beginning, to remedy the present system's shortcomings, even if this means using existing technology.

Mr. James F. Williams II voiced his support for the new system as outlined by Dr. Leiter. NLM's plans to improve and expand the services available over the network are in the national interest and merit the support of the Board and the entire medical library community. The plans stop short of being radical, he said, but are nevertheless at the "cutting edge" of applied technology. The information services planned will be of inestimable value to the health-sciences community. He hopes that NLM will make a special effort to involve this community in the planning of MEDLARS III.

Dr. Cummings commented that the Library has matured in its ability to plan and implement such systems as MEDLARS IIL Work for the original MEDLARS, he noted, was performed almost entirely under contract. Later online development was done partially within NLM (by the Lister Hill Center) and partially under contract. For MEDLARS III, however, we have qualified librarians who can define their needs and write specifications for the system. Also, some parts of the system-building will be done within NLM by our own R and D staff. Dr. Cummings said that it was his belief that it would be a mistake to build a new operating system using advanced technology for technology's sake. NLM should utilize appropriate available technology to do the jobs envisioned as necessary and then improve the system incrementally, as has been done in the past.

IX. PROFESSIONAL AWARENESS OF NLM'S PROGRAMS AND SERVICES

Mr. Robert B. Mehnert, Chief of NLM's Office of Inquiries and Publications Management, described the Library's efforts to increase the awareness of health professionals of NLM's programs. NLM staff annually participate in some 80 conferences and symposia reflecting a wide variety of professional interests. Exhibits at selected meetings also give NLM staff the opportunity to present information about the Library to various professional audiences. Ten exhibits are already scheduled for 1980 at such diverse gatherings as Federation of American Societies for Experimental Biology, the American Industrial Hygiene Association, the Society for Neurosciences, and the Medical Library Association. Another form of personal contact is the large number of professionals who individually and in groups visit the Library each year. Programs ranging from tours to all-day briefings and demonstrations are arranged for them.

A second category of increasing professional awareness is through the wide range of publications—fact sheets, brochures, announcements, newsletters, and others. Another form of information in print about the Library is that published by NLM staff in various journals, monographs, encyclopedia articles, conference proceedings, etc. Last year there were 42 such items published, including some in such journals as JAMA, <u>New England</u> Journal of Medicine, and <u>Science</u>. A number of these articles are reprinted and receive further widespread distribution. Mr. Mehnert noted that, in addition to personal contact and publications, NLM's services are also occasionally the subject of television and radio broadcasts—both in the form of commercial advertisements (sponsored by ITT and IBM, for example), and in program and news interviews with senior NLM staff.

Dr. Huth commented that there is a need for greater efforts to reach medical students, interns, and residents with information about the medical literature and how to make use of it. There should also be published more about NLM in specialized professional journals. He noted that the August 1979 <u>Annals of Internal Medicine</u> has a comprehensive

article on bibliographic tools in medicine. Dr. Cummings told the Regents about restrictions that hampered NLM's public information efforts, ranging from strict OMB regulations governing periodical publications to the stringent travel limitations placed on government employees in traveling to meetings.

X. STATUS OF LISTER HILL CENTER BUILDING

Mr. Kenneth G. Carney, NLM Deputy Executive Officer, after reviewing the steps leading to the development of the Lister Hill Center Building, showed a series of slides that detailed the new building's layout and its specialized facilities. The basic construction contract will be complete in November, one month earlier than called for by the contract. The present schedule calls for occupancy to begin in December and to be completed by March 1980. It is envisioned that 330 employees will be in the building by that time. Partitions and carpeting are being installed under a separate contract and should be completed by March 1980. Mr. Carney then conducted the Regents on a brief tour of the building.

XI. REVIEW OF SELECTED TECHNICAL SERVICES

A. Cataloging Problems:

Mr. James Barry, NLM Deputy Associate Director for Library Operations, reported on cooperative efforts between the Library of Congress, the National Agricultural Library, and NLM to improve technical processing. Concurrent with and related to this joint undertaking is NLM's attempt to deal with a backlog in technical processing, including cataloging. Thirty-four percent of the 22,000 "arrearage" items are in English, Mr. Barry said. These range in date from the mid-sixties to the present. Full cataloging will continue to be applied for core medicine and research material in all languages. Limited cataloging will be applied to much of the remaining material so that it will be available sooner than otherwise possible. The decision to adopt limited cataloging for less substantive material is consistent with the recommendations in the National Level Bibliographic Record--Books and the Library of Congress' decisions supported by a representative group of research libraries. To work on the backlog, 14 staff members have been drafted from other parts of the Library and a number of them are trained in limited cataloging. Also, several trained catalogers who are not now working will be hired temporarily under personal services contracts. Three new full-time cataloging positions were made available, two of which are already filled. Part of the problem in hiring catalogers is the need for certain foreign language skills coupled with a science background. NLM hopes that these steps will allow the cataloging to be current within a year or two.

Commenting on Mr. Barry's presentation, Mr. Williams agreed with the high priority NLM is placing on reducing its cataloging backlog. This labor-intensive intellectual activity at NLM actually saves the entire health-sciences library community a tremendous amount of time and expense.

B. Demonstration of New Retrieval Systems- -CITE and AID:

Dr. Tamas E. Doszkocs, NLM Chief of the Technical Services Division, noted that one of the problems in searching online files in which there is no controlled vocabulary is that the searcher must think of all appropriate terms to describe a search question. Even in files with a controlled vocabulary (like MEDLINE) there is the problem of finding the proper Medical Subject Heading on which to search. Dr. Doszkocs then described an online dictionary he has developed that automatically generates and displays related terms, synonyms, and other semantic associations for given search concepts. This searching tool is called AID (Associative Interactive Dictionary). A second problem is how to allow the end-user- -physicians, researchers, etc.- -to search a file directly without prior knowledge of the system and using their own terminology. The aid developed by Dr. Doszkocs to assist in this is called CITE (Current Information Transfer in English). Dr. Doszkocs demonstrated these two retrieval aids online.

XII. REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS

Dr. Ernest M. Allen, NLM Associate Director for Extramural Programs, presented an overview of FY 1979 awards by program area. A total of 163 grants in the amount of \$8,985,704 was awarded: Ten Training Grants in the amount of \$1,472,153, including the contract-supported Council on Library Resources Health Sciences Library Management Intern Program; seven Special Scientific Projects for \$214,541; 21 Research Grants in the amount of \$1,592,624; 79 Resource Project Grants for \$2,007,894; 36 Publication Grants for \$794,955; nine Regional Medical Library Contracts totalling \$2,848,537; and one Scientific Evaluation Grant in the amount of \$55,000. In comparing the FY 1979 awards to the FY 1980 commitments and the FY 1980 projected budget, Dr. Allen pointed out that of the \$8,625,000 for Extramural Programs in the 1980 budget, \$6,586,564 have already been committed. An additional \$1.3 million, approved for FY 1980 by the Senate Conferees, has not been included in the \$8,625,000. If appropriated, this amount will be earmarked for research projects directly or indirectly related to the Computers-In-Medicine Program. Lister Hill Center funds would be used to continue the five Program Projects funded in FY 1979.

Dr. Sheps raised the question as to whether the topics of learning theory and language development were being addressed in the Computers-In-Medicine Program. He expressed concern about the absence of psychologists, information specialists, and language developers in the current projects being funded. Dr. Schoolman responded that one of the problems has been the small amount of money allocated. The Library is cognizant of the need of as broad an involvement as possible, however. Dr. Schoolman stated, that his greater concern is the trend of Federal agencies to create an expectancy for products at the sacrifice of basic research and fundamental information problems. It is now very difficult to orient grant proposals, even from highly creative and original investigators, to anything but products. NLM has gone out of its way to attempt to point out explicitly that the Library is interested in support of basic information issues, learning theories, and information science in general. Dr. Merritt responded further to Dr. Sheps' concerns by noting that the applications reviewed last May represented a high interdisciplinary mix in the Program Project Grants which did include the types of people Dr. Sheps was concerned about.

Dr. Allen next asked the Regents whether they wished to review a request for continued support from the Kennedy Institute of Ethics at Georgetown University. Such a request would be for ongoing operations costs, following six years of support already provided. While the general position of the Board has been against such funding, exceptions are sometimes justified. Dr. Allen described the success of the program, including five published bibliographies and the establishment of the online data base, "Bioethicsline," in the National Library of Medicine with a use rate of 25 to 35 hours per month by network users. A \$700,000 challenge grant has been made to the Kennedy Institute by the National Endowment for the Humanities on the condition that the Institute obtain matching funds of \$2.1 million over the next three years. The Board agreed to review the application at the January meeting with the understanding that it would receive the customary initial technical review.

XIII. REGIONAL MEDICAL LIBRARY PROGRAM- -CONTRACT COMPETITION*

Mr. Kent A. Smith, NLM Deputy Director, reported that all Regional Medical Libraries will be competing for new contracts during 1979 and 1980. The Requests for Proposals (RFP) mailed to the first three Regions incorporated performance standards in the delivery of interlibrary loans. The review of proposals submitted from Regions I (New England), VII (Midwest), and X (Pacific Northwest) was completed recently. Outside consultants reviewed the technical aspects of the proposals, and their conclusions were considered by a Subcommittee of the Board, chaired by Dr. Doris H. Merritt, on September 28.

Mr. Sheldon Kotzin, RML Coordinator, discussed the criteria contained in the RFP, the strengths and weaknesses of the proposals, and the recommendations of the technical review team. Harvard University, the only applicant from the New England Region, was considered to have the best proposal. The University of Washington submitted the only proposal from the Pacific Northwest Region. Two proposals were received from the Midwest Region--from The John Crerar Library, the present RML, and the University of Illinois. The Technical Review Group requested that a site visit be made to Crerar to clarify some questions. Based on negotiations of budget levels, site visit reports, and responses to questions, the Technical Review Group conducted a second review and made its recommendations. Washington and Harvard were recommended for selection, pending completion of final budget negotiations with staff. The University of Illinois, which had been found technically superior to The John Crerar Library, was recommended to serve as the RML in the Midwest.

Dr. Doris H. Merritt, Chairman of the Board's Subcommittee which performed the final review of the proposals, noted that the Subcommittee was in agreement with the conclusions of the Technical Review Group and recommended acceptance of Harvard University, University of Washington, and the University of Illinois, as the Regional Medical Libraries for Regions I, X, and VII, respectively.

XIV. MODIFICATION IN ALTERATION AND RENOVATION POLICY

Mr. Arthur J. Broering, NLM Deputy Associate Director for Extramural Programs, highlighted some of the pros and cons leading to the recommendation to modify NLM's Alteration and Renovation Policy. A detailed discussion was included in the agenda book. Although PHS grant funds are authorized for alterations and renovations, provided such work is incidental to and necessary for the conduct of a research project or other NIH grant-supported activity, NLM received approval in 1973 from the HEW Office of

* It is noted for the record that Mr. James F. Williams II absented himself from the meeting during the discussion that follows.

Grants Administration Policy to make separate Resource Grant awards specifically and exclusively for the alteration and renovation of health science libraries. After weighing the pros and cons, it appeared advisable to use only the PHS policy. Dr. Abdellah, speaking for the Extramural Programs Subcommittee, which had reviewed this issue on October 3, recommended that a moratorium be imposed on support exclusively for alteration and renovation, but that NLM retain the HEW authority in case of possible need in the future in an unusual situation. The Board concurred on the motion for a moratorium with the understanding that NLM would follow only the PHS policy relative to minor alteration and renovation projects which are a necessary but incidental component of an approved project. The moratorium is to go into effect after the November 1, 1979, deadline for receipt of applications. The Board agreed that the change should be affected after the November deadline.

XV. PROGRESS REPORT ON IMPROVEMENT GRANTS

Mrs. Frances E. Johnson, EP Program Officer, gave a status report on the Medical Library Resource Improvement Grant Program. This successful program is intended to help small hospitals to develop a basic library collection of books and journals. One of the aims of NLM has been to provide seed money to get a library started at a small hospital with the hope that the institution would later seek other means of support to continue the library. Experience has shown that grantees have been successful in obtaining such support. Single institutions and consortia are invited to apply, competing on an equal basis for NLM funds.

The large number of applications received to date for review and funding in FY 1980 indicate a trend that could possibly require the imposition of a ceiling upon funds allocated to this program. Staff will keep the Board apprised of the status of the Improvement Grant Program and will seek its recommendations if such an action should become necessary.

XVI. OTHER BUSINESS

1. Mr. Kent Smith announced that NIH is trying to increase the participation of qualified women and minority scientists on its public advisory committees and in other activities related to its peer review process. The Board of Regents is asked to assist in this effort by seeking the recommendations of committee members concerning women and minority scientists who possess the necessary expertise and might be willing to be considered for such service. Forms were given to the Regents to collect the names and addresses of those who are recommended. The NIH will contact each nominee to determine whether he or she is willing to be considered for service and, if so, the individual will be asked to provide relevant data. For those who agree, the information will be entered into the NIH Consultant File, a computerized registry which has been developed for NIH-wide use. The cooperation of committee members in this important endeavor will be greatly appreciated.

2. Mr. Smith also announced that the NIH Director's Office has asked that several advisory committee members be present at each Institute's annual program planning and review session. The review by Dr. Fredrickson and his staff is the first step in the budget process. NLM's review is scheduled for January 10, 1980. The Board voted to have Dr. Hill and Mr. Williams attend the meeting.

3. The Regents discussed the advisability of electing a Vice-Chairman of the Board. After considering the pros and cons, the Regents tabled the motion until the January meeting.

MEETING CLOSED FOR THE REVIEW OF GRANT APPLICATIONS

XVII. REVIEW OF PENDING APPLICATIONS

Before proceeding with the consideration of pending applications, Dr. Dahlen informed the Board members and consultants of confidentiality and conflict-of-interest procedures and reminded all Regents and consultants to sign, at the conclusion of the grant review, the statement certifying that they had not participated in the discussion of any application where conflicts of interest might occur.

The Board concurred with the recommendations of the Extramural Programs Subcommittee. A total of 71 applications was reviewed, of which 30 were recommended for approval, 35 for disapproval, and six for deferral. Grant applications recommended for approval by the Board are listed in the summary actions (Attachment C). Interim actions taken by EP staff since the May 1979 meeting of the Board were noted.

XVIII. ADJOURNMENT

The meeting was adjourned at 12:15 p.m. on Friday, October 5, 1979.

* * * * * * * * * * * * * *

Wednesday, October 3, 1979, 2:00 to 4:30 p.m. (EP Subcommittee - - List of Attendees under Attachment D) Thursday, October 4, 1979, 9:00 a.m. to 5:00 p.m. Friday, October 5, 1979, 9:00 a.m. to 12:15 p.m.

* * * * * * * * * * * * * *

ACTIONS TAKEN BY THE BOARD OF REGENTS

- The Board approved a resolution to be sent to the HEW Secretary expressing the 1. Regents' concern about the effect of staff cuts on the quality of services provided by the Library (Attachment B).
- 2. The Board agreed to review a request from the Kennedy Institute of Ethics at Georgetown University for continued grant support (Section XII).
- 3. The Regents agreed with the recommendations of the Board's subcommittee for the Review of Competitive Regional Medical Library Contract Proposals that Harvard University, the University of Washington, and the University of Illinois be accepted to serve as Regional Medical Libraries for Regions I, X, and VII, respectively (Section XIII).
- 4. The Board concurred with a proposal to impose a moratorium on support for grants that are exclusively for alterations and renovations (Section XIV).
- The Board of Regents voted to appoint Dr. Hill and Mr. Williams as the Board's 5. representatives at the NIH Director's meeting on January 10, 1980, at which NLM's programs and plans will be reviewed (Section XVII).
- 6. The Board concurred with recommendations of the Extramural Programs Subcommittee. Grant applications recommended for approval are listed in the summary actions (Attachment C).
- 7. The Board presented Dr. Tamas E. Doszkocs, Chief of the Technical Services Division, with the 1979 NLM Regents Award for Technical Achievement. Dr. Doszkocs was cited for his work in developing two experimental online bibliographic search tools- -the Associative Interactive Dictionary (AID) and Current Information Transfer in English (CITE).

I hereby certify that, to the best of my knowledge, the foregoing minutes and attachments are accurate and complete.

Martin M. Cummings, M.D. (Date) // Micholas E. Davies, M.D. (Date) //28/79 Executive Secretary

Robert B. Mehnert Chief, Office of Inquiries and **Publications Management**

BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

CHAIRMAN

	President		0)
ALMODOVAR, Ismael, Ph.D. President	(8/3/82)	SHEPS, Cecil G., M.D. Professor of Social Med	
University of Puerto Rico San Juan, Puerto Rico 00936	<u>809-765-5955</u>	University of North Car at Chapel Hill Chase Hall 132A Chapel Hill, NC 27514	olina
DAVIES, Nicholas E., M.D. Attending Physician Piedmont Hospital Piedmont Professional Building 35 Collier Road, N.W.	(8/3/81)	TOWNSEND, John L., M.D. Chairman Department of Medicine Howard University College of Medicine	(8/3/83)
Atlanta, GA 30309	404-355-1690	2041 Georgia Avenue, N.	
<u>ERGUSON</u> , Emmet F., Jr., M.D. 1515 May Street	(8/3/82)	Washington, D.C. 20060 WILLIAMS, James F., II	
Jacksonville, FL 32204	<u>904-353-5921</u>	Medical Librarian	
<u>HUTH</u> , Edward J., M.D. Editor	(8/3/83)	Vera P. Shiffman Medica Wayne State University 4325 Brush Street	I Library
<pre>\nnals of Internal Medicine \merican College of Physicians</pre>		Detroit, MI 48201	313-577-1168
1200 Pine Street		WILLIAMS, Martha E.	(8/3/82)
'hiladelphia, PA 19104	215-243-1200	Research Professor Coordinated Science Lab	oratory
<pre>HERRITT, Doris H., M.D. Special Assistant to the Direc Hational Institutes of Health Bldg. 1, Room 118</pre>		College of Engineering University of Illinois Urbana, IL 61801	<u>217-333-1074</u>
Bethesda, MD 20205	301-496-9743		

EX OFFICIO MEMBERS

Primary

Alternate

RENTZEN, Willard P., Vice	Adm., MC, USN	WILSON, Almon C., Rear Adm., MC, USN
Surgeon General		Commanding Officer
)epartment of the Navy Jashington, DC 20372	202-254-4153	Naval Health Sciences Education and Training Command
		National Naval Medical Center Bethesda, MD 20014 <u>301-295-0203</u>

OORSTIN, Daniel J., Litt.D. ibrarian of Congress ibrary of Congress 10 First Street, S.E. Washington, DC 20540 <u>202-426-5205</u>

CRUTCHER, James C., M.D. Chief Medical Director he Veterans Administration **:shington, DC 20420 <u>202-389-2596</u>

<u>ELARK</u>, Eloise E., Ph.D. ssistant Director for Biological Behavioral, and Social Sciences stional Science Foundation .300 G Street, N.W., Room 506 ashington, DC 20550 202-632-7867

<u>RICHMOND</u>, Julius B., M.D. Surgeon General, PHS, and Assistant Secretary for Health 200 Independence Avenue, S.W., Room 716G Jashington, DC 20314 202-245-7694

<u>1YERS</u>, Paul W., Lt. Gen., USAF, MC Surgeon General Department of the Air Force Bolling Air Force Base Washington, DC 20332 <u>202-767-4343</u>

'IXLEY, Charles C., Lt., Gen., MC, USA he Surgeon General pepartment of the Army Jashington, DC 20310 202-697-1295 <u>WELSH</u>, William J. Deputy Librarian of Congress Library of Congress 10 First Street, S.E. Washington, DC 20540 <u>202-287-5215</u>

<u>CUSTIS</u>, Donald L., M.D. Deputy Chief Medical Director The Veterans Administration Department of Medicine and Surgery Washington, DC 20420 <u>202-389-2183</u>

none

<u>ABDELLAH</u>, Faye G., Ed.D., Sc.D.
Assistant Surgeon General, and
Chief Nurse Officer, USPHS, and
Chief Advisor Long-Term Care
Policy.OASH/DASH, P,R,S
Parklawn Building, Room 17B09
5600 Fishers Lane
Rockville, MD 20857 301-443-6497

CHESNEY, Murphy A., Maj, Gen. USAF, MC Deputy Surgeon General for Operations HQ United States Air Force, AFMSC/SG Office of the Surgeon General Brooks AFB, TX 78235 512-536-3855

RICHARDS, John C., Col., MC, USA Chief, Graduate Medical Education Branch Education and Training Division U.S. Army Medical Department Personnel Support Agency Washington, DC 20314 202-693-5455

EXECUTIVE SECRETARY

<u>CUMMINGS</u>, Martin M., M.D. Director National Library of Medicine Bethesda, MD 20209 301-496-6221

ATTACHMENT "B"

EMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE NATIONAL INSTITUTES OF HEALTH NATIONAL LIBRARY OF MEDICINE DATE: October 9, 1979

: Director, NIH

4 : Director, NLM

ECT: NLM Board of Regents' Resolution

Attached for your review is a resolution of the NLM Board of Regents developed at their latest meeting on October 4/5, 1979. As you can see it addresses what NLM believes is its most critical need, namely the provision of adequate manpower to serve the basic information needs of the health community. I am hopeful that you will be willing to lend your own personal endorsement to that of the Board of Regents.

Maite In any

Martin M. Cummings, M.D.

Attachment

MORANDUM

:	The Secre	etary
	Through:	US
	-	ES
		Director, NIH

: Acting Chairman, Board of Regents of the National Library of Medicine

F: Resolution Passed by the Board of Regents at the National Library of Medicine at its October 4-5, 1979 Meeting

The Board of Regents of the National Library of Medicine wishes to draw your attention to the severe personnel constraints which restrict its capacity to serve the American health research, education and practicing community.

During the past decade the budget for the Library's activities and program management has been reduced by approximately 25% in real dollars while its basic services continue to increase at a rate of 15-20% per year. The serious effect of this is heightened by the personnel ceilings currently imposed. The FY 1979 appropriation contained 503 positions for NLM, but the authorized employment ceiling was reduced to 468, a decrease of 35 positions. Paralleling the growth in the size of the literature, the workload and demands for library assistance continue to increase; this will inescapably lead to a deterioration in the services provided. (See attached chart)

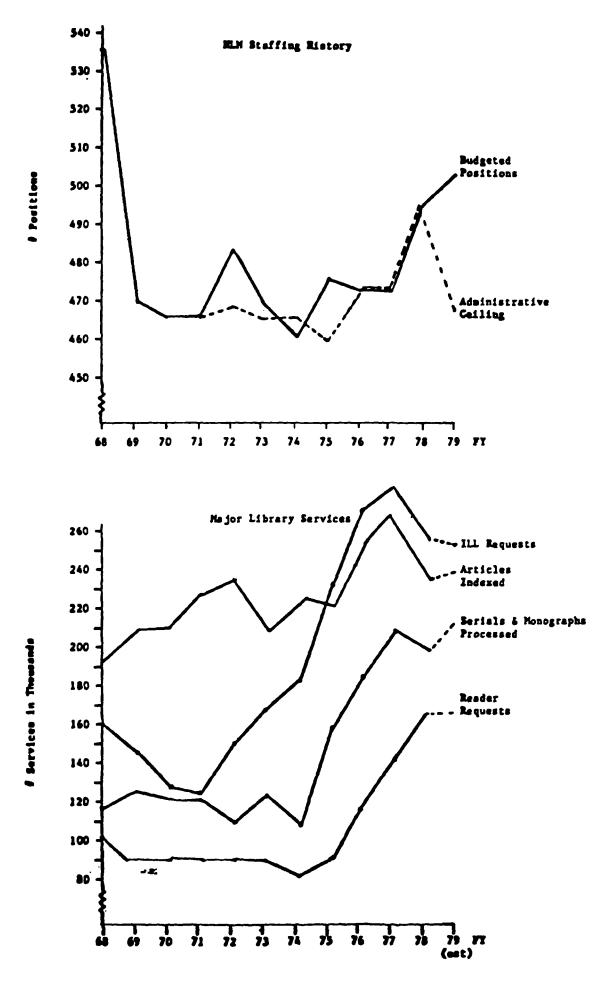
We urge that you authorize the restoration of these positions to this extremely valuable service-oriented library. The effect of such action will assure that the National Library of Medicine will continue to respond to the important information needs of the health community.

Un Henre

Nicholas E. Davies, M.D.

Attachment

ELH STATTING AND MAJOR SERVICES -1968-1979



INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	M	Amine
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1 GO7 LM 03417-01	10	4,000
SINGLE-INSTITUTION GRANT		
1 GO7 LM 03419-01	01	4,000
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1 CO7 LM 03437-01	01	4°000
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1 CO7 LM 03443-01	10	2,500
SINGLE-INSTITUTION CRANT		
1 GO7 LM 03452-01	01	19,823
CONSORTIUM IMPROVEMENT GRANT		
1 GO7 LM 03453-01	10	3,305
SINGLE-INSTITUTION GRANT		
1 GO7 LM 03454-01	10	3 ,22 2
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<u>1</u>/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.

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INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE		
APPLICATION NUMBER SHORT TITLE	RECOM	RECOMMENDED
2 GO7 LM 03046-02A1	02 A 1	36,000
CONSORTIUM IMPROVEMENT GRANT		
2 GD7 LM 03075-02A1	02A1	3,000
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2 GO7 LM 03161-02	02	8,000
CONSORTIUM IMPROVEMENT GRANT		
1 GO7 LM 03322-01	10	10,050
CONSORTIUM IMPROVEMENT GRANT		
1 GO7 LM 03345-01	01	4,000
SINCLE-INSTITUTION GRANT		
1 GO7 LM 03407-01	01	4,200
SINCLE-INSTITUTION GRANT		
1 GO7 LM 03412-01	10	4,000
SINGLE-INSTITUTION GRANT		
1 GO7 LM 03414-01	10	4,000
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1 GO7 LM 03415-01	10	4,000
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APPLICATION NUMBER	SHORT TITLE	RECON	ALTUULS RECOMMENDED
2 ROI LM 03082-02		02	9,299
HUMAN FOOD HABITS: A BIBLIOGRAPHY			
1 ROI LM 03306-01		10	17,425
REFERENCE BOOKS IN DENTISTRY: A GUIDE	DE	70	18,000
1 RO1 LM 03361-01 DUAL: CA		10	27,300
RADIATION THERAPY OF TUMORS AND BON	BONE INJURIES		
1 RO1 LM 03402-01		10	25,016
POSTNATAL DEVELOPMENT OF HUMAN CEREBRAL CORTEX	BRAL CORTEX		
1 RO1 LM 03413-01		01	17,401
MEDICINE AFTER EMANCIPATION: BLACK HEALTH 1865-1895	HEALTH 1865-1895	70	to1 (02
1 RO1 LM 03427-01		10	91,025 104, 450
SELF-DIRECTED CONTINUING EDUCATION FOR PHYSICIANS	FOR PHYSICIANS	03	109, 325
1 ROI LM 03444-01		10	71,555
MODELINC AND EVALUATION OF ON-LINE	USER BEHAVIOR		
1 ROI LM 03446-01		01	15,409
MASS SPECTROMETRY - A FUNDAMENTAL RU	REVIEW		

<u>[/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.</u>

COUNCIL DATE: OCTOBER 1979	STRITCHA	RECOMMENDED									ent BID determinations and
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IáV	INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	APPLICATION NUMBER	1 KIO LM 00040-01	CT: HIGH COST TECHNOLOGY AND THE	1 K10 LM 00051-01 THE MURDERER: A MULTIDISCIPLINARY ANALYSIS

 $\underline{1}/Approval recommendations are not final but are the basis upon which subsequent BID determinations and negotiations will determine final awards.$

BOARD OF REGENTS

Extramural Programs Subcommittee Meeting

October 3, 1979

ATTENDEES

Subcommittee Members Present:

Mrs. Bernice M. Hetzner (Consultant) Dr. Saul Jarcho (Consultant) Dr. Doris H. Merritt Mr. James F. Williams II Ms. Martha E. Williams

NLM Staff Present:

Dr. Ernest M. Allen, Associate Director for Extramural Programs Mrs. Helen S. Bennison, Grants Management Specialist, EP Mr. Arthur J. Broering, Deputy Associate Director for Extramural Programs Dr. Jeanne L. Brand, International Programs Division, EP Mr. Peter Clepper, Program Officer, EP Mrs. Karin K. Colton, Committee Management Assistant Dr. Roger W. Dahlen, Chief, Division of Biomedical Information Support, EP Miss Annette B. Green, Grants Data Clerk, EP Mrs. Frances E. Johnson, Program Officer, EP Mrs. M. Kathleen Nichols, Grants Management Specialist, EP Mrs. Marguerite L. Pusey, Administrative Officer, EP Mrs. Jacqueline B. Watley, Secretary to the Associate Director for EP Mr. Randall Worthington, Program Officer, EP