Medical Informatics: Why Should We Care?

By Gary Byrd, Health Sciences Library, University of North Carolina

Editor’s note: What is medical informatics? Here is a definition used by Dan Masys, Director of the Lister Hill National Center for Biomedical Communications at the National Library of Medicine (and reproduced here from the University of Washington Health Sciences Library’s publication Books & Bytes, February 1989): “Medical informatics is the name given to the academic disciplines that seek to organize and manage information in support of biomedical research, education, and patient care.” The major domains of medical informatics are computerized databases; clinical records systems; computer-assisted medical decision making; and computer-based medical education. According to Dr. Masys, medical informatics may offer one of the only long-term strategies for dealing with the ever-increasing volume and complexity of medical information. So, then, to the question asked by Gary Byrd: Why should we care? Here is Gary Byrd’s answer.

At the fall 1990 meeting of the Association of North Carolina Health and Science Librarians (ANCHASL) I was asked to speak on the subject of medical informatics (MI). . . I spoke from the perspective of our profession using the question “Why Should We Care?” as my springboard. After quite a bit of thinking, I came up with the following list of ten reasons that I think medical librarians should care about developments in medical informatics.

1) The concerns of medical informatics — that is, computer applications in medicine, especially in areas such as artificial intelligence, medical databases, hospital information systems, computer-aided instruction, natural language processing, etc. — will be increasingly central to health sciences librarianship as we move deeper into this era dominated by information technologies.

2) If we want the automated bibliographic information systems we manage to be integrated into the total information resources of the institutions we serve, then we need to understand how these other information systems are being designed, developed, and managed.

See INFORMATICS, page 5
The Memo Pad

Jeri van den Topp

Chair

What I enjoy most about many organizations is the willingness of the people in it to share what they have learned with others, so that the others do not need to "re-invent the wheel." Valerie Schultheiss requested that we share with other members how we announce the Clinical Alerts. Brynn Beals has written an article (elsewhere in this issue) that explores how each of us share these announcements with the medical communities that we serve. It was this request that prompted these thoughts.

One method of sharing I have particularly enjoyed is from the Public Services Section of MLA. They have a collection of locally developed handouts, brochures, etc. to loan to other members. The items that are available are listed in the newsletter. If someone wishes to borrow one of the items, they photocopy the list, check the item(s) they wish to borrow, and send the request with mailing labels to the library. The items are then circulated to the people who wish to see them. Through this service, I have collected fee schedules, patron information sheets (i.e. How to use Dental Literature), descriptions of programs, etc. This has been an invaluable resource for me.

If this is something you would like to see as part of the PNC lending library, let me know! I think we should be proud of our PNC/MLA professional library, which your dues help support; and a collection of locally developed handouts could be a nice enhancement to this library.

PNC Committee Chairs

Archives: Janet Schnall
Bylaws: Jan Schueller
Education: Kathy Nelson
Governmental Relations: Susan Long
Library Automation & Technology: Peggy Burrell
Membership: Leilani St. Anna
Program: Pam Spickelmier
Publications: Valerie Schultheiss
Research: Marcie Horner
Nominating: Kathy Murray

Santa Clara, California, at the Santa Clara Marriott Hotel, April 26-29 1991.

The conference focuses on multimedia information systems; some key areas for multimedia application are online help systems, education/training, consumer information, and unconventional interfaces for the physically disabled. Conference courses will identify current technologies likely to be supplanted by new multimedia technologies, describe multimedia information systems already in use, and help you make multimedia part of your information resources. Courses include "Multimedia in the Health Sciences" and a special briefing, "How to Survive the Recession: A Guide for Information Professionals".

For further information or to request a registration form, call ASIS Mid-Year Meeting, 301/495-0900, 9-5 EST. ASIS fax: 301/495-0810.

The SLA (Special Libraries Association) 82nd Annual Conference will be held in San Antonio, Texas, 8-13 June, 1991. The conference combines technical sessions, information technology exhibits, and social events designed around its theme, "Masterminding Tomorrow's Information—Creative Strategies."

Ticketed events include "Innovative Technologies to Boost Productivity in Your Library," "Making Money: Fees for Information Service," "Thesaurus Construction," and "Drug and Pharmaceutical Information Resources." Conference registration fees covering two general sessions, exhibits, and miscellaneous events (ticketed events are additional): Member Advance (by May 1), $115; Member One Day, $85; Non-member Advance, $140; Non-member One Day, $105. Member rates apply to members of MLA, AALL, ASIS, ARLIS/NA, and the American Chemical Society/Division of Chemical Information. To qualify for the advance registration rate, the registration form envelope must be postmarked no later than May 1.

To request the conference's "Preliminary Program and Registration Booklet," write to Special Libraries Association, Conference Registration, 1700 Eighteenth Street, NW, Washington, DC 20009.

Poster Exhibit to Travel

"To Your Health: An Exhibit of Posters for Contemporary Public Health Issues," will be traveling to ten sites throughout the U.S. and Canada over the next two years. It is scheduled to be in Seattle at the U.W. Health Sciences Library from April 4 - May 31, 1992 in its only scheduled West Coast stop. The exhibit features 76 posters reflecting the health issues of the day, dating from World War I through the 1980s and coming from all parts of the world. The materials were selected from NLM's collection of more than 3,000 medical posters.

ASIS, SLA to Meet

Submitted by Debbie Ketchell

ASIS's (American Society for Information Science) Mid-Year Meeting will be held in
## Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
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</thead>
<tbody>
<tr>
<td>April 15-19</td>
<td>Follow-up to the Fundamentals, Los Angeles, CA. Taught by PSRML Staff. Contact MEDLARS Management at 800-638-9480.</td>
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<tr>
<td>April 18</td>
<td>The Copyright Balancing Act, Seattle, WA. Contact Linda Milgrom, 206/543-8262.</td>
</tr>
<tr>
<td>April 19</td>
<td>The Copyright Balancing Act, Portland, OR. Contact Linda Milgrom, 206/543-8262.</td>
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<tr>
<td>April 19</td>
<td>WMLA Annual Meeting, Seattle, WA. Contact Valerie Schultheiss, 206/244-9970 ext. 533, or Peggy Burt, 206/744-4391.</td>
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<tr>
<td>April 26</td>
<td>Loansome Doc/DOCLINE Workshop, Missoula, MT. Contact Nancy Press, OnTyme: UWHS/L/RML, or 206/543-8262.</td>
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<tr>
<td>April 26-29</td>
<td>ASIS (American Society for Information Science) Mid-Year Meeting Santa Clara, California</td>
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<tr>
<td>May 2</td>
<td>Continuing Library Education Computer Workshop, &quot;Local Area Networks: Are They For You?&quot; Seattle, WA. Contact Susan Veltfort, above.</td>
</tr>
<tr>
<td>May 3</td>
<td>Loansome Doc/DOCLINE Workshop, Twin Falls, ID. Contact Nancy Press, OnTyme: UWHS/L/RML, or 206/543-8262.</td>
</tr>
<tr>
<td>May 9</td>
<td>Continuing Library Education Computer Workshop, &quot;Local Area Networks: Are They For You?&quot; Seattle, WA. Contact Susan Veltfort, above.</td>
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<tr>
<td>May 17</td>
<td>Mainstreaming the Special Library. A Special Libraries Association course. Vancouver, BC. Contact Professional Growth Section.</td>
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<tr>
<td>May 31-June 6</td>
<td>Medical Library Association 91st Annual Meeting, San Francisco, CA. Contact MLA, 312/419-9094.</td>
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<tr>
<td>June 2-5</td>
<td>Canadian Library Association Annual Meeting, Montreal.</td>
</tr>
<tr>
<td>June 8-13</td>
<td>Special Libraries Association Annual Conference, San Antonio, TX. Contact: Special Libraries Association Conference Registration, 1700 Eighteenth Street NW, Washington, DC 20009</td>
</tr>
<tr>
<td>July 9-13</td>
<td>White House Conference on Library and Information Services, Washington, DC.</td>
</tr>
<tr>
<td>October 19-21</td>
<td>Symposium on Computer Applications in Medical Care, sponsored by the American Medical Informatics Association, Washington, DC. Contact AMIA, 11140 Rockville Pike, Box 324, Rockville, MD 20852.</td>
</tr>
<tr>
<td>November 17-20</td>
<td>Northwest Notes is published bi-monthly by the Pacific Northwest Chapter of the Medical Library Association. Valerie Schultheiss, Editor Highline Community Hospital Medical Library 16251 Sylvester Rd. S.W. Seattle, WA 98166 OnTyme code: HCH Phone: 206/244-9970 ext.533 Fax: 206/243-9934</td>
</tr>
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Library Automation
By Peggy Burrell

I've learned it the hard way, and maybe you have, too: BACKUP, BACKUP, BACKUP! When I was cleaning out my Smartcom directory and wiped out my automatic logins, I learned that it only takes two seconds to wipe out hours of work. And, since I had never really totally understood the Smartcom macro setup, I was in a mild panic when I discovered what I had done. Recently, I discovered that I could write a simple batch file using the DOS editor, Edlin, to back up the files on my hard disk. In the past, I have written batch files to make menus — a very simple process that impresses library users with my "computer savvy." So it wasn't hard to write a batch file using Edlin to do periodic backups, and now I back up my hard disk on a monthly basis. This is probably minimal backup, but it's certainly an improvement over my old sloppy methods.

To write batch files, you need to have a knowledge of some simple DOS commands such as CLS (clear screen) and BACKUP which you are probably already using. You also need to know how to edit an Edlin file — it has only a few functions, but it's easily learned.

To execute a batch file, just enter the file name without the extension (i.e., "backup" execute backup.bat). DOS recognizes the file with a "bat" extension as a batch file of commands to be executed.

Edlin Basics

To start an Edlin file — type edlin <filename> at the DOS prompt, for example, "edlin backup.bat". Edlin will respond with:

```
New file
```

To start entering the batch file type i (for insert) at the asterisk. Edlin responds with "1:*", ready for you to type your first command line.

When you are done typing lines, hit CTRL C to get back to the Edlin prompt and e <return> to get back to the DOS prompt.

4. Commands for editing (to be entered at the Edlin "*> prompt)

   a. Display lines — "1l" to start the display at line 1, "2,6l" to display lines 2 to 6, etc. You will want to use this command to see what the file currently looks like.

   b. To insert a line — <line> i. To insert a new line 3, enter "3i".

   c. To correct a line enter the line number, and type the corrected version.

   d. To delete a line enter <line> d, for example "2d" or "1,4d". The second example will delete lines 1 through 4.

   e. To edit an existing file, at the DOS prompt, enter "edlin <filename>", in this case "edlin backup.bat". This will get you back into Edlin to make your corrections.

EXAMPLE OF A BACKUP BATCH FILE

```
c>edlin backup.bat
END of input file

*1 [editor's note: this is a letter "L"]

1:*echo off
2:cls
3:echo *** MONTHLY FILE BACKUP ***
4:echo ^@      
5:echo Put a formatted diskette in drive A
6:pause
7:backup \word\search a: /a
8:backup \com a:
9:echo LABEL DISKETTE "BACKUP FOR <month>"
```

4 — echo ^@ — tells the computer to leave a blank line.
6 — pause — displays own built-in message "Strike a key when ready..." and then waits.
7 — backup — copies files in the directory named to a floppy drive a. The "a:" tells the computer to add the backup files to the floppy without erasing all of the previous files on the floppy as the backup command usually does. Additional backup command modifiers include "/s", which backs up files from all subdirectories; "/m", which backs up files that have been modified since the last backup; and "/d:<date>", which backs up all files that have changed since a specified date.

Don't be afraid! Try it! It really is simple. If you decide this is as fun and useful as I think it is, consult Van Wolverton's Running MS-Dos (published by Microsoft Press) for more information.

Clinical Alerts

by Brynn Beals, St. Joseph Hospital Library, Tacoma, Washington

Thanks to everyone who contributed their strategy for dealing with NLM's new Clinical Alert feature. In addition to trying to more effectively disseminate clinical information to physicians, NLM has provided us with a great new marketing tool for our libraries! To summarize, there seem to be three ways we are approaching the Clinical Alerts.

1. Send the full text of the alert to targeted individuals, identified either by the librarian or the medical staff office, with a cover letter explaining the new program.

2. Send notice of the alert to department heads/medical directors with instructions on how to obtain the full text.

3. Announce the existence of the alert:
   - on physical or electronic bulletin boards
   - in library display case
   - through inhouse newsletters and medical staff newsletters

See CLINICAL ALERTS, page 5
Informatics
Continued from page 1

3) Our national library, the National Library of Medicine (NLM), sees medical informatics as vitally important and is supporting wide-ranging research and many postgraduate training programs in MI.

4) The Medical Library Association now has a strong new section concerned with medical informatics and boasting over 230 dues-paying members. MI Section programming at national conferences provides excellent opportunities to learn about MI research results and to meet the people involved in this research.

5) There is danger that, without closer collaboration with health sciences librarians, medical informatics systems and applications will be designed without appropriate consideration of the information access and policy issues our profession already has the expertise to handle. For example, we can help to insure these systems will meet appropriate networking, bibliographic, and indexing standards and that ease of use and open access are preserved.

6) Our bosses may soon have MI training or credentials as hospital or academic medical center "Chief Information Officers" or "Vice Presidents for Information Resources."

7) As effective managers we need to be aware and make use of research results which may provide better ways to manage information or may change the computing and telecommunications infrastructure within which we provide services.

8) The people within our institutions involved in MI research and applications understand the importance of information and, thus, can be important allies in mustering administrative support for the resources needed to automate and network library databases and services.

Medical schools have been challenged to incorporate the information sciences into their curricula. We have an opportunity to help shape these new curricula so that medical students learn basic concepts of information management and how to effectively use health science library resources and services.

10) Finally, as a relatively new disciplinary field, with a focus on developing practical applications in health care settings, medical informatics has the advantage of looking at information management from the perspective of user demand rather than production and supply. We librarians have traditionally been concerned primarily with building collections of resources to meet potential needs. Richard Rowe, the president of the Faxon Company has argued recently (1) that our supply-driven systems of information questions have encouraged us to keep asking the wrong questions — that is, how to buy more books or journals and how to get them more cheaply. Instead, we need to know our clients better and ask how we can meet their information needs when and where those needs occur. Medical informatics researchers are looking for ways to use information technology to solve medical problems and to improve health care delivery. We need to work with them to build integrated networks of information resources and management tools that not only supply a great variety of potentially relevant information, but that also respond quickly, efficiently, and effectively to the information problems and needs of our users. (1) Rowe, Richard R. "The economics of scholarly communication." Library Acquisitions: Practice and Theory, 1989, 13: 423-27.

Professional Development Funds Available

The PNC Professional Development Fund is designed to encourage participation in professional programs and courses by our members. The Board recognizes that meetings and courses are often too far away for many members to attend — those who live in the major metropolitan areas have a distinct advantage. The aim of the fund is to improve access for members, and to equalize opportunities for attendance at programs and courses which improve members' professional development.

All applications must adhere to the criteria listed below. The applications will be reviewed by the Executive Board, and all applicants will be notified of the Board's decisions. Note: All applications which meet the following criteria will be funded, limited only by solvency requirements of the treasury.

Criterion 1: PNC Membership
Applicant must be a current member of PNC.

Criterion 2: Number of Grants per Applicant
Applicants are eligible for a maximum of one grant per year.

Criterion 3: Number of Scholarships per Institution
No institution may receive more than one scholarship per event per year.

Criterion 4: Dollar Amount
A maximum of $100.00 may be awarded per applicant. The grant will not exceed the actual expense associated with the meeting or program or continuing education course(s) for which the grant is requested.

Criterion 5: Matching Funds
No matching funds will be required of the applicants.

Criterion 6: Subject/Content of Program/Meeting/Course
Professional Development funds are limited to professional programs, meetings, or continuing education courses sponsored by or co-sponsored by PNC and may not be requested or used for any other purposes.

You or another PNC member on your staff may wish to apply for a grant to help offset costs of the Pacific Northwest Chapter's annual meeting this October in Boise, Idaho. Copies of the application form for PNC Professional Development funds may be obtained from Leilani St. Anna, PNC Membership Chair, Health Sciences Library & Information Center, University of Washington, Seattle, WA 98195; call 206/685-3125; OrTyme: UWHSIL/GEN; Bitnet: LSTANNA@U.WASHINGTON.EDU.

Clinical Alerts
Continued from page 4

In addition, the PNRHSLS is keeping copies of full texts of the Clinical Alerts and will send them to anyone who requests them. The folks at Empire Health Services (EHS) in Spokane, WA are thinking of a display that will include copies of Clinical Alerts and stories about how they affect medical practice at EHS!
Oregon

Submitted by Peggy Burrell and Cindy Cunningham, and culled from RxLibris and other sources

The Oregon Health Sciences University Library will be experiencing staff reductions related to Measure 5. The Interlibrary Loan Department will share in those staff reductions. In order to provide the best service possible under difficult conditions, they are asking for our help. When requesting renewals or locations, please use fax or EMS so that they can batch these jobs for efficiency - the staff still hopes to be able to respond the same day. Also, please include phone numbers and fax numbers on EMS requests you would like them to refer. Please contact Cindy Cunningham, OHSU Interlibrary Loan Department (503/494-8026 or fax 503/494-5241) if you have any concerns.

Oregon Health Sciences Libraries Association (OHSLA), along with more than a dozen other health science professional groups, helped plan and attended an Oregon Association of Hospitals (OAH) educational conference last April. OHSLA also participated as an exhibitor, with a display designed to show new technologies in information to be used with the RML's red display board. This display material is available to other PNC/MLA libraries by calling Peggy Burrell at Providence Medical Center in Portland (503/230-6075).

Dolores Judkins and Arthur Rott, DO, Director of Medical Education at Portland's Eastmoreland General Hospital, collaborated to write a successful grant that netted $9,000 from the Northwest Osteopathic Medical Foundation. The money will be used for collection development, computer software, audiovisual software, and online database access.

St. Vincent's Hospital has recently submitted a grant request to a local foundation to fund the purchase, installation, and staffing of several CD-ROM databases on a local area network.

The Kaiser Libraries in the Portland area share Readmore's REMO serials check-in system on a LAN. Each library checks in and routes its own journals, but can check the other libraries' holdings. This is the first time REMO has been networked in this way.

After two years of use at OHSU, ORHION (formerly INFONET) went statewide in June. ORHION is the statewide online information service for health professionals offered by the OHSU Biomedical Information Communication Center (BICC). Current services include OHSU Medline, a 3-year subset of OHSU journals; OHSU public access library catalog; OHSU telephone directory; library request line; OHSU Medical/Nursing Bookstore online (to order any book in print); and the Office of Research Services' monthly Research Bulletins. ORHION's Medline allows for the direct ordering of photocopies from OHSU. Plans are underway to expand the system to include CINAHL, decision support systems, practice management programs, a patient outcomes database, and a program to link patient records with laboratory data, available on workstations as early as the summer of 1991.

PROFESSIONAL ACCOMPLISHMENTS:

Kay Irvine, Western States Chiropractic Library in Portland, has recently been named a Distinguished Member of the Academy of Health Information Professionals. She has also coauthored an article concerning a survey of chiropractic archives appearing in the Journal of Chiropractic History.

Melvina Stell-Marble has been appointed to a three-year term on the Oregon State Advisory Council on Libraries, representing special libraries in Oregon.

PEOPLE:

Kathy Martin, formerly of OHSU Reference Department, is the librarian at Willamette Falls Hospital in Oregon City.... Melanie Ball has become the Medical and Science Information Specialist at the Oregon State Library.... Nancy Brown, formerly a reference librarian at Good Samaritan in Portland, has taken a position at Kaiser Center for Health Research Library.... Pam Bjork is the AAV Librarian at Western States Chiropractic Library in Portland.... Dorrie Towne has been named as the Director of the Oregon Regional Primate Center Library in Beaverton.... Joan Carrie has been hired as the Assistant Coordinator of Outreach Services for the BICC.... Phyllis McCulloch is the new Head of Reference at Good Samaritan Hospital and Medical Center.

Washington

From Washington State ResourceLine and other sources

David Remington is the Deputy State Librarian, Washington State Library. Mr. Remington replaces Vicki Kreimeyer, who resigned to relocate to Boise, Idaho. He has held positions in public and special libraries, including the Library of Congress and the BroDart Company, and comes to the State Library from his position as Director of the Pend Oreille Regional Library, Newport, Washington.

Elaine Martin, previously head of Information and Instructional Services at George Washington University's Paul Himmelfarb Health Sciences Library, is the new Associate Director at University of Washington Health Sciences Library and Information Center (UW HSLIC).

Louise Saul has accepted the position of Information Services Librarian at the UW Health Sciences Library, Seattle, effective March 18. Louise comes from the University of New Mexico, where she was Online Specialist and ILL Coordinator.

Molly Bernard has resigned as information services librarian at UW HSLIC. Scott Condon has a temporary appointment as an information services librarian.

Debbie Ketchell is the new Associate Director for Resource Management and Systems Development at the University of Washington Health Sciences Library, effective last December. She continues in her position as Washington's State Resource Service (SRS) Coordinator as well. Susan Meyers is the SRS program assistant.

Mary Ellen Lemon is the new Project Manager for the UW Health Sciences Center IAIMS Phase 1 Planning Project. The project is funded by the National Library of Medicine. Mary Ellen has served as Coordinator of the Pacific Northwest Regional Health Science Library Service MEDIC Project since...
Washington

Continued from page 6

December 1989. The MEDIC Project, designed to evaluate the efficacy of librarians in quality filtering clinical information to determine scientific validity, is scheduled to end April 1991.

Debra Condon is the new librarian at Whidbey General Hospital Library.... Pamela Murray is the medical librarian at the Naval Hospital, Oak Harbor on Whidbey Island.

Jackie Gagne, Group Health Cooperative Medical Library, Seattle, and Sylvia MacWilliams, Southwest Washington Medical Center Library, Vancouver, WA, recently served as delegates to the Washington State Governor’s Conference on Library and Information Services. Top recommendations of the conference included providing access to libraries for all people, developing coalition for promoting literacy, and making the best use of technology in libraries.

Southwest Washington Medical Center has received a $684 grant from Southwest Washington Independent Forward Thrust (SWIFT) for the purchase of materials on Alzheimer’s Disease, to be used in the Library by physicians, staff, caregivers, and the community.

The Alcohol and Drug Abuse Institute Library at the University of Washington, Seattle, is now connected to OnTyme. ILL and other requests may be sent to their new code ADAILIB.

Stevens Memorial Hospital Library, Edmonds, has new phone numbers: 206/744-4391 voice; 206/744-4182 fax/clinical emergencies; 206/744-4000 main hospital.

St. Cabrini Hospital, Seattle, has closed. Providence Medical Center and Swedish Hospital Medical Center were able to pick up most of the journal collection. Please delete St. Cabrini from directories, DOCLINE, and other lists.

Fred Hutchinson Cancer Research Center has new phone numbers: 206/667-4314 voice; 206/667-4737 fax.

Eastside Medical Laboratory’s address was incorrectly stated in the last Northwest Notes. The correct address is 15305 NE 40th St., Redmond, WA 98052.

MLA Notes

Image Empowerment Strategies for the Health Sciences Librarian

Your image — does it make a difference? You’d better believe that it does! Kaysee Hale will tell you WHY. She will also tell you HOW to enhance your image by providing you with techniques that will make you more effective as a library professional. WHEN and WHERE will she do this? She will be the speaker at the 1:30 p.m. session at the MLA Annual Meeting on Wednesday, June 5 in San Francisco. WHO will be there? Everyone who would like to learn the skills to communicate effectively, to build interpersonal relationships, to get motivated, to build self-esteem, to be EMPOWERED, is welcome to attend. Ms. Hale will discuss guidelines to accentuate the verbal, vocal, and visual components of a professional image. If you would like to learn the techniques of empowerment through image enhancement, plan to be at this multi-sponsored session on June 5. Sponsors include the Status and Economic Interests of Health Sciences Library Personnel Committee, the Federal Libraries Section, the Hospital Libraries Section, and the Nursing and Allied Health Resources Section.

MLA Preliminary Program

Several complications delayed the delivery of the January MLA News and Preliminary Program. The publications were mailed at the same time that companies all over the United States tried to beat the postal increase deadline. This slowed delivery of all second-class mail and heavy items such as the January News, with the Preliminary Program insert. If you still have not received your copy of the January News or Preliminary Program, call MLA Headquarters at 312/419-9094.

Meet a Colleague in San Francisco!

Are you going to MLA in San Francisco? Increase your enjoyment by making a COLLEAGUE CONNEC-
We Want to Hear From You!

News and articles are most welcome! Please submit items via OnTyme or send them on disk — it saves HOURS of work! Call or write for details. Please specify clearly that items are for the newsletter. Short items (under one page) may be submitted to the Editor as typed copy. Please include your name, library, address, phone, and fax number (if available) with all submissions.

The Editor reserves the right to edit submissions if necessary.

Deadlines for Northwest Notes (subject to change) are: May 24, July 26, September 27, and November 22.

Articles from Northwest Notes may be reprinted without permission; credit would be appreciated.

Advertising information is available from the Editor.

To join the Pacific Northwest Chapter, send membership dues to:

Maryanne Blake  
VA Medical Center  
Library 142D  
1660 South Columbian Way  
Seattle, WA 98108

DUES: $5.00 U.S.  
$6.00 Canadian

Non-members of PNC: Subscription rates $7.50 per year.

MAKE CHECK PAYABLE TO PNC/MLA

Your Name:__________________________

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(You may use home or work address)

Circle those that apply:  
Renewal  New Member

Membership type requested:  
Individual  Institutional

Are you a member of the Medical Library Association?  
Yes  No