## Automated Resources at Ruth Lilly Medical Library

by James Jay Morgan Automation Librarian, Ruth Lilly Medical Library Indiana University School of Medicine Indianapolis, IN

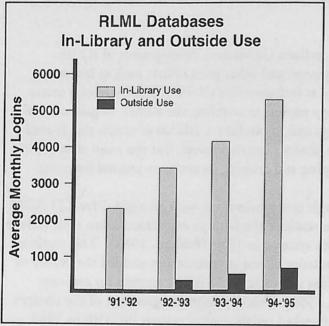
The Ruth Lilly Medical Library (RLML) has undergone a great change in the availability of on-line resources in the past seven years. In 1987 there was no on-line catalog, and subject access to RLML's vast medical journal collection was limited to book indexes and customized on-line searches by reference librarians. These access services were available within the library and over the phone.

The library took part in Indiana University's development of IO (the NOTIS integrated on-line system) and other joint efforts such as Indiana University Purdue University at Indianapolis's (IUPUI) ILIRN library access system. These efforts had large payoffs in enabling the RLML to gain control of its book and serial holdings and to produce a title list of serials that is available in a booklet and on the library's Internet server. But the main effort of the library has gone into developing and refining its access to journal literature.

The first effort was a single user workstation with an eight drive CD-ROM tower in 1988. This was the result of the library's experimentation with various CD-ROM MEDLINE search systems in 1987 (Brahmi, 1989). This workstation quickly proved the popularity of end-user searching and led the library to install one of the country's first networked CD-ROM systems for end-user searching in 1989 (Morgan, 1990). This development grew out of the library's experience with OCLC's networked serials control system (SC350) in 1988 and the appearance on the market in 1989 of several vendors offering networked CD-ROM towers.

This early implementation of a CD-ROM network put the library in good stead, but by 1992 the library's users had stretched the capability of the CD-ROM network to its capacity. The library had two possibilities for expansion: to rework the CD-ROM network into a faster configuration or to migrate the entire system to a Novell server hard disk configuration. The library's chosen software vendor, CDPLUS (recently renamed OVID), had just introduced such a turnkey networked system, and the library installed this new system in 1992.

While slightly different methods of measurement have been used over the years, figures demonstrate great jumps in patron use. On-line searching for patrons by reference librarians has remained relatively constant over the years, but use of the networked database system has grown by leaps and bounds. The growth in searching has been largely a function of the number of stations that the library has made available for public use. The CD-ROM based network supported seven to eight stations from 1990 to 1992, and use peaked at just over 2,000 users per month. The Novell networked system provided faster software and supported a larger number of stations (up to fourteen) in 1995, allowing greatly increased growth and permitting the library to offer twenty-four-hour access to campus users. The improved accessibility within and



outside the library led to a constant increase in the number of users, with the number of logins reaching as high as 7,000 a month in 1995 (See graph).

Despite this increase, there were still many barriers to outside access. The library's efforts to support use outside the library began in 1992, but due to various barriers, outside use has not yet exceeded 1/7 of the logins.

As soon as the faster

system was available, the library provided access to faculty and to the Medical Educational Resources Program (MERP) student laboratory. Use in the lab has not amounted to 100 logins in any month, leading us to assume that students chiefly are interested in a ready reference tool for use while they are in the library, rather than a remote access research tool. In addition, the MERP lab is close to the library, and most students on a library research trip have no reason to detour to the lab. Use in the lab is presumably limited to students already in the lab for other purposes. Faculty use began a slow growth in the Fall of 1992 but was hindered by slow campus network speeds and lack of the hardware necessary to run the software. In 1993 the new version of OVID software required three megabytes of RAM, a hard disk, and an IBM-PC compatible computer with a 286 or higher level processor. This effectively disenfranchised faculty without computers, those with older computers, and those with specialty brands of equipment (Macintosh and UNIX workstations).

Aside from the substantial equipment requirements, access also required a campus network connection. While the Indianapolis campus has made great strides in network wiring over the past few years, faculty access is not yet a given. Much of the hospital computer wiring is of an older type that will not permit a LAN (local area network) connection.

In addition, the library is responsible for supporting medical faculty and students in eight regional Centers for Medical Education around the state at three other IU campuses (Bloomington, NorthWest, and Ft. Wayne), and five other universities. We were able to supply access over the network to Bloomington, but the slow speeds greatly restricted use. Access to other campuses has been impossible.

In 1994 the demand had grown so large that the library purchased eight dial access units to support outside access to the Novell server. While not a long-term solution, dial access met the immediate needs of the users in the regional centers, home users, and users with insufficient equipment. This resulted in an immediate increase in the number of registered outside users from just over 100 to more than 300. The dial access options proved especially popular with students.

In 1994 the library reached an agreement with the IUPUI University Libraries to provide access to *MEDLINE* and the *Science Citation Index* databases in exchange for access to the IUPUI library system's databases. This improved the availability of the data at IUPUI, and in 1995 we expect to add the support of the School of Nursing computer lab.

In another development, the library began looking at supplementing the ILIRN system with an Internet server to provide information about the library and the medical school. We mounted a gopher server in 1993 (GOPHER.MEDLIB.IUPUI.EDU). The purpose of the library's gopher server is to provide easy access to medical and scientific resources on the Internet. These resources include National Institutes of Health servers, genetics data from the Genome project, and information from other medical libraries.

The gopher server also provided connections to the university's library catalog, and provides local medical library information. This local information includes the descriptive information about the library, a copy of the library's list of current serials, a searchable version of the *School of Medicine Bibliography*, and a list of faculty publications from 1986 to date. In 1994 the library added a World Wide Web page (URL http://www.medlib.iupui.edu) to provide the same services to web users.

In 1994 the Indianapolis Foundation awarded the library a grant to move the medical databases from the Novell server to a UNIX server. This grant will enable the library to provide much more complete and faster Internet and dialaccess service. The user will be able to access the system with any machine attached to the Internet and with any machine able to dial into the university network. It will also enable users of other university computing systems to connect to the library's databases, thus integrating our library services with their computing resources.

This new server will be installed in 1995, and will enable the library to integrate its Internet services. When the installation is complete the users of the library's web and gopher server will find a seamless connection to the library's medical databases.

## Bibliography

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