

AGENDA

Forty-First Meeting Of The
BOARD OF REGENTS
National Library of Medicine

9:00 a.m., March 27-28, 1972
National Medical Audiovisual Center
1600 Clifton Road, N.E.
Sound Stage (SSB)
Atlanta, Georgia

- I. CALL TO ORDER AND INTRODUCTORY REMARKS Dr. William Anlyan
- II. CONSIDERATION OF MINUTES OF LAST MEETING TAB I Dr. William Anlyan
(Orange Book)
- III. DATES OF FUTURE MEETINGS TAB II Dr. William Anlyan
1972 and 1973 Calendars in all books
Next Meeting - June 26-27, 1972
Subsequent Meeting
November 20-21, 1972
- Selection of Meeting Date - March 1973
- | | | |
|--------------|--------------|--------------|
| <u>19-20</u> | <u>22-23</u> | <u>26-27</u> |
| M-T | T-F | M-T |
- IV. REMARKS BY DIRECTOR, CENTER FOR DISEASE CONTROL Dr. David Sencer
- V. REMARKS BY DEPUTY DIRECTOR, NATIONAL INSTITUTES OF HEALTH Dr. John Sherman
- VI. REPORT OF THE DIRECTOR, NLM TAB III Dr. Martin Cummings
- COFFEE BREAK
- VII. REPORT ON TOXICOLOGY INFORMATION PROGRAM TAB IV Dr. Henry Kissman

Formal Photograph of the Members of the Board of Regents
in Meeting Room

LUNCH - Executive Dining Room (Catered)

VIII. REVIEW OF NMAC ACTIVITIES

TAB V

- | | |
|--|----------------------|
| a. Overview and Program Content | Dr. Charles Bridgman |
| b. Advisory Services | Mr. Charles Farmer |
| c. Media Development and Training | Mr. Joseph Staton |
| d. Clearinghouse Functions, Acquisitions,
Evaluation, Organization and Distribution | Mr. Carl Flint |
| e. Tour of NMAC Facility | |
| f. BHME Participation | Dr. George Mitchell |
| g. Policy Issues | Dr. Charles Bridgman |

ADJOURNMENT

DINNER (Dutch Treat): Round Table Restaurant (Merlin Room), 2416 Piedmont Road, N.E., Atlanta, Georgia

Cocktails: 6:30 p.m.

Dinner: 7:30 p.m.

Speaker: Dr. John McGovern

Title: "Humanism in Medicine --
An Audiovisual Interview with Wilburt C. Davison,
Wilder Penfield and Emile Holman,
The Three Living Rhodes Scholars of Sir William Osler"

RECONVENE - 9:00 a.m. - March 28, 1972

IX. REPORT OF THE DIRECTOR, LISTER HILL
NATIONAL CENTER FOR BIOMEDICAL
COMMUNICATIONS

TAB VI

Mr. Albert Feiner

BOARD OF REGENTS
NATIONAL LIBRARY OF MEDICINE
MINUTES OF EXECUTIVE SESSION

The Board of Regents of the National Library of Medicine convened in executive session at the National Medical Audiovisual Center, Atlanta, Georgia, on March 28, 1972, at 11:50 a.m.

Pursuant to a recommendation of the Board, earlier in the day, that members of the Subcommittee on Extramural Programs work with the NLM staff to develop guidelines for considering applications to support authors who propose to write books, monographs and the like, the Chairman appointed:

Dr. Layton, Chairman,
Mrs. Hetzner, and
Dr. McGovern.

He requested that the group report its recommendations to the Board of Regents at its next meeting.

Dr. Anlyan also appointed a committee to nominate the Chairman of the Board of Regents for fiscal year 1973 consisting of:

Dr. Michael, Chairman,
General Hekhuis, and
Dr. Marshall.

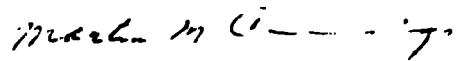
The Board acted on the request from the Associate Director for Specialized Information Services that charges be instituted for major products emanating from the Toxicology Information Referral Center (TIRC), Oak Ridge National Laboratory (AEC), funded by the NLM. Dr. Mider recounted the historical position of the Board that the Library charge for products but not for services. However, the bibliographic compilations produced by TIRC are enriched by inclusion of citations, even abstracts, from periodicals outside the scope of the NLM collections. For example, data on the burden of polycyclic hydrocarbons in marine vertebrates are not contained within the Medlars data base and require more attention to the literature on marine biology than can be provided by the NLM collections alone. The topic has a potential rather than immediate impact on the health of man, his animals, and his food supply. Dr. Kissman proposes to continue to provide compilations without charge that can readily be produced by his staff or require no more than two hours of effort by the TIRC, but to charge \$15 an hour for searches requiring more time from TIRC. The monies would revert to ORNL and would be used to offset the costs of the ORNL-NLM agreement. The proposal has been tested with representatives of Federal agencies and industrial groups who now comprise about 75 percent of the clients and has been endorsed by the Toxicology Information Program Committee of the National Research Council. The Board of Regents approved the proposal unanimously.

The Chairman recognized the personal participation of the Surgeon General, U.S. Army, in the meeting and was joined by other members in expression of appreciation for Dr. Jennings' contributions to the Board's deliberations.

The Chairman requested that the Subcommittee on the Lister Hill National Center for Biomedical Communications review the programs of this Center in depth and report to the full Board in June in view of the substantial progress outlined by Mr. Feiner in the development of a 5-year plan by LHCBC and the prospect of substantially larger fiscal resources available in the coming year.

Adjournment was taken at noon.

Respectfully submitted,



Martin M. Cummings, M.D.
Executive Secretary, Board of Regents
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 1/ 2/ 3/
March 27-28, 1972

The Board of Regents of the National Library of Medicine was convened for its forty-first meeting at 9:00 a.m. on March 27, 1972, in Conference Room SSB, Building Number 3, National Medical Audiovisual Center, Atlanta, Georgia. Dr. William G. Anlyan, Vice President for Health Affairs, Duke University, Chairman of the Board of Regents presided.

Board members present were:

Dr. William G. Anlyan
Dr. William O. Baker
Dr. Harve J. Carlson
Dr. Susan Y. Crawford
Mrs. Bernice M. Hetzner
Lt. General Hal B. Jennings, Jr., MC, USA
Dr. Jack M. Layton
Dr. J. Stanley Marshall
Dr. Angelo M. May
Dr. John P. McGovern
Dr. Max Michael, Jr.
Dr. George W. Teuscher

1/ Proceedings of meetings are restricted unless cleared by the Office of the Director, NIH. The restriction relates to all material submitted for discussion at the meetings, the agenda for the meetings, the supplemental material, and all other official documents.

2/ For the record, it is noted that members absent themselves from the meeting when the Council is discussing applications: (a) from their respective institutions or (b) in which a conflict of interest might occur. This procedure does not apply to "en bloc" actions -- only when an application is under individual discussion, and then only for applications from the Council members' own "campus", will the Council member absent himself.

3/ The Board of Regents, when considering the Extramural Programs of the NLM, sits as the National Medical Libraries Assistance Advisory Board, and concurrently discharges the responsibilities of both bodies.

Alternates to Board members present were:

Dr. Faye Abdellah represented Dr. Jesse L. Steinfeld, USPHS
Brig. General Gerrit Hekhuis represented Lt. General Alonzo A.
Towner, MC, USAF
Dr. James Pittman represented Dr. Marc J. Musser, The Veterans
Administration
Captain Edward Rupnik represented Vice Admiral George M. Davis,
MC, USN

Board members absent were:

Dr. L. Quincy Mumford

National Library of Medicine staff members attending this meeting included:

Dr. Myron Adams, Medical Advisor, NMAC
Dr. Charles Bridgman, Director, NMAC
Mr. Arthur Broering, Chief, Resources Division, EMP
Mr. Frederick Buschmeyer, Deputy Director, NMAC
Dr. Martin Cummings, Director, NLM
Dr. Roger Dahlen, Chief, Research, Training and Publications
Division, EMP
Mr. Albert Feiner, Director, LHCBC
Mr. Charles Farmer, Chief, Audiovisual Systems and Applications
Branch, NMAC
Mr. Charles Flint, Chief, Media Resources Branch, NMAC
Dr. Henry Kissman, Associate Director, SIS
Dr. Lee Langley, Associate Director, EMP
Dr. G. Burroughs Mider, Deputy Director, NLM
Mrs. Patricia Ruben, Administrative Assistant, OAM
Mrs. Ann Sabin, Acting Committee Management Assistant, NLM
Dr. Harold Schoolman, Special Assistant to the Director for
Medical Program Development and Evaluation, NLM
Mr. Joseph Staton, Chief, Education, Research and Training
Branch, NMAC
Mr. Kent Smith, Executive Officer, NLM

Others present included:

PHS and NIH Personnel:

Dr. Kenneth M. Endicott, Director, Bureau of Health Manpower Education, NIH
Dr. George Mitchell, Chief, Office of Audiovisual Educational
Development, BHME, NIH
Miss Marjorie Morrill, Division of Professions and Technical
Development, Regional Medical Programs, PHS
Dr. David Sencer, Director, Center for Disease Control, PHS

Other guests present:

Mr. Bruno Augenstein, Vice President for Research, Rand Corporation
Dr. Arthur P. Richardson, Dean, Emory University
Dr. Vladimir Slamecka, Director, School of Information and Computer
Science, Georgia Institutes of Technology
Dr. Stewart Wolf, Director, The Marine Biomedical Institute

I. OPENING REMARKS

Dr. Anlyan opened the meeting by welcoming and introducing the Regents and guests.

II. CONSIDERATION OF MINUTES OF THE PREVIOUS MEETING

The Board voted approval of the minutes of the meeting of November 22-23, 1971, without change.

III. DATES FOR FUTURE BOARD MEETINGS

The Board confirmed the dates of June 26-27, 1972, for the next meeting. The dates of November 20-21, 1972, and March 26-27, 1973, were approved and confirmed for subsequent meeting dates.

IV. REMARKS BY THE DIRECTOR, BUREAU OF HEALTH MANPOWER EDUCATION (BHME) -
Dr. Kenneth Endicott

Dr. Endicott described the major features of the new Comprehensive Health Manpower Training Act and the new Nursing Training Act that were passed in November 1971. One of the most innovative features of the new legislation is the formula subsidy for operating expenses for schools of medicine, osteopathy, dentistry, optometry, etc. which take the form of capitation grants based in part on enrollment. The legislation has built-in incentives for shortening curriculum and expanding enrollment. This legislation shifts the emphasis of Federal support from subsidies for construction towards operating subsidies.

The second major feature of the legislation is the introduction of support for graduate medical education. This takes the form of training grants for family medicine and capitation subsidies for interns and residents who are training for primary care or such other shortage areas as may be designated by the Secretary. The student loan program and the newly created Health Manpower Education Initiative Awards were also mentioned.

Dr. Endicott specifically pointed to two authorities in the Act of particular interest to the Board of Regents: (1) teacher training--a training grant program established to provide special training in pedagogical technology for medical educators already well trained in medicine or the biomedical sciences; and (2) grants in computer technology which support research in the applications of computer technology to the delivery of health services.

Dr. Endicott indicated that this new legislation provides opportunities for the BHME to work closely with the Board of Regents and the Library, both in audio-visual work and in communications and computer technology.

V. REMARKS BY THE DIRECTOR, CENTER FOR DISEASE CONTROL (CDC) - Dr. David Sencer

Dr. Sencer welcomed the Board of Regents to Atlanta and specifically to the CDC. He made particular note of the excellent relationship that exists between the CDC and the NLM's National Medical Audiovisual Center. In addition to giving a brief and informative history of the mission of CDC, Dr. Sencer took particular note of his laboratory improvement program, designed to improve public health and clinical laboratories, and since 1967 to monitor those laboratories which engage in inter-state commerce. While the CDC prefers to improve laboratories through cooperative efforts, it does have a regulatory function.

VI. REPORT OF THE DIRECTOR, NATIONAL LIBRARY OF MEDICINE (NLM) - Dr. Martin Cummings

The Director expressed his pleasure that the Board of Regents could come to Atlanta to examine the NMAC facility and review its varied activities. He expressed the hope, however, that NMAC would eventually become a part of the NLM Bethesda complex. Dr. Cummings announced that planning funds had been apportioned by the Office of Management and Budget for the Lister Hill Center building. The Department is expected to select the architectural and engineering firm within the next few months.

The Director reviewed the NIH/NLM fiscal year 1973 budget. The President's Budget for NIH totals some \$2,183.6 million, an increase of \$7.5 million over last year's appropriation. Included within the NIH request is \$1,573.2 million for research, \$536.6 million for the Bureau of Health Manpower Education and \$28.1 million for the National Library of Medicine. Dr. Cummings pointed out that this represented an increase of \$4 million or 17 percent for the NLM as detailed below:

FISCAL YEAR 1973 PRESIDENT'S BUDGET

<u>ACTIVITY</u>	<u>1972</u>		<u>1973</u>		<u>Increase</u>	
	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>	<u>Pos.</u>	<u>Amount</u>
MEDICAL LIBRARY ASSISTANCE:						
Training	--	1,200,000	--	1,500,000	--	300,000
Special Scientific Projects	--	95,000	--	95,000	--	--
Research	--	650,000	--	900,000	--	250,000
Library Resources	--	2,505,000	--	2,705,000	--	200,000
Regional Medical Libraries	--	2,147,550	--	2,902,000	--	754,450
Publications Support	--	340,000	--	390,000	--	50,000
Subtotal	--	6,937,550	--	8,492,000	--	1,554,450

DIRECT OPERATIONS:

Lister Hill National Center for Biomedical Communications	19	1,855,000	24	3,072,000	5	1,217,000
National Medical Audio- visual Center	108	2,350,000	110	2,677,000	2	327,000
Library Operations	249	8,481,000	249	8,670,000	--	189,000
Toxicology Information Review and Approval	20	1,318,000	20	1,648,000	--	330,000
Program Direction	32	710,000	32	746,000	--	36,000
	56	2,454,000	56	2,799,000	--	345,000
Subtotal	484	17,168,000	491	19,612,000	7	2,444,000
TOTAL, NLM	484	24,105,550	491	28,104,000	7	3,998,450

The \$1.2 million increase in the budget for the Lister Hill National Center for Biomedical Communications (LHNCBC) presents a real opportunity to introduce new technology in behalf of education, research and health practice. The Director also indicated that a significant increase in support for the Regional Medical Library Program was most appropriate since the regional libraries, like the NLM, must keep pace with the rapid increases (about 10-12 percent per year) in the cost of library operations. The acquisition costs at NLM increased by more than 20 percent in 1971.

The Hearings before the Labor-HEW Subcommittee on Appropriations were characterized as friendly and useful. Congressman Michal of Illinois, the ranking minority member on the Committee, spoke favorably concerning his recent visit to the Library. The Library was treated most fairly in the fiscal year 1973 President's Budget and Dr. Cummings strongly supported this budget before the Subcommittee.

The Director reported that the System Development Corporation (SDC) is progressing well in completing the development of MEDLARS II, in marked contrast to the problems that had been reported to the Board concerning the previous contractor. SDC has also, in coordination with the LHNCBC, established the first large scale successful on-line library-based bibliographic system, MEDLINE. It has been operating since December 1971 and is now tied into fifty institutions and contains a data base of more than 400,000 citations. The Director cautioned that perhaps the biggest problem here may very well be one of determining which institutions can enter the system and which will be excluded.

Dr. Cummings then directed his attention to the report of Commissioner Davis on the Williams and Wilkins Corporation suit against the NIH/NLM which said the NLM violated the copyright laws in providing free interlibrary loans through the use of photocopies. Great misunderstanding exists within the academic community concerning this ruling. The Commissioner's report is not a final judicial decision, but only a recommendation to the full court. Regardless of the decision of the of the Court of Claims the case is likely to go to the Supreme Court for final

adjudication. In the meantime, however, the plaintiff has already approached medical libraries in an attempt to negotiate a special agreement. The most common approach that has been reported to the NLM is an offer of immunity in exchange for increasing the journal subscription prices. The Director cautioned that should all medical libraries agree to pay two and one-half to three times the normal subscription prices, as is being requested, costs would rise some \$20,000,000. Further, if all publishers made similar demands on all academic and public libraries, costs of acquisitions would increase by more than \$500,000,000. Dr. Cummings said that he was in agreement with that section of the Commissioner's report which stated that the copyright issue should be resolved more properly through the legislative process rather than through the courts.

The Director was pleased to announce that the NLM has acquired a large segment of the Pasteur Papers for inclusion in its historical collection.

Finally, the Director briefly reviewed the Library's International Programs primarily based on cooperative arrangements with the sharing of time, talent and resources. They include, for example, an acquisition and document exchange program with some 700 partners in 70 countries. The Library has an agreement with the U.S. Agency for International Development for providing services to 47 developing countries. Last year NLM provided 17,000 interlibrary loans, 265 MEDLARS searches, 51 reference requests, 33 audiovisual loans and 56 subscriptions under this agreement. Since the Library has instituted a service charge system in 1970 for non-AID countries, a 67 percent reduction has occurred in foreign interlibrary loans. NLM currently supplies approximately 2,500 photocopies and about 450 audiovisuals annually. Dr. Cummings was particularly pleased to report significant advances on the Latin-American scene. He noted the excellent cooperation evident from the Pan American Health Organization and its Regional Library of Medicine in South America and likewise the Gorgas Memorial Institute's Regional Library for Central America. These two libraries should serve as model regional overseas libraries. The NLM maintains some eight quid-pro-quo bilateral agreements for use at the computer-based information storage and retrieval system, MEDLARS. On May 15 and 16, heads of these Foreign MEDLARS Centers and their respective technical leaders will meet at the Library of Medicine to: (1) review changes being made in the system, such as MEDLINE; and (2) negotiate a greater return for the use of our MEDLARS tapes.

This concluded the Director's report.

The Chairman then called upon Mrs. Hetzner who reported on how the library community was preparing to deal with the Commissioner's findings in the Williams and Wilkins suit. The American Library Association, the Association of Research Libraries and the Medical Library Association have sent letters to all of their members notifying them of the status of the case. The letters emphasized that no member should accept any propositions advanced by representatives of Williams and Wilkins. The professional societies, in her opinion, should actively support new legislation to produce an equitable copyright law. Considerable discussion by other members of the Board emphasized their concern over the obvious implications of this case.

VII. REPORT ON TOXICOLOGY INFORMATION PROGRAM (TIP) - Dr. Henry Kissman

Dr. Kissman began his report with a brief history of the Toxicology Information Program, a summary of the program objectives and its budget history. He summarized the overall program objectives as follows: (1) create toxicology data bases with information taken from the scientific literature and from the files of cooperating governmental, academic and industrial organizations; and (2) provide a variety of toxicology information services for the scientific community.

Dr. Kissman informed the Board of the establishment of the Toxicology Information Response Center (TIRC) at the Oak Ridge National Laboratory (ORNL). TIP, in collaboration with this new Center, creates data banks and enriched services by using input from the literature, specialized files and subject experts to expand the depth of coverage of subjects which NLM collections treat less comprehensively. Data banks are computerized in such a way that they can be updated, maintained and used to create a variety of products. The development of TIRC has grown more slowly than had been planned. However, recent steps have been taken by TIP and ORNL management to overcome some of the past difficulties. Dr. James Liverman, ORNL, Associate Director for Biomedical and Environmental Sciences, has taken personal charge of all activities under the NLM-AEC agreement.

The Board was then informed about the data acquisition and input functions, including interactions with other organizations in government and industry.

The services TIP will provide to the community take three general forms: (1) query response services; (2) publications; and (3) operation of an on-line information retrieval system.

Query Response Services

Literature searches are being carried out by TIP and TIRC in response to queries from the scientific community. These searches cover various segments of toxicology, but tend to be oriented towards environmental toxicology. The output of each search usually consists of a bibliography which is compiled either through computerized retrieval tools or the more conventional manual methods. Some of the bibliographies will be published through the facilities of the National Technical Information Service, Department of Commerce.

Search requests come to TIP and TIRC from a variety of organizations. Since these searches often require considerable commitment of staff resources, Dr. Kissman proposed to the Board a fee-for-service policy to recoup part of the costs incurred and to prevent abuse of the system. It was recognized, however, that a charge policy might discourage the use of TIRC and shift the use to those who had the ability to pay.

Publications

The TIP is completing the preparation of several publications, such as: the Drug Interaction Bibliography With Selected Excerpts (1967-1970), a thesaurus of

toxicology terminology, and established through a whole-text computer search system, three indexes to the Report to the Secretary's Commission on Pesticides and Their Relationship to Environmental Health. TIP has recently initiated state-of-the-art reviews in various areas of toxicology. These are produced through contracts between authors and the TIRC at Oak Ridge. Dr. Kissman took particular note of a new secondary journal which started publication in January 1972, Health Effects of Environmental Pollutants, an official publication of Biological Abstracts prepared with partial funding by NLM and through coordinated searches of the two computerized data bases, namely Biological Abstracts on Tape and MEDLINE.

On-Line Information Retrieval

Dr. Kissman announced an effort to launch a national on-line toxicology information retrieval system for the scientific community to be known as the Toxicology Information Conversational On-Line Network or TOXICON. Access to the system will be via terminals through the same national communications network the NLM is using for MEDLINE. The system will be operated for TIP by a contractor, Informatics, Inc. No minimal terminal use will be required; that is, the user will be able to use the terminal as much or as little as his needs require. Users will pay for their computer and communications costs. The basic software system for TOXICON is the NASA-developed system, STIMS/RECON. The service will begin in June 1972 and initially will contain two major bibliographic files: The Toxicology Bibliography (1968 to present) and the Health Abstracts Bulletin (1966 to present). Other literature files may be added to the system in the near future, such as abstracts and keywords from the Health Effects of Environmental Pollutants and citations and indexing terms for the first volume of the Drug Interaction Bibliography with Selected Excerpts (1967-1970). Dr. Kissman closed his presentation by indicating that he hoped to demonstrate TOXICON to the Board in the near future.

VIII. REVIEW OF NATIONAL MEDICAL AUDIOVISUAL CENTER ACTIVITIES (NMAC) - Dr. Charles Bridgman

Dr. noted that NMAC's presentation would attempt to show how the Center was responding both to policy and priority guidelines received from the Library and the Board of Regents and to a continuing series of questions received from the Center's user community. Typical user questions are: (1) How can I obtain advice on the use of audiovisual teaching materials in my curriculum and physical facilities; (2) How can I obtain experience in developing such materials; (3) How can I share materials I have developed with other teachers; (4) How can I obtain peer evaluated instructional materials; (5) How can I obtain funding for developing and evaluating materials; and lastly, (6) How do I conveniently access information on such materials and obtain them for my teaching?

Dr. Bridgman illustrated two pathways through which the Center responded to roughly 200,000 user contacts each year for help in answering such questions. Whether the contact be a workshop, a site visit or whatever, the end result is to create good health science instructional materials that can be utilized in the academic setting. Dr. Bridgman explained the seven major program goals that

have been developed by the Center in priority order: (1) Clearinghouse - encompasses a comprehensive effort to assemble, catalog and disseminate data describing instructional media, systems, facilities, and programs relevant to the basic and continuing educational processes; (2) Evaluation and Acquisition - provides for the identification, peer review, and ingathering of data on media in cooperation and in active review consultation with the health professional community; (3) Distribution - provides for user access to discrete relevant media collections and components; (4) Advisory Services - encourages direct interchange and assistance to the health professional community through site surveys, as well as in-house consultations and training programs in planning, design and application of audiovisual instructional technology to problems of on-campus learning environments, systems and equipment; (5) Training - allows for the necessary interchange of knowledge and expertise to familiarize, motivate and instruct faculty and professionals in audiovisual instructional technology; (6) Applied Research - incorporates the acquisition of state-of-the-art information on instructional technology and the selective application of results in innovative prototype efforts; (7) Media Development - establishes means and systems for the development of prototype instructional media programs, learning systems and environments in concert with professional content expertise available through peer organizations, schools and faculties.

Dr. Bridgman identified the dollar resources that have been applied to the seven programs during FY 1971 and 1972, pointing out the continuing shift of resources away from the concept of media production towards developmental efforts.

At the conclusion of Dr. Bridgman's overview, the Chairman called upon Dr. Stewart Wolf for a brief summarization of some of the historical concerns the Board has voiced in the past about the NMAC programs. Dr. Wolf indicated three major concerns: (1) that emphasis be switched from the broad public to the health professional community; (2) that NMAC, rather than be a service reactive type of organization, should be an action organization which develops educational strategies built upon policies and priorities; and (3) that production activities should be reduced and more emphasis be expended towards fostering, coordinating and promoting the sharing of materials among universities. Dr. Wolf concluded that, based on the evidence he had seen at NMAC, he was convinced that NMAC, had in fact, reordered its priorities in keeping with the previous Board recommendations.

Audiovisual Systems and Applications Branch - Mr. Charles Farmer

Mr. Farmer presented the several program activities of his Branch, principally the provision of advisory services encompassing evaluation, clearinghouse, training, and applied research functions. Site surveys requiring analysis and recommendations of ways to apply and improve education technology within an institution are approached in a systematic manner. Thus, elements such as organization, policy and procedure, curriculum, student-teacher interface, physical facilities, medical libraries, audiovisual production capabilities, available software and hardware, etc., are considered as interrelated parts of the whole system that is being evaluated. Confidential reports and recommendations are sent to the participating institutions as a result of survey findings.

NMAC has just initiated a new post-assessment program to measure the impact of these surveys which will provide information on program effectiveness, the validity of NMAC recommendations, and supply information for modifying and improving policies and procedures.

Following Mr. Farmer's presentation, Dr. Marshall introduced a discussion concerning the development and publishing of an inventory on the information gathered on these site surveys.

Dr. Schoolman pointed out that this inventory of programs and resources would be particularly useful to new schools preparing to develop audiovisual programs. Various vehicles such as, catalogs, slides, and TV tapes were discussed as possible means of communicating the gathered information. The Board approved a recommendation that NMAC publish an inventory for the user community of non-privilege information gathered on field trips and site surveys. Specific institutions should not be identified without prior approval of the participating organization. The Board supported the concept of video documentation as well as printed publications.

The Board then began a discussion on the feasibility of forming a new training program for institutional coordinators. It was decided, however, to address this subject after an assessment had been made of the existing training programs sponsored by NMAC.

Education Research and Training Branch - Mr. Joseph Staton

Mr. Staton reported that his Branch was involved in all seven of the Center's principle program goals outlined by Dr. Bridgman. Conventional media production has given way to innovative experimental development efforts, particularly those developed with clearly stated instructional objectives. These employ sound educational theory and design, student evaluation and reinforcement mechanisms, are reviewed by peers and are student-tested during development. They are designed to be applicable in the self-instructional setting. NMAC is working cooperatively with health science professionals, schools and national associations in the development of prototype models of effective self-teaching materials, so that the user community can develop and produce additional needed materials of high quality.

Personnel and equipment resources involved in media development are also used in supporting other center programs, such as training workshops and distribution functions through its video tape duplication program. The Branch feels that its greatest impact on the user community will probably be felt through continued and improved training workshops. Several recent workshops have been conducted combining hands-on training with the development of instructional media. Plans have been approved for experimental regional workshops during FY 1973 in which a corps of NMAC training personnel will be augmented by outside experts. The University on Loan Program providing subject matter expertise to NMAC in return for teacher training in media development and evaluation has proved quite successful.

Following Mr. Staton's presentation the Board toured the NMAC facility.

Media Resources Branch - Mr. Carl Flint

Mr. Flint's Branch has recently been reorganized into three sections, with the addition of an Evaluation and Acquisitions Section which has developed active cooperative evaluation programs with some eight national professional organizations. In all, the Center has contacts with some twenty-four such groups in an attempt to stimulate the further development of media evaluation projects. The Center is pursuing a contractual arrangement under which the AAMC will identify persons to work with NMAC in setting up and managing an even larger scale, peer review process utilizing resources of nearby Emory University. The new section is responsible for field testing completed teaching packages developed at NMAC with cooperation from health science schools. For example, a package on the femoral triangle is now being tested at six different institutions prior to national distribution.

The Branch's clearinghouse function includes the cataloging, indexing, storage and retrieval of information on audiovisual materials. It is hoped that the storage and retrieval system decided upon will also handle many other kinds of information about educational methodologies, production facilities, learning spaces, innovative uses of instructional facilities and hardware systems, etc. Mr. Flint pointed out that an original data base of some 20,000 citations on motion picture films had been narrowed to some 4,000 items whose subject matter relates specifically to health science curricula. More than 3,000 of these items have been recataloged using MeSH in a format compatible with the NLM storage retrieval systems. Through in-house and contractual arrangements about 6,000 additional items can be cataloged during fiscal year 1973 and another 9,000 during fiscal year 1974. At present, the data base is being used solely in support of the Center's in-house cooperative media development and evaluation efforts but should be opened as soon as possible for searches by the health sciences professional user community.

The Center is still seeking the most effective method of distributing reviewed teaching packages through loan or purchase at the lowest possible cost. The National Audiovisual Center in Washington under the General Services Administration has declined to take on this role due to a lack of resources. Production appears to be a proper responsibility of private industry working with the user community by assigning the "rights in data" for reproduction. The Center is studying an approach taken by DHEW's Office of Education whereby exclusive five-year copyright is given to the private developer or co-developer of materials, so that he can arrange for distribution with private sector distribution specialists who in turn are guaranteed exclusive "rights in data" for a limited period of time.

In order to provide room in its film distribution collection for new acquisitions of peer reviewed health professional films, the Center continues to work with film program sponsors toward the end of returning lay oriented films to the sponsors for placement in other distribution mechanisms.

Office of Audiovisual Educational Development, BHME - Dr. George Mitchell

The Office of Audiovisual Educational Development, BHME, and the National Medical Audiovisual Center, NLM, are in their first full year of collaborative efforts. The Office has been established in Atlanta, and a full program of activity has been identified and implemented using the combined resources and expertise of the two organizations.

Dr. Mitchell indicated five primary areas in which the Bureau was using the assistance of NMAC: (1) for counseling and guidance in the design of learning spaces and the selection of equipment; (2) for assistance in curriculum improvement; (3) for the development of innovative instructional materials; (4) for faculty training in audiovisual teaching techniques; and (5) for identification of well prepared teaching materials and assisting in their distribution.

Issues and Recommendations

After the presentations on the NMAC activities were completed, Dr. Schoolman was then asked to review the remaining NMAC issues that required Board action. The issues and the Board recommendations are as follows:

Issue - (1) Given the need for adequate searching tools by which the user can identify appropriate audiovisuals and other teaching needs, a decision must be made as to how comprehensive a catalog is needed. Do we develop a universal all encompassing catalog on the one extreme or merely restrict the data base to materials which have been completely reviewed and evaluated? Dr. Layton reported that the Subcommittee preferred a middle ground where certain materials other than those peer reviewed would be included. At this point, Dr. Cummings pointed out that if one reviews the entire audiovisual collection by subject one can construct two listings: (1) a simple listing of what is in existence; and (2) a listing of evaluated materials which would be produced as a descriptive catalog.

Recommendation - The catalog or data base developed should contain more than reviewed and evaluated materials. The dual listing concept was endorsed as a possible means of accomplishing this end. The NMAC staff should develop guidelines on the scope of this data base and present these guidelines to the Board at the June meeting.

Issue - (2) The videotape duplication program provides instructional materials which otherwise would not be available because of prohibitive costs. The question becomes one of priorities and allocation of NMAC resources. What kinds of boundaries or limits do you assign to this distribution program? Should we have an open ended or closed system?

Recommendation - The videotape distribution system should be a closed system with an upper limit on the number of materials to be developed and stored by NMAC. The system should continue to be updated periodically depending upon NMAC's fiscal and manpower resources. NMAC should be flexible in terms of upward revision of the total numbers and the criteria of selection to be used.

Issue - (3) The Board previously endorsed the concept that content review of instructional material is properly the responsibility of the health science academic community. Does the Board concur with the current attempts to engage the AAMC in the role of the management group for the academic community?

Recommendation - The NMAC should contract with AAMC to accomplish broad peer review evaluation of media materials within the academic medical community. Other analogous mechanisms should be established for other health science specialities such as nursing, dentistry, etc. (Two appropriate organizations identified were: the Association of Academic Health Centers and the Federation of Health Professional Education Associations).

Issue - (4) Within the new NLM/BHME Agreement a committee is established consisting of the Subcommittee of the Board and ad hoc representatives from BHME. This group is to review media development programs that are submitted by the professional groups. The Subcommittee will review the overall program and not individual projects. It will seek to create program balance and good educational content. Dr. Wolf explained to the Board that there were four criteria necessary for a proposal to be eligible for review: (1) it must be within the general scope of health sciences education; (2) it must have the backing or endorsement of a specialty society; (3) the proposers must commit themselves to working at NMAC in designing the multi-media production; and (4) materials produced must be made available to all users.

Recommendation - An outside review body should be established to review media development proposals as outlined in the new collaborative agreement between NLM and BHME.

Issue - (5) NMAC conducts various training workshops such as the University on Loan Program and the specialty group training program. It was suggested that an additional training program be developed for high level health science education personnel. These people, when trained, could serve in the role of institutional coordinators who would be in a position to articulate support and integrate audiovisual media development programs within the total institutional setting. Dr. Layton indicated that NMAC must set priorities for its training program because the specialty group concept is in competition with the coordinator group concept. He also mentioned the need for training of the technological group.

Recommendation - NMAC should give high priority to the design and implementation of a training program geared towards high level health educators whose organizational viewpoint and authority could stimulate and integrate all aspects of audiovisual educational activities within the institutional setting. Continued support was recommended for on and off site training also for technicians, but NMAC was encouraged to seek out alternate sources for technical training.

IX. REPORT OF THE DIRECTOR, LISTER HILL NATIONAL CENTER FOR BIOMEDICAL COMMUNICATIONS (LHNCBC) - Mr. Albert Feiner

Mr. Feiner divided his presentation into two parts: (1) progress made on the AAMC Report on the roles for the LHNCBC; and (2) development of the ATS-F Satellite Communication Experiments.

At the last Board meeting, a recommendation of the Priorities Review Committee was adopted advocating the organization of a biomedical communications network to provide a mechanism for inter-institutional cooperation and sharing of resources required to meet the needs of medical education and medical practice. The recommendation also called for the development of a clearinghouse for information on all aspects of technology in medicine.

Mr. Feiner concurred strongly in these recommendations, pointing out that no one institution, no matter how sophisticated, can have all the existing data bases on a single computer. There is a clear need for a relatively inexpensive method for sharing various data bases. The Lister Hill Center has chosen to concentrate its first clearinghouse efforts in the field of biomedical computer applications. Mr. Feiner indicated there were at least four operational levels of such a clearinghouse: (1) a conventional literature abstracting and indexing service; (2) a stock-in-trade set of formalized computer program descriptions with details on computer capacity, source and cost of programs, etc.; (3) a service to provide selected computer programs and their documentation, along with instruction on how to use the programs; and (4) a clearinghouse that shares computer programs by placing them on a network.

At Level 1 the Center is examining the feasibility of an annotated bibliography of biomedical computer applications. Efforts are also underway to determine the possibility of producing the standardized descriptions needed for a Level 2 operation. A major Level 4 effort is underway known as the Biomedical Data Network which is placing on-line through the TYMSHARE Network three data bases for sharing with the academic user community. Mr. Feiner briefly described the programs of the three participating institutions: (1) Ohio State University School of Medicine; (2) University of Illinois Medical Center; and (3) Massachusetts General Hospitals.

The importance of coordination was emphasized in establishing a viable network and a management plan to accomplish this goal was explained. A Data Communication Service (DCS) Manager from the LHNCBC will be appointed to monitor the contracts, define the user requirements and be responsible for reports dealing with user response, evaluating system usage and costs. Under the direction of the DCS Manager will be two units: (1) The User Services and Evaluation Unit will compile reports on usage statistics, user attitudes and service reactions and disposition of user complaints and service inquiries. This Unit will also prepare user manuals and provide demonstrations and other training type workshops. (2) The Communication and Network Operations Unit will follow-up on network malfunctions and make all arrangements to provide telecommunication facilities to users. In addition to monitoring the network services and recommending service expansion, this Unit will insure that there will be no interference with MEDLINE

users of the network.

Mr. Feiner then discussed the development of the ATS-F Satellite Communication experiment. The Secretary, DHEW, in conjunction with the President of the Corporation for Public Broadcasting (CPB) last year requested permission of the National Aeronautics and Space Administration (NASA) to experiment with the ATS-F spacecraft as a means for distributing educational health care, and other information. There are four major advantages in this type of satellite communications: (1) communication cost is independent of distance; (2) it is easy to bring new users into the network; (3) the operating frequencies are almost free from national interference sources; and (4) large bandwidths are available.

The LHCNBC, the lead organization in DHEW for health experiments, will allocate \$300,000 this fiscal year to plan experiments in sufficient detail to identify types and costs of the training, facilities, and hardware required for the experiments. In FY 1973, \$800,000 has been set aside for the development and procurement of the majority of the hardware. The Health Services and Mental Health Administration (HSMHA) has committed up to \$1,000,000 in FY 1973 and \$1,500,000 in FY 1974 for support of experiments, and the BHME has likewise committed up to \$500,000 in FY 1973 and \$1,000,000 in FY 1974. Mr. Feiner also reported the excellent relationships existing with Dr. Cameron, Office of Education (OE), who as OE project officer for STS-F experiments has voiced his desire for joint planning, facility and personnel sharing.

The Secretary, DHEW, has appointed an Operational Planning Committee which must approve all health and education experiments. The systems engineering and integration responsibility to meet the educational and health needs is discharged by a joint DHEW/CPB/NASA committee.

Mr. Feiner concluded with a brief technical summary of the ATS-F spacecraft, its specifications, terminal configuration, and certain of its limitations.

Dr. Anlyan asked Dr. Baker and Mr. Augenstein to comment. Dr. Baker indicated that the satellite components seemed most appropriate for the experimental stage and only hoped that these experiments would soon lead to clear policies for an operational system. Both Dr. Baker and Mr. Augenstein pointed out the importance of staying ahead of the rapidly developing technology. Mr. Augenstein emphasized the need to spell out goals and objectives for this program in a five-year plan. He also called upon the Defense Department representatives on the Board to explore the advantages they could take of these experimental efforts.

PROGRESS REPORT ON RECOMMENDATIONS OF AAMC REPORT

Dr. Anlyan called upon Dr. Schoolman to review the progress made on the four specific recommendations made by the Priority Review Committee. Dr. Schoolman indicated that most of these recommendations had been discussed during the LHCNBC and NMAC presentations but took particular note of the recommendation concerning the development of manpower for computer applications in medicine. A formal description and agreement between NLM and BHME for the formulation of a

training grant program for health scientists in computer applications will soon be consumated.

X. REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS - Dr. Lee Langely

Dr. Langley reported that following the Board of Regents recommendation concerning training grants, a meeting of all involved program directors was held in Bethesda at which time the reasons for the decision to phase out the master's degree programs were discussed. At that meeting it was explained that truly innovative programs, or those which contain a high biomedical course content, would be maintained. There was general agreement that the policy decision is a wise one and it is being implemented.

Next, Dr. Langley stated that steps have been taken to start the new computer technology training program that had been discussed earlier by Dr. Schoolman. He said that there are applications ready for review from Stanford and Alabama, and that contacts have been made with Virginia, Ohio State and Miami. He thought that no more than six programs would probably be approved and funded in FY 1973.

Attention was drawn to the 50-State geographic survey of the distribution of EMP expenditures that was included in the Board books. This survey was carried out by EMP and shows the total NLM grant picture in each state.

A major discussion concerning the Special Scientific Project program was held with the Subcommittee for Extramural Programs and with the full Board. For this purpose staff had prepared a detailed chronological history of the authorizing legislation which showed the purpose and scope of the program. The ensuing discussion focused upon the following questions: (1) who should be supported; (2) the product to be produced; and (3) what assurances can be obtained before making the award that a product will be produced. The discussion indicated the need for guidelines. For this purpose, a subcommittee consisting of Dr. Layton, Chairman; Mrs. Hetzner; and Dr. McGovern was appointed to meet with staff to formulate such guidelines which will then be presented to the June Board.

CONSIDERATION OF PENDING APPLICATIONS

Dr. Langley outlined the current financial status of each of the extramural programs after which the applications were considered. The first application was for a Special Scientific Project for Dr. John Murray, University of California Medical Center, San Francisco. This application had been recommended for approval by the Biomedical Library Review Committee and by the Board Subcommittee for Extramural Programs. The Subcommittee directed staff to award the second year only if six chapters of the monograph were received by the end of the first year. The Board concurred.

Dr. Dahlen presented the remainder of the training, research and publication applications. In all cases, except one, the Board concurred with its Subcommittee. In that case, the application for a training grant with Dr. Don Swanson as Program Director had been recommended for disapproval by the Subcommittee, although approved by the Biomedical Library Review Committee. The Board voted approval for the Ph.D. component. The priority, however, makes it unlikely to be funded.

Mr. Broering presented the resource applications. The Board concurred with all the recommendations of its Subcommittee.

Finally, the Board concurred with the interim actions taken by staff.

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: MARCH 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01469-01	NATIONAL LIBRARY RESOURCE PROJECT GRANT	01 39,075
		02 51,500
		03 53,500
1 G08 LM 01470-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 38,575
		02 50,500
		03 53,500
1 G08 LM 01485-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 45,580
		02 47,280
1 G08 LM 01507-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 76,269
		02 152,533
		03 132,927
1 G08 LM 01555-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 53,500
		02 53,500
		03 16,000
1 G08 LM 01557-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 12,000
		02 12,000
1 G08 LM 01559-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 10,790

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01575-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 2,000
		02 2,000
		03 2,000
1 G08 LM 01580-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 4,764
1 G08 LM 01593-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 7,106
1 G08 LM 01595-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 67,829
		02 109,868
		03 116,203
1 G08 LM 01603-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 6,473
1 G08 LM 01604-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 24,000
		02 22,500
		03 22,500
1 G08 LM 01605-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 69,050
		02 65,250
		03 65,750

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: MARCH 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE		AMOUNTS RECOMMENDED
1 G08 LM 01607-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01	14,608
		02	11,317
1 G08 LM 01609-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01	25,612
		02	25,260
		03	28,339
1 G08 LM 01610-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01	39,947
		02	38,867
1 G08 LM 01614-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01	72,520
1 G08 LM 01630-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01	10,000
		02	10,000

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: MARCH 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
2 R01 LM 00087-06		2,200
	PUBLICATION OF BIBLIOGRAPHY OF MEDICAL ENTOMOLOGY	
2 R01 LM 00802-03		8,707
	STATE'S RIGHTS MEDICINE IN THE OLD SOUTH, 1819-1861	
2 R01 LM 00813-03		21,314
	GUY DE CHAULIAC'S MEDICAL VOCABULARY	
2 R01 LM 00882-03		27,792
	SEMANTIC FOUNDATIONS FOR QUESTION-ANSWERING SYSTEMS 2	27,792
1 R01 LM 01537-01		4,661
	INFORMAL COMMUNICATION STRUCTURE OF SCIENCE	
1 R01 LM 01538-01		3,800
	ANALYSIS OF CORONERS' RECORDS, LONDON	3,925
1 R01 LM 01574-01		71,941
	BIOMEDICAL LIBRARIANS IN PATIENT CARE SETTING	70,879
		74,047

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: MARCH 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 R01 LM 01621-01		10,000
	BIBLIOGRAPHY OF VIRUSES	
1 R01 HS 00911-01	DUAL: LM	50,000
	COMPUTER AIDED MEDICAL DECISION	50,000
*1 R01 EY 00949-01	DUAL: LM	8,600
	ATLAS OF OPHTHALMIC PATHOLOGY OF ANIMALS	

*LM to become primary assignee on this grant

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: MARCH 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
2 T01 LM 00104-06A1		30,000
		30,000
	TRAINING PROGRAM IN BIOMEDICAL COMMUNICATION	30,000
		30,000
		30,000
1 T01 LM 00150-01		32,170
		33,732
	HISTORY OF MEDICINE AND PUBLIC HEALTH	37,315
*1 T01 LM 00156-01		42,000
		42,000
	HEALTH SCIENCES LIBRARY TRAINING PROGRAM	59,700
		59,700

*Formerly 3 T01 LM 00123-04S1

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: MARCH 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 F13 LM 26,412-01		24,520
		19,529

WRITE BOOK: PATHOPHYSIOLOGY OF RESPIRATORY DISEASE

AGENDA

Forty-Second Meeting Of The
BOARD OF REGENTS
National Library of Medicine

9:00 a.m., June 26-27, 1972
Board Room
Bethesda, Maryland

- I. CALL TO ORDER AND INTRODUCTORY REMARKS Dr. William Anlyan
- II. CONSIDERATION OF MINUTES OF LAST MEETING TAB I Dr. William Anlyan
(Orange Book)
- III. DATES OF FUTURE MEETINGS TAB II Dr. William Anlyan
- 1972 and 1973 Calendars in all books
Next Meeting - November 20-21, 1972
Subsequent Meeting
March 26-27, 197
- Selection of Meeting Date - June 1973
- | | |
|--------------|--------------|
| <u>18-19</u> | <u>21-22</u> |
| M-T | T-F |
- (Conflict: American Medical Association Meeting - June 18-22, 1973)
- IV. REMARKS BY THE DIRECTOR, NIH Dr. Robert Marston
- V. REPORT BY THE DIRECTOR, NLM TAB III Dr. Martin Cummings
- VI. NLM AFFIRMATIVE ACTION PLAN, EQUAL TAB IV Mr. Kent Smith
OPPORTUNITY PROGRAMS, UNION, OTHER Mr. Arthur Robinson
EMPLOYEE ACTIVITIES AND ADMINISTRATIVE
MATTERS

COFFEE BREAK

BOARD OF REGENTS
NATIONAL LIBRARY OF MEDICINE
MINUTES OF EXECUTIVE SESSION

The Board of Regents met in Executive Session at the National Library of Medicine at 2:05 p.m. on June 27, 1972.

A draft resolution addressed to the National Advisory Health Professions Education Council and with minor changes was adopted unanimously for transmittal to Director, Bureau of Health Manpower Education (attached).

Recent recipients of the Regents' Award have returned their checks on that account. Therefore the monetary component of the award seems less desirable than the certificate and recognition. The Board moved to replace the certificate with an appropriate plaque the value of which should approximate the annual income from the fund from which the award is made. However, the Director deemed it desirable to reexamine the terms and conditions of the original gift. The Board then moved that the Director examine the problem and report his recommendations to the Board at its November meeting. The motion passed unanimously.

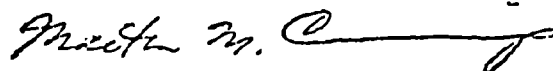
Dr. Abdellah raised questions relative to the report of the ad hoc committee that considered the use of Library appropriations for support of publications. The use of the term award as opposed to program was discussed at length. Special Scientific Projects was considered a misnomer. General Jennings moved that the name be changed to Distinguished Scholar Program, which was duly recorded and passed without dissent.

The Board elected Dr. Jack M. Layton to the Chairmanship for the coming year and expressed its sincere appreciation for the excellent services rendered by the retiring members, Doctors Alyan, Michael and Teuscher, who reciprocated its sentiments appropriately.

Dr. Cummings announced the death of Dr. Wilburt C. Davison, former chairman of the Friends of the Library, and agreed to extend the Board's sympathy to his family.

Adjournment was taken at 2:32 p.m.

Respectfully submitted,



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

Bethesda, Maryland

WHEREAS, the Medical Library Assistance Act of 1965 authorized funds for the construction of library facilities, now codified in the Public Health Service Act, Part J. Sec. 390(b) [42 USC 280 b-3] which reads:

"It is therefore the policy of this part to... (1) assist in the construction of new, and the renovation, expansion or rehabilitation of existing medical library facilities..."

and

WHEREAS, Part J, Section 393 [42 USC 280 b-3] of the Public Health Service Act as amended specifies the eligibility for such construction grants and the terms and conditions thereunto appertaining, and

WHEREAS, the Congress appropriated to the National Library of Medicine in FY 1967 and 1968 an aggregate of \$11,250,000 to support construction of library facilities and, in fact, 11 such grants were awarded, and

WHEREAS, the Director, NIH, on October 3, 1968, appointed a task force to consider the reorganization and consolidation of construction grant programs, which recommended some consolidation of such programs, and

WHEREAS, the Director, NIH, in a memorandum dated January 21, 1969, delegated the authorities for medical library construction to the Director BIME (then BMET) as of December 26, 1968, and

WHEREAS, memoranda exchanged between appropriate members of the staffs of the NLM and the BIME, including the respective Directors, during 1969, in which the proposal that the NLM continue to participate in review of construction grants under the Medical Library Assistance Act of 1965, as well as in multi-purpose library construction grants, was agreed to by the BIME to the extent that no positions or funds would be forthcoming from BIME for that purpose, and

WHEREAS, since FY 1968 appropriations to the National Library of Medicine have included no funds to support construction of library facilities, but the Bureau of Health Manpower Education has awarded \$24,000,000 in 17 grants for construction of such facilities of which 6 were free-standing buildings in academic institutions and the rest were indeed multi-purpose facilities in which space for library activities was an integral part, and

WHEREAS, the Board of Regents of the National Library of Medicine is convinced that the expertise of the Library staff in forecasting the needs of new medical libraries far exceeds that of any identifiable

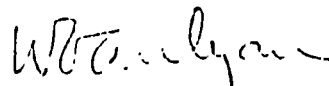
comparable knowledge in the Executive Branch of the United States Government because of its intimate familiarity with and participation in the developments by which libraries are becoming modern biomedical learning and communications centers through adaptation of existing communications technologies and the use of sophisticated information in non-textual formats that require substantial change in the development of adequate design not usually included in the conventional concept of a medical library, and

WHEREAS, the public clamor for ready access to health professionals and their capabilities has resulted in a marked expansion of health educational programs which in turn required enlarged and improved library services, and

WHEREAS, the Board of Regents is also convinced that inclusion of library facilities within a multi-purpose building unless properly planned can militate against the flexibility that is and will continue to be essential to the development of cost-effective uses of advancing technologies to improve and accelerate the learning process in the continuum of education of all health professionals that extends from academe to continuing education of practitioners;

therefore

BE IT RESOLVED that the Board of Regents of the National Library of Medicine address its colleagues of the National Advisory Health Professions Education Council to offer its assistance and that of the staff of the National Library of Medicine in the review of all applications for grants to construct library facilities, whether free-standing buildings or as components of more complex facilities, and to call to the attention of the National Advisory Health Professions Education Council the importance of buildings which house only libraries in the context of modern concepts, support for which is available from Federal funds.



William G. Anlyan, M.D., Chairman
Board of Regents
National Library of Medicine

THE BOARD OF REGENTS
of the
NATIONAL LIBRARY OF MEDICINE

MINUTES OF THE 42nd MEETING

June 26-27, 1972, Bethesda, Maryland

MEMBERS PRESENT: Dr. William G. Anlyan, Dr. William O. Baker, Dr. Harve J. Carlson, Dr. Susan Y. Crawford, Mrs. Bernice M. Hetzner, Lt. Gen. Hal B. Jennings, Jr., Dr. Jack M. Layton, Dr. J. Stanley Marshall, Dr. Angelo M. May, Dr. John P. McGovern, Dr. Max Michael, Jr., Dr. George W. Teuscher

MEMBERS ABSENT: Dr. L. Quincy Mumford, Lt. Gen. Alonzo A. Towner

ALTERNATES: Dr. Faye G. Abdellah represented Dr. Jesse L. Steinfeld both days.
Dr. James Pittman represented Dr. Marc J. Musser both days.
Capt. Edward J. Rupnik represented Vice Adm. George M. Davis both days.

GUESTS: Senator Edward M. Kennedy
Mrs. G. Burroughs Mider
Dr. Fred C. Cole, President, Council on Library Resources, Inc.
Dr. Hilliard Jason, Professor-on-leave, Michigan State University;
Educational Consultant to Lister Hill Center
Dr. Robert Q. Marston, Director, National Institutes of Health
Dr. Kelly M. West, Professor of Medicine and Continuing Education,
University of Oklahoma Medical Center
Mr. Alfred R. Zipf, Executive Vice President, Bank of America,
Consultant

STAFF: Dr. Martin M. Cummings, Dr. G. Burroughs Mider, Dr. Clifford L. Bachrach, Dr. Robert J. Benford, Mrs. Helen S. Bennison, Mr. Albert M. Berkowitz, Dr. John B. Blake, Dr. Jeanne L. Brand, Mr. Arthur J. Broering, Mr. Raymond E. Brown, Dr. William H. Caldwell, Mrs. Thelma G. Charen, Dr. Roger W. Dahlen, Mrs. Doris J. Doran, Mr. Albert Feiner, Mr. Joseph B. Foley, Mrs. Louise H. Gamage, Mrs. Rose Marie Holston, Mrs. Frances H. Howard, Mrs. Frances E. Johnson, Dr. Henry M. Kissman, Dr. Lee Langley, Dr. Joseph Leiter, Mrs. Erika B. Love, Mrs. Claire S. Marwick, Mrs. Nina W. Matheson, Mr. Davis B. McCarn, Mr. Robert B. Mehnert, Dr. George E. Mitchell, Mrs. M. Kathleen Nichols, Dr. Paulo P. Pamplona, Mrs. Marguerite L. Pusey, Mrs. Frances Rigau, Mr. Arthur J. Robinson, Jr., Mrs. Patricia Ruben, Dr. Harold M. Schoolman, Mr. Kent A. Smith, Mrs. Janet S. Welsh

Minutes of Meeting
Board of Regents
June 26-27, 1972

OPENING REMARKS

Dr. Anlyan opened the meeting by welcoming and introducing the Regents and guests. The chairman noted that this would be his last Board of Regents meeting and also that of Drs. Michael, Teuscher, and Carlson. General Hekhuis, USAF, has been transferred and Dr. Anlyan acknowledged his valuable contributions to the Board and its subcommittees.

CONSIDERATION OF MINUTES OF THE PREVIOUS MEETING

The Board voted approval of the minutes of the March 27-28 meeting, without change.

DATES FOR FUTURE BOARD MEETINGS

The Board confirmed the dates of November 20-21, 1972, for the next meeting. The dates of March 26-27 and June 21-22, 1973, were approved for subsequent meeting dates. The Regents accepted an offer by Dr. Layton to hold the March 26-27, 1973 meeting at the University of Arizona in Tucson.

REMARKS BY NIH DEPUTY DIRECTOR--DR. JOHN F. SHERMAN

Dr. Sherman stated that the recent phenomenon, commonly called "consumerism," and the resulting heightened interest by the public in the workings of the Federal Government have prompted an examination by Congress into how advisory boards and councils are constituted and how they conduct their business. Several bills now pending in Congress would bring these advisory groups under closer scrutiny and require that their deliberations (including agendas, actual sessions, and minutes) be open to the public. Exemptions allowing closed sessions, originally written into the 1967 Freedom of Information Act, fall into three categories: (1) trade secrets, the responsibility for which falls largely on initial review groups dealing with grant and contract proposals; (2) the right of the Executive branch to protect the confidentiality of consultants' opinions; and (3) research results, where it is felt that premature disclosure would raise false hopes among those seriously ill. These exemptions, it is believed, will apply in the future as they have in the past.

Dr. Sherman also discussed the effects of Executive Order 11671, issued on June 7, which calls for advisory council sessions to be open to the

public. This order will have an undoubted impact on the operations of senior policy advisory groups such as the Board of Regents. Although grant and contract deliberations can be justified as closed to outside observers, there is doubt that matters not in these categories, including policy discussions and "executive sessions," could be closed. The department or agency head may establish reasonable limits as to the number of persons attending and the nature and extent of their participation, and the meeting chairman would have wide discretion in adjourning meetings. Under the Executive order, before a meeting takes place a notice of time, place, and agenda must be published in the Federal Register and/or in local news media. Following the meeting, minutes must be available, including a list of participants and questions and discussion by the public attending.

Guidelines for implementing the Executive order have not yet been issued by the Secretary's Office.

The Deputy Director stated that sizable budget increases for health programs were passed by the House of Representatives. It is probable that there will be some increases over the House figure, added by the Senate. There may be some delay in the passage of a final health budget because of differences in House and Senate strategy in resolving the two sets of figures voted by the two bodies. Major imbalances in the Federal budget raise the possibility of drastic action by both the congressional and executive branches after the November election.

Dr. Sherman noted that of increasing concern to NIH are not budget strictures, but position cutbacks and grade-level reductions that have affected levels of service in some components of NIH, including NLM. The nursing situation at the Clinical Center, for example, is critical in terms of decline in quality of service.

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

Dr. Cummings said that he was pleased by the supportive language for Library programs in the reports of House and Senate subcommittees, and also by the level of funding requested in the 1973 budget. The reports of both subcommittees reveal a strong interest in the application of new technology for Library and information services.

The Director reviewed in detail the FY 1973 budget request: The total is for \$28.5 million, as compared with \$24.1 million in FY 1972. The 1973 total includes a half million dollars added by the Senate subcommittee which would be of particular importance to the programs of the Lister Hill Center. Dr. Cummings described the disposition of part of the requested increase in the extramural area. Echoing the thought voiced earlier by Dr. Sherman, the Director expressed concern for the manpower required to

maintain library services and initiatives in the application of new technology. The increase of seven positions contained in the President's budget is equal to or greater in importance than the increase in dollars.

Dr. Cummings noted that the Medical Library Assistance Act will come before Congress for renewal this year. Only minor changes have been requested, such as raising the levels of authorization for training programs.

The Director reported on a formal collaborative agreement between the Library and the Bureau of Health Manpower Education to join resources on behalf of the audiovisual needs of health education. Dr. George E. Mitchell, Chief of the Bureau's Office of Audiovisual Educational Development, has been designated to serve also as the Deputy Director of the National Medical Audiovisual Center. A very close bond has thus been forged between NLM and BHME. The Congress has commended the Bureau and the Library on embarking on this promising arrangement.

A first-of-its-kind meeting of directors of foreign institutions which have MEDLARS centers and the directors of the centers themselves was held on May 15-16 at NLM. Dr. Cummings reported that the institution chiefs are pleased with the collaborative developments and that they have suggested the creation of an International Policy Advisory Group, composed of those attending, to meet periodically and consider policy issues. After seeing demonstrations, those attending were most enthusiastic about MEDLINE and the new TOXICON program.

Another important recent meeting at NLM, reported on by Dr. Cummings, was that of the National Commission on Libraries and Information Science. The Commission was impressed by NLM's innovations in service mechanisms and was particularly interested in the Williams and Wilkins copyright case. The Director perceived an interest by a few of the Commission members in seeing the National Agricultural Library and the National Library of Medicine joined to the Library of Congress to create a "National Library." As far as it involves NLM, this is a tendency to be vigorously resisted, regardless of the position of NAL or LC.

Dr. Cummings noted progress on the long road to construction of a building for the Lister Hill National Center for Biomedical Communications. The \$900,000 appropriated in 1970 for architectural design and engineering planning has been released by the Office of Management and Budget in FY 1972. NIH took prompt action to transmit NLM requirements to the Department and OMB for approval. GSA will select an architectural and engineering firm in August to begin work under contract. During the past three years, the projected costs for the building have increased because of inflation by approximately 25 percent, Dr. Cummings reported.

REPORT OF THE NLM EXECUTIVE OFFICER--MR. KENT A. SMITH

Mr. Smith reported on progress in response to two bulletins issued by the Office of Management and Budget--one restricting Federal civilian employment, the other controlling grade escalation. Because of employment restrictions, the Library's personnel ceiling is 463, compared to 484 budgeted positions. In the area of grade reduction, the Library will reach its goal of GS-9.2 (a reduction of .073) by June 30, 1972. This is made possible by limiting the number of promotions and by eliminating or restructuring at a lower grade vacant positions. In a related area, Mr. Smith noted that the Five-Year Plan, 1974-78, calls for an increase from 505 positions in FY 1974 to 561 in FY 1978 (under a realistic "planning target"), or an increase from 530 to 718 under a "high-level" (more desirable) target. As identified in the Five-Year Plan, increases in personnel would be primarily for the Lister Hill Center and NMAC, with a lesser increase for Library Operations.

The Executive Officer described the efforts by the National Federation of Federal Employees (NFFE) and the American Federation of Government Employees (AFGE) to gain exclusive recognition at NLM and NMAC, respectively. An election was held in September 1971 at NLM among nonprofessional, nonsupervisory personnel (about 180 employees) and, as a result, recognition was gained for the union. A prenegotiation agreement was executed in March and, after the submission of proposals by the NFFE and counterproposals by the Library, negotiations are now going on to establish a comprehensive labor agreement in Bethesda. It is expected that AFGE will request that an agreement be negotiated soon at NMAC to include professional and nonprofessional, nonsupervisory employees (approximately 82). Recognition for the union was gained by an election in March.

Identified in the Five-Year Plan is the problem of appointing qualified minority-group candidates and women to advisory groups such as the Board of Regents. Those persons identified as being suitable are frequently already serving in similar capacity for other groups, Mr. Smith noted. Staffing requirements for the Library's Equal Employment Opportunity activities were also outlined in the five-year forecast: from 2.6 man-years in FY 1974 to 1.0 man-years in 1978. One reason for the projected decline is the future relocation in Bethesda of NMAC personnel presently in Atlanta and a combining of the two separate EEO functions. In addition, a successful, working EEO program should require less planning for and implementing of new EEO activities. The Executive Officer then presented a series of statistical charts that showed progress toward the goal of upgrading minority-group and women employees.

Mr. Smith next outlined the development of the Equal Employment Opportunity Program at NLM, beginning with a conference of 52 Library

employees in March 1971 at Harper's Ferry to develop recommendations for an EEO program. He introduced Mr. Arthur J. Robinson, Jr., NLM EEO Coordinator, who described the objectives and action steps contained in an Affirmative Action Plan developed for NLM.

Mr. Robinson described the NLM Affirmative Action Plan as a plan for equal employment opportunity that provides management accountability for EEO results and sets a definite time frame for implementing affirmative actions. The plan has seven sections: education, training, and career development; recruitment and placement; promotion; communication; employee relations; women's concerns; and management of the EEO program. From over 70 specific action steps recommended, all with target dates for implementation, Mr. Robinson mentioned several as being of particular significance:

1. Director, NLM, to encourage recruitment of minorities and women in high-level positions.
2. Development of statistical employee profile.
3. Job restructuring (Library Technicians).
4. Supervisory appraisal of employees.
5. Employee meetings to explain management procedures.
6. Evaluation of supervisors' EEO performance.

Mr. Robinson also noted that it is important that the plan itself be evaluated. He will monitor its successes and failures in both structure and implementation.

REPORT OF THE ASSOCIATE DIRECTOR FOR LIBRARY OPERATIONS--DR. JOSEPH LEITER

Dr. Leiter described the integration of MEDLINE into the medical library network over the past year. There are currently 77 institutional users of MEDLINE, we are building toward a planned total of 200 users in the first phase of MEDLINE. All 11 Regional Medical Libraries now offer MEDLINE services. The new on-line system is working quite well, with average response times well within acceptable limits. Backup computer capability is being developed, however, for the time when the present system is being used to capacity. Communication network costs to the Library average \$1.13 per search, exclusive of computer processing costs, with the average length about 15 minutes. The number of MEDLARS demand searches run has dropped drastically since January as more and more users take advantage of MEDLINE, it is planned to phase out the MEDLARS demand search completely by January 1973.

The data base of indexed citations includes approximately 230,000 entered in FY 1972 (compared to about 160,000 five years ago); in the process, the indexing backlog has shrunk from 80,000 to 30,000 articles, an acceptable level. This progress has been made possible largely by the indexing performed at foreign MEDLARS centers as part of the quid pro quo arrangement with NLM. Concomitant with the increase in indexing has been a substantial growth of medical subject heading vocabulary.

The development of MEDLINE has provided the stimulus to build two new data bases: CATLINE (cataloging on-line) and SERLINE (serials on-line). CATLINE is an on-line machine-readable catalog file to be made available to librarians for acquisition and cataloging purposes. CATLINE should also speed up interlibrary loans and help librarians provide reference services. The second data base being developed (SERLINE) is a serial locator file that will result in both a printed desk-top reference tool to locate within the network some 5,000-6,000 journal titles, and an on-line serial locator index.

The Associate Director for Library Operations discussed a recently signed agreement with the Library of Congress to participate in their Cataloging-in-Publication Program. The Program provides libraries with cataloging information for monographic material well in advance of publication date, and also will assure that cataloging data is published in the book itself. Of the approximately 185 publishers actively participating with the Library of Congress in the Cataloging-in-Publication Program, 12 are medical publishers. By increasing the 12 to 29, NLM would be able to monitor in advance over 75 percent of the substantive medical monographs published in the United States each year.

Dr. Leiter discussed the increase in funds available for procurement of library materials (highlighted by several valuable history of medicine acquisitions); the increase in interlibrary loan activity (to about 120,000 transactions this year); and the adverse effects of manpower ceilings, grade reduction, and EEO and upward mobility activities on Library Operations. For example, he noted, 24 percent of the staff of Reference Services Division were enrolled in the Upward Mobility Program, totalling 101 hours per week. There is the possibility that these figures may double within a year. Other employee development programs, supervisory training, and MEDLINE training programs further reduce the effective work force.

Finally, Dr. Leiter described the revision of the Library's scope and coverage manual that took place in January 1972. Following this revision, an in-depth analysis was made of the Reference Collection to weed out obsolescent items and to identify deficient portions of the collection. As a result, many weak areas in the Library's monographic collection have been identified and action is underway to strengthen these areas by expanded acquisition.

Following Dr. Leiter's presentation, Dr. John B. Blake, Chief of the History of Medicine Division, showed the Regents a recent, very valuable acquisition--a beautifully illuminated thirteenth-century Oxford manuscript that includes several medical texts.

REPORTS ON NETWORK DEVELOPMENT AND REGIONAL MEDICAL LIBRARIES

Dr. Harold M. Schoolman, Special Assistant to the Director for Medical Program Development and Evaluation, described to the Board the hierarchical model of the document delivery system. The first level within the network is comprised of community hospital, technical institute, and junior college libraries; the second, the "primary resource level," includes health science libraries in institutions of higher learning, such as medical school libraries; the 11 Regional Medical Libraries make up the third level; NLM constitutes the fourth. The management model of the system calls for policy guidelines and national coordination to come from NLM, with the advice of the Board of Regents. Actual implementation of network programs, however, is the responsibility of the Regional Medical Libraries.

The method of funding network services, Dr. Schoolman reported, has now been completely converted from grant to contract. The total dollar amount does not vary greatly between the last year under grant financing and the first year of contract funding. This occurred because a large number of commitments under the grant program had to be carried over under contract funding. In the second contract year, however, there are significant reductions in management and planning costs and MEDLARS support. This money is being used for increased funding of library services under the contract.

In discussing document delivery services in the network, Dr. Schoolman noted the number of journal titles necessary to fill user requests: It is estimated that 400 serials will fill about 75 per cent of all requests, and that as few as 1,000 serials will fill 90 percent; 2,000 serials will fill about 96 percent. The RML network will accept responsibility for approximately 6,000 serial titles. Each region will have approximately 2,300 (the data base of Index Medicus). Given these dimensions of responsibility for the network, the next problem is financing interlibrary loan traffic. Clearly, NLM will make no attempt to seek support to underwrite in toto the biomedical interlibrary loan traffic in the country. Therefore, each level of the hierarchy will have to assume fiscal responsibility for the major support of its own constituency. NLM will provide support for the network operation and management and will underwrite the difference (net lender) between levels of service given to a lower level and received from a higher level in the hierarchy.

Beyond document delivery, the regional library network will begin to formalize in a comparable way the region-wide development of reference

services. The various automated data bases now being created will aid in this. Audiovisual material is also a field where some librarians feel the need for network services.

Problems identified in the Regional Medical Library Program for which we will be seeking solutions in the next year include: boundaries for existing geographic regions; whether proper libraries have been selected as Regional Medical Libraries; and whether the present organizational structure for interinstitutional collaboration is the proper one.

Dr. Kelly M. West of the University of Oklahoma Medical Center reviewed for the Board the report of the Biomedical Library Review Committee's Subcommittee on Regional Medical Libraries, chaired by Dr. David A. Kronick of the University of Texas at San Antonio. In making its study, the subcommittee consulted with NIH officials, the staff of the Regional Medical Libraries, a sampling of the libraries within the regions (both those involved in network services and those without a close collaborative association with a Regional Medical Library), and a number of users of library services. In general, the subcommittee found that Regional Medical Libraries were well administered, and that the directors of these libraries approved the change from grant to contract funding. The potential is great to build on the network framework to develop the "net lender" concept (mentioned by Dr. Schoolman), and also collaborative acquisition programs.

The recommendations of the Regional Medical Library Subcommittee included:

1. Broader participation within each region to determine RML policy.
2. Studies to examine the potential of the "net lender" concept.
3. Studies to recommend methods for local financing of regional services.
4. Periodic data collection, analysis, and evaluation for the entire national network.
5. Closer liaison with the Regional Medical Programs.
6. Grant requests should be examined for regional implications.
7. Attention within the distribution network should be given to nonprint media.
8. Specific budget allotments for the services NLM provides as a Regional Medical Library.

Following Dr. West's presentation, Mr. Arthur J. Broering of the Library's Extramural Programs discussed briefly the Regional Medical Library Grant

Program, including eligibility and review procedures, now that the switch has been made to a contract mechanism. Dr. Cummings then described a review of the early phase of the grant program for Regional Medical Libraries that disclosed only 40 percent of the grant money was going to services. Under the contract mechanism, however, fully 60 percent is spent on services, and there will be a greatly improved capability to account for funds spent.

REPORT ON THE DEVELOPMENT OF A CLEARINGHOUSE OF INFORMATION ON AUDIOVISUAL INSTRUCTIONAL MATERIALS--DR. GEORGE E. MITCHELL

Dr. Mitchell's presentation was in response to a recommendation of the Board of Regents at its last meeting that NMAC establish a data base and operate an automated reference retrieval system for audiovisual instructional materials in the health sciences. The data base would contain, Dr. Mitchell explained, both evaluated and nonevaluated audiovisual material prepared by medical schools, teaching hospitals, national professional societies, government agencies, pharmaceutical houses, and commercial producers.

NMAC staff, audiovisual producers, teachers, health science professionals, and librarians would be able to access the system through NMAC. Catalogs generated by the computer would be available to the health community.

Dr. Mitchell described an existing contract with a consortium of 28 southern medical schools to produce needed audiovisuals and to inventory and evaluate material presently in use in the schools. Other arrangements, with the American Physiological Society and the Association of American Medical Colleges, will result in further identification and peer evaluation of existing audiovisual materials in health science education.

REPORT FROM THE BOARD'S LISTER HILL CENTER SUBCOMMITTEE--DR. MAX MICHAEL, JR.

Dr. Michael reviewed the various activities of the Lister Hill Center: the satellite communications experiment; data communications network development; interactive microwave television project in New England; and cable television projects in East Harlem and Denver.

The subcommittee, after reviewing the three types of budget presented in the Five-Year Plan (namely, "current budget," "15 per cent budget," and "desired budget"), arrived at several recommendations for the Board, among which were:

1. The "desired budget" be approved as the one needed to accomplish the Lister Hill Center mission.

2. The Five-Year Plan be approved as a blueprint for the Lister Hill Center.
3. The Subcommittee on the Lister Hill Center of the Board of Regents should meet regularly and make recommendations to the Regents concerning Center policies and priorities.
4. The Lister Hill Center should be free to hire consultants.
5. The Board of Regents should establish liaison with high-priority Federal health programs, (e.g., cancer), so bio-medical communications planning can be integrated into the planning for these programs.

REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS--DR. L. L. LANGLEY

Dr. Langley first reviewed the financial status of the various extramural programs authorized under the Medical Library Assistance Act:

<u>Program</u>	<u>Appropriation</u>	<u>Obligations to Date*</u>	<u>Balance</u>	<u>Cut-Off Priority</u>
Research	\$ 650,000	\$ 610,533	\$ 39,467	218
Publications	340,000	276,688	63,312	214
Training	1,200,000	978,055	221,945	301
SSP	95,000	72,025	22,975	180
Resources	2,505,000	2,250,299	254,701	320
RML	2,102,000	1,959,620	142,380	281

*June 27, 1972

The data show that most of the appropriation in each program has been obligated, and Dr. Langley assured the Board that as a result of actions taken by the Board at this meeting the balance in each program would be obligated before the end of the 1972 fiscal year. The seemingly large balance in the Training Program is to be utilized to fund the three new training grants in the recently approved computer technology program. The balance in the Regional Medical Library Program will be utilized to fund grants designed to supplement the service contracts.

At the last Board meeting in Atlanta in March, the Special Scientific Projects Program was discussed. This led to the more extensive

consideration of the support of publications and, as a result, a special subcommittee was appointed to make recommendations concerning the support of publications and to formulate guidelines for the administration of the Special Scientific Projects Program. Following the subcommittee's meeting, a draft document was prepared which was circulated to the special subcommittee members for comment, and the final document was presented by Dr. Langley to the Board of Regents on Tuesday, June 27. Minor modifications were made, and the motion carried to accept the document (Appendix A). Staff and the special subcommittee were then charged with the responsibility of formulating guidelines for the implementation of the document.

Dr. Langley informed the Board that Dr. John Murray, whose application for a Special Scientific Project was approved at the March meeting, has entered into a contract with Saunders and Company for publication of his manuscript. The Board was also informed that an application for a Special Scientific Project from Dr. Theodore Benzinger had been recommended for disapproval.

Dr. Roger W. Dahlen presented applications for Special Scientific Projects, Training Grants, Research Grants, and Publications Grants to the Board for consideration. Mr. Arthur J. Broering presented applications for Resource Grants and the Regional Medical Library Grants. (A list of the applications approved is in Appendix B.)

SPECIAL PRESENTATIONS

1. On Tuesday, June 27, Senator Edward M. Kennedy presented to the Library a bust of his brother, the late President John F. Kennedy. The bust is the work of sculptor Robert Berks and it will be displayed in the lobby next to the bust of Senator Lister Hill.
2. Dr. Cummings presented the Director's Award to retiring Deputy Director, Dr. G. Burroughs Mider.
3. Dr. Anlyan, Chairman of the Board, presented the Regents Award for Scholarship and Technical Achievement to Mrs. Thelma G. Charen of the Indexing Section, Bibliographic Services Division.

Respectfully submitted,



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

MEETING OF THE SPECIAL SUBCOMMITTEE ON PUBLICATIONS
OF THE NLM BOARD OF REGENTS

At the Board of Regents meeting held in Atlanta, Georgia, on March 27-28, 1972, a subcommittee was appointed to look into the matter of support of publications and specifically to draw up guidelines for the Special Scientific Projects Program. Dr. Jack M. Layton was appointed chairman with Mrs. Bernice M. Hetzner and Dr. John P. McGovern as members. Arrangements were made to hold the meeting in Chicago on May 11, with Dr. Alvin E. Lewis representing the Biomedical Library Review Committee and Dr. Lee Langley representing the staff. Dr. McGovern was unable to attend.

The committee first addressed itself to the question, When should public funds be used to support the preparation of a manuscript? The committee agreed on the following:

1. When a work has intrinsic value but lacks commercial possibilities.
2. To support a distinguished scientist while he produces a manuscript that summarizes or reflects the high level of competence attained by intensive study of a particular biomedical subject.
3. To speed up the production and hasten the availability of potentially important publications by permitting the author to work full-time rather than part-time.
4. When NLM wishes to contract for a specific product.
5. When the funds will act as a primer or a catalyst to support a project that could not be started without such support or a project which could be facilitated with such funding.

In all cases, the work should be scholarly, not a popularization; it should be an effort which pulls together the bits and pieces of a particular field, or it may be a work needed by advanced scholars working in other areas.

The next question considered was how to evaluate the application. There was unanimous agreement that applications for grants and proposals for contracts should receive dual review. This means that the primary review should evaluate the application or proposal on the basis of (1) merit and (2) the market for the product. The Board of Regents should then provide secondary review in all cases.

Should the completed manuscript receive evaluation? The committee decided that whenever a subvention for publication is required, there should be evaluation of the manuscript by an appropriate group of experts. This is also true if the manuscript is to be published by a governmental agency. For purposes of program justification, all manuscripts will ultimately be evaluated.

What should be supported?

1. Secondary publications in the fields of medical librarianship, health information science, and biomedical communications. These are areas of core importance to the Library's objectives.
2. Critical reviews of the present state of knowledge in health fields and the health-related information sciences. The production of thoughtful, well-integrated summaries should be encouraged. This is an area of particular interest to the Library.
3. Abstracts, bibliographies, handbooks (such as atlases, catalogs, data compendia, dictionaries, directories, and manuals), indices, translations, and other secondary publications in the broad health sciences.
4. Pilot or temporary support of secondary periodical publications for such purposes as the initiation of new periodicals, the improvement of existing services, or the development of experimental and innovative approaches to information packaging.

The committee agreed that in all cases progress should be closely monitored by the staff.

The Special Scientific Projects Program was discussed at length. The following conclusions were reached:

1. The program should be continued.
2. The name of the program should be changed to "Distinguished Scholar Award."
3. The author should work full-time, in no case less than 80%.
4. The grant may provide compensation comparable to his current academic salary. However, since it is recognized that in the case of advanced distinguished scientists this figure could be \$40,000 per year or more, the product must be evaluated in the light of the total cost.

5. The emphasis is placed on competency, not age.
6. In general, the grant should be limited to one year. There was agreement that an individual distinguished and experienced in his field working full-time could, in almost every case, complete the work within one year.
7. Any royalties resulting from publication of the work must pay back the grant before accruing to the author.
8. The work need not be a manuscript but may be any appropriate information medium.
9. NLM presently has the mandate to support publications in the entire field of biomedicine and should accept this mandate.

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE		AMOUNTS RECOMMENDED
2 R01 LM 00984-03	TRANSLATE GALEN'S TREATISE ON THE DISEASED PARTS	03 04	10,760 10,760
1 R01 LM 01388-01A1	PREPARATION OF INDEXED ANNOTATED DREAM BIBLIOGRAPHY	01A1	20,529
1 R01 LM HD 01431-01A1	HISTORICAL REVIEW OF MENTAL RETARDATION IN THE UNITED STATES	01A1 02	27,894 27,654
1 R01 LM 01433-01A1	A BIBLIOGRAPHY: IMPLICATIONS OF ORGAN TRANSPLANTATION	01A1	32,450
1 R01 LM 01655-01	MANUSCRIPT PREPARATION, TOXIC PLANTS OF THE CARIBBEAN	01 02	14,222 14,394
1 R01 LM 01658-01	JACQUES TENON AND HOSPITAL REFORM IN 18C FRANCE	01 02	7,947 6,797

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: June 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE		AMOUNTS RECOMMENDED
1 R01 LM AI 01659-01		01	2,100
	PUBLICATION OF PACIF. INS. MONOGR. ON MYDAEINAE		
1 R01 LM 01662-01		01	22,236
	ON LINE DEMONSTRATION SERIALS CONTROL SYSTEM	02	12,287
1 R01 LM 01664-01		01	13,556
	THE MOSCOW PLAGUE OF, 1771: A SOCIAL HISTORY		
1 R01 LM 01665-01		01	8,354
	BLOOD-LETTING: A STUDY IN THE HISTORY OF THERAPEUTICS	02	7,853
1 R01 LM 01674-01		01	5,550
	PSRMLS: EVALUATION OF A REGIONAL MEDICAL LIBRARY		
1 R01 LM 01701-01		01	31,000
	TEXT SEARCHING RETRIEVAL OF BIOMEDICAL PAPERS	02	26,769
1 R01 LM 01706-01		01	7,560
	INDEX TO BIOMEDICAL CONGRESS & SYMPOSIA PROCEEDINGS	02	6,292
		03	6,654

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 R01 LM 01809-01		01 2,200

JOHANN PETER FRANK'S COMPLETE SYSTEM OF PUBLIC HEALTH

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G04 LM 01737-01		8,260
	REGIONAL MEDICAL LIBRARY GRANT	8,860
1 G04 LM 01741-01		77,849*
	REGIONAL MEDICAL LIBRARY GRANT	82,260*
		87,140*

*Subject to negotiation

APPLICATIONS APPROVED BY COUNCIL
 (Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01675-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 36,577 02 34,715 03 35,925
1 G08 LM 01677-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 21,255 02 13,950 03 13,950
1 G08 LM 01687-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 10,105 02 9,000 03 5,700
1 G08 LM 01688-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 17,220 02 16,836 03 18,554
1 G08 LM 01695-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 5,100 02 2,900
1 G08 LM 01697-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 31,720 02 33,642 03 36,026

APPLICATIONS APPROVED BY COUNCIL
 (Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01700-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	55,583
1 G08 LM 01718-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	25,251
		23,746
		25,611
1 G08 LM 01719-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	68,147
		61,444
		52,206
1 G08 LM 01734-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	100,000
1 G08 LM 01736-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	38,633
1 G08 LM 01739-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	12,530

APPLICATIONS APPROVED BY COUNCIL
 (Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01749-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	20,405
1 G08 LM 01752-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	64,268
		50,518
1 G08 LM 01753-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	14,256
		27,872
1 G08 LM 01755-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	19,653
		8,490
1 G08 LM 01756-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	45,912
		27,721
1 G08 LM 01765-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	4,723

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01769-01		21,735
		2,000
	MEDICAL LIBRARY RESOURCE PROJECT GRANT	2,000

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 F13 LM 26,415-01		26,670
	CONTROL OF INFECTIOUS DISEASES IN TWENTIETH CENTURY	25,243
		25,707

APPLICATIONS APPROVED BY COUNCIL
 (Arranged numerically by program)

COUNCIL DATE: JUNE 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 T01 LM 00152-01	PHYSICIAN TRAINING IN BIOMEDICAL INFORMATION SCIENCES	01 120,000 02 120,000 03 120,000
1 T01 LM 00153-01	TRAINING PROGRAM IN MEDICAL INFORMATION SCIENCES	01 61,415 02 89,948 03 101,420 04 103,176 05 105,020
1 T01 LM 00154-01	COMPUTER AND INFORMATION SCIENCE IN MEDICINE	01 110,000 02 130,000 03 145,000 04 145,000 05 145,000

AGENDA

Forty-Third Meeting of the
BOARD OF REGENTS
National Library of Medicine

9:00 a.m., November 20, 1972
8:30 a.m., November 21, 1972

Board Room
Bethesda, Maryland

- I. CALL TO ORDER AND INTRODUCTORY REMARKS Dr. Jack M. Layton
- II. CONSIDERATION OF MINUTES OF LAST MEETING TAB I Dr. Jack M. Layton
(Orange Book)
- III. DATES OF FUTURE MEETINGS TAB II
1972 and 1973 Calendars in all books
Next Meeting -- March 26-27, 1973 (M-T) in Tucson, Arizona
Subsequent Meeting -- June 21-22, 1973 (Th-F)
Selection of Meeting Date -- November 1973
19-20 26-27 29-30 Thanksgiving -- November 22, 1973
(M-T) (M-T) (Th-F)
- Entomological Society of America, November 26-29, 1973, Houston
- IV. REMARKS BY THE DIRECTOR, NIH Dr. Robert Q. Marston
- COFFEE BREAK
- V. REPORT OF THE DIRECTOR, NLM TAB III Dr. Martin M. Cummings
- VI. REPORT ON REFERENCE SERVICES DIVISION TAB IV Mr. Albert M. Berkowitz
Mrs. Bernice M. Hetzner
Primary Discussant

LUNCH -- Open Choice

(Cafeteria in NLM on A Level; O'Donnell's Restaurant, 8301 Wisconsin Avenue;
Ramada Inn, 8400 Wisconsin Avenue; Holiday Inn, 8120 Wisconsin Avenue;
Raleigh Inn, 8011 Woodmont Avenue; and others also within walking distance
of NLM.)

REVIEW OF CONTRACTS

(Meeting Closed)

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| VII. | STATUS OF MEDLARS II AND MEDLINE DEVELOPMENT | TAB V | Mr. Davis B. McCarn
Mr. Alfred R. Zipf,
Primary Discussant |
| VIII. | REPORT ON LISTER HILL CENTER | TAB VI | Mr. Albert Feiner |
| IX. | REPORT ON NATIONAL MEDICAL AUDIOVISUAL CENTER | TAB VII | Dr. Charles F. Bridgman
Capt. Edward J. Rupnick
Primary Discussant |

ADJOURNMENT

DINNER (Dutch Treat) -- Csikos Hungarian Restaurant
Broadmoor Hotel
3601 Connecticut Avenue, N. W.
Washington, D. C.

Cocktails: 6:30 p.m. Dinner: 7:30 p.m.

Speaker: Dr. William O. Baker

Topic: "Science, Signals, and Messages"

RECONVENE -- 8:30 a.m., November 21, 1972

November 21, 1972

REVIEW OF CONTRACTS AND GRANTS

(Meeting Closed)

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| X. | REPORT ON TOXICOLOGY INFORMATION PROGRAM | TAB VIII | Dr. Henry M. Kissman |
| XI. | EDUCATIONAL TECHNOLOGY FOR MEDICINE:
ACADEMIC INSTITUTIONS AND PROGRAM MANAGEMENT | TAB IX | Dr. Eugene A. Stead |
| | COFFEE BREAK | | |
| XII. | REPORT OF THE ASSOCIATE DIRECTOR FOR
EXTRAMURAL PROGRAMS | | Dr. Lee Langley |
| | A. Information Science Meeting | | |
| | B. Review of Council Procedures,
"Guidelines for Adjustments by Staff in
Time or Amount of Grant Award" | TAB I (Gray Book) | |
| | C. Follow-up of Publications
Program Analysis | TAB II | |
| | D. Chairman's Grant | TAB III | |
| | E. DRG Report | TAB IV | |
| | F. National Library of Medicine's Participation
in Library Construction Project Review | | Dr. Harry W. Bruce, Jr.
(Bureau of Health
Manpower Education) |
| | G. Report on Conference on Information Science and
Biomedical Communications Research | TAB V | Dr. Susan Y. Crawford |
| XIII. | CONSIDERATION OF PENDING APPLICATIONS | | Dr. Lee Langley |
| | A. Policy Questions | TAB VI | |
| | 1. Revised Grant Regulations | | |
| | 2. Application Guidelines | | |

B. Research Grants	TAB VII	Dr. Roger W. Dahlen
C. Distinguished Scholar Program	TAB VIII	"
D. Training Grants	TAB IX	"
E. Resource and Regional Grants	TAB X	Mr. Arthur J. Broering

LUNCH -- Conference Room B (Catered)

EXECUTIVE SESSION

(Meeting Closed)

XIV. EXECUTIVE SESSION

ADJOURNMENT

BOARD OF REGENTS
NATIONAL LIBRARY OF MEDICINE
MINUTES OF EXECUTIVE SESSION

The Board of Regents met in Executive Session at the National Library of Medicine at 2:10 p.m. on November 21, 1972.

A draft resolution addressed to the Secretary, Department of Health, Education, and Welfare (attached) was adopted unanimously.

The Board reviewed the proposed "Guidelines to Establish Awards in Support of New Academic Health Science Libraries," approved their use by the National Library of Medicine on an interim basis, and asked the staff to prepare for Board consideration a strengthened version of this interim document.

The Board unanimously approved changing the form of the Regents' Award (certificate and monetary award) to a suitable plaque with appropriate inscription. The Chairman designated Dr. John P. McGovern as Board member of a special award committee to be convened by the Director to nominate candidates for the Regents' Award.

The Chairman made the following appointments:

Executive Committee:

Dr. William O. Baker
Dr. J. Stanley Marshall
Dr. John P. McGovern
Dr. Jack M. Layton, Chairman

Extramural Programs Subcommittee:

Dr. Faye G. Abdellah
Dr. Susan Y. Crawford
Mrs. Bernice M. Hetzner
Lt. Gen. Hal B. Jennings, Jr.
Dr. John P. McGovern
Dr. Jack M. Layton, Chairman

Lister Hill Center Subcommittee:

Dr. William O. Baker
Dr. William N. Hubbard, Jr.
Dr. J. Stanley Marshall
Dr. Angelo M. May
Brig. Gen. George E. Reynolds

National Medical Audiovisual Center:

Lt. Gen. Hal B. Jennings, Jr.
Capt. Edward J. Rupnik

The Board approved transmittal of a note of appreciation to Dr. Harve Carlson, National Science Foundation, for his many contributions as a member of the Board for 15 years.

The meeting adjourned at 3:45 p.m.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Martin M. Cummings".

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

Bethesda, Maryland

RESOLUTION
OF THE
BOARD OF REGENTS OF THE NATIONAL LIBRARY OF MEDICINE

NOVEMBER 21, 1972

The Board of Regents of the National Library of Medicine urgently requests that the Department of Health, Education, and Welfare implement, through the Library, national policy requiring coordination and nonduplication of information systems and data bases serving various executive agencies in the Federal Government.

This applies specifically to the rapidly growing bibliographic and data systems essential for effective function of environmental health and safety activities, such as those of the National Institute of Occupational Safety and Health. These systems should be part of, not separate from or parallel to, appropriate systems already established. A present example concerns information on evaluation of compounds to which humans may be exposed. Here, the Toxicology Information Program of the National Library of Medicine appears to the Board to be the most suitable informational resource.

However, the Board is requesting a prompt survey of governmentwide information activities in toxicology and compound hazard characterization, among others. Consequently, we shall soon recommend further actions to inhibit wasteful and diverting proliferation of agency data and bibliographic programs. Immediately, however, we respectfully request that administrative revisions, including funding transfer, be undertaken by the Department of Health, Education, and Welfare to bring present efforts together under the designated sponsorship of the National Library of Medicine.

DEPARTMENT OF HEALTH, EDUCATION,
AND WELFARE

NATIONAL INSTITUTES OF HEALTH
NATIONAL LIBRARY OF MEDICINE

Minutes of Meeting
November 20-21, 1972

Board Room
National Library of Medicine
Bethesda, Maryland

THE BOARD OF REGENTS
of the
NATIONAL LIBRARY OF MEDICINE

MINUTES OF THE 43rd MEETING

November 20-21, 1972, Bethesda, Maryland

MEMBERS PRESENT: Dr. William O. Baker, Vice Adm. George M. Davis (morning of November 20 only), Dr. Harve J. Carlson, Dr. Susan Y. Crawford, Mrs. Bernice M. Hetzner, Dr. William N. Hubbard, Jr. (November 20 only), Lt. Gen. Hal B. Jennings, Jr., Dr. Jack M. Layton, Dr. J. Stanley Marshall (November 21 only), Dr. Angelo M. May, Dr. John P. McGovern.

MEMBERS ABSENT: Dr. L. Quincy Mumford, Dr. Marc J. Musser, Lt. Gen. Robert A. Patterson, Dr. Jesse L. Steinfeld.

ALTERNATES: Dr. Faye G. Abdellah represented Dr. Jesse L. Steinfeld both days. Mr. John G. Lorenz represented Dr. L. Quincy Mumford both days. Dr. James A. Pittman, Jr. represented Dr. Marc J. Musser both days. Capt. Edward J. Rupnik represented Vice Adm. George M. Davis the afternoon of November 20 and all day November 21. Brig. Gen. George E. Reynolds represented Lt. Gen. Robert A. Patterson both days.

GUESTS: Dr. Robert Q. Marston, Director, National Institutes of Health. Dr. Harry W. Bruce, Jr., Director, Division of Physician and Health Professions Education, Bureau of Health Manpower Education. Mrs. Madeline P. Chizever represented the Director of Regional Medical Programs Service. Dr. Fred C. Cole, President, Council on Library Resources, Inc. Dr. Hilliard Jason, Professor-on-leave, Michigan State University; Educational Consultant to Lister Hill Center. Dr. Bernice Lipkin, Executive Secretary, Computer and Biomathematical Sciences Study Section. Mr. John Sherrod, Director, National Agricultural Library. Dr. Eugene A. Stead, Jr., Professor of Medicine, Duke University Medical Center. Mr. Alfred R. Zipf, Executive Vice President, Bank of America; Consultant.

STAFF: Dr. Martin M. Cummings, Mr. Melvin S. Day, Dr. Clifford L. Bachrach, Mrs. Helen S. Bennison, Mr. Albert M. Berkowitz, Dr. John B. Blake, Mrs. Ruth E. Bortz, Dr. Jeanne L. Brand, Dr. Charles F. Bridgman, Mr. Arthur J. Broering, Mr. Raymond E. Brown, Dr. Ralph P. Christenson, Mr. Peter A. Clepper, Mrs. Karin K. Colton, Miss Mary E. Corning, Dr. Roger W. Dahlen, Mrs. Doris Doran, Mr. Albert Feiner, Mrs. Rose Marie Holston, Mrs. Frances H. Howard, Mrs. Frances E. Johnson, Dr. Henry M. Kissman, Dr. Lee Langley, Dr. Joseph Leiter, Mrs. Erika B. Love, Mrs. Claire S. Marwick, Mrs. Nina W. Matheson, Mr. Davis B. McCarn, Mr. Robert B. Mehnert, Mrs. Marguerite L. Pusey, Mrs. Jane P. Santucci, Dr. Harold M. Schoolman, Mr. Edmund Scullo, Mr. Kent A. Smith, Mrs. Barbara Sternick, Mr. Seymour I. Taine, Mr. Ben R. Tate, Mrs. Janet S. Welsh, Mr. Richard T. West, Dr. Harold A. Wooster, Dr. Galina Zarechnak.

Minutes of Meeting
Board of Regents
November 20-21, 1972

OPENING REMARKS

Dr. Layton, Chairman, opened the meeting by welcoming the Regents and guests to the 43rd meeting of the Board. He introduced new Regent Dr. William N. Hubbard, Jr., former Dean of the University of Michigan Medical School and now Executive Vice President of the Upjohn Company. Dr. Hubbard previously served on the Board from 1963-67, and was twice elected chairman, in 1965 and 1966. Dr. Cummings introduced Mr. Melvin S. Day, recently appointed NLM Deputy Director, and Mr. Seymour I. Taine, new Chief of the Technical Services Division.

The Chairman noted that in June the Regents learned of the death of Dr. Wilburt C. Davison, former Chairman of the Friends of the Library and President of the Honorary Consultants to the Library, predecessor to the Board of Regents. The Board sent a telegram to the family at that time. Dr. John P. McGovern participated in memorial services for Dean Davison at the Duke chapel on November 17.

CONSIDERATION OF MINUTES OF THE PREVIOUS MEETING

The Board voted approval of the minutes of the 42nd meeting, without change.

DATES FOR FUTURE MEETINGS

The Board confirmed the dates of March 26-27, 1973 for the next meeting, in Tucson. The dates of June 21-22 and, tentatively, November 29-30 were adopted for subsequent meeting dates.

REMARKS BY NIH DIRECTOR--DR. ROBERT Q. MARSTON

Dr. Marston noted there was little to report on matters of budget or legislation. DHEW is operating under a continuing resolution which, in the case of NIH, essentially limits expenditures to the 1972 level. In the area of legislation, there is much activity centered around the legislative package that will accompany the President's message to Congress in January.

The year ending June 30, 1972 was a very good year for NIH. Dr. Marston listed a number of accomplishments in support of this contention: reasonable resolutions of such difficult problems as the enlargement of the cancer program; the support by five Institutes for the Nobel Prize winners in medicine and biochemistry; successful implementation, under great pressure, of new legislation in health manpower; a "major breakthrough in understanding" at the Secretary and OMB levels of the Library's role in biomedical communications; and an unusual amount of recognition for the high-quality work of NIH intramural scientists, highlighted by the Nobel Prize awarded to Dr. Christian B. Anfinsen. The NIH Director foresees great opportunities in the coming year for medical research, education, and biomedical communication.

Dr. Marston reported on an upcoming series of meetings later this year between him and the chairmen of all NIH study sections and initial review committees. These meetings, which take place every two years, are to improve communications between advisory groups and keep the Director informed on advisory group activities. Representatives of senior advisory groups (including the Board of Regents) will meet with him in January as a followup.

Dr. Marston affirmed that advisory board deliberations related to the review of grant applications are not open to public participation. With this exception, our policy is to open all proceedings of advisory committee meetings to the public. The Director expressed concern that an outside observer sitting in on only a small portion of a two- or three-day meeting might carry away (and perhaps put into print) false impressions of the sense of the matters discussed.

In response to a question about the outlook for the '74 budget, Dr. Marston made the following points: NIH is better prepared to cope with a period of reduction in expenditures than in past years when inexperience in making reductions led to serious problems; Presidentially initiated revenue-sharing decentralization will have an unknown effect on NIH programs; the predicted increases in uncontrollable expenditures may have the effect of reducing the resources for new, innovative programs; in a time of fiscal constraint, the high-emphasis programs with great visibility (for example, cancer and sickle cell anemia) must not be allowed to prosper at the expense of less glamorous but equally necessary programs. Dr. Marston also spoke of his concern about the ethical aspects of experimenting on human subjects, and the need for greater precautions to be taken by researchers when dealing with human subjects.

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

Dr. Cummings reviewed for the Board the tortuous path of efforts to extend the Medical Library Assistance Act which expires June 30, 1973. Through an unusual series of events, the Act was considered by various committees in Congress in three different bills. Unfortunately, Congress adjourned on October 18 with no final action on the House bill. The Director said that it is his opinion that there will be action to extend the Act before June 30, 1973.

On the financial front, the Library has been forced to operate under a continuing resolution which limits spending to FY 1972 rates. Much of the 4.5-million-dollar increase called for by the President's FY 1973 budget may be lost to the NLM if the Library remains under this restrictive spending authority for much of the year. However, the continuing resolution does provide funds to cover some mandatory increases in operating costs (such as past pay raises). Dr. Cummings presented a chart showing how the NLM proposed to operate at this level of 24.8 million dollars instead of at the President's proposed budget of 28.5 million dollars. This presentation showed that the greatest budgetary hardships would be experienced by the Lister Hill Center and by the Regional Medical Library program.

The Director next reported that NLM has been successful in reducing the average grade level to 9.184, well below the target assigned of 9.200. These and further reductions, however, may result in some deterioration in the quality of library services.

In the area of copyright, NLM has continued to seek an accommodation with Williams and Wilkins that would not accede to their demand for license or royalty payments for single-copy photocopy privileges, yet would not interfere with the medical publishing industry's right to maintain an economic viability. In response to a Williams and Wilkins proposal, the Library took the position that it would not accept a rise in price that implied a license to photocopy, nor would it make payment for photocopying for interlibrary loans. Williams and Wilkins, for the duration of the litigation, have agreed to drop their demands for photocopy charges and accepted our position that payment of the new institutional subscription rate does not imply license to photocopy. The full Court of Claims has not yet ruled on the case, and there is no clear indication of when it will do so. In addition to the amicus curiae briefs submitted by the ALA, ARL, and the MLA, there have been submissions from 14 additional organizations supporting NLM, including a number of medical institutions and several scientific societies.

Dr. Cummings also reported on several special activities at NLM since the last Board meeting. These included: a meeting of some 40 medical journal editors at NLM in September to examine the problems of modern

medical publications; real progress by the U.S. National Libraries Task Force on Cooperative Activities in the area of the National Serial Records Data Program--Mr. Paul Vassalo, the Task Force leader for this activity, has made great strides in integrating the serial records of the three national libraries; a meeting of the Regional Medical Library Evaluation Committee in October and the planned evaluation of Regions II, IV, and V in early 1973 (the results to be presented at the March meeting of the Board), with the remaining regions being surveyed in the following year; and a new lobby exhibit in honor of the sesquicentennial of the birth of Louis Pasteur.

REPORT OF THE NLM EXECUTIVE OFFICER--MR. KENT A. SMITH

Mr. Smith reported on the progress of the Lister Hill Center Building design. He indicated that the firm of Carroll, Grisdale, and Van Alen has been awarded the architectural and engineering contract and that their schedule calls for final working drawings to be submitted by February 1974. Assuming construction money is appropriated, an invitation to bid would be possible late in FY 1974. The facility is estimated to cost \$14.3 million, to contain 195,000 gross square feet (124,000 net), and to house a workforce of 450. The National Medical Audiovisual Center (NMAC), the Lister Hill National Center for Biomedical Communications (LHNCBC), the Office of Computer & Engineering Services (OCES), and Extramural Programs (EP) will be moving into the new facility.

The Executive Officer also reviewed the history and major milestones leading to the present regulations governing the opening of advisory committee meetings to the public. The guidelines of Executive Order 11686 become effective in January 1973 and will implement the Federal Advisory Committee Act. Mr. Smith summarized the resulting policy: there will be maximum public accessibility to advisory committee meetings; Institute directors will identify open and closed portions of the meetings and the extent to which the public will participate in the meetings; any person may attend an open session; announcement of the meeting in detail must be published in the Federal Register; comments on discussions may be submitted by the public to the chairman, who will make them available to committee members; the chairman may adjourn the meeting when he feels it is in the public interest. As the result of a suggestion by Mr. Zipf, the form on which guests at a meeting are registered will show the times of their arrival and departure from the session.

REPORT ON THE REFERENCE SERVICES DIVISION (RSD)--MR. ALBERT M. BERKOWITZ

Mr. Berkowitz discussed the organizational makeup of RSD, consisting of three sections: Reference, Loan and Stack, and Photoduplication. The Division is the largest in the Library Operations component of NLM, with a staff of about 75 full- and part-time employees. In addition to

traditional reference and loan functions, RSD provides MEDLINE capability in the Reading Room for Library users, and also has an imposing array of audiovisual hardware and software available. The Division plays two important roles within the Library component of the Biomedical Communications Network--that of Regional Medical Library for the Mid-Atlantic Region, and that of backstop for providing interlibrary loans within the network.

Major programs of the Reference Services Division include:

1. Interlibrary Loan Service. The largest single program of the Division. RSD filled 151,000 requests in FY 1972. The goal for throughput time on ILL is three days.
2. Reference Services. The Division received over 22,000 requests for reference services in 1972--by mail, phone, and from on-site users. A slight downward trend in the number of on-site readers may be the result of improved local medical library collections and an increased availability of MEDLINE. RSD also distributed in that period over 34,000 Literature Searches (printed bibliographies on a specialized biomedical subject) in response to written requests.
3. Reader Service. More than 91,000 requests from on-site requesters of material were received in 1972. Since NLM is a closed-stack library, this necessitates retrieving material from the stacks and reshelving it after use. RSD is now filling reader requests at the rate of 70 percent within 20 minutes.
4. Photographic Services. The principal activity of the Photoduplication Section is filming, processing, preparation of hard copy, inspecting, and mailing of journal article copies provided on interlibrary loan. In addition, this section provides general photographic support, including the developing of light-sensitive paper from the photocomposing unit for the Library's MEDLARS-produced publications.
5. Stack Maintenance. This program maintains the physical condition of the collection. It also accomplishes any necessary shifting of material as areas become overcrowded and is responsible for updating a locator tool for the stacks, Guide to the Collections. A contract for stack maintenance this year has identified 29,000 duplicate items and 25,000 gaps in serials, and has revealed

that one percent of the material is misshelved. Related to this is the work of the Library on the National Serials Data Program to identify serials: NLM has developed an aperture card to serve as the unit record that contains the cover and one other page from the journal on microfilm, and a unique ISSN (International Standard Serial Number). Filming has been completed for all of the 18,000 serial titles in the A-level collection.

6. Micropreservation Filming Program. The amount of in-house microfilming for preservation purposes has been maintained at a low level and is restricted to items requested by the medical community which are not otherwise available. A contract for filming 1,500,000 pages to exacting specifications is now in effect and this program should be accelerated in order to capture on film those portions of the collection which are rapidly deteriorating.

Mr. Berkowitz discussed the effect of employee development programs on providing reference services. These programs are desirable for RSD employees because of the limited upward mobility inherent in many of the positions and the low grade structure of the Division. Unfortunately, large staff involvement in these programs (e.g., 24 percent of the full-time staff during the last spring semester was enrolled in Upward Mobility College) has reduced the number of manhours available for RSD operations and makes it extremely difficult to continue to provide high-quality services for 70 hours each week in the Reading Room and maintain production in such operations as loan and stack and photoduplication.

Mr. Berkowitz summarized the results of recent evaluations of RSD activities: there will soon be a decision on the disposition of security classified Government documents in the collection that receive little use; interlibrary loan requests for technical reports will be referred to the National Technical Information Service which sells the reports; the reference collection is being updated and the 650 serial titles on open shelves in the Reading Room have been reviewed with the number reduced to 285 high-use journals; the possibility of "job ladders" will continue to be investigated in the Photoduplication Section as well as efforts to increase motivation and job mobility and lessen turnover; call numbers are now required for all requests for reader service and box files are being used for unbound issues to increase handling efficiency; shelves are being cross-indexed under a contract; and an experienced staff member is available to assist less experienced personnel locate difficult materials in the collection.

The Board complimented Mr. Berkowitz for his excellent presentation and record of performance. As discussant for Mr. Berkowitz's presentation, Board member Mrs. Bernice M. Hetzner emphasized the importance of stack

maintenance and agreed that increased support for this activity was desirable. She commented that good service usually goes unrecognized and she praised the accomplishments of the Library in the throughput times for interlibrary loans and delivery of materials to on-site users. She noted that RSD's work in developing prototype programs, such as the provision of MEDLINE and audiovisual services in the Reading Room, has important implications for the entire medical library community.

In response to a query by Dr. Layton on manpower problems in RSD, Dr. Joseph Leiter, Associate Director for Library Operations, commented that any action by the Board of Regents that would lead to relief of restrictions on hiring part-time and temporary employees would be helpful. Dr. Cummings noted in this regard that a program for health science students to work part-time at NLM would have great benefit for both students and Library.

Dr. Cummings also commented that Dr. Frank B. Rogers, his predecessor at NLM, had predicted accurately the shortage of space for the collection the Library will be faced with by 1977. Dr. Rogers' recommendation to the Bureau of the Budget in 1962 to build on the basis of a 30-year projection (500,000 square feet at \$27 per square foot) was cut in half. To build the needed space now would cost about \$60 per square foot.

STATUS OF MEDLINE AND MEDLARS II DEVELOPMENT--MR. DAVIS B. McCARN

Mr. McCarn, Acting Associate Director for Science Communications and Computer Engineering Services, reported that MEDLINE now averages 30-35 simultaneous users searching the system at an annual rate of 140,000 searches (compared to 24,000 annual demand searches under MEDLARS I). Response time per query is about four seconds. Recent evaluation of MEDLINE service at user institutions shows that 80 percent of the searches are being entered by the librarians and that 27 percent of the searches are for users in the community not ordinarily associated with the institution. Eighty-seven percent of users say MEDLINE is of considerable or major value in searching the literature.

Mr. McCarn described the network as including 40 metropolitan areas in the U. S. and extensions to Canada and Paris. Costs are down to about \$6 per connect-hour as compared to an estimated \$24 if MEDLINE did not operate through a network but were direct dial to the computer.

Recent and projected changes in MEDLINE:

1. Addition to all citations of Journal Citation Identifier, including the International Standard Serial Number and an identifier for AIM journals.
2. Title search capability by the end of December.

3. In January, a second computer on the network at SUNY will also process MEDLINE search requests.
4. A computer-aided instruction course on how to use MEDLINE will be available next February.

New on-line services to be available on the network, in addition to MEDLINE, are:

1. SDILINE--current month of Index Medicus on-line.
2. CATLINE--monograph catalog information on-line.
3. SERLINE--serial locator file on-line to locate any of 6,000 serial titles in 100 medical libraries.
4. COMPFILE--the complete MEDLARS file (2200 journals) for on-line searching and off-line printing of the bibliography.
5. The Office of Education's ERIC file is available on the network for MEDLINE users.
6. TOXICON--Toxicology information on-line.
7. NTIS data base and Chemical Abstracts (Condensates) are to be available on-line.

Mr. McCarn reported to the Board the status of MEDLARS II procurement. The contract with the System Development Corporation will result in a conversion of MEDLARS I to the IBM 370/155 computer with added capabilities in the area of vocabulary handling. The total fixed price of the contract is \$1,182,000. The Project Control Document, which describes the schedule, has been delivered along with a System Design Overview (a complete description, in general terms, of what the system will do) and a test plan. Preliminary testing of a mini-system will begin at the Library in January. A major problem has been that the photocomposition equipment specified for MEDLARS II (the Linotron 1010 and the Photon 713) has been judged impractical. The Joint Committee on Printing has been asked for permission to purchase the Photon 901, which has been performing reliably at NLM for two years.

Mr. Alfred R. Zipf expressed concern that expansion of MEDLINE might be moving ahead too fast. There is a finite number of terminals possible, but the use of these terminals will continue to grow. He suggested that

we develop a plan for more restricted growth of MEDLINE. Mr. Zipf expressed pleasure with the progress and competence shown by SDC in the development of MEDLARS II.

Mr. McCarn then discussed with the Board two proposals: a policy statement concerning on-line services and, second, a recommendation concerning negotiations for commercial or other information services. (See page 16, "Actions Taken by the Board of Regents in General Session.")

The proposed policy statement for on-line services prompted a discussion by the Regents of the adequacy of safeguards to prevent MEDLINE from becoming saturated with too many users. Dr. William O. Baker suggested the possibility that many users would be satisfied with accessing a more limited data base that could be maintained locally or regionally, thus taking some of the pressure off the central NLM computer. Such a system would be supplementary to the national network.

There was lively discussion by the Regents on the second proposal--the desirability of the Library's offering its services to negotiate on behalf of MEDLINE user institutions for advantageous rates for new on-line services as they become available. Although lower rates and improved services would result from such an arrangement, there would be the problem, despite disclaimers, of an implied endorsement of these outside services by NLM.

REPORT ON THE LISTER HILL CENTER (LHC)--MR. ALBERT FEINER

Mr. Feiner, Director of the Lister Hill Center, reported on progress in four areas concerned with providing accessibility to health care:

1. Computer-aided instruction (CAI) programs, involving health education material from Ohio State University, Massachusetts General Hospital, and the University of Illinois, have been put on the Tymshare network to investigate the usefulness of these programs at institutions other than the ones where they were developed. Users of this network service must agree to add their material to the system and conduct careful evaluation of the usefulness of the on-line instructional programs. Use of this service has been heavy. If the experiment is to become more than a "toy," the participating institutions must restructure parts of their medical curricula to include CAI.

2. The interactive television program in the New Hampshire-Vermont region, centered at Dartmouth Medical College, is operating successfully. Education, training, diagnosis, and treatment are all being communicated to geographically dispersed facilities via two-way television hookup. The cost-benefit figures from this experiment, when fully evaluated, should prove invaluable for future applications. Participating institutions, in addition to Dartmouth, are the University of Vermont, Claremont General Hospital, and Central Vermont Hospital. Problems of FCC approval for the project have been overcome and the program is now operating experimentally.
3. A contract has been awarded by LHC to the Department of Community Medicine of the Mt. Sinai School of Medicine to establish an interactive cable TV link for the predominately elderly tenants of a 246-unit public housing project in East Harlem. The tenants infrequently venture from the apartment complex and it is believed that an interactive system would be able to reach them, through their TV sets, with patient care and health information and education material. A two-day seminar of experts with experience in this area is planned in the next two months to give guidance to Mt. Sinai planners in the development of their approach, hardware, and content requirements.
4. The present Alaska experimental program has proved its value during the past year in over 20 medical emergencies in outlying areas that required prompt communication of a village health aide with a medical consultant. Initial evaluation shows that the number of health aide-doctor contacts is considerably higher at villages with satellite communications than those with conventional high-frequency radio. This frequent contact boosts the confidence of the health aide and also results in a measurable increase in his knowledge of health and first-aid techniques.

A major effort by HEW is now underway to plan for health and education experiments utilizing the ATS-F satellite. A committee of representatives of the Secretary's office, Bureau of Health Manpower Education, Health Services and Mental Health Administration, and LHC is considering experiments proposed for the Rocky Mountain area and the Pacific Northwest (including Alaska). Contracts have been let for the initiation of this program: two for planning, one for the purchase of prototype terminals,

one for systems engineering support of the experiment planners, and one for planning the evaluation of the program. The experiments will expand the present experience being acquired in Alaska utilizing the ATS-1 satellite. In addition to serving remote regions, satellite communications can be of great value in connecting sizeable populations with similar interests and missions which are widely dispersed. It is estimated the two-way terminals for the new experiments can be built, in quantity, for about \$10,000 each.

Dr. Baker commented that the cost estimates seemed realistic and urged that continued critical planning take place.

REPORT ON NATIONAL MEDICAL AUDIOVISUAL CENTER (NMAC)--DR. CHARLES F. BRIDGMAN

Dr. Bridgman, NMAC Director, briefed the Regents on progress in the clearinghouse function. NMAC relations with BHME and particularly the Bureau's Office of Audiovisual Educational Development (OAED) have been excellent in this regard. There is now a major effort to gather catalog information on the most recent available audiovisual instructional materials, utilizing the efforts of outside groups such as a consortium of 32 southern medical schools that is now actively engaged in developing, evaluating, and sharing materials. Past experience of NMAC indicates that about 90 percent of those considered are rejected after evaluation by peer groups. A test data file of completely evaluated citations for instructional materials will be put on the AVLINE subfile for access on-line.

As to the schedule for clearinghouse implementation, Dr. Bridgman reported that the format for citations is complete and that the initial data for 4,000 evaluated citations will be entered into the system by May 1973. Some 400 more elaborate instructional packages will be entered by November 1973. On-line search of the AVLINE files will be available by June 1973.

The NMAC Director next reported on work of the Advisory Committee to NMAC-OAED that has met twice since the last Regents meeting. Chaired by Dr. Stewart G. Wolf, Jr., the committee reviewed 25 proposals to develop audiovisual educational materials. Dr. Bridgman listed the criteria used by the committee in evaluating the proposals and then discussed each of the eight approved proposals.

Captain Edward J. Rupnik emphasized the problem of identifying, evaluating, and classifying existing audiovisual instructional material, while at the same time encouraging the development of new material, as basic to the NMAC effort. He said that guidelines formulated by the Board would be essential if "order is to result from what may seem as chaos." Captain Rupnik, a member of the Advisory Committee, discussed that committee's concern that another advisory group of NLM or BHME might approve a proposal previously turned down by the Advisory Committee. Therefore, the committee has recommended that all new requests for media support or development come to the attention of the NMAC-OAED advisory committee.

Dr. Cummings agreed and said the EP staff would be asked to send the NMAC-OAED advisory committee copies of every grant proposal received by NLM that has audiovisual implications. NMAC, in turn, will be asked to provide the EP staff with copies of contract proposals they receive.

Chairman Layton expressed his pleasure at the progress made in implementing the Board's recommendations on reviewing audiovisual materials and developing a clearinghouse at NMAC. Dr. Hubbard noted that at least five major attempts to accomplish these same ends by other organizations have failed, and that a successful program of evaluation and distribution would indeed be a notable accomplishment.

REPORT ON THE TOXICOLOGY INFORMATION PROGRAM (TIP)--DR. HENRY M. KISSMAN

Dr. Kissman described the major objectives of the TIP as building computerized data banks containing toxicological information and establishing services for the dissemination of this information to the scientific community. The former objective includes the collection of both document bases ("to retrieve the location of facts") and data bases ("to retrieve the facts themselves").

Dr. Kissman reported on progress under the interagency agreement between the Atomic Energy Commission and the National Library of Medicine to develop a Toxicology Information Response Center (TIRC) at the Oak Ridge National Laboratory (ORNL). TIRC has four functions: query response (literature searches, information analysis, bibliographies); sponsorship of state-of-the-art reviews; file building (data extraction, abstracting, computer processing); and computer support (systems design, programming, processing). Bibliographies of wide interest prepared in answer to query responses, and some state-of-the-art reviews will be sold through the National Technical Information Service (NTIS). Difficulties in establishing these functions have revolved around the organizational structure at ORNL, wherein TIP has had to deal with three distinct ORNL organizations. Recently, an agreement was reached with ORNL to locate TIRC in the Environmental Information Systems Office there. A new director of TIRC is soon to be named.

The Associate Director reported on several new and in-process TIP publications, including the recently published Drug Interactions--An Annotated Bibliography with Selected Excerpts, 1967-1970, available from GPO. He also reviewed for the Regents the development of TOXICON, and announced that some 210,000 abstracts and citations are now part of this on-line system. TOXICON has been available for public use since October 1972 through the same Tymshare network that services MEDLINE. Unlike MEDLINE, however, the TOXICON user is assessed a

one-time training fee of \$350 and a service charge of \$45 per terminal hour. In addition to containing abstracts in searchable form, the toxicology system does have several special features, including a word-proximity search capability. TOXICON is operated for the Library by a contractor, Informatics, Inc., and now serves 15 subscribers including Government agencies, universities, and industrial firms. A monthly TOXICON newsletter has been initiated and a TOXICON User Group meeting is planned for next spring.

Following Dr. Kissman's presentation there was a discussion by Board members of the importance of coordinating information-gathering activities of various Federal agencies. Dr. Baker expressed surprise that an agency such as the National Institute of Occupational Safety and Health, HSMHA, would embark on building an information system that appears replicative of TIP's. Dr. Cummings agreed that the difficulty of getting coordination and cooperation from the agencies would be a recurring problem in building TOXICON and other information files. He added that a high-level advisory committee for the TIP effort, chaired by the Assistant Secretary for Health, hasn't functioned for some time. Although NLM is fulfilling the intent of the President's Science Advisory Committee to set up a program in toxicology, the agencies aren't cooperating in the spirit called for by the committee report that recommended TIP be established. Chairman Layton asked the Regents to consider whether the problem should be addressed in a formal resolution by the Board.

EDUCATIONAL TECHNOLOGY FOR MEDICINE

Dr. Eugene A. Stead, Professor of Medicine at Duke University School of Medicine, discussed with the Regents the recommendations of a committee of the Association of American Medical Colleges to medical school faculties contained in the report, "Educational Technology for Medicine: Academic Institutions and Program Management." The study was funded by an NLM contract. Dr. Stead emphasized that since the committee did not have representation from other health professions, the recommendations apply only to medical schools. It is assumed that other health professions will review their educational activities in the light of this report and make recommendations appropriate to their goals. It is planned that the recommendations will go to all medical schools for their consideration in planning their future roles in developing educational technology.

There are eight recommendations in the study:

1. The extensive development and use of expensive educational and technological materials can be justified only if these

materials are utilized in educating students and health professionals at all levels--from undergraduate to continuing medical education.

2. Medical schools should have evaluation procedures for the educational process at all levels.
3. Medical schools should have a clearly defined educational commitment with monies dedicated to its support.
4. Medical school committees in charge of faculty promotion should recognize and reward faculty contributions to the educational process.
5. Institutional development of educational resources should be related to the fulfillment of explicitly stated institutional objectives or to research in medical education.
6. Medical schools should have institutional policies covering copyright and contract arrangements for instructional materials faculty create.
7. Medical schools should both cooperate in interinstitutional production of instructional materials and support individual investigator-oriented research.
8. The program of NMAC should be considered as one useful model for development of instructional resources.

REPORT OF THE ASSOCIATE DIRECTOR FOR EXTRAMURAL PROGRAMS--DR. LEE LANGLEY

As required each November, Dr. Langley brought to the attention of the Board the "Guidelines for Adjustments by Staff in Time or Amount of Grant Award," which were reaffirmed without revision.

The Board was brought up to date on the Distinguished Scholar Program, formerly known as the Special Scientific Projects Program, which had been discussed extensively during the previous two meetings. Members agreed with a Subcommittee recommendation that a certificate be designed for presentation to the Distinguished Scholars.

Dr. Langley described the Library's newly adopted procedure for reimbursing initial review group members and ad hoc consultants for expenses incurred in connection with their services. The Chairman's Grant, as the mechanism is known familiarly, has proven highly gratifying, with payment being made within two weeks.

Attention was drawn to the DRG Administrative Report under Tab IV of the gray book.

Dr. Harry W. Bruce, Jr., Director, Division of Physician and Health Professions Education, Bureau of Health Manpower Education, discussed the National Library of Medicine's participation in library construction project review. He described the relevant legislation since 1963; the changes which have evolved in the application, review, and award process; problems which have arisen; and the present status of funding.

On October 5, 1972, during the fall meeting of the Library's Biomedical Library Review Committee, a Conference was held to explore the areas of information and biomedical communications research. Dr. Susan Y. Crawford, who attended on behalf of the Board of Regents, summarized for the Board the five papers delivered at the Conference by authorities in the field, comments they elicited from assigned discussants, and resulting recommendations.

Before turning to the consideration of pending applications, Dr. Langley put before the Board proposed amendments to the Public Health Service Act regulations covering the award of Regional Medical Library projects and Construction Grants, with which it concurred. Board members further recommended approval of the Resource Grant application guidelines, as presented, concerning alteration and renovation projects, and recommended approval, with some modification, of a second set of guidelines concerning interaction between the Biomedical Library Review Committee and the Regional Medical Library directors. A third, related to collection development projects, was tabled.


Members were reminded of confidentiality and conflict-of-interest procedures and were requested to refrain from disclosing deliberations outside this meeting and to leave the room during the discussion of applications in which they might have a potential conflict of interest.

Dr. Roger W. Dahlen presented to the Board for consideration Research Grants, Publications Grants, the Distinguished Scholar Program, and Training Grants. Mr. Arthur J. Broering presented applications for Resource Grants and one Regional Medical Library Grant. (A list of applications approved is in Appendix A.) The Board also approved a number of interim actions (Appendix B).

ADJOURNMENT

The 43rd Meeting of the Board of Regents was adjourned at 3:45 p.m., November 21, 1972.

Respectfully submitted,


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

ACTIONS TAKEN BY THE BOARD OF REGENTS IN GENERAL SESSION

1. The Board approved the proposed policy statement (Appendix C) governing the provision of on-line services by NLM, including program objectives, operational model, and specific responsibilities.
2. The Board voted to approve a recommendation (Appendix D) by a Subcommittee of the Regional Medical Library Directors to authorize NLM to negotiate on behalf of all MEDLINE user institutions as a group to obtain the best possible rates for commercial or other information services for MEDLINE users.
3. The Board reaffirmed the written guidelines (Appendix E) for Extramural staff to use in adjusting amounts of grant awards.
4. The Board approved the suggestion to present certificates to recipients of Distinguished Scholar Awards.
5. The Board approved the proposed revised grant regulations (Appendix F) dealing with construction of health science library facilities and establishment of Regional Medical Libraries.
6. The Board approved proposed policies and procedures (Appendix G) for resource grant applications for alterations and renovations of health science libraries.
7. The Board approved, with amendment, the proposed guidelines (Appendix H) for interaction between the Biomedical Library Review Committee and Regional Medical Library Directors.

APPLICATIONS APPROVED BY COUNCIL, 1/
 (Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
2 R13 LM 00824-04	INTERNATIONAL MAMMALIAN HISTOLOGICAL NOMENCLATURE	04 3,650 05 4,550 06 10,050
1 R01 LM 01539-01A1	MORTALITY AND THE MEDICAL TREATMENT OF SLAVES	01A1 12,502 02 10,996 03 7,426
1 R01 LM 01660-01	CRITICAL REVIEW OF ELECTROCARDIOGRAPHY	01 15,035 02 15,931 03 17,141
1 R01 LM 01703-01	TO CATALOG MEDICAL LIBRARY OF PENNSYLVANIA UNIVERSITY	01 21,630 02 14,268
1 R01 LM 01778-01	EXPERIENCES WITH THE DUKE CURRICULUM	01 25,630

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

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 197

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE		AMOUNTS RECOMMENDED
1 R01 LM 01786-01	SYNTHESIS OF LITERATURE ON MOSQUITOES	01	16,325
		02	16,750
1 R01 LM 01803-01	MEDICINE AND MODERNIZATION IN EAST AFRICA, 1900-1960	01	6,362
1 R01 LM 01804-01			
	THE MEDICAL ENLIGHTENMENT, 1695-1750	01	13,250
		02	13,250
		03	13,250
1 R13 LM 01810-01	INTERNATIONAL ANATOMICAL NOMENCLATURE (U.S. PARTICIPATION)	01	4,000
		02	7,500
		03	5,000
1 R13 LM 01815-01	WORKSHOP ON MEDICAL DIFFUSION	01	6,648
1 R01 LM 01832-01			
	THE TRANSCRIBED BROADCAST DEMONSTRATION	01	52,000
		02	42,000

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 R01 LM 01834-01	MEDOC-MEDICAL DOCUMENTS INDEX	22,656
1 R01 LM 01843-01	AN EXPANDABLE SYSTEM FOR COMPUTER-BASED LEARNING	23,855
		24,657
		25,499
1 R01 LM 01855-01	INDEX TO COMPUTERIZED TEACHING IN THE HEALTH SCIENCES	6,136
		6,080
1 R01 LM 01857-01	CONTINUING EDUCATION NEEDS FOR MEDICAL LIBRARIES	30,050
		30,960
1 R01 LM HD 01886-01	SURVEY ON WORLDWIDE VARIATION IN HUMAN GROWTH AND PHYSIQUE	7,050
9 R01 LM HD 01893-03	AUTOPSY DISSECTION TECHNIQUE - A CINEMATOGRAPHIC ATLAS	5,835

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 T01 LM 00157-01		27,349
		49,663
	PH.D. PROGRAM IN BIOMEDICAL COMMUNICATION RESEARCH	57,774
		37,520
		5,591
1 T01 LM 00159-01		83,211
		109,187
	BIOMEDICAL COMPUTING AND INFORMATION PROCESSING	126,965
		141,273
		76,947

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01578-01A1	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01A1 3,640 02 8,090
1 G08 LM 01676-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 43,348
1 G08 LM 01678-01A1	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01A1 10,756 02 10,952
1 G08 LM 01681-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 11,295 02 11,830
1 G08 LM 01699-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 35,261 02 35,548
1 G08 LM 01710-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 25,000 02 25,000

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE	APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
	1 G08 LM 01711-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 19,000 02 19,000
	1 G08 LM 01716-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 35,135 02 35,135 03 35,135
	1 G08 LM 01757-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 66,514 02 57,285 03 18,950
	1 G08 LM 01777-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 49,000 02 49,000
	1 G08 LM 01819-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 23,710 02 23,061 03 24,077
	1 G08 LM 01844-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	01 35,000 02 35,000 03 35,000

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE		AMOUNTS RECOMMENDED
1 G08 LM 01845-01		01	15,586
	MEDICAL LIBRARY RESOURCE PROJECT GRANT	02	4,300
1 G08 LM 01846-01		01	5,012
	MEDICAL LIBRARY RESOURCE PROJECT GRANT	02	5,012
1 G08 LM 01848-01		01	1,575
	MEDICAL LIBRARY RESOURCE PROJECT GRANT		
1 G08 LM 01849-01		01	16,367
	MEDICAL LIBRARY RESOURCE PROJECT GRANT		
1 G08 LM 01858-01		01	11,424
	MEDICAL LIBRARY RESOURCE PROJECT GRANT	02	12,224
		03	13,079
1 G08 LM 01865-01		01	5,000
	MEDICAL LIBRARY RESOURCE PROJECT GRANT		

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01869-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	7,011
1 G08 LM 01870-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	29,867
		77,649*
		58,493*
1 G08 LM 01871-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	45,000
		35,000
		23,000
1 G08 LM 01872-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	15,500
		16,640*
1 G08 LM 01903-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	40,109
		29,057
		30,316
1 G08 LM 01936-01	MEDICAL LIBRARY RESOURCE PROJECT GRANT	24,503
		14,700
		6,050

*To be negotiated

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G08 LM 01940-01		01 10,905
		02 10,790
	MEDICAL LIBRARY RESOURCE PROJECT GRANT	03 6,750
1 G08 LM 01962-01		01 10,000
		02 8,000
	MEDICAL LIBRARY RESOURCE PROJECT GRANT	03 6,000

APPLICATIONS APPROVED BY COUNCIL
(Arranged numerically by program)

COUNCIL DATE: NOVEMBER 1972

INSTITUTE/DIVISION: NATIONAL LIBRARY OF MEDICINE

APPLICATION NUMBER	SHORT TITLE	AMOUNTS RECOMMENDED
1 G04 IM 01877-01		16,450
		14,000
	REGIONAL MEDICAL LIBRARY GRANT	12,700

01
02
03

INTERIM ACTIONS:

Consistent with the "Guidelines for Adjustments by Staff in Time and Amount of Grant Award," prescribing the conditions of staff negotiations with grantees, the following interim actions were taken:

Research Grants	- - -	1 increase
Publications Grants	- - -	3 decreases
Training Grants	- - -	4 decreases
Resource Grants	- - -	2 increases and 2 decreases

In addition, a change in a Research Grant principal investigator was administratively approved.

NATIONAL LIBRARY OF MEDICINE ON-LINE SERVICES PROGRAM POLICY STATEMENT

INTRODUCTION

The National Library of Medicine is committed to the development of a Biomedical Communications Network (BCN) to serve health services delivery, education and research.

The Regional Medical Library Program (RMLP) is one part of the development of the Library component of the BCN. Another part now assuming an increasingly important role in the development of the Library component of the BCN is a variety of on-line services. These services are now limited to MEDLINE (MEDLARS On-Line) but a variety of additional services are in development. These services will greatly increase the accessibility of the biomedical literature and will allow economies and improvements in medical libraries and information centers throughout the nation.

Since these new services facilitate access to the literature, the development of this aspect of the BCN must be coordinated with the RMLP to insure appropriate document delivery services and to improve the efficiency of the delivery service to meet the growing demand on-line services will place on this service.

The implementation of this program is to be achieved through NLM support of existing institutions willing and able to assume these additional service responsibilities. It is neither desirable nor necessary to build separate institutions for this purpose.

I. PROGRAM OBJECTIVES

A. General Objective

To develop an interactive cooperating network as a model for study, growth, and development of a nationwide Biomedical Communications Network designed for information transfer to support health services delivery, education, and research.

B. Immediate Objectives

To support the development and operation of a range of on-line information services for the nation's medical libraries. This network should include, but not be limited to, the following characteristics:

1. Rapid and efficient delivery of bibliographic and related information.
2. Optimal cost effectiveness of the services and the related document delivery services.

3. National coordination and regional management and planning.
4. Access to bibliographic services on a balanced basis to serve the fundamental purpose of the network, i.e., health services delivery, education, and research.

The network shall have the responsibility for providing access in an orderly fashion to the nation's health science information resources in order to supplement general formal and informal pre-existing arrangements; and shall provide for access to the information retrieval system even for health science practitioners and educators removed from major medical centers.

II. OPERATIONAL MODEL

A. General

The system design is generally not hierarchial except in its management aspects. The NLM and RML's exercise overall management and provide supporting services, e.g., training and trouble resolution, but each unit obtains service on an equal and self-sufficient basis.

B. First Level - The Basic Unit

On the assumption that every community hospital in this country may be thought of as having a fundamental continuing education obligation, the basic unit is best considered as an essentially independent, free-standing educational organization. This would include the following:

1. Hospitals.
2. Large institutions with meaningful health science education and training programs.
3. Other health-related schools--research organizations or governmental agencies.

There is a limit to the on-line services of the NLM, and they will be available to only a limited number of requesting institutions; however, the NLM will provide increasing capabilities to meet the legitimate needs of the medical community. Access to the service will be provided to institutions to achieve the immediate objectives above (I.B.).

C. Second Level

This level will be made up of selected institutions with significant library resources that would be designated as Participating Libraries. In most instances, these would be libraries of the nation's medical schools.

D. Third Level

The Regional Medical Library.

E. Fourth Level

The National Library of Medicine.

III. SPECIFIC RESPONSIBILITIES

A. All Levels

1. All elements agreeing to provide on-line services should function in a manner consistent with the rapidity inherent in such services. In general, no requests should be held more than one working day.
2. Prompt delivery of search results is mandatory. When feasible users should be encouraged to use the services themselves or at least be present when their requests are run. As a general rule, requests should not be returned or forwarded to another center. If the request is from outside the area of responsibility, unless inappropriate to the services, it should be fulfilled and the requestor informed where he should obtain the service in the future.

B. National Library of Medicine

The National Library of Medicine will be responsible for network operation, management and control; and national coordination of planning.

1. Basic policies shall be determined by the Board of Regents of NLM. The Board shall be kept informed by an annual report and review by NLM.
2. Network management and control by NLM will be implemented by the senior management group which will consist of the following:
 - a. Special Assistant for Program Planning and Evaluation
 - b. Associate Director, Library Operations
 - c. Associate Director, Computer and Communications Systems
 - d. Director, Lister Hill Center

3. The Associate Director, Library Operations, will be responsible for day-to-day management of the services providing a focal point for the operational services, training, and quality control of the services and data bases. In addition, he will provide for the impact of the service on the document delivery requirements.
4. The Associate Director, Computer and Communications Systems, will provide overall management of the services during their development and day-to-day management of the computer and communication resources providing the services.
5. The Director, Lister Hill Center, will plan the expansion of the network to meet geographic needs and plan the development of follow-on communication services.
6. National coordination of planning will be accomplished in collaboration with the Directors of the Regional Medical Libraries.

C. The Regional Medical Library

1. Will be responsible to the planning and management of a coordinated system within the region for provisions of library services, both on-line services and document delivery.
2. Will be a back-up for the education activities, supplying coordination and expertise in support of other medical libraries' education efforts within the geographic area of their responsibility.

D. The Participating Library

1. Requirements - The Participating Library must have the capacity to operate as a meaningful node in the network.
2. Responsibilities
 - a. Will support the information needs of the basic units located within its geographic area.
 - b. Will join with other Participating Libraries within the region in a coordinated effort to support network development.
 - c. Will undertake such coordinated educational activities for the basic units in its geographic area as it deems necessary for the implementation of the regional plan.

E. The Basic Unit

Will indicate its willingness to underwrite the continuing costs of its participation. The willingness of the basic unit to meet these conditions will be reflected in a signed agreement between the unit and the NLM. Prerequisites include, but are not limited to:

1. Adequate staff to supervise and manage the service within the basic unit and assure effective communication with the network.
2. Agreement to pay communication charges between basic unit and the network
3. Announcement activities to all health professionals in their locality.

IV. NETWORK STATUS AND PLANNING

The on-line bibliographic service is now nearing completion of Phase I in its development. The NLM, RML's and Participating Libraries are now or are becoming users of the services. Phase II will extend these on-line services to basic units in the regions. There are now about 120 using institutions. By the end of 1973, a total of 250 institutions/terminals should be provided.

The following criteria will apply in the selection of basic units:

A. Geographic Equity

The NLM will generate estimates based on total physician population for the 250 institution/terminals by state and region. These will be suggested estimates only and leeway and judgment should be expected in regional plans based on them.

B. Purpose Balance

The initial group of Phase I users of the on-line services have provided a high level of support to education and research institutions. Phase II should, therefore, concentrate on insuring accessibility to health professionals engaged in health care delivery.

C. Economy and Efficiency

Priority will be given to basic units which can provide the service free of charge or at low cost to their users. In addition, to reduce the impact of the service on the document delivery system, priority will be given to basic units which hold or plan to acquire on a cooperative basis at least 70 of the principal journals usually requested. Exceptions may be made for remote communities.

SUBCOMMITTEE RECOMMENDATION FOR NON-NLMON-LINE LIBRARY SERVICES

The RML Directors' Subcommittee on the Use of the On-Line Information Services recommends that NLM negotiate for the MEDLINE users as a group to obtain the best possible rates for such services to the members who wish to use them. This in no case, will constitute endorsement by NLM or the RML's of such services. In principle, any minimum charge should be recovered from using institutions with NLM as a participating institution. The Subcommittee will develop guidelines for such negotiations and identify desirable services.

GUIDELINES FOR ADJUSTMENTS BY STAFF
IN TIME OR AMOUNT OF GRANT AWARD

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.
 - (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

MEMORANDUM

APPENDIX F
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

TO : Arthur J. Broering, EMP, NLM

DATE SEP 20 1972

FROM : Director, DPHPE

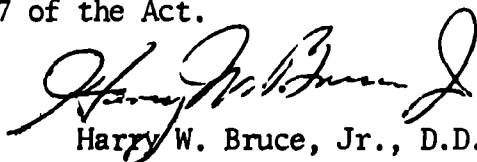
SUBJECT: Revised Regulations

This is in reply to your request of September 11 for comments on the proposed revision of regulations for the Medical Library Construction Program.

I have one comment. Subpart A does not make it readily discernible that the contract authority is not applicable to the construction of medical library facilities authorized by Section 393. The following, if acceptable to General Counsel, would clarify the applicability of contract authority:

§59a1. Applicability

The provisions of this subpart apply to the award of grants for the construction of medical library facilities as authorized by Section 393 of the Act and to the award of grants and contracts for the construction of regional medical libraries as authorized by Section 397 of the Act.


Harry W. Bruce, Jr., D.D.S.

MEMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY

SEP 1 1972

OFFICE OF THE GENERAL COUNSEL

TO : Mr. Arthur S. Broering
Chief, Resources Division
Extramural Programs, NLM

DATE: August 23, 1972

FROM : William G. Ketterer *W.G.K.*
Attorney Advisor, NIH
Public Health Division

SUBJECT: Regulations (42 CFR Part 59a, Subparts A and C)--Grants for Construction of Medical Libraries and Establishment of Regional Medical Libraries-- Proposed Amendments Under P.L. 91-212

Attached for consideration by the Board of Regents is a draft notice of proposed rule making proposing amendments to the Public Health Service regulations governing the award of grants for construction of medical libraries and establishment of regional medical libraries under section 393 and section 397 (formerly section 398) of the Public Health Service Act, as amended by P.L. 91-212. In addition, we have included proposed amendments to implement Reorganization Plan No. 3 of 1966 and Reorganization Orders of the Secretary thereunder.

Although regulations relating to grants are exempt from the public rule making procedures of the Administrative Procedure Act (5 U.S.C. § 553(a)(2)), we have prepared them in the form of a notice of proposed rule making with 30 days opportunity for public comment in accordance with the directive of the Secretary requiring utilization of the public participation procedures of that Act for all such regulations of the Department.^{1/} In the interest of implementing the statutory changes which were enacted March 13, 1970, without further delay, we have provided in the preamble that the amendments would become effective immediately upon republication in the Federal Register.

The proposed regulations are largely self explanatory. Particular provisions which merit comment are discussed briefly below.

^{1/} Memorandum, The Secretary to Assistant Secretaries and Agency Heads-- Public Participation in Rule Making, October 12, 1970.

(1) Addition of Contract Authority: The principle change has been to revise both subparts to authorize the award of contracts for the stated program purposes in lieu of grants (§ 59a.1, 59a.3, 59a.5a, 59a.31, 59a.33 and 59a.35). We have cleared such provisions with Mr. Henry Pike of the Business and Administrative Law Division which has general responsibility for preparation of regulations involving contracts. The approach taken is simply to authorize, not require, the award of a contract in lieu of a grant to carry out program purposes to eligible applicants and to make all the provisions of Subparts A and C equally applicable to any such contracts.

Such change is authorized under subsection (f) of section 397 of the Public Health Service Act which was added by P.L. 91-212. That subsection reads as follows:

"(f) The Secretary may also carry out the purposes of this section [i.e., section 397] through contracts, and such contracts shall be subject to the same limitations as are provided in this section for grants".

Section 397 authorizes grants to public or private nonprofit medical libraries^{2/} to enable them to serve as regional medical libraries for the geographical area in which they are located. Section 397 also authorizes grants for "construction, renovation, rehabilitation or expansion of physical plant"^{3/} of such libraries and provides that such grants "shall be made in the same manner and subject to the same conditions as are provided for grants made under section 393 ... "^{4/} Present regulations governing the award of grants under section 397 (except construction) are set forth in Subpart C of Part 59a; and the regulations governing grants for construction of medical library facilities under section 393 and construction of regional medical libraries under section 397 are covered in Subpart A of Part 59a.

We would therefore read subsection (f) of section 397 as authorizing contracts (1) to establish and maintain regional medical libraries and (2) for construction, renovation, rehabilitation and expansion of

^{2/} Interpreted in the regulations to mean "institutions authorized and qualified to carry on the functions of a medical library" 42 C.F.R. § 59a.31.

^{3/} Section 397(b)(6), Public Health Service Act, as amended by P.L. 91-212.

^{4/} Id. section 397(d).

such libraries pursuant to the same terms and conditions of section 393. Accordingly, in order to implement fully the additional authority set forth in subsection (f) of section 397 it would be necessary to amend both Subparts A and C of the existing regulations.

(2) § 59a.37(b)(1) Service Undertakings. (Amendment 2.i). This subparagraph has been revised to conform to the amendment to section 397(c)(1)(A) of the Public Health Service Act under which grantees must agree "to modify and increase their library resources, and to supplement the resources of cooperating libraries in the region, so as to be able to provide adequate supportive services to all libraries in the region as well as to individual users of library services."

(3) § 59a.38(a) Termination by the Secretary. (Amendment 2.j). Deletion of the term "Surgeon General" and substitution of the term "Secretary" in lieu thereof would necessitate revision of this paragraph relating to termination of awards, since it presently provides for termination only by the Surgeon General (or the Acting Surgeon General or the Deputy Surgeon General)^{5/} with final review "by the Secretary". The paragraph has been patterned largely after the termination provision for research project grants (42 C.F.R. § 52.15(b)), except that the right of a grantee to request reconsideration of such termination has been preserved.

After the draft regulations have been reviewed by the Board of Regents, please return the draft with any changes they may recommend to this office for preparation in final form appropriate for publication in the Federal Register.

Enclosure

^{5/} 42 C.F.R. § 59a.32(c) defines Surgeon General as including delegates "except that as used in § 59a.37 [sic] the term Surgeon General shall mean only the Surgeon General, the Deputy Surgeon General, or an Acting Surgeon General" The reference to § 59a.37 is probably a typographical error. The section relating to termination of awards (i.e., § 59a.38(a)) was probably intended, as is the case with respect to termination of grants for basic resources under Subpart B. See 42 C.F.R. § 59a.12(c).

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

[42 CFR Part 59a]

MEDICAL LIBRARY ASSISTANCE

Grants for Construction of Medical Library Facilities
and Establishment of Regional Medical Libraries

Notice is hereby given that the Director, National Institutes of Health, with the approval of the Secretary of Health, Education, and Welfare, proposes to amend Subparts A and C of Part 59a of the Public Health Service regulations governing the award of grants for construction of medical library facilities and establishment of regional medical libraries under section 393 and section 397 (formerly section 398) of the Public Health Service Act, in order to implement amendments to those sections made by the Medical Library Assistance Extension Act of 1970, Public Law 91-212. The proposed amendments were prepared with the advice and assistance of the Board of Regents of the National Library of Medicine.

In addition, it is proposed to amend those regulations to reflect Reorganization Plan No. 3 of 1966 and Reorganization Orders of the Secretary of Health, Education, and Welfare of March 13 and April 1, 1968 (33 F.R. 4894, 5426).

Inquiries may be addressed, and data, views and arguments relating to the proposed regulations may be presented in writing, in triplicate, to the Director, National Institutes of Health, 9000 Rockville Pike, Bethesda, Maryland 20014. All comments received will be available for public inspection in the Office of the Associate Director for Extramural Programs, Room 1016B, Federal Building, 7550 Wisconsin Avenue, Bethesda, Maryland, week days (Federal holidays excepted) between the hours of 8:30 a.m. and 5 p.m. All relevant material received not later than 30 days after publication of this notice in the FEDERAL REGISTER will be considered.

Notice is also given that, in light of the public interest in enabling the Secretary to award grants and contracts under the medical library assistance programs involved without further delay, it is proposed to make any amendments that are adopted effective upon publication in the FEDERAL REGISTER.

Dated:

Director, National Institutes of Health

Approved:

Secretary

It is therefore proposed to amend Part 59a of 42 CFR as follows:

1. Amend Subpart A as follows:

a. Amend the title of Subpart A to read as follows:

Subpart A--Grants and Contracts for Construction of Medical Library Facilities

b. Amend the table of contents of Subpart A by adding the following entry immediately after "59a.5 Approval of grants.":

59a.5a Contracts.

c. Revise the issuing authority for Subpart A to read as follows:

Authority: The provisions of this Subpart A issued under secs. 392, 393, 397, 79 Stat. 1060, 1060, 1065, as amended; 42 U.S.C. 280b-2, 280b-3, 280b-8.

d. Delete all references in Subpart A to "Surgeon General" and "Surgeon General's" and substitute in lieu thereof the term "Secretary" or "Secretary's", respectively.

(Reorg. Plan No. 3 of 1966; 3 CFR 1966 - 1970 Comp.; Reorg. Ords. and Delegations of Mar. 13 and Apr. 1, 1968 (33 F.R. 4894, 5426))

e. Amend § 59a.1 to read as follows:

§ 59a.1 Applicability.

The provisions of this subpart apply to the award of grants and contracts for the construction of medical library facilities as authorized by section 393 and section 397 of the Act (42 U.S.C. 280b-3, 280b-8).

f. Amend § 59a.2 by deleting paragraph (c) and substituting in lieu thereof the following new paragraph (c):

§ 59a.2 Definitions.

* * * * *

(c) "Secretary" means, unless the context otherwise requires, the Secretary of Health, Education, and Welfare, and any other officer or employee of the Department of Health, Education, and Welfare to whom the authority involved has been delegated.

* * * * *

g. Amend § 59a.3 by adding after the word "grant" the words "or contract" and by redesignating the citation "section 398" as "section 397". As amended § 59a.3 would read as follows:

§ 59a.3 Eligibility.

In order to be eligible for a construction grant or contract the applicant must:

(a) Meet the requirements of section 393 or section 397 of the Act, whichever is applicable, and

(b) Be located in a State.

h. Amend § 59a.4(e) by redesignating "section 398" as "section 397".

1. Amend Subpart A by adding immediately after § 59a.5, the following new section:

§ 59a.5a Contracts.

In lieu of making a grant for construction, renovation, rehabilitation or expansion of a regional medical library as authorized by section 397 of the Act, the Secretary may enter into a contract with an eligible

applicant for such purposes. In addition to other applicable laws and regulations, the provisions of this subpart shall be applicable to such contracts.

j. Amend § 59a.6 by deleting in the second sentence after the word "Secretary" the phrase "of Health, Education, and Welfare".

k. Amend § 59a.7(j) by deleting the proviso after the word "facility". As thus amended, paragraph (j) would read as follows:

§ 59a.7 Terms, conditions, and assurances.

* * * * *

(j) That sufficient funds are available to meet the non-Federal share of the cost of constructing the facility.

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2. Amend Subpart C as follows:

a. Amend the title of Subpart C to read as follows:

Subpart C--Grants and Contracts for Establishment of Regional Medical Libraries

b. Revise the issuing authority for Subpart C to read as follows:

Authority: The provisions of this Subpart C issued under secs. 392, 397, 79 Stat. 1060, 1065, as amended; 42 U.S.C. 280b-2, 280b-8.

c. Delete all references in Subpart C to "Surgeon General" and substitute the term "Secretary" in lieu thereof.

(Reorg. Plan No. 3 of 1966; 3 CFR 1966 - 1970 Comp.; Reorg. Ordé. and Delegations of Mar. 13 and Apr. 1, 1968 (33 F.R. 4894, 5426))

d. Amend § 59a.31 to read as follows:

§ 59a.31 Applicability.

The provisions of this subpart apply to the award of grants and contracts to public or private nonprofit institutions authorized and qualified to carry on the functions of a medical library, to establish and maintain regional medical libraries for the geographic areas in which they are located, as authorized by section 397 of the Act (42 U.S.C. 280b-8). Grants and contracts for construction of such libraries are covered in Subpart A of this part.

e. Amend § 59a.32 by deleting paragraph (c) and substituting in lieu thereof the following new paragraph (c):

§ 59a.32 Definitions.

* * * * *

(c) "Secretary" means the Secretary of Health, Education, and Welfare and any other officer or employee of the Department of Health, Education, and Welfare to whom the authority involved has been delegated.

* * * * *

f. Amend § 59a.33 by adding after the word "grant" the words "or contract" and by redesignating the citation "section 398" as "section 397". As amended § 59a.33 would read as follows:

§ 59a.33 Eligibility.

In order to be eligible for a grant or contract the applicant must:

- (a) Meet the criteria specified in section 397 of the Act, and
- (b) Be located in a State.

g. Amend § 59a.35 to read as follows:

§ 59a.35 Award.

- (a) Grants. The Secretary, with the counsel and advice of the

National Medical Libraries Assistance Advisory Board, shall award a grant to those applicants whose arrangements and proposed services will in his judgment best promote the purposes of section 397 of the Act.

(b) Contracts. In lieu of making a grant, the Secretary may enter into a contract with an eligible applicant to establish and maintain a regional medical library under section 397 of the Act. In addition to other applicable laws and regulations, the provisions of this subpart shall be applicable to such contracts.

h. Amend § 59a.36 by deleting in the second sentence after the word "Secretary", the phrase "of Health, Education, and Welfare".

i. Amend § 59a.37 by revising paragraph (b)(1) to read as follows:
§ 59a.37 Terms, conditions, and assurances.

* * * * *

(b) Service undertakings. (1) The grantee shall agree to modify and increase its library resources, and to supplement the resources of cooperating libraries in the region, so as to be able to provide adequate supportive services to all libraries in the region as well as to individual users of library services.

* * * * *

j. Revise § 59a.38(a) to read as follows:
§ 59a.38 Termination.

(a) Termination by the Secretary. Any grant or contract may be revoked by the Secretary in whole or in part at any time when, in his judgment, the grantee or contractor has failed in a material respect

to comply with the Act or the regulations of this subpart. The grantee or contractor shall be promptly notified in writing of any such determination and given the reasons therefor. Within 10 days after receipt of such notice, or such longer period as the Secretary may allow, the grantee or contractor may request a reconsideration of such termination and shall be afforded an opportunity to present, orally or in writing, such information or argument as may be pertinent.

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Policies and Guidelines for
ALTERATION AND RENOVATION PROJECTS

I. POLICIES

A. Legislation

Grant funds are available for the cost of making minor alterations and renovations.

From: Public Health Service Rules and Regulations: "Grants for Improving or Expanding Basic Resources," Title 42, Chapt. 1, Subchapter D, Part 59a22b.

B. Qualification as Project Grant

Alteration and Renovation (A & R) costs qualify for Resource Project Grant support provided the building has a usable life of not less than two years and is architecturally suitable for conversion to or retention of the library function. A & R costs are limited to the cost of modifying existing space and utilities within a completed and finished structure.

Architectural and related fees and the cost of adapting any of the following building features are allowable:

1. Physical characteristics: interior dimensions (walls, partitions, ceilings), surfaces and finishes.
2. Environment: temperature, humidity, ventilation, acoustics.
3. Utilities: plumbing and electricity.
4. Furniture: user carrels, tables, chairs, shelving, index tables, card catalog files, desks and office furniture.

The following costs are not allowable:

1. New construction including additional new floor area, enclosure of porches, finishing unexcavated areas, completion of "shell" areas.
2. Relocation of exterior walls.
3. Routine maintenance of physical plant or equipment.
4. Purchase of office equipment including typewriters; purchase of photocopiers, terminals and audiovisual equipment.

NOTE: Any costs, except architectural fees, incurred prior to receipt of a "Notification of Grant Awarded" are not eligible for grant support.

C. Grant Limitations

The aggregate cost to the grant of any single A & R project is limited to a maximum of 75% of the total allowable cost up to a maximum of \$50,000.

II. INSTRUCTIONS FOR PREPARING APPLICATIONS FOR A & R PROJECTS

- A. Substitute for Page 5, "Detailed Project Grant Budget," of the application a cost estimate similar to Attachment A.
- B. In lieu of the project plan narrative outline (see Page 14 of the Project Grants Policy Statement, "II. Instructions for Preparing the Application; C. Completion of Page 7 and Succeeding Pages") applicants for A & R projects should use the following guide:

1. Statement of Need

Describe present physical facilities and indicate why they are inadequate in size, location, convenience, function, attractiveness, etc.

2. Scope of Work

Provide a general description of the extent of the proposed work. Include details of any design criteria, such as lighting levels and acoustical treatment.

3. The Proposed Library

- a. Indicate proposed administrative organization and services of renovated library.
- b. Provide information on the proposed size of collection, rate of growth, development of non-book media collection, etc.
- c. Describe expected changes in the type, scope or magnitude of the services to be provided. Indicate how new facilities will permit the improvement or expansion of services or the creation of new services.
- d. Indicate the scope of current services to the community of users not associated with the applicant institution and describe any expansion of these services after completion of the project. If extramural library services are now provided or are to be provided, the applicant should show an awareness of regional and subregional activities and should indicate how his own extramural service plans complement the regional services.

4. Matching Funds

Indicate the non-Federal source of matching funds for the alteration and renovation project. Explain whether funds are on hand or anticipated. If funds are on hand or if an institutional commitment is assured, provide documented evidence signed by an authorized institution official. Generally, an A & R award will not be made until the availability of the non-Federal matching support is assured.

C. Documents Required

1. Two sets of schematic floor plans (1/4" or 1/8" scale) showing work to be done.
2. Two sets of floor plans showing existing conditions of the area to be renovated.
3. Two copies of outline specifications for the proposed work. Enclose the floor plans and specifications with the single copy of the application which is to be sent to the Resources Division, Extramural Programs. DO NOT SEND TO THE DIVISION OF RESERACH GRANTS (see Project Grants Policy Statement, "II, Instructions for Preparing the Application; A. General Instructions, Pages 6 and 7").

D. Additional Information

1. All designs must comply with local building codes.
2. If the A & R project is to be accomplished by the competitive bidding method, the contractor(s) must comply with the Equal Employment Opportunity standards (see Attachment B). Those standards must be made a part of the final bidding documents and the final contract.

Projects may also be undertaken by the institution's physical plant personnel depending on the complexity of the A & R work and the qualifications of physical plant department. If the A & R project is to be done by this "force account" method, the schematic drawings and outline specifications should be accompanied by a statement which provides evidence that the physical plant department is qualified to accomplish the proposed work, for example, a description of work, of a similar scope, which has been accomplished by the institution's own personnel. Use of "force account" is not recommended for projects exceeding \$25,000. All costs for "force account" work must be substantiated by appropriate receipts for the purchase of materials and certified pay records for the labor, or the charge will not be allowed at audit.

ATTACHMENT A

COST ESTIMATE OUTLINE - ALTERATION AND RENOVATION PROJECT

_____ Date _____ Institution _____

Estimate the total costs of the project in which the Federal Government is requested to participate:

- 1. Demolition \$ _____
- 2. General Construction (carpentry, masonry, painting, etc.) \$ _____
- 3. Plumbing \$ _____
- 4. Heating, Ventilation and Air Conditioning \$ _____
- 5. Electrical \$ _____
- 6. Furniture (attach itemized price list) \$ _____
- 7. Architect's & Engineer's Fee \$ _____
- 8. Other Costs (specify) \$ _____
\$ _____
\$ _____ \$ _____
- 9. Total Alteration and Renovation Costs \$ _____
- 10. Maximum Grant Request (0.75 x Line 9, but not more than \$50,000) \$ _____

Total net square feet (n.s.f.) of floor area in alteration and renovation proposal _____ n.s.f.

Estimated cost per net square foot $\frac{\text{(total \$)}}{\text{(total n.s.f.)}}$ \$ _____

Source of this estimate _____

EQUAL OPPORTUNITY CLAUSE¹

(The following clause is applicable unless this contract is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR, ch. 60).)

During the performance of this contract, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this Equal Opportunity clause.

(b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, "a notice to be provided by the agency Contracting Officer," advising the labor union or workers' representative of the Contractor's commitments under this Equal Opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(e) The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the Contractor's noncompliance with the Equal Opportunity clause of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) The Contractor will include the provisions of paragraphs (a) through (f) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however,* That in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

¹On or after October 14, 1968, the term "race, color, religion, sex, or national origin" is substituted for the term "race, creed, color, or national origin," as provided by Executive Order No. 11375, October 13, 1967 (32 F.R. 14303).

**Guidelines for Interaction Between
The National Library of Medicine,
Biomedical Library Review Committee
And
Regional Medical Library Directors**

Background

The Biomedical Library Review Committee (BLRC) is responsible for the review and evaluation of grants submitted under the Medical Library Assistance Extension Act. In June 1971, a subcommittee of the BLRC was assigned a task of evaluating the status of the Regional Medical Library Program. One of the observations of the subcommittee concerned the absence of a mechanism for interaction between the BLRC and the RML Directors on matters of regionally related grant applications. It is, of course, essential in a peer group review system that the reviewers have adequate information to make judgments on the overall quality and the relative merit priority of proposals considered by them. In the Resource Grant and Regional Medical Library Grant Programs the quality and merit of individual proposals are closely related to the regional operation and plans for development. Therefore, up-to-date knowledge, on the part of the BLRC, of the regional activities and plans is a prerequisite for making judicious recommendations on the proposals. The BLRC believes that they do not now have complete access to this knowledge. Their concern is more than simply a need to know whether a grant request conflicts with, duplicates or overlaps the regional activities. It is also a need to be able to assess the potential of a project to complement the regional operation and enhance its development.

With regard to the Resource Grants, the subcommittee of the BLRC realizes the problem regarding: 1) a reluctance of the RML Director to be placed in the position of an arbiter ("political pressure") and 2) time and geographic restraints which prevent the Director from acting as a comprehensive fact gathering agency for his region. At least the first of these problems should not exist with the Regional Grant Program since, by definition, these projects are developed cooperatively with the Regional Director.

Any conceivable Regional Grant application is inherently dependent on a regional plan. Since each prime contractor for RML services is responsible for the provision of network management for regional services, the coordination of activities within the region, implementation of NLM directives and planning for orderly growth and development of the network, it seems clearcut that the BLRC must have input directly from the RML Director relative to the place and priority in the RML plan of all Regional Grant proposals.

I. Regional Medical Library Grants

A. General Description

The RML Grant is available to the RML and the Regional Participating Libraries, defined as those major libraries with a specific geographic area of network responsibility. It is an important tool for the support experimental, developmental and innovative programs designed to assist the RML in implementing plans for orderly growth and development. RML Grant proposals, by definition, must have had their genesis in an RML development plan. They are not simply another source of support for which eligible libraries within a region compete with each other to resolve individual or subregional problems or satisfy individual or subregional needs. They are rather a means to mount a coordinated effort to build the region in a systematic manner.

B. Procedure

It is proposed that all RML Grant applications include a discussion prepared under the direction of the RML Director which describes in detail how the grant project relates to the regional plan. This discussion should contain elements which will enable the BLRC to arrive at a recommendation in light of the specific information about relevant regional services, regional problems and regional needs. These comments will be carefully considered by the Committee in their evaluation process, together with national factors which may bear a relationship to the project. It is important to emphasize that the RML Director's comments concerning the project's importance to the regional operation are also vital factors in the overall review.

Whether the information presented in the RML Grant application is provided by the RML Director individually or whether it is the result of joint authorship involving the Advisory Committee or Executive Committee or directors of Participating Libraries is not specified and may vary from region to region or within the region, depending on the nature of the proposal. The mechanism would be left to the respective RML Directors.

II. Medical Library Resource Project Grants

A. General Description

The BLRC's subcommittee suggested a few procedures which they believed would ameliorate the problems of political pressure and geographic restraints relative to the RML Directors' input on Resource Grants. For example, they believed that assigning the

preliminary review responsibility to an advisory group or council and involving the subregional (Participating) libraries would resolve these concerns. However, there are NIH grant management policies relative to the establishment of grant review committees, treatment of privileged information, use of ad hoc consultants and avoidance of conflicts of interest, which make such suggestions difficult to implement.

Two fundamental principles determined the proposed procedures for RML-BLRC interaction on Resource Project Grants:

1. Project Grants can be most effectively used to complement the Regional Program if the RML staff is involved from the beginning, assisting inexperienced applicants concerning the technical aspects and methodology of the project and advising all applicants concerning the appropriateness of the project relative to the regional activities and plans. This will afford a greater degree of management and control (particularly for projects closely related to regional activities) than simply suggesting that applicants provide a copy of a completed proposal for reaction by the RML Director.
2. It is not the primary purpose of the RML to provide a critical review of the technical aspects of Project Grant proposals; this is the function of the Biomedical Library Review Committee.

B. Procedure

Instructions for Resource Grant proposals will include a foreword on the interrelationships of the Project Grants and the Regional Medical Library Program. Applicants will be urged to contact RML officials prior to preparing their applications to discuss the nature and purpose of the proposal. The foreword should make clear to the applicants that, although the BLRC and Board's recommendations on applications will not be determined on the basis of its relationship to the regional plan, they will be influenced by this factor. Staff believe that with an emphasis on the importance of the Regional Director's input, most Resource Project Grant applicants will seek out this pre-application contact.

The subcommittee of the BLRC indicated that a good case can be made for the relationship of any Resource Grant to the regional development plan. Thus, for all grant proposals, staff will provide the RML with the following data: name and location of applicant institution; name of individual responsible for the project; an abstract of the proposal including length of project period and other pertinent information relative to actual or potential regional or subregional involvement. The RML Director will be asked to comment specifically on how the project relates to regional planning.

As soon as NLM staff learns that a Resource Project Grant application is to be submitted (i.e., through a verbal communication, a "letter of intent," a draft proposal, or the actual application), they will inform the appropriate Regional Medical Library Director immediately, unless it is evident that the RML Director is aware of the details of the proposal. This will permit the Director to interact with the applicant at the earliest possible time, and prior to the availability of the staff-prepared abstract.

C. Comments

1. It should be made clear to the applicant that the nature of the competitive grant review mechanism is such that whatever assistance is provided, no assurance can be given that a proposal will be approved or if approved that it can be funded. Although the extramural staff of NLM will make every effort to keep the RML Director informed of the policies and other review considerations (see III, Follow-up) the applicant will also be encouraged to discuss the proposal with the appropriate NLM staff member.
2. The RML Director should not neglect the possibilities of utilizing the Resource Grant mechanism to further influence regional development. As strengths, weaknesses, and potentials are identified within the region the RML Director may wish to encourage an application or a group of similar applications from local first and second level libraries.
3. In providing answers to the questions on Project Grant applications the RML Director may request assistance from the Advisory Committee and the Participating Library in the area of the applicant institution and is free to supply the Participating Library with the abstract and other data provided by NLM. However, if the applicant provides the Director with a copy of the application this should be treated as confidential information and should not be sent to Participating Libraries or others without the permission of the applicant.

III. Follow-up

In addition to the procedures suggested above it is also believed to be important for the RML Directors to be kept informed about: Resource Improvement applications and awards from their regions; awards made for Project Grants; and policy decisions and recommendations by the Committee and the Board of Regents.

Continued assessment of changing regional resources and services, identification of newly established hospital libraries assisted through the Improvement Grant, an awareness of the implementation

of innovative technical projects, etc. will assist the RML Directors in their regional planning efforts. Thus, the following information will be provided to the Directors by NLM staff:

1. At the end of each quarter of the fiscal year a list of Resource Improvement Grant applications and their review status will be forwarded to the Director.
2. As Project Grants are funded the notice of award will be sent to the RML Director at the same time this document is sent to the grantee.
3. As policy decisions or recommendations which affect grant operations are made by the Board of Regents, the RML Directors will be provided with details on the nature and reason for the decisions.
4. Other items of interest, such as the terminal reports for particularly innovative or successful projects, problems occurring in the implementation of projects, etc. will be provided to the RML.

Finally, so that the review committee members can put the activities of an individual RML in the context of network planning and development, reports by the NLM staff and the RML Evaluation Subcommittee will be periodically submitted to the BLRC.

Appendix A

Type of Grant	Eligible Libraries	Deadline Dates for applications	Purpose	Grant Duration	Grant Limitation
Regional Medical Library Grant (Regional Grant-RML Grant)	RML's & participating Regional Resource Libraries	Feb. 1, June 1, & Oct. 1 of each year	Projects to complement Regional operation or to assist in regional development by research, demonstration or development.	One to three years	Limited by Program Appropriation
Resource Project Grant (Project Grant)	Any non-profit, non-federal library primarily related to health	March 1, July 1, and Nov. 1 of each year	Projects to improve services of an individual library or of a consortium of community libraries	One to three years	\$200,000 for fiscal year t primarily financed by program appropriation
Resource Improvement Grant (Improvement Grant)	Same as Project Grant	None - applications can be submitted at any time	Grants for acquisition of basic library materials at institutions which need to establish a library or which need to bring existing libraries up to minimum standards	One year	\$3,000 plus bonus for training cost