

National Library of Medicine

Workforce Plan: FY 2002-2003

The National Library of Medicine has a unique position within the National Institutes of Health. The Library actively seeks out all substantive scholarly publications in the biomedical sciences, catalogs and indexes them, and makes their contents available through a variety of sophisticated computer-based services. In this, it is an indispensable component of the national biomedical enterprise. The NLM is also a leader in sponsoring and conducting research and training in various aspects of biomedical communications.

These responsibilities require the Library to have a workforce with a great diversity of skills. Not only are information professionals needed—librarians and computer experts, for example—but, as a result of a radically expanded portfolio of information responsibilities, the Library employs health educators, bioinformaticians, molecular biologists, linguists, advanced electronic imaging experts, and many others whose background and training would not ordinarily be associated with a library. It is not an exaggeration to say that involvement with the NLM—as a recipient of NLM-sponsored training, a grantee, or a staff member—appears in the résumés of most prominent American medical librarians and science information administrators.

The programs of the NLM are guided by, and closely track, a formal long range plan. First put in place in 1986 under the aegis of the NLM Board of Regents, the wide-ranging plan envisioned, among other things, the establishment at the NLM of a National Center for Biotechnology Information. This was done by act of Congress in 1988. Over the years, the long range plan has been updated in such areas as outreach, scientific imaging, toxicology and environmental health, international health, and training. The current FY 2000–2005 update of the plan reaffirms the Library's fundamental mandate to collect, organize, preserve, and disseminate the biomedical literature. However, three areas that affect the workforce are singled out for special attention: health information for the public, molecular biology, and coping with the evolving electronic nature of the medical literature. In total, an estimated 35% of new hires projected for FY 2002 and FY 2003 relate to these new initiatives. All three areas have figured prominently in NLM's testimony to the Congress, and health information for the public is featured in the Library's GPRA submission. The Library's evolving mandate is profoundly affecting the size of the NLM workforce and the mix of employee skills and background that are required. Over the last several years, NLM has completely reconfigured its computer operation from legacy systems to distributed architecture, leading to a fundamental change in skills required by the Library's computer staff and systems librarians.

This expansion of responsibility, when combined with the inexorable growth of the published collection on the shelves of the Library, has led to a serious problem that affects the workforce directly: the need for more physical space. Staff of the National Center for Biotechnology Information are scattered among several buildings and the size of their individual workspace has been reduced. Storage space for more books, journals,

and other materials in the collection will disappear by 2004. These problems are being addressed both by NLM's plans to acquire more space and by the active encouragement of such administrative strategies as flexible work schedules and telecommuting that reduce the number of staff present at one time.

Even in the face of these changes, the Library is having notable success in managing its diverse workforce. To use as examples two of the areas previously noted, the use of NLM databases (the principal database is MEDLINE) has skyrocketed in 4 years from 7 million to 260 million searches annually. Fully one third of these searches are being done by the public. In the other area, molecular genetics, free Web access to the Human Genome was announced by NLM on February 13, 2001. The number of records in the GenBank database of sequence information, one of a number of databases and research tools maintained by the National Center for Biotechnology Information, is currently 11 million and doubling every 16 months. GenBank is a vital resource for today's scientists, being accessed 250,000 times each day by approximately 20,000 researchers around the world. Clearly, the NLM is managing its human resources to maximum advantage: more information than ever before is being disseminated to scientists and the public.

The rapidly evolving nature of the Library's mandate and workforce requires NLM to place great emphasis on flexibility. Telecommuting is used extensively in several areas of the Library where the nature of the work permits. The Library's extensive indexing of journal articles—some 450,000 a year—is one such area. Almost all NLM employees are on flexible work schedules. In an institution with such a variety of work requirements, there is a high priority placed on staff development. In addition to the training normally offered to NIH staff, within NLM there are several unique opportunities for professional training: an NLM Director's Employee Education Fund (for all staff), the NLM Library Associate Fellowship Program (for selected librarians identified as future leaders of the profession), and several training programs in NLM's biotechnology and communications research programs.

Continued emphasis on flexibility—in workplace, hours of duty, and other terms of employment—are important tools in getting a high-quality workforce and maintaining its morale. Because of our efforts, NLM has an extremely low rate of personnel grievances and EEO complaints. Flexibility is especially important in an institution such as the NLM, where information technology permeates virtually every operation. Notable advances have been made in the services provided by the Library as a result. In one crucial area, database creation, the number of steps between journal publisher and the end user of NLM databases has been reduced from six to three. The result has been the explosion of use of these databases by health professionals and the public (as noted above). In another key area, the Library has reduced the time required to respond to a request from anywhere in the world for a book or journal article in the NLM collection from 4 days to less than 1. Providing such levels of service requires a management structure where employees are empowered by sophisticated communication and information-handling tools. This, in turn, requires an altered supervisory model: NLM's current staff to supervisor ratio is 15:1 and it is gradually shifting to more independent decision-making.

NLM Hiring Plans for FYs 2002/2003

	FY 2002	FY 2003	Total
INTRAMURAL			
Senior Investigators ¹	0	0	0
Investigators ¹	2	1	3
Other MD/PhDs, in FTE positions	23	18	41
Other MD/PhDs in non-FTE positions (IRTA, VF)	5	4	9
Other lab/clinical staff => GS-13	9	7	16
Other lab/clinical staff =< GS-12	28	29	57
Admin/support staff => GS-13	7	7	14
Admin/support staff =< GS-12	5	3	8
Infrastructure support => GS-13			0
Infrastructure support =< GS-12 ²			0
Summer and other temps not listed above (include summer IRTAs)	8	8	16
TOTAL INTRAMURAL	87	77	164
EXTRAMURAL			
HSAs/SRAs and other senior level science administrators => GS-13	0	0	0
Other science administration positions =< GS-12	0	0	0
Grants Management and R&D Contract Staff => GS-13 ³	3	0	3
Grants Management and R&D Contract Staff =< GS-12 ³	2	3	5
Administrative and support staff => GS-13	2	0	2
Administrative and support staff =< GS-12	0	2	2
Infrastructure support => GS-13			0
Infrastructure support =< GS-12 ²			0
Summer and other temps not listed above			0
TOTAL EXTRAMURAL	7	5	12
IC TOTAL	94	82	176
¹ Using OIR professional designations			
² Include all wage grade positions related to infrastructure in this group			
³ Includes 1101, 1102, 301 and 303 series where individual is engaged in these activities on a full-time basis.			