ClinicalTrials.gov Wins Prestigious Award for Government Programs

Web Site Gives Patients and Families Facing Life-threatening Illnesses Access to Centralized Information on Clinical Trials

ClinicalTrials.gov, the patient-friendly Web site developed by the National Library of Medicine for NIH, has received Harvard University's prestigious "Oscar" of government awards—the Innovations in American Government Award. ClinicalTrials.gov, one of five winners, will receive a $100,000 grant to support its replication.

Dr. Alexa McCray, director of NLM's Lister Hill Center, oversees the ClinicalTrials.gov project. Dr. McCray presented that project before the selection panel for the Innovations in American Government Awards—obviously quite effectively.

ClinicalTrials.gov grew out of 1997 legislation that required HHS to broaden the public's access to information about clinical trials on a wide range of serious or life-threatening diseases by establishing a registry for both federally and privately funded trials (http://clinicaltrials.gov/). ClinicalTrials.gov is a completely confidential Web site. No registration or personal identification of any kind is required. People who search the site are not contacted by the sponsors of clinical trials or anyone else.

"Created in 2000, the Web site gives patients and families convenient access to information on clinical trials for a wide range of diseases and conditions," said NLM director Dr. Donald A.B. Lindberg. "If we are to continue to make the giant strides in diagnosis, treatment, and cure of illness that marked the last century, we must have the participation in clinical trials by well-informed volunteers."

Alexa T. McCray, PhD, who directs the ClinicalTrials.gov

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NLM and ACP Foundation Launch National Information Program for Internists, The *Information Rx*

Now the Prescription Pad Will Point Patients to MedlinePlus

Think of doctors' prescriptions and you probably think of pills. But the *Information Rx*, a new program of the American College of Physicians Foundation (ACPF) and NLM, encourages the nation's internists to write prescriptions for a trustworthy Web site of free medical information, www.medlineplus.gov. The launch took place April 22, 2004 in New Orleans, Louisiana.

ACP's 115,000 internist members will be encouraged to "prescribe" information to their patients from MedlinePlus using a special "prescription pad" during office visits.

"Physicians have always known that an informed patient who takes an active role is a 'better' patient," notes NLM Director Donald A.B. Lindberg, MD. "We believe that both patients and their doctors will welcome this additional medical tool—good medical information—in their continuing efforts to provide good health care."

"With today's focus on the health literacy challenge, a problem affecting almost half of all American adults according to a recent Institute of Medicine report, a program like *Information Rx* coupled to MedlinePlus can make a real difference in patient understanding," says Elliot Siegel, PhD, project director and NLM Associate Director for Health Information Programs Development.

Traditionally, physicians have supplemented discussion of a diagnosis or condition in the office with brochures that are rarely tailored to each patient's special needs. Today, the majority of US adults who are online—80 percent—use the Internet to find health information. And most say it helps them get better health care, a study by the Pew Internet and American Life Project reports.

"Part of an internist's job is to explain illnesses and diagnoses to their patients," says Bernard M. Rosof, MD, Chair of the ACP Foundation Board of Trustees. "NLM's MedlinePlus provides authoritative, user-friendly and commercial-free information that doctors can use to supplement information provided in the office or clinic."

Dr. Rosof points out that health content on the Internet ranges from clinical research to pharmaceutical product sales promotions, to endorsements of herbal and mineral supplements and everything in between. "It's not easy to determine the credibility or validity of online health information," he says. "MedlinePlus is a Web site that physicians use and it's also consumer friendly for patients. It's a site we can recommend to our patients without reservation."

MedlinePlus has information on more than 650 diseases and conditions and links to pre-formulated searches of the MEDLINE database to allow viewers to find references to the latest professional articles on health topics. Under each topic, patients will find information on symptoms, diagnosis and treatment, current news stories, research studies, clinical trials, helpful graphics and even interactive tutorials. MedlinePlus accepts no advertising and most information is available in Spanish. The project was launched nationally on the opening day of the American College of Physicians'

ClinicalTrials.gov Wins Prestigious Award for Government Programs

project, remarked, "Most gratifying to us has been the reaction of our users. Our primary, overriding goal is to provide patients, their families, and other interested individuals with high-quality, reliable health information."

Traffic on the site is one measure of its value. Since its inception, the site has logged more than 75 million hits. During the last two years, daily visitors to the site have more than doubled from 7,130 to 16,055. In February 2000,

ClinicalTrials.gov included about 4,400 trials. Today, that number has more than doubled to 11,000.

The Innovations in American Government Awards is a program of the Ash Institute for Democratic Governance and Innovation at Harvard University's Kennedy School of Government. The award is administered in partnership with the Council for Excellence in Government.

New Regents Appointed

Chabrán, Gingrich Bring Diverse Skills and Experience to Library's Governing Board

NLM recently welcomed two new members to its governing body, the Board of Regents. They attended their first meeting September 21-22. The Board meets three times a year at the NLM. In addition to ten members appointed by the HHS Secretary to four-year terms, there are nine ex officio members.

Richard Chabrán has worked in the area of Latino librarianship for over 25 years. He chairs the California Community Technology Policy Group, a coalition of community-based and statewide organizations that works to ensure that underserved communities reap the benefits offered by computers, the Internet and digital innovations.

Former Speaker of the U.S. House of Representatives **Newt Gingrich, PhD,** is CEO of The Gingrich Group, a management consulting firm dedicated to expanding the capabilities and reach of forward-looking corporations and organizations in the health and health care industry. Dr. Gingrich recently founded The Center for Health Transformation, a collaboration of public and private entities engaged in moving the United States towards a fair, knowledge-intense and innovation-rich system of health care.

Richard Chabrán (l.) and Newt Gingrich are the most recent additions to NLM's Board of Regents, although each brings with him decades of experience.

The next meeting of the NLM Board of Regents is scheduled for February 15–16, 2005. Minutes of the Board of Regents meetings are on the NLM web site under "Board of Regents" (www.nlm.nih.gov/od/bor/bor.html.)

NLM and ACP Foundation Launch National Information Program for Internists

Annual Meeting in New Orleans. The joint project has been tested in two venues by nearly 517 ACP internists and their patients in Georgia and Iowa. Pre- and post-tests found that 97 percent of the participating internists made information referrals, with 59 percent using the "prescription pads for information" provided by ACPF and NLM. Twenty percent of participating physicians also reported an increase in patients bringing Internet information into the office visit.

Internists who participated in the pilot programs said that MedlinePlus empowers patients (54 percent), explains difficult concepts and procedures (43 percent), and improves patient-physician communication (42 percent). The project was modified for the third stage of the pilot program in Virginia in March 2004 to partner with Virginia librarians as an additional resource to help patients use MedlinePlus.

NLM's National Network of Libraries of Medicine will help patients who have questions about access to MedlinePlus.

The ACPF and NLM program provides participating internists with a poster, bookmarks and a supply of prescription pads, where the physician can write in a disease or condition and advise patients on how to look up the information on MedlinePlus.

The ACP Foundation exists to support the mission of the American College of Physicians and to improve the health of the public through the creation and support of programs in education, research, service, and professionalism. A nonprofit organization based in Philadelphia, the ACP Foundation works with other health organizations, the public, and corporations.

NLM Associates Begin 2004-05 Fellowship Year

Diverse Group Reflects the Excellence and Dedication That Are the Program's Hallmarks

Seven NLM Associates, including an international Fellow from Zambia, began their year at the National Library of Medicine September 1, 2004.   The NLM Associate Fellowship Program is an annual internship for recent graduates of ALA-accredited master's degree programs in library and information science. Fellows receive a comprehensive orientation to NLM programs and services, after which they conduct individual projects in areas of interest. Projects are typically of a research, development or evaluation nature.

Margaret A. Basket received her MSI in April 2004 from the University of Michigan. She has library intern experience at the Minnesota State Archives, 3M Company and Millennium Pharmaceuticals, as well as experience in document delivery and as head librarian for a university residence hall library. Prior to librarianship, she had 10 years experience as a project and technical service engineer at the 3M Company. She was a Peace Corps volunteer in Senegal from 1998-2002.

The NLM Associate Fellows, Class of 2004-05. Left to right: Lidia Hutcherson, Loren Frant, Stephanie Dennis, Rachel Gyore, Wamunyima Christine Kanyengo, Sandy Tao and Margaret Basket.

Stephanie N. Dennis received her MLS in May 2004 from the University of Maryland. She has experience developing Web sites, creating Web tutorials, and categorizing online health information for a search engine development

Second Year Placements for NLM Associate Fellows

Seven Fellows from the 2003-04 class of NLM Associate Fellows are also participating in the optional Second Year of the program, which provides for an additional year of training at a health sciences library. The Second Year placements for 2004-05 are as follows:

- **Erinn (Faiks) Aspinall**, Health Sciences Library and Informatics Center, University of New Mexico;

- **Theodora Bakker**, Dahlgren Memorial Library, Georgetown University Medical Center;

- **Lonelyss Charles**, The Lamar Soutter Library, University of Massachusetts Medical School;

- **Julie Gaines**, Briscoe Library, University of Texas Health Science Center at San Antonio;

- **Jeffery Loo**, William H. Welch Medical Library, Johns Hopkins University;

- **Nancy Pulsipher**, CDC Information Center, Centers for Disease Control and Prevention; and

- **Andrea Ryce**, Health Sciences Libraries, University of Washington.

American Indian Health: The Latest in NLM's Growing Family of Special Population Web Sites

Consumer-Friendly Resource Addresses Special Health Concerns of Four Million Americans

As part of its ongoing effort to reduce health disparities by tailoring online resources to special populations, NLM has launched a Web site to address the health concerns of the four million Americans who claim American Indian or Alaska Native ancestry. The site, "American Indian Health," is at http://americanindianhealth.nlm.nih.gov.
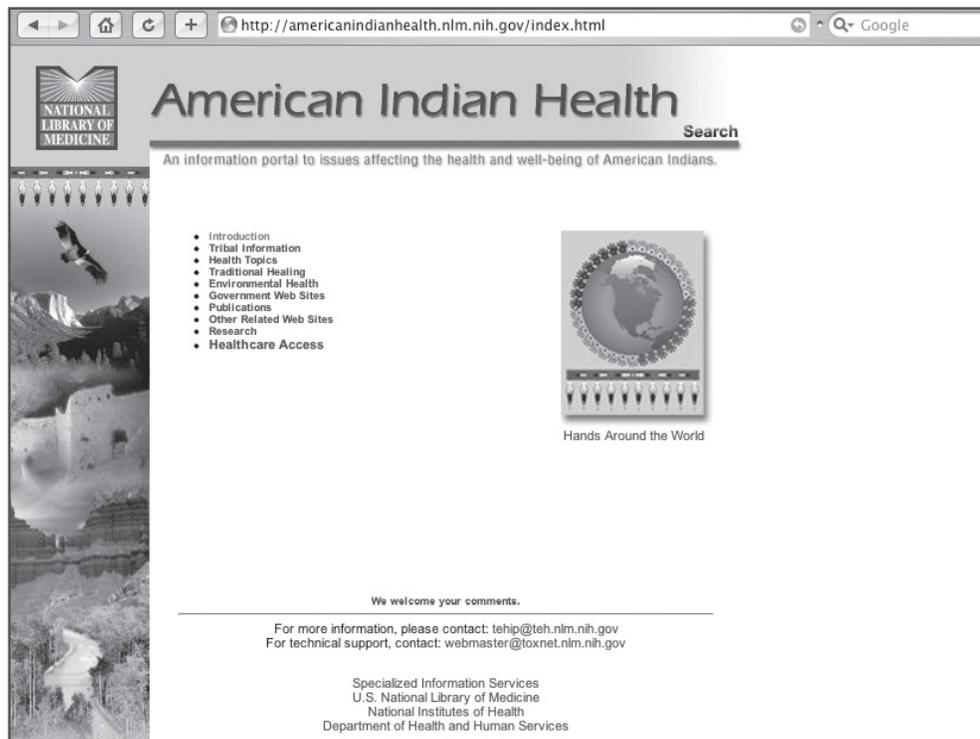
Because special populations have different health needs, the Library has created several specialized sites—for example, for Asian Americans, those living in the Arctic and far north, senior citizens and Spanish-speaking Americans. These are all available at http://www.nlm.nih.gov/databases.

American Indian Health addresses the unique needs of this population. Research shows that Native Americans are 2.6 times more likely to have diabetes as non-Hispanic whites of a similar age. American Indians also have a greater mortality risk for tuberculosis, suicide, pneumonia, alcoholism and influenza than the average population.

American Indian Health brings together pertinent health and medical resources, including consumer health information, the results of research, traditional healing resources and links to other Web sites. Much of the information has been assembled from other National Library of Medicine resources such as PubMed and MedlinePlus.

"The National Library of Medicine is interested in reaching out to populations with special needs," said Donald A.B. Lindberg, MD, library director. He notes that, for Native Americans, the NLM has a history of attending local powwows and making health information available during those events.

Screen capture from http://americanindianhealth.nlm.nih.gov

NAMES IN THE NEWS

RECOGNIZING AND HONORING THE NLM COMMUNITY

Dianne McCutcheon

Dianne McCutcheon has returned to NLM as chief of the Technical Services Division, Library Operations. Before this appointment, she was a systems planning analyst at the Library of Congress, where she coordinated projects to enhance the use of the Integrated Library System (ILS). Prior to her work at LOC, she served NLM in a variety of positions including systems librarian in the Selection/Acquisitions and Serial Records Sections, assistant head, Serial Records Section, Library Operations ILS coordinator, and head, Serial Records Section. She is a former NLM Associate and also has experience as a hospital library manager. In addition to her key role in ILS implementation, McCutcheon was instrumental in the development of serials automation at NLM, including the national serials holdings database that supports the routing of interlibrary loan requests in DOCLINE, automated serials invoice processing and integration of serials control and indexing systems. She is the recipient of several awards, including NLM's Frank B. Rogers Award.

Ivor D'Souza

Ivor D'Souza has been named chief, Systems Technology Branch, Office of Computer and Communications Systems (OCCS). He has a master's of science degree in electrical engineering from Catholic University and a bachelor's degree in electronics and communications engineering from Manipal Institute of Technology, India. D'Souza has been a partner and vice president of AAC Associates, Inc. of Vienna, Virginia since 1998. He has over 14 years of project management, technical, engineering and analytical experience working in complex information systems environments.

Dr. David Lipman

David J. Lipman, MD, director of the National Center for Biotechnology Information (NCBI), has been named the second winner of the annual Senior Scientist Accomplishment Award presented by the International Center for Computational Biology. Larry Hunter of the University of Colorado Health Sciences Center, chaired the ICSB award committee. He remarked, "Over the course of his distinguished career, Dr. Lipman contributed to several of the most important tools used in the analysis of gene sequence data, and managed the growth of many of the most essential public scientific databases. His vision and leadership of the NIH's National Center for Biotechnology Information has not only altered the course of computational biology, but of science as a whole." Lipman's search method papers have been cited nearly 40,000 times and are considered landmarks that have served as the basis for the discovery of biological functions for unknown sequences, furthering the understanding of the molecular basis of human disease. Dr. Lipman has headed NCBI since 1989.

(l. to r.): Wei Ma, Eve-Marie Lacroix, Jennifer Marill, MLA President 2003-2004 Patricia Thibodeau, Lori Klein, Naomi Miller, Joyce Backus and Paula Kitendaugh.

The Medical Library Association's Thomson Scientific/ Frank Bradway Rogers Information Advancement Award has been awarded to a group of NLM librarians for their vision and hard work in creating MedlinePlus, a benchmark Web site for the general public in both English and Spanish. They are **Joyce Backus, Paula Kitendaugh, Lori Klein, Eve-Maire Lacroix, Wei Ma, Jennifer Marill and Naomi Miller.** MedlinePlus was developed using a combination of scripting software and database structures to deliver its content. The program has been integrated with other NLM services including Pub Med and DOCLINE. Each month, more than six million users around the world turn to MedlinePlus for reliable health information. The award is sponsored by Thomson Scientific, a provider of integrated information programs to researchers, librarians, physicians, pharmacists and others. Frank B. Rogers was director of the Library of the Surgeon General, NLM's antecedent, from 1949 to 1963.
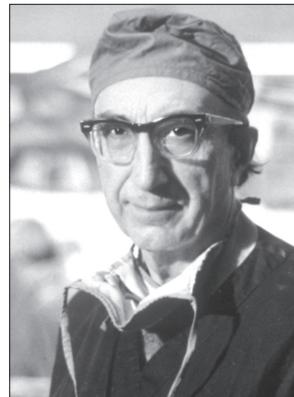
Betsy Humphreys, MLA President Patricia Thibodeau, and Martha Fishel. (l. to r.).

The Medical Library Associations' President's Award has been given to **Martha Fishel**, deputy chief of the Public Services Division, and **Betsy Humphreys**, associate director for library operations, for their work in transferring into digital format MLA's scholarly publication, the *Bulletin of the Medical Library Association*, making it available to librarians and health professionals throughout the world via PubMed Central. The President's Award is presented periodically to MLA members selected by the Association's officers and board of directors for exceptional contributions that have enhanced the profession of health sciences librarianship or furthered the objectives of the organization.

David Nash and friends are on the ball when it comes to fitness.

Dr. Michael DeBakey

Michael E. DeBakey, MD, former chair of the NLM Board of Regents and chancellor emeritus of Baylor College of Medicine, is the recipient of the 2004 David E. Rogers Award, jointly sponsored by the AAMC and the Robert Wood Johnson Foundation. As a pioneer in vascular and cardiac surgery, he was recognized for his major contributions to improving health and health care for Americans. Dr. DeBakey's discoveries in the field of artery disease have made a substantial contribution to the fight against this leading cause of death. He is credited with the development of the Dacron graft used for replacing diseased arteries in the body. In 1954 he performed the first successful repair of an abdominal aortic aneurysm using a Dacron graft. This medical innovation also allowed Dr. DeBakey to pioneer a series of related surgical procedures, including the first successful aortocoronary artery bypass using one of the patient's own leg veins to "bypass" a blocked artery in the heart. In addition to receiving worldwide recognition for his surgical discoveries, he is renowned for his efforts to train future physicians and foreign colleagues worldwide.

Equal Employment Opportunity Manager **David Nash** (left), a former Harlem Globetrotter himself, joined current Globetrotters, US Surgeon General Richard H. Carmona, MD, MPH (in hat), and Health and Human Secretary Tommy G. Thompson (between Nash and Carmona) for the June 16, 2004 "Healthier US Fitness Day," an extravaganza on the national mall in Washington, DC. The event was sponsored by the President's Council on Physical Fitness and Sports.

U.S. Mint Selects Designs by NLM Head of Graphics for New Nickel

If He Were a Rap Star, Would Joe Fitzgerald Be Known as "Five Cent"?

Joe Fitzgerald, NLM's chief of graphics, has made a piece of art that will touch everybody in America.

Fitzgerald's award-winning design for the new nickel, recently unveiled at the U.S. Mint Building in Washington, shows a tight close-up of Thomas Jefferson's profile and "Liberty" in Jefferson's own script. The word looks alive, as if floating on Jefferson's breath—as if uttered before our eyes.

There's never been another coin like it.

"I honestly thought it had no chance of winning, because it doesn't show the whole head," says Fitzgerald. "But if you see just the face, you get more of a feel for the person, his intellect. People will take it out of their pockets and say, *Who is this? What have they done to my money?*"

What they've done is to create the first completely redesigned nickel since 1938, and now Fitzgerald is the 25th person in the history of the Republic to execute a design for the front of a circulating coin. At the U.S. Mint Building on September 16th, Fitzgerald, along with mint sculptor and engraver Don Everhart, received his award.

"The people at the Mint were great," says Joe. "I've never had so much fun in any paid activity."
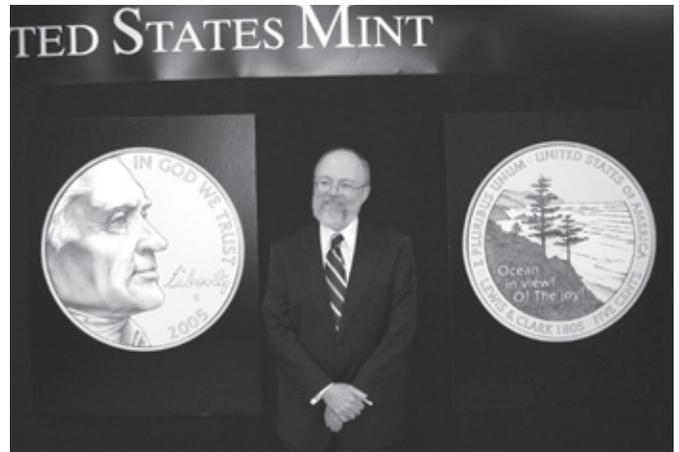
Not to diss his day job. "I've enjoyed my 23 years at NIH, where I work with some of the most wonderful people in the world. This job has provided me with a tremendous amount of experience." Still, a good artist knows when to stop, and next spring Fitzgerald will retire after 33 years of government service.

A graduate of the University of Maryland and a fifth generation Washingtonian, Fitzgerald always knew he wanted to be an artist. Influences are Degas, Monet, Turner, Rembrandt and Van Gogh. ("He rips himself open for you," Fitzgerald says of the latter.)

Fitzgerald himself paints portraits and landscapes in lush and subtle pastels.

Happily, on his last week of employment in May 2005, he'll have a retrospective at the Foxhall Gallery in Washington. Afterwards he plans to paint and to travel with his wife, Jean Fitzgerald, a photographer and artist.

"I start with an abstract idea in my head and then I try to get my artwork to match," he says. "Artists see things in different ways because if you see them the same way as all the others, you're not committing art." And in his office, art is everywhere. His basement space in the Lister Hill

NLM graphic artist Joe Fitzgerald poses at the Mint between reproductions of the two faces of his award-winning design for the new nickel.

Center emanates light and color from framed posters of his one-man shows, prints, sculptures, a jack-in-the-box, and snapshots of his treasured pug, Fabio.

His paintings hang in collections as diverse as the U.S. Embassy in Turkey, the Hyatt Hotels, and Judge Robert Bork.

But the new nickel is art with a difference.

The drawing of Jefferson is just one side of the coin. On the back is the tree-lined view of the ocean as seen by Lewis and Clark with the accompanying text, "Ocean in view! O the joy!" It's a stirring sight to the explorers.

And seeing his designs on actual U.S. nickels in 2005 will be a stirring sight for Fitzgerald "because people will collect coins, pass them on to their children and store them in banks and vaults. These little sculptures will last for thousands of years."

When you get that new nickel, check for the initials "JF"—that'll be Joe Fitzgerald, NLM's favorite artist.

Thanks to Belle S. Waring, Prints and Photographs, History of Medicine Division, for contributing this article.

Requiem for an Information Heavyweight

Stanley Jablonski, Former Head of Indexing, Dies at 88

Although, ever humble, he did not want any public mention made of the fact, celebrated bibliographer and indexer Stanley Jablonski, an NLM employee till 1976, died August 3, 2004.

Born in Poland, Jablonski came to the United States as a young man and found a mentor in Dr. Claudius Mayer, the noted physician and scholar who was the last editor of the *Index-Catalogue of the Library of the Surgeon General's Office*. Mayer sensed Jablonski's promise and hired him for a one-year conditional position as an assistant cataloger in 1949.

The conditions must have all been met, as Jablonski remained with the Library of the Surgeon General until his retirement, witnessing its metamorphosis into the National Library of Medicine. He rose through the ranks to become head of the Index Section.
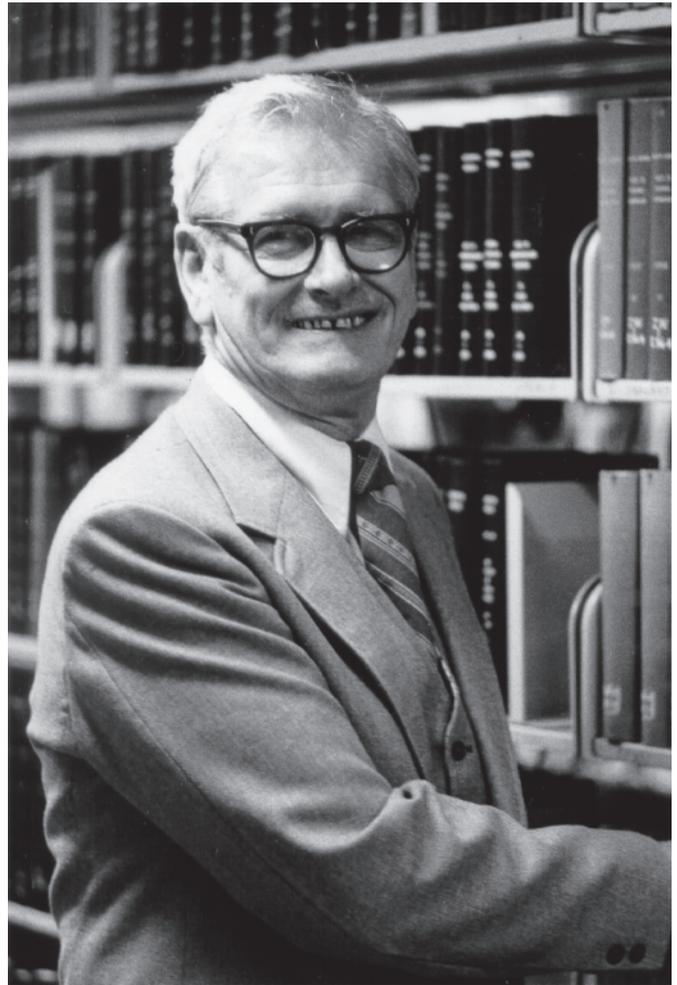
As a second act, in retirement, Jablonski embarked on a different adventure: a full-time writing career.

"In the Index Section, you work entirely with tools," Jablonski once told *NLM NEWSLINE*. "My writing is usually a reaction to a lack of tools. If there's a gap that I've noticed in the medical reference materials," he continued, "I ask myself, 'Why doesn't somebody do this work?' And then I realize that I should do it myself."

Among his most celebrated reference works was the *Online Multiple Congenital Anomaly/Mental Retardation Syndromes* database, available worldwide through the NLM Web site. It was the updated version of his printed *Dictionary of Syndromes and Eponymic Diseases*, first published in 1969.

For his "continuing scholarly achievement" in developing the *Syndromes* database, Jablonski received the prestigious NLM Director's Award in 2001. His friend and colleague, Eve-Marie LaCroix, director of NLM's Public Services Division, thought the honor well deserved. "When we looked at the top used resources on the NLM home page, Stan's *Syndromes* database was near the top of the list. It was used over a half million times in the first year alone," she told *NEWSLINE*.

Jablonski kept writing and researching at NLM in his retirement, always neatly dressed in a coat and tie. His underground office in the main Library looked like a library unto itself, its shelves chock-a-block with books and bookmarks marking the places where he'd found nuggets worth noting.

Surrounded by his treasured books, Stanley Jablonski is shown around the time of his 1976 retirement from NLM.

"I have a natural curiosity," Stanley Jablonski once remarked. "And I like to go into depth with something."

One of his last endeavors was a book on cholesterol, because his wife, Lucille, suffers from high levels of it. She survives him and lives in Virginia.

Billings' Bold Innovation to be Shelved

Index Medicus *to Cease as Print Publication at Year's End*

An era is drawing to a close. The printed *Index Medicus*, started by John Shaw Billings in 1879 and published for 125 years, will cease at the end of 2004. Billings directed NLM's antecedent, the Library of the Surgeon General, from 1865 to 1895.

Once an indispensable tool for health professionals and librarians, it is now a seldom used alternative to PubMed® and other Internet-based products that contain the database from which *Index Medicus* has been generated for nearly 40 years.

For years, *Index Medicus* has been invaluable in medical care, education, and research, but use of the printed index declined slowly once MEDLINE® became available in 1971. Subscriptions to *Index Medicus* declined more noticeably in the 1980s with the introduction of end-user searching and dropped precipitously once MEDLINE was available free on the Internet in 1997. In 2000, NLM® ceased publication of the annual *Cumulated Index Medicus*. In that same year, the Government Printing Office recognized PubMed as the definitive permanent source of MEDLINE data and no longer required Depository Libraries to retain the printed *Index Medicus*.

By 2003, the number of subscribers to the monthly *Index Medicus* fell to 155 and even for countries in the developing world demand for the publication is almost non-existent. The lack of use of *Index Medicus* is a natural result of free world wide availability of more complete, current, and easily searched electronic versions of the NLM's authoritative indexing data.

Although the printed *Index Medicus* will cease, journals recommended for inclusion in MEDLINE by NLM's journal selection advisory committee will still be distinguishable from other journals in PubMed. NLM will continue to produce the annual black and white printed MeSH tool and also expects to continue the printed *List of Journals Indexed in Index Medicus*, perhaps expanding its coverage to all indexed MEDLINE journal titles. NLM also will continue its indexing practice of starring MeSH terms as the main point of an article. Even though the printed *Index Medicus* (which lists citations under their starred headings only) will cease, there is still a need to designate the main points of an article for online retrieval.

For those users who do not wish to rely solely on PubMed access to NLM indexing data, there are numerous other Internet versions of MEDLINE as well as several commercial CD-ROM products. The MEDLINE data are available free under a license agreement should any company wish to publish a printed product.

For many years, NLM has considered the MEDLINE database to be the definitive version of its indexing data, and the Library is firmly committed to ensuring the integrity and availability of the data via its online systems. MEDLINE data are backed up each night and after one month the data is stored off site. In addition, NLM is currently establishing a remote site for critical NLM systems, including the indexing data creation and maintenance system and the complete version of PubMed. If necessary, users will be switched over to full searching of PubMed at the remote site without any interruption in access.

If you have questions or comments about *Index Medicus* please send them to: publicinfo@nlm.nih.gov.

NLM Associate Fellows 2004-05

project. Prior to her career in librarianship, she conducted research and analysis for the Grants Resource Center of the American Association of State Colleges and Universities, for the software company Blackboard and for the Points of Light Foundation. Her undergraduate degree is in English language and literature.

Loren Frant received her MLIS in June 2004 from the University of California, Los Angeles. As a graduate student, she gained experience in reference and instruction in UCLA's College Library and the Oviatt Library at California State University, Northridge. She also worked at the Fowler Museum of Cultural History on projects related to thesaurus construction, cataloging best practices and collection management systems. During summer 2003 Loren volunteered in a primary school library in rural South Africa. Prior to pursuing her MLIS, Loren worked for a visual history foundation, a museum software vendor and an IT consulting company. Her undergraduate degree is in American studies.

NLM Deputy Director Kent Smith Retires

Gifted Administrator Leaves Rich Legacy of Achievement and Innovation

One of the most familiar faces at the National Library of Medicine, Deputy Director Kent A. Smith, has retired after 25 years in that position. In a period that saw sweeping changes in information technology and in the Library's mission, Smith trained his outstanding management skills and political astuteness on many bold visions, forging public and private partnerships to turn concepts into realities. He collaborated with House and Senate members to craft the legislation creating the National Center for Biotechnology Information (NCBI) and was instrumental in establishing the Library as a leader in the emerging area of online consumer health information. Smith also oversaw the complex, multifaceted planning efforts for a third Library building on the NIH campus. His sense of humor and talent for public speaking were other gifts that enhanced his strong leadership of national and international organizations in the information field.
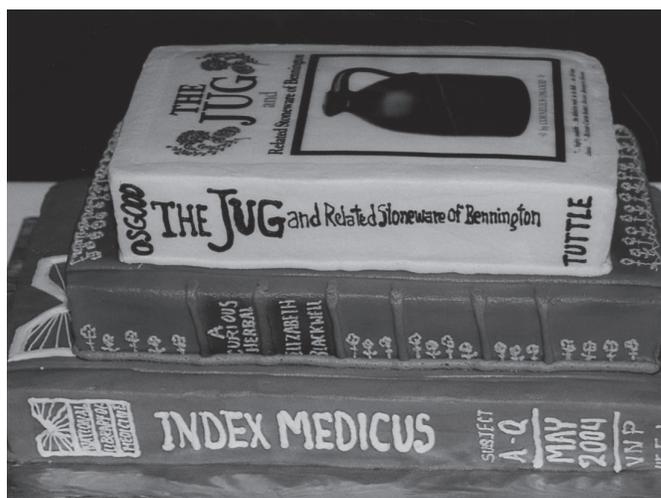
Smith, 65, was celebrated with a farewell party at the Library, July 28, 2004. In addition to a scrapbook full of tributes from friends and colleagues, he received cash gifts totaling $1,000, which he asked to be donated to NIH's Children's Inn. The Inn houses children who are being treated at NIH and their families, providing a comfortable, friendly environment during stressful times. The big surprise gift and a distinct honor to Kent was the announcement that his portrait would be commissioned and hung in the NLM Reading Room.

Well wishers from NLM, the greater library community, Capitol Hill, diverse federal agencies, health care organizations and the other realms with which he has worked through the years turned out in large numbers to salute Kent Smith. Family members flew in from New York City and Providence RI to join with Kent's son, Kent W., and daughter, Holly, who live in the Washington area. At his side was his wife, Mary, a contracting officer in the NLM Office of Acquisitions Management. His two grandchildren, Caroline and Sean, came to enjoy the festivities as well.

A highlight at his NLM sendoff was a cake in the shape of three books significant to Smith. *Index Medicus*, a signature NLM publication of monthly bibliographic listings, was on the bottom. The middle book was *A Curious Herbal*, published in the 18th century by British botanist Elizabeth Blackwell. This beautiful work is significant because it was the first book in NLM's collection immortalized in the online program "Turning the Pages," which Smith helped

The manager's manager, Kent Smith, at his desk at NLM. To many, he was one of the best known faces at the Library, and one of its most trusted and respected staff members.

The fabulous farewell party cake, fraught with significance about the professional and personal interests of Kent Smith.

bring to NLM from the British Library. The top book in the cake was *The Jug and Related Stoneware of Bennington*, a resource on stoneware crocks and pitchers that reflects Kent's passion for antiques. In fact, in retirement, he will continue as proprietor of two booths at Antiques Crossroads, an antiques mall near Hagerstown, Maryland. (He also sells some of his antique finds on ebay.)

NLM Deputy Director Kent Smith Retires

On July 12, 2004, Senator Tom Harkin (D-IA) published a tribute to Kent Smith on page S7934 of the *Congressional Record*. That piece appears below.

Mr. HARKIN. Mr. President, as a Member of the Senate who has worked in the area of medical research and health care, I draw the attention of the Congress—and Nation—to the retirement of a truly outstanding civil servant: Kent A. Smith. For the past quarter century, Mr. Smith, as deputy director, has managed the day-to-day operation of the National Library of Medicine, a part of the National Institutes of Health, U.S. Department of Health and Human Services. The National Library of Medicine is the largest medical library in the world, and it serves as the indispensable hub of national and international scientific medical communication.

The administrative and managerial astuteness of Mr. Smith has converted the vision of the Library's directors, Donald A.B. Lindberg, M.D., and his predecessor, Martin M. Cummings, M.D., into outstanding operational programs. There are many examples. One of the great success stories at the Library of the National Institutes of Health in the last decade is the National Center for Biotechnology Information. This institution, which serves as the collector and disseminator of molecular sequence data resulting from the Human Genome Program, is absolutely indispensable to the conduct of 21st century biomedical science. Its various web services are used almost a billion times each year by people around the globe. Mr. Smith provided invaluable support to members of the House and Senate, and their staff, in developing the legislation that created the center.

He has also been closely associated with the amazingly successful entry of the National Library of Medicine into the world of web-based consumer health information relied on by millions of Americans. His skill at managing people and budgets has allowed the Library to move beyond its traditional emphasis on serving exclusively scientists and health professionals. Today, such heavily used consumer information services as MedlinePlus, ClinicalTrials.gov, NIHSeniorHealth.gov, and the Household Products Database are testimony to his success in administering such a diverse institution as the Library now is.
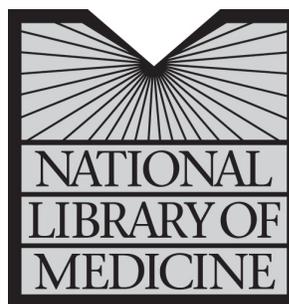
Kent Smith, trained in mathematics, economics, and management, is known to medical librarians around the world. In our country he has had close ties to the 5,000 member institutes of the National Network of Libraries of Medicine, and he has championed their cause in many venues. His leadership and tireless efforts have had great impact on the development of federal information policies that ensure broad public access to an expanding universe of electronic government health information resources.

He is also known for his strong leadership of national and international organizations in the information field. He has served as President of the National Federal of Abstracting and Indexing Services, President of the International Council of Scientific and Technical Information, Chair of the Policy Group of the Federal Library and Information Center Committee, Vice President of the UNESCO General Information Program, and Chairman of CENDI, a group of federal scientific and technical information and technology managers.

I am aware that there are many farsighted and dedicated managers serving the people of the United States. It is a pleasure for me to honor one with whom I am personally acquainted and who, on the occasion of his retirement, richly deserves our thanks for a job well done.

The crowd, a blend of friends and colleagues from the public and private sectors, gathers in the Lister Hill Center lobby to honor retiring Deputy Director Kent Smith.

Library Acquires 16th Century *Pharmacopoeia*

Rare German Work Broke New Ground

The dictionary defines "pharmacopoeia" as "a book containing an official or standard list of drugs, along with recommended procedures for their preparation and use."

The Library has recently acquired a rare and important 16th century pharmacopoeia, the *Pharmacopoeia, seu Medicamentarium pro Rep. Augustana* (Augsburg, 1573). This beautiful work is a copy of the second edition of the official pharmacopoeia of the city of Augsburg, Germany. The first edition had been printed in 1564.

This 1573 edition was the first issued with the title *Pharmacopoeia*, and was also the first edition to be printed in the tall, narrow format often used by apothecaries for recording recipes. The Augsburg *Pharmacopoeia* was compiled by Adolph Occo III, city physician and inspector of the apothecary shops of Augsburg. Considered to be the most thorough of the early pharmacopoeias, the Augsburg *Pharmacopoeia* went through numerous editions and was in use through the mid-18th century.

Thanks to Margaret Kaiser, acquisitions librarian, History of Medicine Division, for contributing this article.

Title page of the *Pharmacopoeia, seu Medicamentarium pro Rep. Augustana* (Augsburg, 1573).

NLM Associate Fellows 2004-05

Rachel A. Gyore received her MLS in May 2004 from the University at Buffalo, The State University of New York. She has three years' experience as a library assistant in the Edward G. Miner Library at the University of Rochester, working in reference, circulation, archives, and Web management. She also has three years experience as an assistant manager at Borders Books & Music. Her undergraduate degree is in history.

Lidia Y. Hutcherson received her MLIS in May 2004 from the University of Illinois at Urbana-Champaign. She comes to NLM with six years of experience in academic libraries. As a graduate student, she gained experience at the University of Illinois Library of the Health Sciences-Urbana, in the Office of Planning and Budgeting at the University of Illinois Library, and the Carle Hospital Medical Library. She also has experience as a library assistant in serials management at Washington University in St. Louis and public services at Thomas Jefferson University. Her undergraduate degree is in history.

Sandy D. Tao received her MLIS degree in May 2004 from San Jose State University in California. She has experience in library automation, serving as a metadata support specialist at the Stanford University Library. Prior to beginning her career in librarianship, she had five years' experience in information systems development, including database, Web site, and Web applications development. She

Products & Publications

New TOXMAP Website Pinpoints Harmful Chemicals in Communities

NLM announces the launch of TOXMAP, a free interactive Website that shows, on maps, the amount and location of certain toxic chemicals released into the environment in the United States. No registration is required for use of this new site, which is at http://toxmap.nlm.nih.gov.

TOXMAP focuses on the geographic distribution of chemical release, their relative amounts and their trends over time. This release data comes from industrial facilities around the U.S., as reported annually to the Environmental Protection Agency (EPA). TOXMAP also links to NLM's extensive collection of toxicology and environmental health references, as well as to a rich resource of data on hazardous chemical substances in its TOXNET databases (http://toxnet.nlm.nih.gov/). There are also fact sheets and summaries about the various chemicals, written by the Agency for Toxic Substances and Disease Registry. TOXMAP is a product of NLM's Division of Specialized Information Services (SIS).

"WISER" Puts Hazardous Materials Information in the Palms of First Responders' Hands

SIS has released WISER (Wireless Information System for Emergency Responders, at http://wiser.nlm.nih.gov), a personal data assistant (PDA) system designed to assist first responders during hazardous material incidents. WISER provides a wide range of information on hazardous substances, including chemical identification support, physical characteristics, emergency medical treatment, containment and suppression information.

First responders in general, and Hazmat (hazardous materials) units in particular, must make many decisions quickly in handling hazardous materials incidents. Emergency response teams need accurate information about the clinical and environmental impacts of hazardous substances. The WISER application extracts related and relevant content from NLM's Hazardous Substances Data Bank (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB), which contains detailed, peer-reviewed information on hazardous substances.

NCBI's Entrez Query Goes "Global"

The National Center for Biomedical Information's Entrez (the life sciences search engine) search and retrieval system now offers one-stop shopping when it comes to information retrieval. A new cross-database search method allows a single query to span: the traditional NCBI-sequence databases; Nucleotide and Protein; the literature databases, such as PubMed, PubMed Central, Books, OMIM, Journals and MeSH, the structurally-oriented databases, Structures, the Conserved Domain Database, 3D-Domains; the NCBI Taxonomy, Gene Expression Omnibus (GEO), Single Nucleotide Polymorphisms (SNPs), Population Sets, Genomes, Sequence Tagged Sites, UniGene, Gene-centered information (Gene); and, finally, the NCBI Web site itself.

NLM Associate Fellows 2004-05

also has laboratory experience as a research technician on a human genome research project. Her undergraduate training was in biology.

Wamunyima Christine Kanyengo is participating in this year's program as an International Fellow. She received her MALS in 1998 from the University of Cape Town, South Africa. In Zambia, she is Head of the University of Zambia Medical Library, which has a sister library partnership with the University of Florida Health Science Center Library. Her undergraduate degree is in library studies and public administration from the University of Zambia.

NLM would like to thank the schools of library and information science and the health sciences libraries for their continued support of this Fellowship program and their encouragement of outstanding candidates to apply. Applications for next year's program, to begin in September 2005, are now being accepted and the due date is February 15, 2005. Information on the Associate Fellows Program, along with an application, is available in the Training & Outreach section of NLM's Web site (http://www.nlm.nih.gov/about/training/associate/).

Thanks to Dr. Barbara Rapp, director of the NLM Associate Fellowship Program, for contributing this article.

"Strange Hells Within the Minds War Made": War and Trauma in the 20th Century

HMD Mini-Exhibit Opens in Time for Veterans Day

The History of Medicine Division has mounted a fascinating new exhibit, *"Strange Hells Within the Minds War Made": War and Trauma in the 20th Century*. It opened November 9, 2004 and will remain in the glass cases inside and outside the HMD Reading Room until May 31, 2005.

Within the first few months of the start of the First World War, British army physicians began to see a new and disturbing condition among soldiers. They suffered from a wide array of disabling symptoms, both mental and physical, with no apparent physical cause. Blamed at first on the percussive effect of high explosives on the nervous system, the condition was called "shell shock." It soon became clear, however, that the cause was not physical.

This exhibit shows how shell shock manifested itself during the First World War, the conditions of the Western Front that contributed to it, the medical response to it, and its literary heritage. It traces the 19th century antecedents of shell shock—hysteria, neurasthenia and railway spine—and its later manifestations—battle fatigue and posttraumatic stress disorder—in the wars and civil disasters of the 20th century.

The exhibit curator, Carol Clausen, says that the inspiration for the exhibit was a novel, Pat Barker's *Regeneration*, which takes place in a hospital for British officers suffering from shell shock. Two major War poets, Siegfried Sassoon and Wilfred Owen, were treated there. Clausen, an HMD librarian, began to explore the sources on which the novel was based, writings by and about Sassoon and Owen and their therapists, W.H.R. Rivers and Arthur Brock. Her interest grew to include the history and literary heritage of the First World War and of the psychological disorders caused by war. The exhibit was designed with the assistance of Joe Fitzgerald, NLM's chief of graphics.

Since the 1920s, red poppies have symbolized the remembrance of those who died in war; paper poppies are traditionally worn on November 11, the anniversary of the armistice that ended the First World War and now Veterans Day in the US. The poppies figure prominently in promotional materials for the exhibition and, on the first two days it was open, paper poppies were available for visitors.

Taken during the Third Battle of Ypres (Passchendaele), Belgium, July 31-November 10, 1917, this photograph shows five soldiers making their way gingerly across a duckboard track. The path takes them over shell holes filled with water and we see gaunt tree trunks in the misty background, Chateau Wood. The blasted trees, mud and pock-marked landscape are typical of areas of trench warfare. The image, from the collection of the Imperial War Museum, London, is one the most reproduced photos from the First World War.

The two main cases display a large number of authentic artifacts of the First World War, suggesting a scene in "no man's land," where the fighting took place, and a trench, where the troops and their officers lived for most of the War. Recordings of popular songs of the War and readings of War poetry accompany the exhibit.

Incidentally, the exhibition title comes from a poem by Ivor Gurney, an English poet and composer who served as a private soldier in the First World War.

Products & Publications

The cross-database search option, labeled "Entrez" on the NCBI homepage search menu, replaces "GenBank" as the default. This link then leads to a new Entrez Home Page (www.ncbi.nlm.nih.gov/Entrez), which provides a cross-database search box and a listing of the Entrez databases that can be searched in tandem. Question mark icons to the right of each database name lead to descriptions of database content. The database names and icons link to homepages where single-database queries can be constructed using lists of database-specific field restrictions, or tables that can be used to define search limits. In addition, the Entrez homepage toolbar provides links to popular NCBI tools and resources such as the Map Viewer and BLAST.

"NLM Catalog," New Entrez Database, Debuts

Entrez has added another new database, called the "NLM Catalog," to its vast holdings. The NLM Catalog provides access to NLM bibliographic data for over 1.2 million journals, books, audiovisuals, computer software, electronic resources and other materials via the NCBI Entrez retrieval system. Supporting automated mapping features such as explosions on MeSH terms, the new database is an alternate search interface to the bibliographic records resident in Locator Plus. The NLM Catalog is available at www.hcbi.nlm.nih.gov/entrez/query.fcgi from the "Search" pull-down menu and from the PubMed sidebar. It is also a hyperlink under "Library Catalogs & Services" on the NLM homepage. An overview of this new database can be viewed at www.ncbi.nlm.nih.gov/entrez/query/static/nlm-cat_help.html#overview.

Quote Unquote

"As a rule…he who has the most information will have the greatest success in life."

—Benjamin Disraeli,
British politician, 1804-81

"I find that a great part of the information I have was acquired by looking up something and finding something else on the way."

—Franklin P. Adams,
American journalist, 1881-1960

"Information is a source of learning. But unless it is organized, processed, and available to the right people in a format for decision making, it is a burden, not a benefit."

—William Pollard,
American corporate executive, 1938-

"Libraries: The medicine chest of the soul."

—Inscription over the door of the library at the ancient Greek city of Thebes by Sicilian Greek historian Diodorus Siculus, 90-21 BC

"Libraries are reservoirs of strength, grace and wit, reminders of order, calm and continuity, lakes of mental energy…In any library in the world, I am at home, unselfconscious, still and absorbed."

—Germaine Greer,
Australian-born writer and academic, 1939-

Thanks to Feifan Eric Wang, a student at Thomas S. Wootton High School in Rockville, MD and a volunteer in NLM's Office of Communications and Public Liaison, for collecting these quotations.

The following references cite works that discuss the products and services of the NLM. If you know of other appropriate citations for this column, please send reprints or references to Melanie Modlin, Editor, *NLM NEWSLINE*, Office of Communications and Public Liaison, NLM, Bethesda, MD 20894, or e-mail to: mm354i@nih.gov. *(NOTE: Some of the articles listed may be outside the scope of the NLM collection and therefore are not available from the Library on interlibrary loan.)*

Abidi SS, Finley A, Milios E, Shepherd M, Zitner D. Knowledge management in pediatric pain: mapping on-line expert discussions to medical literature. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 3-7.

Adar E. SaRAD: a Simple and Robust Abbreviation Dictionary. Bioinformatics. 2004 Mar 1;20(4):527-33.

Alexander G, Hauser S, Steely K, Ford G, Demner-Fushman D. A usability study of the PubMed on Tap user interface for PDAs. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1411-5.

Allen T, Crawford R, Jensen D, Adams K, Goodman G, Erickson H. For literature searches, is Medline enough? Stepping on stone. Lab Anim (NY). 2004 Feb;33(2):16.

Ammenwerth E, de Keizer N. An inventory of evaluation studies of information technology in health care: trends in evaluation research 1982 – 2002. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1289-94.

Antani S, Long LR, Thoma GR. Content-based image retrieval for large biomedical image archives. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 829-33.

Aronson AR, Mork JG, Gay CW, Humphrey SM, Rogers WJ. The NLM Indexing Initiative's Medical Text Indexer. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 268-72.

Bao Y, Federhen S, Leipe D, Pham V, Resenchuk S, Rozanov M, Tatusov R, Tatusova T. National center for biotechnology information viral genomes project. J Virol. 2004 Jul;78(14):7291-8.

Baud RH, Ruch P, Gaudinat A, Fabry P, Lovis C, Geissbuhler A. Coping with the variability of medical terms. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 322-6.

Bizinella Nardon F, Moura LA. Knowledge sharing and information integration in healthcare using ontologies and deductive databases. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 62-6.

Bodenreider O. The Unified Medical Language System (UMLS): integrating biomedical terminology. Nucleic Acids Res. 2004 Jan 1;32 Database issue:D267-70.

Bodenreider O, Burgun A. Aligning knowledge sources in the UMLS: methods, quantitative results, and applications. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 327-31.

Bopf M, Coleman T, Long LR, Antani S, Thoma GR, Jeronimo J, Schiffman M. An architecture for streamlining the implementation of biomedical text/image databases on the Web. In: Proceedings of the 17th IEEE Symposium on Computer-Based Medical Systems; 2004 Jun 24-25; Bethesda, MD. Los Alamitos(CA): IEEE Computer Society; 2004. p. 563-69.

Boudry C, Bozet G. [A tutorial for Medline PubMed]. Med Sci (Paris). 2004 Aug-Sep;20(8-9):804-7. French.

Bowie J. Four options for implementing SNOMED. J AHIMA. 2004 Jul-Aug;75(7):30-3; quiz 35-6.

Brown TM, Fee E. Peace and feminism. Am J Public Health. 2004 Jan;94(1):34.

Brown TM, Fee E. A role for public health history. Am J Public Health. 2004 Nov;94(11):1851-3.

Brown TM, Fee E. Sir James Crichton-Browne: Victorian psychiatrist and public health reformer. Am J Public Health. 2004 May;94(5):724.

Cahn M. New resources from the Educational Clearinghouse database. PHHA News [Internet]. 2004 Fall-Winter [cited 2004 Nov 9]:30. Available from: http://phha.mlanet.org/newsletter/fall2004.pdf

Cantor MN, Lussier YA. Mining OMIM^{TM} for insight into complex diseases. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 753-7.

Carlin BG. PubMed automatic term mapping. J Med Libr Assoc. 2004 Apr;92(2):168.

Chapman WW, Fiszman M, Dowling JN, Chapman BE, Rindflesch TC. Identifying respiratory findings in emergency department reports for biosurveillance using MetaMap. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 487-91.

Chen H, Sharp BM. Content-rich biological network constructed by mining PubMed abstracts. BMC Bioinformatics. 2004 Oct 8;5(1):147.

Crowell J, Zeng Q, Ngo L, Lacroix EM. A frequency-based technique to improve the spelling suggestion rank in medical queries. J Am Med Inform Assoc. 2004 May-Jun;11(3):179-85.

Davison AP, Morse TM, Migliore M, Shepherd GM, Hines ML. Semi-automated population of an online database of neuronal models (ModelDB) with citation information, using PubMed for validation. Neuroinformatics. 2004 Fall;2(3):327-32.

Demner-Fushman D, Hauser SE, Ford G, Thoma GR. Organizing literature information for clinical decision support. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 602-6.

Divita G, Tse T, Roth L. Failure analysis of MetaMap Transfer (MMTx). In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 763-7.

Duckles SP, Smith H. Going legit: MI now indexed in PubMed. Mol Interv. 2004 Feb;4(1):1.

Eannarino JC. Collection Development Manual of NLM, fourth edition, now available. PHHA News [Internet]. 2004 Fall-Winter [cited 2004 Nov 9]:25-6. Available from: http://phha.mlanet.org/newsletter/fall2004.pdf

Egorov S, Yuryev A, Daraselia N. A simple and practical dictionary-based approach for identification of proteins in Medline abstracts. J Am Med Inform Assoc. 2004 May-Jun;11(3):174-8.

Eveillard P. [Psoriasis in MEDLINE]. Rev Prat. 2004 Jan 15;54(1):69. French.

Fee E, Brown TM. Depression-era malaria control in the South. Am J Public Health. 2004 Oct;94(10):1694.

Fee E, Brown TM. Dispelling the specter of nuclear holocaust. Am J Public Health. 2004 Jan;94(1):36.

Fee E, Brown TM. An eventful epoch in the history of your lives. Am J Public Health. 2004 Mar;94(3):367.

Fee E, Brown TM. Factory injuries and progressive reform. Am J Public Health. 2004 Apr;94(4):540.

Fee E, Brown TM. Hospital smoking bans and their impact. Am J Public Health. 2004 Feb;94(2):185.

Fee E, Brown TM. Popularizing the toothbrush. Am J Public Health. 2004 May;94(5):721.

Fitzpatrick RB. Haz-Map: information on hazardous chemicals and occupational diseases. Med Ref Serv Q. 2004 Summer;23(2):49-56.

Fogarty M. National Library of Medicine: American Indian health. Am Indian Rep. 2004 Sep;20(9):26.

Garcia AM. [New version of the "uniform requirements for manuscripts submitted to biomedical journals"]. Gac Sanit. 2004 May-Jun;18(3):163-5. Spanish.

Gaudinat A, Joubert M, Aymard S, Falco L, Boyer C, Fieschi M. WRAPIN: new generation health search engine using UMLS Knowledge Sources for MeSH term extraction from health documentation. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 356-60.

Gillen JE, Tse T, Ide NC, McCray AT. Design, implementation and management of a Web-based data entry system for ClinicalTrials.gov. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1466-70.

Gorman PN, Yao P, Seshadri V. Finding the answers in primary care: information seeking by rural and nonrural clinicians. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1133-7.

Habibzadeh F. Sensitive versus specific search strategies on PubMed. Saudi Med J. 2004 Aug;25(8):1126; author reply 1126.

Hadley AE, Cohen A. From information jungle trails to superhighways for health caregivers in the Pacific. Pac Health Dialog. 2002 Sep;9(2):242-5.

Han SB, Kwak M, Kim S, Yoo S, Park H, Kijoo J, Kim J, Choi M, Choi J. A comparative study on concept representation between the UMLS and the clinical terms in Korean medical records. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 616-20.

Hare D. The wording is important = Les mots sont importants. Can Vet J. 2004 Aug;45(8):637-8. English, French.

Hauser SE, Demner-Fushman D, Ford G, Thoma GR. PubMed on Tap: discovering design principles for online information delivery to handheld computers. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1430-3.

Hauser SE, Demner-Fushman D, Ford G, Thoma GR. A testbed system for mobile point-of-care information delivery. In: Proceedings of the 17th IEEE Symposium on Computer-Based Medical Systems; 2004 Jun 24-25; Bethesda, MD. Los Alamitos (CA): IEEE Computer Society; 2004. p. 147-52.

Hochstein C. TOXMAP: A GIS information portal to environmental health databases. PHHA News [Internet]. 2004 Fall-Winter [cited 2004 Nov 9]:7-19. Available from: http://phha.mlanet.org/newsletter/fall2004.pdf

Hochstein C. Update from the National Library of Medicine, Division of Specialized Information Services. PHHA News [Internet]. 2004 Fall-Winter [cited 2004 Nov 9]:21-4. Available from: http://phha.mlanet.org/newsletter/fall2004.pdf

Hokamp K, Wolfe KH. PubCrawler: keeping up comfortably with PubMed and GenBank. Nucleic Acids Res. 2004 Jul 1;32(Web Server issue):W16-9.

Hole WT, Carlsen BA, Tuttle MS, Srinivasan S, Lipow SS, Olson NE, Sherertz DD, Humphreys BL. Achieving "Source Transparency" in the UMLS® Metathesaurus®. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 371-5.

Jeronimo J, Schiffman M, Long LR, Neve L, Antani S. A tool for collection of region based data from uterine cervix images for correlation of visual and clinical variables related to cervical neoplasia. In: Proceedings of the 17th IEEE Symposium on Computer-Based Medical Systems; 2004 Jun 24-25; Bethesda, MD. Los Alamitos (CA): IEEE Computer Society; 2004. p. 558-62.

Kaiser J. Scientific publishing. Congress puts similar heat on NIH. Science. 2004 Jul 23;305(5683):458.

Kanter AS, Maldonado J, Varshney A, Naeymi-Rad F. A mediated health search portal for trusted medical content. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1138-41.

Kim GR, Aronson AR, Mork JG, Cohen BA, Lehmann CU. Application of a medical text indexer to an online dermatology atlas. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 287-91.

Kim J, Le DX, Thoma GR. Automated labeling from biomedical journals published in foreign languages. In: Callaos N, Lesso W, Kurogi S, Tanaka A, Castillo O, editors. SCI 2004. Proceedings of the 8th World Multiconference on Systemics, Cybernetics and Informatics; 2004 Jul 18-21; Orlando, FL. Vol. 5, Computer science and engineering. Orlando (FL): International Institute of Informatics and Systemics; c2004. p. 444-9.

Kingsland LC, Prettyman MF, Shooshan SE. The NLM Gateway: a metasearch engine for disparate resources. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 52-6.

Korotkiy M, Middelburg R, Dekker H, van Harmelen F, Lankelma J. A tool for gene expression based PubMed search through combining data sources. Bioinformatics. 2004 Aug 12;20(12):1980-2.

Kostoff RN, Block JA, Stump JA, Pfeil KM. Information content in Medline record fields. Int J Med Inform. 2004 Jun 30;73(6):515-27.

Kranke P. [Effective literature searching. Focusing the question and using PubMed queries]. Anaesthesist. 2004 Mar;53(3):286-89. German.

Landers SJ. Rx isn't just medication anymore. amednews.com [Internet]. 2004 May 24-31 [cited 2004 Nov 9];47(20):[about 3 p.]. Available from: http://www.ama-assn.org/amednews/2004/05/24/hlsb0524.htm

Landro L. How to find the latest on results of clinical trials. Wall Street Journal. 2004 Jun 17:D1.

Larkin M. Tenley Albright. Lancet. 2004 Jan 17;363(9404):252.

Lawrence JC, Levy LS. Comparing the self-described searching knowledge of first-year medical and dental students before and after a MEDLINE class. Med Ref Serv Q. 2004 Spring;23(1):73-81.

Le DX, Thoma GR. Automated article links identification for Web-based online medical journals. In: Callaos N, Lesso W, Kurogi S, Tanaka A, Castillo O, editors. SCI 2004. Proceedings of the 8th World Multiconference on Systemics, Cybernetics and Informatics; 2004 Jul 18-21; Orlando, FL. Vol. 5, Computer science and engineering. Orlando (FL): International Institute of Informatics and Systemics; c2004. p. 462-6.

Leroy G, Rindflesch TC. Using symbolic knowledge in the UMLS to disambiguate words in small datasets with a naïve Bayes classifier. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 381-5.

Li S, Becich MJ, Gilbertson J. Microarray data mining using gene ontology. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 778-82.

Liu Y, Brandon M, Navathe S, Dingledine R, Ciliax BJ. Text mining functional keywords associated with genes. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 292-6.

Lowes R. Web-savvy docs tell us where to go. Med Econ. 2004 Jan 23;81(2):67, 71-2, 74.

Mary V, Marquet G, Le Beux P. MeSH and specialized terminologies: coverage in the field of molecular biology. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 530-4.

McCray AT, Ide NC, Loane RR, Tse T. Strategies for supporting consumer health information seeking. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 1152-6.

Mehnert R. National Library of Medicine. In: Bogart E, editor. The Bowker annual library and book trade almanac. 49th ed. Medford (NJ): Information Today, Inc.; 2004. p. 63-9.

Michael S. Consumers wowed by Web sites: some federal sites among top survey performers. Fed Comput Week. 2004 Mar 22:62.

Mitchell KJ, Becich MJ, Berman JJ, Chapman WW, Gilbertson J, Gupta D, Harrison J, Legowski E, Crowley RS. Implementation and evaluation of a Negation Tagger in a pipeline-based System for information extract from pathology reports. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 663-7.

Monegain B. Docs write prescriptions for Internet time. Healthc IT News [Internet]. 2004 May 24 [cited 2004 Nov 9]:[about 2 p.]. Available from: http://www.healthcareitnews.com/

Moore M, Ahmed T, Glazer A. Using an automated knowledge agent for reference and customer service. J Med Libr Assoc. 2004 Apr;92(2):271-3.

Mougin F, Burgun A, Loréal O, Le Beux P. Towards the automatic generation of biomedical sources schema. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 783-7

Mouillet E. [Free access to full text. How to work with PubMed Central]. Sante. 2004 Jan-Mar;14(1):55-8. French.

National Reference Center for Bioethics Literature. Digital library projects: beyond the beltway. Kennedy Inst Ethics J. 2004 Jun;14(2):207-10.

Onogi Y, Ohe K, Tanaka M, Nozoe A, Sasaki T, Sato M, Kikuchi Y, Shinohara T, Suzuki H, Kaihara S, Seyama Y. Mapping Japanese medical terms to UMLS Metathesaurus. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 406-10.

Otero P, Pedernera F, Montenegro S, Borbolla D, Garcia Marti S, Luna D, Gonzalez Bernaldo de Quiros F. Evolution of medical informatics in bibliographic databases. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 301-5.

Nelson SJ, Schopen M, Savage AG, Schulman JL, Arluk N. The MeSH translation maintenance system: structure, interface design, and implementation In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 67-9.

Neveol A, Soualmia LF, Douyere M, Rogozan A, Thirion B, Darmoni SJ. Using CISMeF MeSH "Encapsulated" terminology and a categorization algorithm for health resources. Int J Med Inform. 2004 Feb;73(1):57-64.

Pothier PE. Searching PubMed for evidence-based dentistry. Am J Orthod Dentofacial Orthop. 2004 Jan;125(1):20A.

Qureshi F. Practice tip. Undertaking a literature search using PubMed. Aust Fam Physician. 2004 Jun;33(6):439-40.

Rebholz-Schuhmann D, Marcel S, Albert S, Tolle R, Casari G, Kirsch H. Automatic extraction of mutations from Medline and cross-validation with OMIM. Nucleic Acids Res. 2004 Jan 2;32(1):135-42.

Royall J, Bennett M, van Schayk I, Alilio M. Tying up lions: multilateral initiative on malaria communications: the first chapter of a malaria research network in Africa. Am J Trop Med Hyg. 2004 Aug;71(2 Suppl):259-67.

Santoro E, Garattini S. [A model for integrating biomedical research information]. Recenti Prog Med. 2004 Apr;95(4):207-9. Italian.

Sedlar L. New feature added to PHPartners.org. PHHA News [Internet]. 2004 Fall-Winter [cited 2004 Nov 9]:24-5. Available from: http://phha.mlanet.org/newsletter/fall2004.pdf

Seifried SE, Ching C, Tanji V, Wermager P. ePOI: electronic Pathways to Online Information facilitating access to Hawaii's Online Library Resources. Hawaii Med J. 2004 May;63(5):157-8.

Shou J, Antani S, Long LR, Thoma GR. Evaluating partial shape queries for pathology-based retrieval of vertebra. In: Callaos N, Chambah M, Gaburro Z, Loutfi M, editors. SCI 2004. Proceedings of the 8th World Multiconference on Systemics, Cybernetics and Informatics; 2004 Jul 18-21; Orlando, FL. Vol. 12, Applications of cybernetics and informatics in optics, signals, science and engineering. Orlando (FL): International Institute of Informatics and Systemics; c2004. p. 155-60.

Shuman AL. For literature searches, is Medline enough? Perception of an adequate literature search. Lab Anim (NY). 2004 Feb;33(2):15-6.

Silverman J. For literature searches, is Medline enough? Lab Anim (NY). 2004 Feb;33(2):15.

Sood A, Erwin PJ, Ebbert JO. Using advanced search tools on PubMed for citation retrieval. Mayo Clin Proc. 2004 Oct;79(10):1295-9; quiz 1300.

Spivak SM. Giant household products database. Clean Restor. 2004 Feb:8 passim.

Srinivasan P, Hristovski D. Distilling conceptual connections from MeSH co-occurrences. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 808-12.

Stanley RJ, Seetharaman S, Long LR, Antani S, Thoma GR, Downey E. Image analysis techniques for the automated evaluation of subaxial subluxation in cervical spine x-ray images. In: Proceedings of the 17th IEEE Symposium on Computer-Based Medical Systems; 2004 Jun 24-25; Bethesda, MD. Los Alamitos (CA): IEEE Computer Society; 2004. p. 204-9.

Tadmouri GO, Bissar-Tadmouri N. A major pitfall in the search strategy on PubMed. Saudi Med J. 2004 Jan;25(1):7-10.

Tomasulo P. The NLM Gateway: something old, something new. Med Ref Serv Q. 2004 Spring;23(1):41-9.

Tran TD, Garcelon N, Burgun A, Le Beux P. Experiments in cross-language medical information retrieval using a mixing translation module. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 946-52.

Walker FL, Thoma GR. A Web-based paradigm for file migration. In: Archiving 2004. Final program and proceedings. Proceedings of IS&T'S 2004 Archiving Conference; 2004 Apr 20-23; San Antonio, TX. Springfield (VA): Society for Imaging Science and Technology; c2004. p. 93-7.

Wang X, Quek HN, Cantor M, Kra P, Schultz A, Lussier YA. Automated terminology networks for the integration of heterogeneous databases. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 555-9.

Wexler P. The U.S. National Library of Medicine's Toxicology and Environmental Health Information Program. Toxicology. 2004 May 20;198(1-3):161-8.

Wilkinson DM, Huberman BA. A method for finding communities of related genes. Proc Natl Acad Sci U S A. 2004 Apr 6;101 Suppl 1:5241-8.

Wong SS, Wilczynski NL, Haynes RB. Developing optimal search strategies for detecting clinically relevant qualitative studies in MEDLINE. In: Fieschi M, Coiera E, Li YJ, editors. MEDINFO 2004. Building high performance healthcare organizations. Proceedings of the 11th World Congress on Medical Informatics; 2004 Sep 7-11; San Francisco, CA. Bethesda (MD): American Medical Informatics Association; 2004. p. 311-4.

Wren JD, Garner HR. Shared relationship analysis: ranking set cohesion and commonalities within a literature-derived relationship network. Bioinformatics. 2004 Jan 22;20(2):191-8.
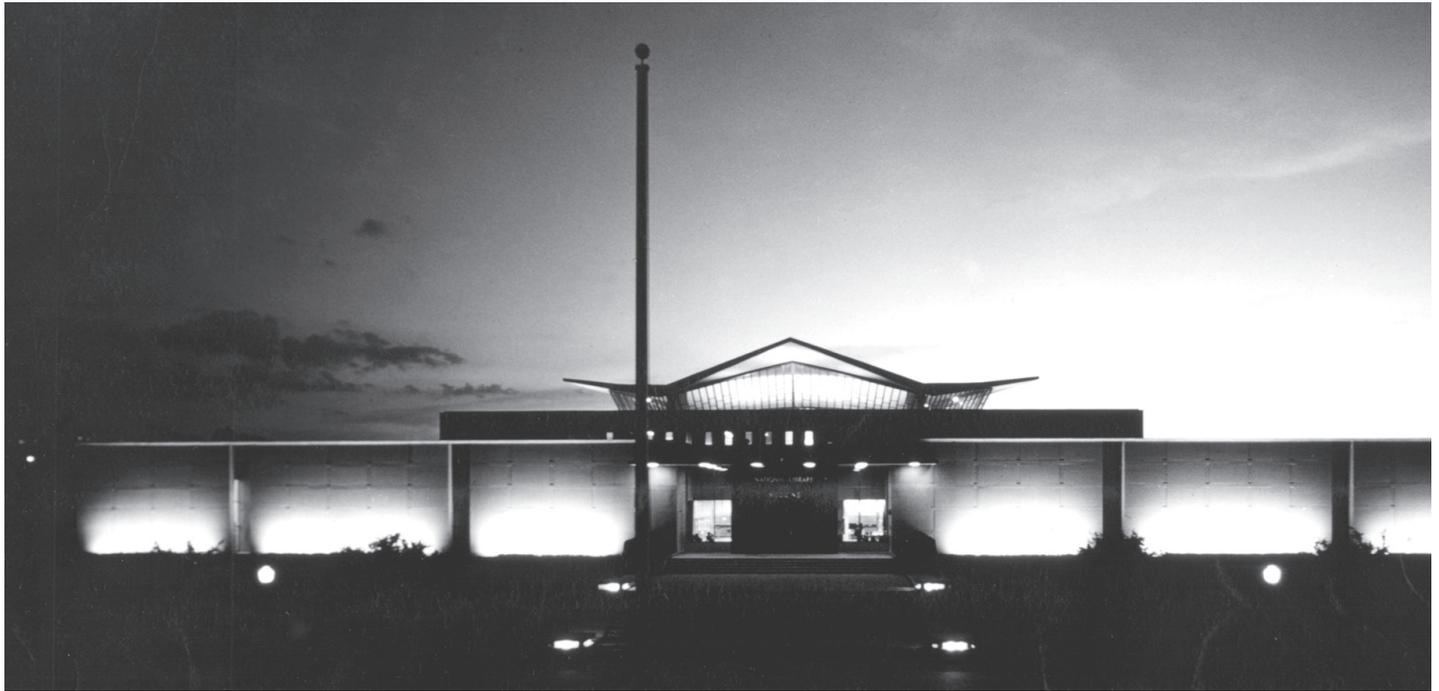
Xu X, Lee DJ, Antani S, Long LR. Curve matching for spine x-ray image retrieval using dynamic programming. In: Callaos N, Chambah M, Gaburro Z, Loutfi M, editors. SCI 2004. Proceedings of the 8th World Multiconference on Systemics, Cybernetics and Informatics; 2004 Jul 18-21; Orlando, FL. Vol. 12, Applications of cybernetics and informatics in optics, signals, science and engineering. Orlando (FL): International Institute of Informatics and Systemics; c2004. p. 172-6.

Xu X, Lee DJ, Antani S, Long LR. Partial shape matching of spine x-ray shapes using dynamic programming. In: Proceedings of the 17th IEEE Symposium on Computer-Based Medical Systems; 2004 Jun 24-25; Bethesda, MD. Los Alamitos (CA): IEEE Computer Society; 2004. p. 97-102.

Yasnoff WA, Humphreys BL, Overhage JM, Detmer DE, Brennan PF, Morris RW, Middleton B, Bates DW, Fanning JP. A consensus action agenda for achieving the national health information infrastructure. J Am Med Inform Assoc. 2004 Jul-Aug;11(4):332-8.

Youngberry K. Telemedicine research and MEDLINE. J Telemed Telecare. 2004;10(2):121-3.

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