

## **National Library of Medicine - HNL**

(1) Assists the advancement of medical and related sciences through the collection, dissemination, and exchange of information important to the progress of medicine and health; (2) serves as a national information resource for medical education, research, and service activities of Federal and private agencies, organizations, and institutions; (3) serves as a national information resource for the public, patients, and families by providing electronic access to reliable health information issued by the National Institutes of Health and other trusted sources; (4) publishes in print and electronically guides to health sciences information in the form of catalogs, bibliographies, indexes, and online databases; (5) provides grant support for medical library development and for training of biomedical librarians and other health information specialists; (6) conducts and supports research in methods for recording, storing, retrieving, preserving, and communicating health information; (7) creates information resources and access tools for molecular biology, biotechnology, toxicology, environmental health, and health services research; and (8) provides technical consultation services and research assistance.

**Office of the Director - HNL1**

(1) Directs and coordinates Library activities; (2) advises the NIH Director on policy relating to the management and control of biomedical communications media; (3) studies, identifies, and defines needs in biomedical communications; and (4) provides the secretariat for the Board of Regents of the National Library of Medicine.

## **Office of Administration - HNL12**

(1) Plans and directs administrative management functions of the Library including financial management, personnel management, contracts management, administrative services, management analysis, and legislation; (2) advises the NLM Director and the Divisions on developments in administrative management and their implications and effects on program management; and (3) coordinates administrative management activities of the Divisions of the Library.

**Office of the Director - HNL121**

Plans, directs, and coordinates the administrative management functions of the Library.

## **Office of Acquisitions - HNL123**

(1) Manages and conducts a comprehensive program of all research and development contracting, non-research and development contracting, station support contracting, commercial item acquisitions using simplified acquisition procedures, GSA Federal Supply Schedule acquisitions and simplified acquisitions for customer ICs. (2) Provides advice and assistance regarding all phases of the acquisition cycle from planning to closeout with the purpose of accomplishing all acquisitions needed for the scientific mission and all related acquisitions required by its customers.

## **Contracts Branch 1 - HNL1232**

(1) Plans, manages and carries out research and development contracting and consolidated station support/simplified acquisitions activities in support of the NLM missions and client service centers, including the solicitation, negotiation, coordination, awarding, and monitoring of all actions; (2) works with program staff and provides advice and guidance to support their activities in the most effective and efficient manner; (3) develops guidelines, procedures, and internal controls to ensure proper and continuing implementation of NIH and other applicable policies, laws and regulations; (4) coordinates with other branches within the NLM Office of Acquisitions Management and elsewhere at NIH to develop new approaches and identify and implement best practices; and (5) provides liaison support and representation to the greater NIH acquisition community.

## **Contracts Branch 2 - HNL1233**

(1) Plans, manages and carries out research and development contracting and consolidated station support/simplified acquisitions activities in support of the NLM missions and client service centers, including the solicitation, negotiation, coordination, awarding, and monitoring of all actions; (2) works with program staff and provides advice and guidance to support their activities in the most effective and efficient manner; (3) develops guidelines, procedures, and internal controls to ensure proper and continuing implementation of NIH and other applicable policies, laws and regulations; (4) coordinates with other branches within the NLM Office of Acquisitions Management and elsewhere at NIH to develop new approaches and identify and implement best practices; and (5) provides liaison support and representation to the greater NIH acquisition community.

### **Contracts Branch 3 - HNL1234**

(1) Plans, manages and carries out research and development contracting and consolidated station support/simplified acquisitions activities in support of the NLM missions and client service centers, including the solicitation, negotiation, coordination, awarding, and monitoring of all actions; (2) works with program staff and provides advice and guidance to support their activities in the most effective and efficient manner; (3) develops guidelines, procedures, and internal controls to ensure proper and continuing implementation of NIH and other applicable policies, laws and regulations; (4) coordinates with other branches within the NLM Office of Acquisitions Management and elsewhere at NIH to develop new approaches and identify and implement best practices; and (5) provides liaison support and representation to the greater NIH acquisition community.



#### **Contracts Branch 4 - HNL1235**

(1) Plans, manages and carries out research and development contracting and consolidated station support/simplified acquisitions activities in support of the NLM missions and client service centers, including the solicitation, negotiation, coordination, awarding, and monitoring of all actions; (2) works with program staff and provides advice and guidance to support their activities in the most effective and efficient manner; (3) develops guidelines, procedures, and internal controls to ensure proper and continuing implementation of NIH and other applicable policies, laws and regulations; (4) coordinates with other branches within the NLM Office of Acquisitions Management and elsewhere at NIH to develop new approaches and identify and implement best practices; and (5) provides liaison support and representation to the greater NIH acquisition community.

## **Office of Financial Management - HNL124**

(1) Conducts the financial management program of the NLM including the formulation and execution of the budget, administration of fiscal and budgetary controls, financial reporting, cost accounting for products and services, cost comparison studies, and development of recommendations for improving the utilization of financial resources; and (2) develops financial management policies and procedures, and advises program officials in the implementation of these procedures.

## **Office of Administrative and Management Analysis Services - HNL125**

(1) Provides a wide range of administrative services to NLM program areas to include property management, mail services, telecommunications, reprographics, and transportation; (2) oversees facilities maintenance within the NLM complex of buildings to include all repairs and renovations; (3) provides all program areas with management analysis services including organization and management studies, directives management, records management, and conference management; (4) directs NLM's occupational health and safety program and oversees NLM asset and employee security; and (5) maintains a centralized office supply service.

## **Office of Computer and Communications Systems - HNL13**

(1) Performs systems analysis in collaboration with user organizations to determine requirements for data processing support, and performs systems analysis and computer programming for the implementation of data processing systems; (2) guides the development of new systems developed under contract for the National Library of Medicine; (3) coordinates the planning for, and provision of, on-line information services from the NLM; (4) conducts information systems analyses of ongoing programs of the NLM to identify areas requiring improvement; (5) as appropriate, coordinates the digital network planning and operations for the NLM; (6) advises the Director, NLM, of Information Technology and digital communications activities; (7) provides data processing technical interface with Medical Literature Analysis and Retrieval System (MEDLARS) Centers; (8) maintains operating systems; (9) establishes production schedules and performs production control for NLM systems; (10) distributes data to MEDLARS Search Centers and other authorized users in the United States and abroad; (11) provides user help desk, microcomputer and desktop workstation support to NLM; and (12) provides for computer security for NLM systems.

**Office of the Director - HNL131**

Responsible for (1) planning, directing, controlling, coordinating and administering OCCS activities; (2) all NLM operational information technology activities and the development of all information technology applications in support of all library program areas; (3) participating in general NLM research and information technology activities; (4) preparing and coordinating information technology planning and budgeting activities of the Library including necessary submissions to DHHS; (5) coordinating and assisting foreign centers and NLM sponsored computer centers in the use of various systems and NLM data bases; (6) supports Integrated Library Systems; (7) supports database creation maintenance; and (8) supports nationwide access to biomedical literature.

### **Systems Technology Branch - HNL133**

Responsible for (1) operating the NLM Computer Center with its associated telecommunications, and related support equipment; (2) managing machine utilization and reporting on performance and systems usage; (3) assisting in the selection of data processing and communications equipment and its site planning, installation and acceptance testing; (4) managing the preparation and processing of input data; (5) maintaining computer procedures and runbooks for all production programs; (6) recommending procedural and processing changes to improve work flow for production systems and for systems under development; (7) analyzing hardware and system software; (8) providing systems interface for systems developed by NLM programs; (9) evaluating new hardware and software for applicability to NLM requirements; (10) maintaining general purpose software; (11) providing training for all NLM staff; (12) developing and evaluating tools to measure overall system performance; (13) programming and maintaining communication-related software in the Computer Center; (14) providing technical services for NLM desktop workstation and personal computer requirements; and (15) provides for computer security for NLM systems.

## **Facilities Management Section - HNL1332**

Responsible for (1) operating the different computer systems and telecommunications equipment; (2) preparing and transmitting magnetic tapes containing data to remote processing centers; (3) - coordinating the provision of necessary automatic data processing supplies; (4) certifying the operational worthiness of new and existing computer programs; (5) making initial evaluations of computer malfunctions and notifying appropriate personnel; (6) directing, coordinating, and scheduling the program execution of all production systems that are run on a recurring basis; (7) coordinating all known requirements from the various areas within NLM for computer processing requirements; (8) scheduling the generation and updating of the NLM data bases on a timely basis and preparing copies of the data bases for distribution to the various MEDLARS Centers throughout the world; (9) maintaining an active inventory of all magnetic tapes in the NLM tape library; (10) developing procedures and schedules for periodic back-up of NLM data bases and program~ and arranging off-site storage facilities for the data and program security; (11) exercising quality control of computer input and output to assure accuracy, completeness and quality standards; (12) developing and implementing processing procedures and providing management reports on system and product utilization; (13) providing all physical needs for the facility, to include electrical power, environmental controls, and lighting, as well as a secure environment, to include 24-hour monitoring, intervention, and reporting; (14) serving as a single point of contact and coordination for all system outages due to scheduled system/building maintenance and physical changes to the facility; and (15) conducting periodic electrical, structural, and physical planning surveys for future system/hardware additions.

### **Systems Services Section - HNL1333**

Responsible for (1) administering, managing and efficiently utilizing of NLM computer equipment, and its operating systems and utility programs; (2) implementing new or improved operating systems and utility programs and selecting and acquiring computing and telecommunications equipment and features; (3) investigating new computer technology, advanced data manipulation techniques and systems, advanced and current operating systems, programming languages and compilers, data communications technology and services in relationship to the overall mission of OCCS and the NLM as a whole; (4) planning, designing, implementing, and maintaining the security and reliability of NLM production and development systems; (5) modeling, evaluating, applying, and testing various systems solutions to meet NLM's current and future requirements; (6) defining and evaluating future NLM systems concepts and major operational enhancements; (7) assessing state-of-the-art solutions and R&D activities for meeting NLM's systems needs and requirements; (8) recommending systems architectures and implementation strategies for developing next generation systems; (9) providing platforms for integrating and piloting major systems components and services; and (10) determining human roles for proposed operational concepts.



## **Desktop Services Section - HNL1334**

Responsible for (1) Information Technology Services Center (ITS C) operations; (2) managing and controlling user requests for access to NLM production and test systems; (3) screening and routing problems and questions reported to the ITSC (the centralized help desk); (4) tracking reported problems to assure timely problem resolution and to keep management informed of problem status; (5) performing analytic and evaluative analysis of microcomputer hardware and software, and establishing hardware and software standards; (6) providing technical services for personal computers and workstations; (7) assisting in office automation services; (8) evaluating state-of-the-art personal computing capabilities and services; and (9) providing desktop programming support.

## **Network Engineering Section - HNL1335**

Responsible for (1) evaluating, deploying, administering and maintaining state-of the-art networking and data communications technologies, products, and services to meet NLM's internal and external connectivity requirements in compliance with established FIPS standards; (2) coordinating NLM-wide networking activities among and with NLM organizational entities, NIH, and other organizations as required; (3) planning, designing, developing, implementing, and maintaining changes and enhancements to the operation of NLM's existing local area networks (LANs); (4) providing technical assistance and administration regarding LAN usage; (5) installing and maintaining LANS; (6) providing for Internet connectivity and related services; (7) planning and implementing network management and security; and (8) managing and monitoring contractual activities for networking and data communications services.

## **Applications Branch - HNL134**

Responsible for: (1) assessing the current and future business goals of the NLM and making recommendations to accomplish these goals; (2) participating in the development of NLM's short and long range planning and objectives; (3) developing and maintaining computing systems to support the mission of the NLM; (4) performing project assessment to determine business goals and estimate scope or functional limits for new systems or services; (5) defining and validating system requirements for a project, identifying and documenting new system functions and interactions; (6) evaluating and applying state-of-the-art methodologies to new application development and enhancements to existing systems; (7) selecting and acquiring appropriate hardware and software to meet the goals of the project; (8) developing RFPs and subsequent management of contract activities in accomplishing system development and maintenance of existing systems; (9) developing a system design which clearly defines the user interface, business logic, and database components for the project; (10) developing computer programs and conducting necessary quality assurance tasks to ensure the system satisfies all requirements; (11) documenting all phases of the computing environment in accordance with industry standards; (12) ensuring adherence to relevant international standards; (13) managing all operational databases and related systems; and (14) coordinating activities among and with NLM organizational entities, NIH, and other organizations as required.

## **E-Health Information Section - HNL1342**

Responsible for (1) supporting of new system development and selected modifications of existing systems in response to approved requests for new capabilities including developing and analyzing requirements, designing and programming systems, testing and implementing systems, and documenting systems; (2) providing consulting services both within NLM and other organizations; (3) developing and maintaining software engineering and documentation standards; (4) monitoring systems development activities for adherence to established standards; (5) providing technical management of development activities leading to the establishment of new NLM data bases and operational software; and (6) developing RFPs and subsequently managing contract activities in accomplishing system development.

## **E-Library Technology Support Section - HNL1343**

Responsible for (1) developing procedures to establish, update, and maintain the on-line data bases including testing procedures to ensure accuracy of data base update activities; (2) ensuring the integrity and security of data bases through control of the specifications which define data base content and through the establishment and surveillance of recovery and restart procedures for operational data bases; (3) establishing procedures, guidelines and standards for the interchange and delivery of information; (4) planning, coordinating, and administering of all aspects of operational information delivery systems; (5) providing technical guidance to end user in support of extension and changes to existing delivery systems; (6) establishing procedures, guidelines and standards for the collection and validation of information; (7) performing assigned systems analysis and software modifications of operational systems; (8) developing full text database systems; (9) establishing procedures, standards and guidelines for interchange of data with publishers and other information providers; and (10) applying new technology, including image processing and distributed processing, to database management systems .

## **Medical Language Branch - HNL135**

Is responsible for applying techniques of computer and information science to problems in the representation, retrieval and manipulation of biomedical knowledge and information. This branch performs software development and production support for standardized medical language and biomedical systems, which are used to index the world's biomedical literature, provide standardized nomenclature for clinical drugs, and aids the development of systems that help researchers retrieve and integrate electronic biomedical information. Specifically, the Medical Language Branch is responsible for (1) conducting research and development of applications, tools, and computer systems to represent, manipulate, and disseminate biomedical knowledge and information; (2) developing, enhancing, and operating applications such as the Unified Medical Language System, the RxNorm system, and the Medical Subject Headings system to manage, produce, and disseminate controlled vocabularies and classifications; (3) managing the software life cycle of new and existing bioinformatics and natural language systems; (4) conducting research and evaluation for leading edge technologies and lexical software tools to improve the performance and efficiencies of NLM vocabulary, classification, and coding systems; (5) providing the necessary systems support to permit distribution of NLM information products to the scientific community and government agencies; (6) providing technical consultation and direction to the community in building and enhancing electronic information systems that create, process, retrieve, integrate, and/or aggregate biomedical and health information; (7) developing and operating systems to manage the distribution of pharmaceutical product labeling and to provide public access to information about the names of pharmaceutical products and their ingredients; and (8) managing contracts and agreements required in support of the above activities.

## **Office of Strategic Initiatives - HNL14**

(1) Serves as principal advisor to the NLM Director for matters and programs concerning strategic directions of NLM, including open science, as well as analysis, evaluation, and reporting of and on NLM programs and activities, (2) leads development of strategic plans and coordinates their implementation, (3) plans, develops, implements, and coordinates activities in the areas of open science and the intersection of open science and data science, (4) analyzes and evaluates NLM programs formatively and summatively, (5) analyzes and formally reports on the achievements, programs, and activities of NLM, (6) coordinates technology transfer for NLM, and (7) supports NLM policy development and legislative tracking.

## **Office of Communications and Public Liaison - HNL15**

(1) Plans, directs, and coordinates the NLM public communications and public liaison program; (2) conducts a variety of outreach activities to inform both the scientific/medical communities and the general public about the information services available to them from the NLM; (3) as part of the NIH-wide public liaison function, coordinates public liaison activities between NLM and consumers, advocacy groups, and voluntary organizations; (4) answers inquiries from the public, Federal agencies, Congress, and scientists and health professionals about the NLM and its programs; (5) coordinates NLM World Wide Web functions and chairs the working group that oversees NLM web activities; (6) prepares reports, fact sheets, pamphlets, newsletters, videos, and graphics that explain the NLM and its programs; (7) arranges and conducts formal presentations for visiting groups, tours of the Library for visitors, and maintains a publicly accessible Visitors Center; (8) serves as service contact for groups using the Lister Hill Center Auditorium; (9) obtains clearances, procures printing services, and distributes NLM publications; (10) coordinates exhibit services at professional meetings for NLM programs; (11) provides editorial and writing services to NLM components; (12) clears NLM-produced publications and staff-produced manuscripts and coordinates the activities of the NLM Editorial Review Committee; and (13) reviews and advises on requests for information under the Freedom of Information Act and serves as liaison with NIH and HHS Freedom of Information officials.



## **Division of Library Operations - HNL2**

(1) Selects, acquires, catalogs, and preserves biomedical publications; (2) indexes and provides access to the material; (3) furnishes reference and document delivery services; (4) prepares and publishes indexes, catalogs, and other publications for the use of the biomedical community; (5) administers national on-line biomedical information retrieval services; and (6) coordinates the National Network of Libraries of Medicine.

## **Office of the Director - HNL21**

(1) Administers the Library's direct operations; (2) analyzes and evaluates direct operations in relation to program needs; (3) plans and administers NLM's information retrieval services; (4) plans and oversees the National Network of Libraries of Medicine; and (5) uses the Literature Selection Technical Review Committee as a scientific advisory group appointed to review and recommend journals to be indexed by NLM.

## **National Information Center on Health Services Research and Health Care Technology - HNL212**

(1) Collects, stores, analyzes, retrieves, and disseminates information on health services research, clinical practice guidelines, and health care technology, including the assessment of such technology; (2) develops and maintains databases; (3) develops and implements methods of carrying out such purpose; (4) ensures that information concerning clinical practice guidelines is collected and maintained electronically and in a convenient format; (5) develops and publishes criteria for the inclusion of practice guidelines and technology assessments in the information center database; (6) coordinates the NLM's programs and services in the field of health services research; (7) analyzes the information needs of the creators and users of health services research information and assesses how NLM meets these needs; (8) identifies service enhancements and new products needed in the field of health services research; (9) coordinates the development of new and enhanced services; (10) collaborates with other NLM organizational units to develop and implement outreach strategies to make NLM and the National Network of Libraries of Medicine services better known to the users and creators of health services research information; (11) serves as the primary operational liaison to the Agency for Health Care Policy and Research, the Institute of Medicine, and other relevant institutions, organizations, and groups on matters related to health services information; and (12) oversees contracts and interagency agreements related to health services research information.

## **Medical Subject Headings Section - HNL 21-3**

Develops and maintains the Medical Subject Heading Authority List (MeSH).

## **History of Medicine Division - HNL22**

(1) Collects, preserves, interprets, and presents materials documenting the history of medicine, biomedical science, health and disease in all time periods and cultures; (2) provides researchers and the public with access to manuscripts, books, photographs, films and other historical resources; and (3) promotes, conducts, and facilitates scholarly research and public education through seminars, lectures, exhibitions, film programs, websites, databases, publications, catalogues, and finding guides.

## **Exhibitions Section - HNL222**

(1) Produces onsite and online exhibitions to enhance the public and scholars' awareness and appreciation of the National Library of Medicine's collections; (2) conducts and interprets scholarly research in science, medicine, and history; (3) designs and develops displays; (4) produces educational and interpretive outreach programs for diverse audiences; and (5) provides tours to diverse audiences.

## **Images and Archives Section - HNL223**

(1) Acquires, catalogs, arranges, describes, and reproduces collections in archives and modern manuscripts (since 1600), prints and photographs, other still visual resources, and historical audiovisuals that document the history of medicine, biomedical science, health, and disease; (2) manages collections on and off-site; (3) provides access to these collections, through the HMD reading room, interlibrary loan of surrogates, web-posting of surrogates, and by other means; (4) provides analytical descriptions of these collections through catalog entries, finding aids, subject guides, and other documents; (5) preserves these collections through proper handling, housing, preservation and conservation interventions, and preparing of surrogates; and (6) facilitates the awareness and use of these collections by diverse audiences.

## **Rare Books and Early Manuscripts Section - HNL224**

(1) Selects and acquires rare manuscripts (before 1601) and historically significant printed medical materials from all cultures and time periods (especially before 1914) as well as new historical reference materials; (2) provides access to all historical materials in the Library both on-site (HMD Reading Room) and off-site; (3) maintains bibliographic control over the rare printed and early manuscript collection by setting cataloging priorities, creating guidelines for cataloging rare materials, and designing cataloging projects; (4) manages collection maintenance including preservation, stack maintenance, emergency preparedness, and security for rare printed and early manuscript materials; (5) extends outreach efforts to the public to inform them about the historical collections; and (6) serves as a leader in the fields of special collections and history of medicine librarianship.



### **Technical Services Division – HNL23**

(1) Recommends policy on scope and coverage for the NLM collection; (2) maintains the *Collection Development Manual of the National Library of Medicine*; (3) plans and manages a comprehensive program of selection, licensing, acquisitions, processing, and cataloging of biomedical literature; (4) maintains machine-readable data bases of the Library's holdings and provides access to bibliographic and full-text holdings; (5) manages bibliographic and digital library systems to support the Division's operations as well as support a broad range of LO and NLM services; and (6) coordinates technical services with the biomedical community including other national and research libraries, in the U.S. and abroad, the several library associations, and other Government and non-government organizations.

## **Cataloging and Metadata Management Section - HNL232**

(1) Provides authoritative bibliographic records required for the bibliographic control of the biomedical literature procured in English and foreign languages for the NLM collection and other NLM programs; (2) maintains machine-readable bibliographic and related records in NLM data bases and Name Authority Files; (3) distributes machine-readable records in MARC and XML formats; (4) provides metadata mapping and services for bibliographic and authority data; (5) maintains the NLM Classification; (6) cooperates with the Library of Congress and with other libraries in a variety of shared and cooperative bibliographic control programs; and (7) assists biomedical libraries using NLM's bibliographic data as the source for cataloging copy.

## **Collection Development and Acquisitions Section - HNL233**

(1) Builds the modern NLM collection of biomedical literature, including print and electronic resources and other digital content according to the guidelines of the *Collection Development Manual of the National Library of Medicine*; (2) selects materials in English and foreign languages for the NLM collection; (3) provides preliminary bibliographic control for resources selected; (4) acquires materials in all formats from sources worldwide, utilizing contracts, purchase orders and other procurement mechanisms; (5) licenses and manages access to electronic resources; (6) processes materials received for the collection; and (7) manages the NLM literature budget and payment processing.

## **Library Technology Services Section - HNL234**

(1)Manages the bibliographic and digital library systems used to support the Technical Services Division's collection development, acquisitions, licensing, electronic resources management and cataloging operations. These systems also support a broad range of NLM services including collection management, circulation, preservation, indexing and access to the NLM collection; (2) coordinates the maintenance, development, testing, release planning, training and documentation for the NLM integrated library system, online public access catalogs, digital repository, electronic resources management systems, documentation system, systems to support NLM indexing and citation creation activities, and numerous other systems and software; and (3) provides first-level hardware and software desktop support for the Division.

## **Public Services Division - HNL24**

(1) Administers customer services to users of NLM's products, collections and databases worldwide; (2) administers a national and international interlibrary loan program in coordination with the National Network of Libraries of Medicine; (3) provides onsite circulation and reference services for the general collection for visitors to NLM; (4) oversees a program to preserve the NLM's book and journal collections and manage digital repositories; (5) administers a national information resource for the public, patients, and families by providing electronic access to reliable health information issued by the National Institutes of Health and other trusted sources; (6) supports NLM outreach to health professionals and the public; (7) supports these programs in coordination with other government agencies, national organizations, libraries, and international organizations; and (8) provides information services to support NLM staff research and training through the Staff Library.

## **Collection Access Section - HNL242**

(1) Provides access services to the General Collection of the National Library of Medicine including books, journals, audiovisuals, and microfilm. Services include the acceptance and verification of interlibrary loan requests submitted by the national Network of Libraries of Medicine and other international libraries; the retrieval of items from the General Collection; photocopying; providing requested material via mail, telefacsimile or over the Internet; the analysis and identification of items difficult to locate; and the education of users with respect to NLM interlibrary loan policies; (2) manages DOCUNE, NLM's national online interlibrary loan request routing and referral system and provides support services to the Regional Medical Libraries; and (3) accepts and verifies requests submitted by onsite Reading Room patrons, retrieves items from the General Collection; provides an overnight photocopy service; and maintains the automated systems associated with onsite services.

## **Reference and Web Services Section - HNL244**

1) Provides centralized reference, customer services, and referrals to users of NLM's products, collections, and databases worldwide; (2) Selects content, manages systems, performs maintenance, and implements improvements for a national information resource for the public, patients, and families that provides electronic access to reliable health information issued by the National Institutes of Health and other trusted sources; (3) Supports NLM websites and other technologies that provide services to the nation; (4) Provides and manages electronic and print reading room collections; (5) Performs outreach to professionals and the public through training, exhibitions, bibliographies, and print and electronic guides to health information.; (6) Carries out these programs in coordination with other government agencies, national organizations, libraries, and international organizations.

## **Preservation and Collection Management Section - HNL246**

(1) Provides a focal point within the National Library of Medicine for the preservation of NLM's collections; (2) manages in-house and contract actions for preservation activities, including binding and repair of serials and monographs in the general collection, microfilming of embrittled materials, and copying of audiovisual and electronic formats; (3) manages in-house and contract actions for management of the general collection, including shelving, shifting, shelf reading, inventories, gapping, withdrawals, collection security, space planning, and monitoring storage conditions; (4) manages staff and user preservation education and disaster prevention and recovery programs; (5) represents NLM in cooperative programs with other U.S. and foreign institutions; (6) evaluates developments related to preservation and provides consultation and guidance to biomedical libraries and others on preservation issues and methods.



## **Bibliographic Services Division - HNL25**

(1) Analyzes and indexes for publication, the literature of medicine and allied sciences; (2) analyzes and prepares requests for special bibliographies for computer processing; (3) develops recurring bibliographic services; (4) develops and produces Index Medicus and related publications; and (5) manages MEDLINE, a national biomedical information and retrieval system.

**Index Section - HNL252**

Analyzes and indexes for publication the literature of medicine and allied sciences.

### **Medlars Management Section - HNL253**

(1) Administers and manages the production of MEDLARS services including the decentralized MEDLARS program; (2) coordinates MEDLARS activities between NLM and MEDLARS centers -providing appropriate means of interchange of technical information, serving as a clearing point for decentralized MEDLARS information; and (3) establishes and processes recurring bibliographies, Index Medicus and other MEDLARS products for publication; (4) reviews, analyzes and evaluates MEDLARS products and services and makes recommendations on possible system improvements in indexing, searching, vocabulary development, training and journal selection; and (5) distributes literature searches.

### **Lister Hill National Center for Biomedical Communications - HNL3**

(1) Performs research and development to create and improve biomedical communication systems, methods, and networks, and to enhance information dissemination and utilization among health professionals; (2) collaborates with members of the health professions community, and studies, defines, and develops needed information technology materials and services; (3) develops audiovisual and other information systems to improve health professions education, research, and the delivery of health services; (4) applies technology to the improvement of biomedical communications; (5) encourages and performs research and development in the production, dissemination, use, and evaluation of audiovisual, computer-based, and other educational materials and systems; (6) trains health educators in methods and technologies supporting biomedical communications; (7) plans and administers a national program to improve the quality and use of biomedical audiovisual materials in schools of the health professions and throughout the biomedical community; and (8) participates in interdisciplinary, cross-divisional collaborations and projects where appropriate.

### **Office of the Director - HNL31**

(1) Plans, directs, and manages the research, development, and technical operations of the Lister Hill National Center for Biomedical Communications (LHNCBC); (2) provides consultative services regarding the biomedical communications needs of health care delivery, health education, and medical research; (3) develops innovative concepts and programs for the improvement of biomedical information transfer; (4) coordinates the development and implementation of biomedical information processing and transfer services for DHHS components and other groups using communications networks; and (5) utilizes the NLM Board of Scientific Counselors as a scientific advisory group appointed to review the research programs of the Lister Hill Center.

## **Computational Health Research Branch - HNL32**

(1) Conducts research to improve health and healthcare through methodological advances in clinical informatics and the processing of diverse forms of clinical data, such as electronic health record, imaging and sensor data; (2) disseminates research through scientific publications, presentations at scientific conferences, and development of prototypes that demonstrate research concepts; (3) collaborates with other elements of the LHNCBC and NLM and other organizations to translate research findings into operational computational solutions that can be implemented in healthcare and research environments; (4) provides training and mentoring of postdoctoral fellows and other students in the domain of computational health informatics research; and (5) participates in interdisciplinary, cross-divisional collaborations and projects, where appropriate.

## **Scientific Computing Branch - HNL38**

(1) Designs, develops, and maintains robust, leading-edge, cost-effective computational infrastructure and computing resources to support research and development in computational health and biology, applied clinical informatics, and related fields; (2) assesses needs for scientific computing capabilities in support of research and development in computational health and biology, applied clinical informatics, and related fields; (3) supports development and delivery of computational solutions to address clinical problems; (4) identifies and evaluates emerging computer, communications, and information processing technologies for application to computational health and biology research, applied clinical informatics, and related fields; (5) demonstrates and evaluates effective ways to incorporate health data standards into scientific computing environments; and (6) participates in interdisciplinary, cross-divisional collaborations and projects where appropriate.

## **Applied Clinical Informatics Branch - HNL39**

(1) Identifies and develops innovative solutions for complex biomedical informatics challenges related to the use of diverse forms of clinical data (such as electronic health record, imaging, and sensor data) that scale across institutional boundaries and applications; (2) translates new research results into operational solutions that can be implemented in healthcare and research environments; (3) explores and improves upon emerging solutions in the use of clinical data, including standards for terminology and data communications; (4) collaborates with other entities within NIH and DHHS agencies to develop data science solutions to address issues of mutual interest; and (5) participates in interdisciplinary, cross-divisional collaborations and projects where appropriate.



## **Division of Extramural Programs - HNL5**

(1) Administers programs to augment and strengthen the health sciences libraries of the Nation and to improve biomedical communications and information management through grants to, or contracts with, non-Federal and private institutions; (2) analyzes and evaluates extramural programs in relation to program objectives and national needs to achieve balanced and effective support; and (3) provides grants management, grants processing, and administrative management services.

**Office of the Director - HNL51**

(1) Plans, directs, and administers the operations of the extramural programs; (2) coordinates collaborative efforts with other NIH components and Federal agencies in the general areas of informatics, information management, networking, health library support, and publications; and (3) provides technical and management assistance to advisory and review committees.

**Scientific Review Office - HNL54**

Responsible for scientific review activities of the Biomedical Library Review Committee.

## **Grants Management - HNL55**

(1) Monitors the entire grants process to ensure that all required business management actions are performed by the grantee and the Government, both prior to and after award; (2) develops and revises grant budgets; and (3) ensures proper utilization of funds in carrying out appropriate grant policies and EP program plans.

## **Program Management - HNL56**

(1) Advises applicants for grants or contracts in the areas supported by the NLM; (2) monitors awards made to ensure timely and appropriate focus on the intended work; (3) supports the evaluation and conduct of research, development, and demonstration projects in the field of informatics; (4) supports institutional and individual training projects to increase the national pool of experts in informatics research and applied informatics; (5) makes awards to qualified scholars to support preparation of publications in such areas as critical reviews of the literature, history of medicine, and other subjects of importance to the health sciences; (6) enhances utility and availability of biomedical information by supporting projects which promote use of computers and telecommunications by health science libraries; (7) manages grant projects concerned with educational technology; and (9) provides secretarial services and staff assistance to advisory committees in these program areas.

## **National Center for Biotechnology Information - HNL7**

(1) Conducts and sponsors research and development of systems that enhance electronic access by biomedical scientists to university, commercial, and government factual databases and knowledge bases in biotechnology; (2) supports, assists, and enhances existing public information resources for biotechnology, such as nucleic acid and protein sequence databanks and other related research information resources; (3) conducts and sponsors collaborative research and development for molecular biology research information systems, including methods of data acquisition, representation, retrieval, and analysis; (4) provides technical consultation and assistance to other government and private organizations that support biotechnology research and development to foster the links among computer-based biology information resources; (5) sponsors and conducts workshops, symposia, and other scientific meetings to foster the development of computer and information science as applied to basic biological research; and (6) develops and promotes standards for databases, communications, and nomenclature for molecular biology data which facilitates the sharing of research data among laboratories on a national and international scale.

**Office of the Director - HNL71**

(1) Plans, directs, and manages the research, development, and technical operations of the National Center for Biotechnology Information; (2) provides consultative services to the molecular biology research community and other government agencies regarding information systems and analytic software; (3) coordinates efforts to gather biotechnology information worldwide; (4) encourages cooperation between government and private sector sources of biotechnology information, including scientific societies, foundations, and companies; and (5) utilizes the NCBI Board of Scientific Counselors as a scientific advisory group to review NCBI research programs.

## **Office of Administrative Management - HNL712**

(1) Plans, directs, and coordinates the management of administrative activities of the Center and provides administrative services to the OD and the branches of the Center including: contract and procurement management, personnel, finance and budget, property, travel, office automation, and automatic data processing; (2) advises the Center Director and senior staff on the administrative management of the Center and its programs; and (3) develops policies, guidelines, and procedures on matters relating to the administrative management of the Center.



## **Information Resources Branch - HNL72**

(1) Plans, directs, and manages the technical operations of the NCBI--specifically, the computer systems employed for research, development, and public access--and provides programming support to NCBI R\& D programs; (2) coordinates with other Federal agencies and biology information resources to facilitate the development of data repositories at the NCBI; (3) plans, develops, and manages contracts and cooperative agreements procuring equipment and services in support of all NCBI information functions; (4) supervises network operations for the NCBI and coordinates with other government agencies for nationwide and international access to NCBI services; (5) serves as liaison to agencies involved in genome projects; (6) performs applied research and development, provides technical consultation and direction, identifies user needs, and conducts evaluations related to applying NCBI-developed software to the biology user community and integrating NCBI software and data bases for public access; and (7) maintains responsibility for supporting outside users of NCBI services and assists in the organization of meetings and workshops to foster use of information technologies in the biology workshop.

### **Information Engineering Branch - HNL73**

(1) Performs applied research in the area of data representation and analysis for molecular biology data, including development of computer-based systems for the storage, management, and retrieval of knowledge concerning molecular biology, genetics, and biochemistry; (2) designs schemas and specifications for representation of sequence, genetic, and structural information in databases which will serve as national resources; (3) designs and develops distributed software systems from the prototype to operational phase which provide researchers with both local and remote computational services; (4) coordinates access to sequence, genetic, structural, and bibliographic data bases by building integrative systems and establishing linkages to existing data bases; (5) establishes collaborative informatics research projects with NIH intramural laboratories as well as extramural academic groups; (6) consults and advises other government agencies and research laboratories on advanced methods of software and database design; and (7) develops and promotes standards for databases, data exchange, and biological nomenclature.

## **Computational Biology Branch - HNL74**

(1) Conducts basic and applied research in computational, mathematical, and theoretical problems in molecular biology and genetics, including genome analysis, sequence comparisons, sequence search methodologies, macromolecular structure, dynamics and interaction, and structure/function prediction; (2) establishes collaborative research projects in computational molecular biology with biologists, chemists, mathematicians, and computer scientists in NIH intramural laboratories, other government agencies, universities, and industry; (3) consults and advises other government agencies and research laboratories in the application of computer-based analytic tools in molecular biology; and (4) interacts with experimental molecular biology groups to enhance laboratory-based research through the application of computational and theoretical approaches. Provides leadership and direction to the programs and activities of the National Institutes of Health, and assists the Assistant Secretary for Health in the formulation of national health policy