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News from Academic Information Services and Research

## The New JEFFLINE Digital Office: Your Connection to the Internet

How many of the last 15 issues of *JeffNEWS* can you find in your office? How many newspapers and magazines do you get delivered to your office daily? Which of the following do you get "piped" directly into your office: a) Daily stock quotes, b) ESPN News, c) Philadelphia Weather Reports, or d) a weekly list of upcoming events in Philadelphia and the Delaware Valley?

If you have access to the new JEFFLINE Digital Office (pictured on this page), the answers are: "All 15, a whole newsstand full, and all-of-the-above." The new JEFFLINE Digital Office offers quick links to information resources from the Jefferson campus and from around the world, via the newest section of the Internet, the World Wide Web. More and more, people are discovering that they can find information quickly and efficiently with the new JEFFLINE Office and the Internet.

How does the JEFFLINE Digital Office work? First, imagine you are reading a regular book. In the begin-

ning of most books, you will find a table of contents with a listing of page numbers for various topics. If you locate a topic of interest, you can turn to that page. In some books you will see a cross-reference to another page or a section of another chapter. You might jump ahead in the book and look at information that relates to, or clarifies information you are reading.

Now imagine what would happen if we computerized your book and automated this cross-referencing

capability. You might have a table of contents on the computer screen listing not just different topics but whole information resources such as medical databases. You could jump from reading an NIH request for proposal to a grants database, and then jump to information about grant support at Jefferson. Or you might go from scanning the latest cancer articles in a database such as Current Contents and then jump to THOMCAT, the Jefferson on-line catalog to find out if we hold the jour-

*continued on page 3*



*AISR Connections* gives Jefferson faculty, students, employees, and friends news that they can put to use in knowledge management, biomedical communications, and instructional technology. The services of Academic Information Services and Research (AISR) include: Scott Library, Academic Computing and Medical Media Services.



Thomas  
Jefferson  
University

## Nursing Informatics

Nurses have a tradition of embracing appropriate technologies, including today the Internet. In a 1993 cover story in its journal *Reflections*, the national nursing honor society Sigma Theta Tau proudly declared nurses "knowledge workers," and announced plans for an electronic library. At this point, it was clear that the profession of nursing and traditional nursing establishment had undergone a dramatic shift, with informatics claiming a central role in the nursing professional identity.

The Department of Nursing boasts a long history of preparing students on the cutting edge of computer based technologies and information skills integration. Under the progressive guidance of Sharon Renshaw, MSN, RN, Assistant Professor of Nursing and Director of the College of Allied Health Sciences Learning Resource Center (LRC), and with the constant support of Dean Lawrence Abrams, EdD, the College began its move to computer/information technology, now known as nursing informatics, in 1983. In 1984, TJU became the first nursing program in the country to require a course in nursing computers/information. In these early days, our goals centered on "teaching with the computer and teaching about the computer." By 1987, the emphasis was on data communications. Today, the concept of "computer literacy" is outdated. The computer is no longer seen as a machine to be operated, but rather as a crucial source for information and communication.

The current nursing curriculum emphasizes skills for self-directed learning and professional development, and addresses the realities of managed care, shifting health care resources, and changing technologies. Our curriculum focuses on three technology-related goals: 1) helping students understand current technologies in the field of nursing; 2) examining the role of nurses in bringing new technology into nursing practice; and 3) enabling stu-

dents to master current professional tools and incorporate computing into all nursing activities and settings. Internet resources such as electronic mail, discussion groups, and access to remote information, are all incorporated into our curriculum.

A "Lab on Wheels," which will assist students' operations out in community settings, is a mobile information center, complete with physical assessment equipment, small screen VCR, and a laptop computer equipped with health risk and nutritional analyses, patient teaching materials, and a database of community resources.

This grant-funded project applies the general goals of our curriculum, and clearly establishes "the community connection." To introduce another perspective on nursing informatics and to teach methods of documenting nursing findings, the LRC also houses a simulated bedside computing system with full nursing documentation capabilities, similar to that used in some small hospitals. And, a pioneering application of interactive videodisk technology for multimedia computer assisted learning, entitled "Medication Administration," was designed in conjunction with AISR's Office of Academic Computing. The program allows students to visualize the skill processes clearly, and fosters real and dramatic learning and retention.

Active information and critical evaluation skills must be taught as process skills and modeled by faculty. The new undergraduate program in the course Nursing Knowledge includes critical analysis of on-line literature and evaluation of sources culled from the Internet. For another example, in the IMPART program,



Pamela G. Watson, RN, ScD  
Chairman, Department of Nursing

a grant supporting advanced education and research opportunities for minorities, students receive four hours of in-class instruction on approaches to information seeking and on-line literature search skills. Informatics applications also figure prominently in the graduate nursing curriculum.

One promising indicator of our success is the burgeoning demonstrable student interest in informatics issues. Two 1995 Baccalaureate nursing graduates completed significant independent study projects in informatics. In the present and the future of nursing communications, Internet access plays a key role.

The Department of Nursing intends to help ensure that nursing in the 21st century will be high-tech, high-touch, research-derived, and community-based, while always preserving and enhancing nursing's age-old patient-centered focus. ▲

"One promising indicator of our success is... student interest."

## Internet Research Links on JEFFLINE

Thomas Jefferson University  
Jefferson Cancer Center  
Office of Animal Resources  
Office of Research Administration

### Cancer Research

Breast Cancer Information  
CancerNet (NIH)  
Dana Farber Cancer Institute  
M.D. Anderson Cancer Center  
National Cancer Center,  
Tokyo, Japan  
National Institute for Cancer  
Research (Italy)  
OncoLink (Penn)

### Other Research Resources

AIDS (NIH)  
CDC Morbidity & Mortality  
Weekly  
Federation of American  
Societies for Experimental  
Biology (FASEB)  
GenBank (NCBI)  
Genome Database (Johns  
Hopkins)  
HIVNET (Amsterdam)  
Information Infrastructure  
Task Force  
National Academy of  
Sciences (NAS)

nals of interest. You could then skip to an Internet discussion group or relevant information resources such as the *CDC Daily Summaries*. If any of these activities sound interesting, you might want to step into the JEFFLINE Digital Office.

To help you locate the information you need, both locally and on the Internet, AISR has designed the JEFFLINE Office pictured on the cover. The JEFFLINE Office is a kind of graphical table of contents to the information on JEFFLINE and the Internet—labelled with the most important information resources you need. All you have to do is point your mouse at a resource and click.

Say, for instance, you want to access the Library catalog to look up a book or journal. By pointing at the Scott Library Electronic Bookshelf over on the left wall and clicking your mouse on the word THOMCAT, you will be taken to the catalog where you can check if the Library holds the resource you are looking for and whether it is checked out. Similarly, clicking on MEDLINE will take you to MEDLINE and the other databases that use the new OVID interface.

By now you may be asking, "How do they do that?" The answer is that there is a new type of software that allows the JEFFLINE designers to incorporate not only graphics (pictures) but also sound and even digital video. This software is called a

browser because it allows you to browse through information resources such as JEFFLINE or the Internet by using your mouse to click on pictures or text. The browser along with the new graphical JEFFLINE allows you to click and jump from one place to another because it connects you to a new section of the Internet called the World Wide Web. If JEFFLINE is like a book, the World Wide Web is like a giant cross-referenced library. Hundreds of universities, schools and companies are creating materials for the World Wide Web, so information in JEFFLINE can be linked to related information at NIH, the University of London, or a hospital in Japan.

Besides Library resources, users of the JEFFLINE Office can access other local electronic resources as well. A click on the telephone icon will take you to a directory where you can look up the electronic mail names of your Jefferson colleagues who have AISR e-mail accounts. Once you know their account name, a click on the e-mail outbox will take you to your AISR e-mail account.

Other electronic resources can be found on the picture of the bulletin board on the right wall, including electronic bulletin boards where Jeffersonians can discuss topics of mutual interest with other members of the Jefferson community or access Usenet, the worldwide bulletin board system. Usenet contains hundreds of discussion groups, composed of people from around the world who want to discuss things from popular movies and films to diabetes and AIDS.

If you look out the JEFFLINE Office window you will see parts of the Jefferson campus. Clicking on the window will take you to information about the Allied Health, Graduate and Medical colleges comprising Thomas Jefferson University, as well as information from other services units on campus such as the Office of Financial Aid and the Thomas Jefferson Bookstore.

At this point, many of you may be ready to join the ranks of JEFFLINE

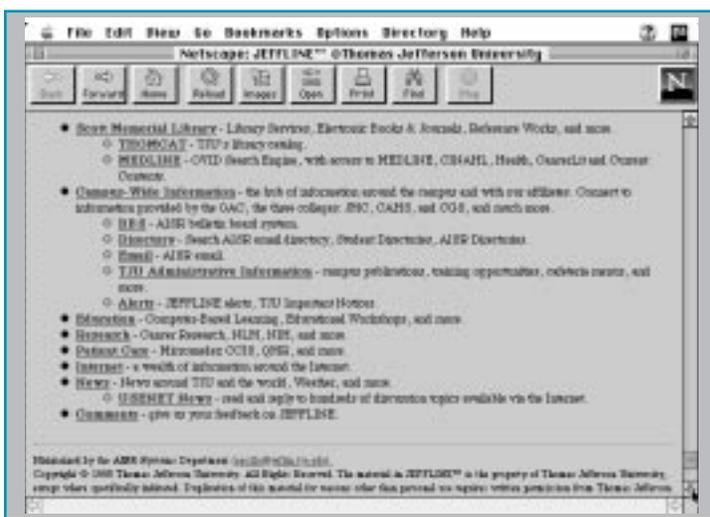


users and trade in your cluttered old office for the shiny new JEFFLINE Digital Office. You will need three things:

- A computer with an Ethernet card;
- a connection to the campus Ethernet backbone; and,
- the browser software which gives you the ability to access the JEFFLINE Office in its full beauty as well as other images, sounds and even digitized video that you might run across on the Internet.

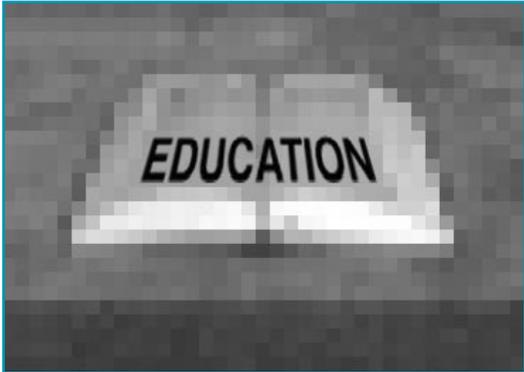
You are on your own in securing the computer but the Department of Information Systems (DIS) can connect you to the campus Ethernet (if your building is wired properly) and either DIS or AISR can supply you with the browser software.

For those of you who can't gain access to the campus Ethernet, you can use a modem (a device that connects your computer to the phone lines) to dial-in to JEFFLINE. You will not see the nice picture of the Office but you will get the JEFFLINE menu with the same services listed (as shown at the bottom left-hand side of the page). As you can see, all of the same labels are available on the menu. The best part of the menu version is that you can even gain access from your home computer if you have a modem. AISR is currently testing faster modems and special modem software that will allow users to get the full graphical version of the JEFFLINE Office even over the phone. Stay tuned for more exciting news on this front in the coming months. ▲



JEFFLINE Text-only Menu

## JEFFLINE Resources— Education, Research & Patient Care



### EDUCATION

So, now it is time to meet the Jeffersonians who are using the JEFFLINE Digital Office and the newest features of the Internet to help them with their many duties in patient care, research and education.

Marvin V. Gozum, MD, of the Department of Internal Medicine, and Director of Clinical Informatics for AISR, is working on developing a table of contents page (called a home page) for himself and for other departments. He points out that “the most immediately clinically useful World Wide Web pages for primary care are government: AHCPR pages for the entire text of practice guidelines and preventive care services.” He also recommends the CDC Web Pages for *Morbidity and Mortality Weekly Report*, “a gold mine right there; I stopped looking at my paper subscription.”

Jack London, PhD, of the Jefferson Cancer Institute (JCC) has been especially active in using the new features of the World Wide Web portion of the Internet. Dr. London said, “We are currently working on a project which will utilize the Web for communication among medical staff of patient specific data. The major issue to be addressed is data security so that the confidentiality of the patient’s clinical information is protected.”

Many Jeffersonians are enhancing their research capabilities with their Internet connection. According to Dr. London, “The primary thrust of our Web pages is to provide information to interested parties on clinical research taking place here at the JCC. For example, physicians at member hospitals of the Jefferson Cancer Network (as well as physicians here at TJU) can consult our

Web pages to determine if there is an active (open) clinical trial for a specific form of cancer that a patient of theirs has been diagnosed as having.”

Larry Waldroup, BS, RDMS, of the Department of Radiology uses JEFFLINE’s worldwide connection to collaborate on research projects. “We are performing research work with a group in Israel. Through Jefferson’s high-quality connection to the Internet, the researchers in Israel are able to telnet to a computer here at Jefferson, and are able to have near-immediate access to research data as it is collected here. It is almost as if the Internet obliterates the intervening distance.”

According to Vincent Silenzio, MD, the Internet may be a more efficient way to find grant information. “Very interestingly, for clinical researchers seeking grants and other funding, Internet-based resources improve upon the written materials. On-line it is easier to search for and find very appropriate sources efficiently.”

Herschel P. Goldstein, PhD, of the Department of Neurology, uses the Internet for a variety of research purposes. “The Internet has become an integral tool in my efforts, both scientific and academic. Scientific use of the Internet is primarily e-mail with colleagues from around the world, but also includes mailing lists, news groups, files sent and retrieved via ftp and access to library databases, especially OVID.”

Many Jeffersonians use JEFFLINE and the Internet to improve teaching and staff development. Nancy L. Rothman, R.N., Ed.D, of the Department of Nursing, uses JEFFLINE to connect to the Internet for current health policy information. According to Dr. Rothman, “The Internet allows quicker access to current information. As research and clinical guidelines are shared on the Internet it will provide quicker access to the most current information.”

Herschel P. Goldstein, PhD, has been using the World Wide Web design capabilities to create Neuroscience lessons available over JEFFLINE. “The best example I can mention has been my effort to add an Internet, World Wide Web component to the 1st year medical student Neuroscience course, ID150. One service provided, simulated quizzes based on previous years’ questions, was particularly popular.”

AISR can help you use and create information for JEFFLINE or the Internet. AISR offers Internet classes, templates you can use to design your own World Wide Web pages, as well as design consulting services. ▲

*For more information about JEFFLINE or Internet access:*

*955.2516 Edward Michalak  
e-mail [michalak@jefflin.tju.edu](mailto:michalak@jefflin.tju.edu)*

*For more information about how to create Internet and World Wide Web pages or information resources for your department:*

*955.4965 Dr. Rodney Murray  
e-mail [murray@jefflin.tju.edu](mailto:murray@jefflin.tju.edu)*



### PATIENT CARE



### RESEARCH

## Introducing AISR's Newest Professional— Ann Koopman

### CD-ROM databases in Scott Library

These titles are accessible in the Library.

- AIDSLINE
- AMA Freida Fellowship & Residency Information Database
- BIOETHICSLINE Plus
- Biological Abstracts
- Entrez—Genetics Sequences Database
- Educational Resource Information Center
- Federal Register
- Grants Database
- Health & Psychosocial Instruments (HAPI)
- Index to Scientific & Technical Proceedings (ISTP)
- PsycLIT
- Science Citation Index
- Scientific American Medicine
- SPIN—Sponsored Programs Information
- SPORT Discus

Hundreds of other databases are searchable on a fee-for-service basis. Current awareness service is available for all databases, including CD-ROMs.

955.7676  
e-mail  
koopman@jeflin.tju.edu

It wasn't too long ago that JEFFLINE contained only a scaled-down version of MEDLINE and a few other resources. The Reference area on the second floor of the Library had only a few computers for CD-ROM products such as PsycLIT. The computers on the third floor Learning Resources Center (LRC) ran mainly computer-based learning programs. The Internet was a totally separate and hard-to-access resource. Those were the "good old days."

Today, JEFFLINE sports a new graphical look that allows JEFFLINE designers to create suites of information resources organized under common themes such as Patient Care. Local databases such as Micromedex can be grouped with resources located on the Internet, and campus departments can design their own JEFFLINE information modules. New computers in the Reference area and in the LRC can access the CD-ROM databases. Although it was never easy to manage the electronic information environment, it now requires the skill of a juggler to make sure

these resources hang together. Enter Ann Koopman, AISR's new Coordinator of Electronic Information Services.

As AISR's newest member of Public Services, Ann is responsible for Internet and CD-ROM resources and subscription database services. She also co-chairs AISR's Knowledge and Information Resources Working Group which will evaluate and select resources for JEFFLINE.

Ann comes to Jefferson from Indiana-Purdue University Library, where she served as Science and Engineering Librarian and focused her efforts on Internet resource development. Ann's involvement with the exemplary Indiana-Purdue's Library Information System included building the content and contributing to the overall design.

Ann is one librarian who has made the transition from paper to electronic resources. She wants to use her experience in electronic resources to help design a JEFFLINE so usable that training is minimal and navigation is intuitive. "We need to create a



Ann Koopman, AISR Coordinator of Electronic Information Services

flexible, attractive, and effective on-line environment, which integrates all our information services into one JEFFLINE. We can best accomplish this creative endeavor by the active involvement of and collaboration with Jefferson departments and individual Jeffersonians." ▲

*On-line database searching or current awareness questions?*

955.7676 Ann Koopman  
e-mail koopman@jeflin.tju.edu

## AISR Audiovisual Team Wins S.T.A.R. Award

For their excellent service and friendly, personal approach, (pictured left to right) Julian Pryer, Rick Boone, Brian Delgross and Roger Mgrdichian, have been recognized as Jefferson's S.T.A.R. team for the second quarter of 1995.

As the Audiovisual Equipment Services group of AISR's Medical Media Services, this team is responsible for delivery, set-up, and pick up of sound systems, projection equipment, including computer projection, and other meeting support material on the entire Jefferson campus. Their domain includes 20 buildings and over 75 classrooms and auditoria. This essential service also assures that all necessary tools for effective presentations—pointers, screens, flipcharts, x-ray view racks—are available and in good working order.

During the past year, they have

provided over 35,000 hours of AV equipment access for over 4,000 Jefferson events. A typical day includes about 20 deliveries and set-ups, and can run from 6:00 am until 11:00 pm.

"It's wonderful to be recognized, and since the recognition is for the whole team, we feel four times the honor," said lead AV technician Roger Mgrdichian.

Sensitivity, teamwork, awareness, and respect are the key values recognized by Thomas Jefferson University Hospital's S.T.A.R. Program.

The team's photo now hangs in the S.T.A.R. Gallery of the Hospital's Atrium Cafeteria. The team also enjoyed a special brunch. ▲

*For information about audiovisual services contact:*

955.1290 Roger Mgrdichian



AISR's STAR AV team

# Internet Fair and Courses-Come to Learn

## August 1995 Internet Workshops

In addition to Internet Day on August 9:

Wed, August 9, 10-12  
Computer-Mediated  
Communication, including  
AISR Pine E-mail

Tues, August 15, 10-12  
Macintosh Tools for the  
Internet

Wed, August 16, 10-12  
IBM Tools for the  
Internet

Thurs, Aug 17, 1-3  
Hypertext Mark-up  
Language

To register  
955.6391  
Education Services  
edservices@jefflin.tju.edu

Take a midsummer escorted road trip down the information super-highway, the Internet, on August 9th and learn to answer questions such as:

How can clinicians use the Internet for patient care? What do information-savvy health care managers do on the Internet? Which Internet resources are useful for teaching or staff development?

AISR will present Internet/JEFFLINE Day on Wednesday August 9th in Scott Memorial Library. Demonstrations, workshops, and consultations will be offered from 9:00 am until evening.

The new JEFFLINE Digital Office, your connection to the Internet, will make its official debut. Current uses of the Internet at Jefferson will be highlighted as well as demonstra-

tions of innovative uses of the Internet, such as video teleconferencing. Topical sessions and hands-on workshops will focus on the information needs of clinicians, instructors, administrators and managers.

University departments or groups can arrange for special sessions tailored to their areas of interest and research. A special evening session is planned for Jeffersonians unable to participate in the daytime activities. Sessions of interest to both beginners and experienced Internet users will be provided. Finally, if you or your department has developed an interesting Internet resource, you might want to volunteer to demonstrate it as part of the day's activities.

Besides this special Internet / JEFFLINE Day, AISR offers a number of courses to help you understand and use the Internet. For beginners, there is a demonstration class where you will be shown the major features of the new JEFFLINE and some major resources on the Internet. Other courses provide hands-on sessions where you can learn to use electronic

mail, the World Wide Web and even how to write your own World Wide Web home page.

Once you learn the basics of writing your own home pages, AISR also provides consulting to campus departments and groups that want to design information resources and make them available on JEFFLINE.



*To receive an Internet/JEFFLINE Day schedule of events or a course schedule:*

*955.6391 AISR Education Services  
e-mail edservices@jefflin.tju.edu*



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