



IAIMS NEWSLETTER

A publication of the Spencer S. Eccles Health Sciences Library at the University of Utah

Spring 2001

Volume 16 InfoFair 2001 Supplement

InfoFair 2001

Thursday, March 22, 2001

Genome Research in Healthcare Cracking the Code

presented by

The University of Utah Spencer S. Eccles Health Sciences Library

sponsored by

The University of Utah Health Sciences Center

InfoFair is an annual event at the University of Utah Health Sciences Center with the goal of providing up-to-date information on computer applications, resources and services as well as a glimpse into the future of computers and computing in the health sciences.

The theme of InfoFair 2001 is **Genome Research in Healthcare: Cracking the Code**. The Clifford C. Snyder, M.D. and Mary Snyder Lecturer is Daniel R. Masys, M.D., Director of Biomedical Informatics, University of California, San Diego.

A panel discussion follows Dr. Masys' lecture. Panelists join Dr. Masys in discussing issues related to genomics and the delivery of healthcare. Panel participants are Lisa Cannon Albright, Ph.D., Bernie A. LaSalle, B.S., and James E. Metherall, Ph.D., with moderator Wayne J. Peay, M.S. Questions and input from the audience is encouraged.

Eugenia Posey-Marcos, Ph.D., Staff Scientist with the National Center for Biotechnology Information (NCBI) will provide an overview of the molecular database resources available from NCBI during an afternoon session to be held in the Genetics Auditorium.

InfoFair 2001 concludes with a demonstration of wireless technologies and a panel discussion of issues related to wireless

computing. Library staff will be available to answer questions about access to Eccles Library's wireless network and databases such as PubMed MEDLINE, the Cochrane Library, MD Consult and Stat!Ref at the Electronic Resources Fair. Meet informally with staff in the Reference area on the main level of the Spencer S. Eccles Health Sciences Library from noon to 1:00 P.M..

Plan to visit the InfoFair 2001 Web Gallery via the InfoFair 2001 website at <http://medlib.med.utah.edu/infofair/infofair2001/gallery.html> Links highlight molecular and genetic information resources, ethical issues related to gene therapy and wireless technology.

The Clifford C. Snyder, M.D. and Mary Snyder Lectureship

Dr. Clifford C. Snyder, Professor of Surgery, founded the Division of Plastic and Reconstructive Surgery at the University of Utah School of Medicine in 1967 and served as chair of that division until 1985 when he was appointed Professor Emeritus of Surgery and Associate Dean of the School of Medicine. Throughout his career, Dr. Snyder has been an ardent supporter of the library. Dr. Snyder's endowment of The Clifford C. Snyder, M.D. and Mary Snyder Lectureship provides funding for the featured presentation at InfoFair.

InfoFair 2001 Program

The Clifford C. Snyder, M.D. and Mary Snyder Lecture and Panel Discussion

Location: George and Dolores Eccles Institute of Human Genetics Auditorium

9:30 A.M.-10:30 A.M. **Introduction**

Wayne J. Peay, M.S.

Information Science for Genome-Enabled Research and Healthcare

Daniel R. Masys, M.D., F.A.C.P.

10:30 A.M.-11:00 A.M. **Refreshments**

11:00 A.M.-Noon **Meet the Experts panel discussion**

Moderator: *Wayne J. Peay, M.S.*

Panelists: *Daniel R. Masys, M.D., F.A.C.P.*

Lisa Cannon Albright, Ph.D.

Bernie LaSalle, B.S.

James E. Metherall, Ph.D.

Location: Spencer S. Eccles Health Sciences Library, Reference Area—Main Level

Noon-1:00 P.M. **Electronic Resources Fair: Responding to Your Needs**

Afternoon Presentations

Location: George and Dolores Eccles Institute of Human Genetics Auditorium

1:00 P.M.-2:15 P.M. **Molecular Database Resources at the National Center for Biotechnology Information**

Eugenia Posey-Marcos, Ph.D.

Location: Spencer S. Eccles Health Sciences Library, History of Medicine Room—Upper Level

2:15 P.M.-2:30 P.M. **Break**

Location: Spencer S. Eccles Health Sciences Library, History of Medicine Room—Upper Level

2:30 P.M.-4:00 P.M. **Wireless Network demonstration and panel discussion**

Moderator: *Nancy T. Lombardo, M.L.S.*

Panelists: *Frederick S. Albright, Ph.D.*

Mark Beekhuizen

John A. Harris

Chris Hessing

Dave Hoisve

Jonzy

Web Gallery

The Web Gallery is linked via the InfoFair 2001 website:

<http://medlib.med.utah.edu/infofair/infofair2001/gallery.html>



The Clifford C. Snyder, M.D. and Mary Snyder Lecture Abstract

Information Science for Genome-Enabled Research and Healthcare

The acquisition of the complete human genome forms the foundation of 21st Century health science and healthcare, for it provides a reference to begin to understand the blueprint of health and disease at a molecular level. Microarray-based laboratory technologies offer the prospect of simultaneously measuring the expression levels of tens of thousands of genes simultaneously. Detecting patterns within these oceans of data and correlating gene expression patterns with clinical events is a major challenge for biologists, statisticians, and informatics professionals.

This talk will review recent trends and challenges in the field of functional genomics² and discuss the impact that computer and information technology will have on the coming era of molecular medicine.

The Clifford C. Snyder, M.D. and Mary Snyder Lecturer

Daniel R. Masys, M.D., F.A.C.P.

Director, Biomedical Informatics, University of California, San Diego School of Medicine

Dr. Masys is currently the Director of Biomedical Informatics at the University of California, San Diego School of Medicine and Associate Clinical Professor of Medicine. An honors graduate of Princeton University and the Ohio State University College of Medicine, he completed postgraduate training in Internal Medicine, Hematology and Medical Oncology at the University of California, San Diego, and the Naval Regional Medical Center, San Diego. He served as Chief of the International Cancer Research Data Bank of the National Cancer Institute, National Institutes of Health, and from 1986 through 1994 was Director of the Lister Hill National Center for Biomedical Communications, which is the computer research and development division of the National Library of Medicine. He also served as the NIH representative to the federal High Performance Computing, Communications, and Information Technology committee which advised the President's Office of Science and Technology Policy in the area of advanced computing and National Information Infrastructure.



InfoFair Presenters and Panelists

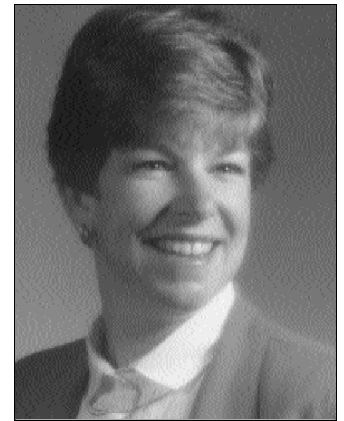
Frederick S. Albright, Ph.D.

Administrator for Computer Information Systems and Research Assistant Professor, College of Pharmacy, University of Utah
Derick Albright is a member of the Jornada Focus Group in the College of Pharmacy. This group was created by Dean John Mauger to bring handheld computer technology into pharmacy practice education and the Pharm.D. program. This focus group is developing projects to assess the impact of using handheld computers in the classroom and during student clinical rotations. The group is also developing handheld computer research projects for education and the clinical practice of pharmacy. Derick's group focuses on the HP Jornada handhelds (680 and 720) running the WindowsCE OS as the system of choice. Derick also served as adjunct faculty for the Department of Computer Information Systems, College of Business, Idaho State University to teach courses in computer language, management information systems and computer literacy. He obtained his M.S. and Ph.D. in Medical Informatics at the University of Utah.

Lisa Cannon Albright, Ph.D.

Professor, Department of Medical Informatics, Division of Genetic Epidemiology, University of Utah School of Medicine

Dr. Albright has been at the University of Utah since 1988. She is a Professor in the Department of Medical Informatics, Division of Genetic Epidemiology. She founded the Genetic Research group at LDS Hospital in 1995, and has served as its Director since its inception.



Dr. Albright is a genetic epidemiologist involved in family studies for common diseases that have an inherited component. She was involved in the studies that identified the first melanoma gene, the first two breast cancer genes, and the first prostate cancer gene.

Dr. Albright's studies have a similar goal: to identify and understand predisposition genes for common disorders. Her research group accomplishes this through the study of extended Utah high-risk pedigrees. She currently directs studies of prostate cancer, colon cancer, aneurysm, and depression sponsored by the National Institutes of Health as well as private industry.



Mark Beekhuizen

*Director of Network Operations, Health Sciences Center,
University of Utah*

Mark Beekhuizen has worked for University Hospital since 1994. He has managed the HSC network operations since mid 1995. Mark came to the University of Utah from TRW Defense Systems in Washington D.C. where he managed corporate and customer networks. He has been working as a technical support person in the computer field since 1979.

John A. Harris

*Information Systems Manager, College of Nursing,
University of Utah*

John Harris started at the College of Nursing in 1995 as the Network Administrator for their Informatics program. In 1996, he became the IS Manager for the College of Nursing, inheriting a network with two small Netware 3.12 servers, and approximately 150 nodes with 200 users. By 2001, his operation has grown to nine servers using Netware, Solaris and NT which deliver everything from file and print services to Web services to Oracle database services. These servers now service over 300 nodes with 700 users. John enjoys working at the University because of the endless opportunities to learn the latest technologies, and looks forward to participating in the developing the wireless infrastructure.

Chris Hessing

*Lead Network Specialist, J Willard Marriott Library,
University of Utah*

Chris Hessing is the Lead Network Specialist for the University of Utah J. Willard Marriott Library. He is responsible for the operation of the data networks within the library; this includes Ethernet, ATM, and Wireless. He also wrote the software for the authentication method for wireless that is currently being reviewed for implementation on campus.

Dave Hoisve

*Head of Microcomputing, J. Willard Marriott Library,
University of Utah*

Dave Hoisve heads Microcomputing at the J. Willard Marriott Library. His responsibilities include technical leadership of over 1,000 staff, library and student lab computing systems. Dave is also extensively involved in campus computing activities and currently heads the campus IT Managers Committee.

Jonzy

Institutional Security Office, University of Utah

Jonzy is a member of the University of Utah Institutional Security Office (ISO). The ISO provides guidelines and consultation to help minimize computer security vulnerabilities and incidents within the University of Utah computational environment. The ISO constantly conducts audits and probes of machines on campus to minimize the risk of intrusion, evaluates security problems detected after incidence of intrusion, and provides guidelines and information to System Administrators for securing their networks and workstations.

Bernie A. LaSalle, B.S.

*Informatics Core Director, Huntsman General Clinical
Research Center, University of Utah*

Bernie LaSalle has been a staff member of the School of Medicine since 1977. He joined the General Clinical Research Center (GCRC) in 1986. He is the chairperson of the national GCRC BioInformatics Conference. His primary interest is the support of clinical research by developing and promoting informatics, medical informatics and bioinformatics resources within the Health Sciences Center.

Nancy T. Lombardo, M.L.S.

*Systems Librarian, Spencer S.
Eccles Health Sciences Library,
University of Utah*

Nancy Lombardo received her Masters of Library Science from Emporia State University in August 1994 and accepted a position at the Eccles Library in October 1994. Nancy is the co-principal investigator for a Higher Education Technology Initiative Grant that led to the development of the virtual course Internet Navigator. As the Systems Librarian, Nancy works with the library's technical staff to coordinate, maintain and improve the library's technological capabilities. In addition, Nancy teaches a variety of Internet classes and works with library faculty and staff on projects to enhance Eccles Library services through appropriate use of technology.



James E. Metherall, Ph.D.

*Associate Professor, Department of Human Genetics, University
of Utah*

James Metherall is an Associate Professor in the Department of Human Genetics at the University of Utah. Dr. Metherall's lab studies the cellular and molecular processes that control cholesterol metabolism and how these processes relate to coronary heart disease and other diseases of cholesterol metabolism. His work uses a wide range of approaches including biochemical and metabolic assays, human genetics, somatic cell genetics, and mammalian expression cloning.

Wayne J. Peay, M.S.

*Director, Spencer S. Eccles
Health Sciences Library,
University of Utah*

Wayne Peay received an M.S. degree with honors from the School of Library Service of Columbia University in 1977. While attending library school, he was the Assistant Director of



the Data Processing Department at the Medical Library Center of New York. Following his graduation, he returned to the University of Utah as Head of Media Services at the Eccles Health Sciences Library. In 1984, he was appointed Director.

Eugenia Posey-Marcos, Ph.D

Staff Scientist, National Center for Biotechnology Information, National Library of Medicine

Eugenia Posey-Marcos recently joined the National Library of Medicine's National Center for Biotechnology Information (NCBI) in the capacity of staff scientist for NCBI User Services. Dr. Posey-Marcos received her Ph.D. in biomedical research with a concentration in biochemistry and molecular biology from East Tennessee State University in 1998. Her dissertation work involved studying the dynamics of long interspersed repetitive DNA. Postdoctoral research included work in mouse targeting vectors and the genetics involved in lipid metabolism in the Department of Nutrition, School of Public Health, University of North Carolina in Chapel Hill. Prior to coming to NCBI, she was an IRTA post-doctoral fellow at the National Eye Institute (NIH), studying apoptosis as it relates to macular degeneration in the Laboratory of Retinal Cell and Molecular Biology. Dr. Posey-Marcos' work at NCBI involves user services, including training users in NCBI resources. Her hobbies include music: she has a B.M. and M.M. in music from Wesleyan College (1976) and the University of Hartford (1981), respectively.

InfoFair 2001 Abstracts

Meet the Experts panel discussion

Local panelists will join Dr. Masys in discussing the issues related to genome-enabled research and healthcare. Audience participation and questions are encouraged. The panel moderator is Wayne J. Peay, M.S. Panelists are Lisa Cannon Albright, Ph.D., Bernie LaSalle, B.S., and James E. Metherall, Ph.D.

Molecular Database Resources at the National Center for Biotechnology Information

Molecular sequence information is increasingly an important part of all biological research. Facility with public sequence databases and search tools is therefore essential to all life science researchers. The largest public repository of biological sequence information is maintained by the National Center for Biotechnology Information (NCBI) at the National Library of Medicine. Dr. Posey-Marcos' talk describes database resources and tools available through the World Wide Web interface to the NCBI. The primary nucleic acid sequence database is GenBank, an archival collection of over 10 million DNA sequences from over 70,000 organisms. Dr. Posey-Marcos will describe the nature, content and scope of GenBank and other important NCBI databases. The primary Web access to these data is through the

Entrez database and text search system, which allows integrated access to GenBank and other nucleic acid sequence and protein databases as well as literature (PubMed), genome and structure data available at the NCBI. Dr. Posey-Marcos will demonstrate Entrez text search strategies for finding sequence records and the power of neighboring and linking to find related information. Despite the power of the Entrez search system, sequence similarity searching is the most useful way of approaching sequence databases. The sequence similarity search engine BLAST provides fast and sensitive access to all sequence data at the NCBI and is linked to the Entrez system for access to related data. Dr. Posey-Marcos will provide essential information on using the various forms of BLAST available on the Web including PSI-BLAST, PHI-BLAST and RPS-BLAST (CDD-Search). In the past few years, sequences of complete genomes including numerous microbes, *C. elegans* and *Drosophila* have become available. The NCBI provides access to annotated integrated genomic maps and assembled sequence for complete genomes. The NCBI is also a primary site for assembly and annotation of the Human Genome Project data, and NCBI has recently released an assembly of the draft human genome. Dr. Posey-Marcos will demonstrate some of the specialized genomic resources, assembled sequences, maps and tools and explain how to access data from the draft human genome.

Wireless Network demonstration and panel discussion

Wireless networking is an emerging technology on the University of Utah campus and has enormous potential for convenient and ubiquitous computing. However, there are a number of significant implementation challenges to overcome before a seamless wireless network providing secure and uninterrupted service becomes a reality on campus. A demonstration of wireless computing will be presented. The panel members will discuss:

- security issues
- outline specific implementation plans
- and the challenges involved in moving to a wireless environment.



Electronic Resources Fair: Responding to Your Needs

Library staff will be available to answer your questions about access to Eccles Library's wireless network, and databases such as PubMed MEDLINE, the Cochrane Library, MD Consult and Stat!Ref. This is your opportunity to view the latest electronic journals and molecular biology tools and resources. Visit the Electronic Resources Fair between noon and 1:00 P.M on the library's main floor and explore the array of electronic resources and services available from <http://medlib.med.utah.edu/>
The pod door is open, come on in!

Web Gallery

The Web Gallery is a unique way of introducing creative and informative Web resources for a variety of disciplines. This year, molecular and genetic information resources will be highlighted on the InfoFair website. Search systems and key databases from the National Center for Biotechnology Information (NCBI) will also be featured. Links to sites exploring ethical issues and wireless technology will be provided. Visit the Web Gallery at <http://medlib.med.utah.edu/infofair/infofair2001/gallery.html>

Directions and Parking

The Spencer S. Eccles Health Sciences Library is located on the University of Utah Health Sciences Center Campus just south of the University Hospital/School of Medicine building and northeast of the College of Nursing. The George and Dolores Eccles Institute of Human Genetics is located southeast of the Eccles Library. Signs on Wasatch Drive and North Medical Drive mark the route to the Spencer S. Eccles Health Sciences Library. A brochure on *Transportation to Eccles Library* is available by contacting the Reference Desk 801-581-5534 or via the Web at: <http://medlib.med.utah.edu/pubs/transport.html>

Visitor parking is available directly south of the Eccles Library. The lot is regulated by a ticket and the fee is \$1 per hour to a maximum fee of \$5 per day. Parking passes (\$3.00 per day) are available from the Parking Services Office located on the west side of Wasatch Drive, or from the Hospital cashier located in the lobby at the hospital entrance (801-581-2100). This parking pass allows parking in any A, U or E parking lot. Come early as parking spaces fill up quickly!

For a parking brochure or further information about parking at the University of Utah, contact Parking Services at 801-581-6415. Parking Service office hours are: 7:30 A.M.-5:00 P.M. Monday through Friday.

The University Department of Parking and Transportation Services provides free shuttles across campus from 6:00 A.M. to 6:00 P.M. Monday through Friday. Contact Shuttle Customer Service 801-581-4189 for details.

The Utah Transit Authority (UTA) serves the University of Utah with 21 direct routes including two express routes from Weber and Utah counties. Call UTA at 801-287-4636 for details and schedule information.

Special Assistance Provided by:

The Staff and Education Team of the
Spencer S. Eccles Health Sciences Library
The George & Dolores Eccles Institute of Human Genetics
The University of Utah School of Medicine
Office of Continuing Medical Education
The University of Utah Health Sciences Center
Office of Public Affairs
The Utah Medical Association

InfoFair 2001 Coordinator

Jeanne Le Ber, M.L.I.S.

Associate Librarian, Education Services, Spencer S. Eccles Health Sciences Library, University of Utah
Jeanne Le Ber is responsible for coordinating the formal education efforts of the Eccles Library in a team environment. She works with faculty from the School of Medicine and Colleges of Health, Nursing and Pharmacy to identify, schedule and teach information literacy classes, with an emphasis on using electronic resources. She is the editor of the *IAIMS Newsletter*, and coordinates the monthly Library and Information Technology Forums.

Program Committee

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Jeanne Le Ber, M.L.I.S.
Nancy T. Lombardo, M.L.S.
Daniel R. Masys, M.D., F.A.C.P.
Wayne J. Peay, M.S.
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Lectureship Coordinator



Eccles Electronic Resources

The Spencer S. Eccles Health Sciences Library website provides numerous links to electronic resources. During InfoFair 2001, staff from the Eccles Library will be available to answer questions about how to access the library's wireless network and how to access electronic resources from off-site. Join library staff at the Electronic Resources Fair from noon until 1:00 P.M. in the Reference area on the Main Level. Some links of interest:

Cochrane Library

<http://www.updateusa.com/clubip/club.htm>

The Cochrane Library is a source of reliable evidence in health care decision making.

Electronic Journals

<http://medlib.med.utah.edu/database/ejournal.html>

This link provides a list of full-text electronic journals available to the University of Utah community.

Harrison's Online

<http://www.harrisonsonline.com>

Harrison's Principles of Internal Medicine is available online from any University of Utah computer or via the proxy server. Click on the subscriber login button to start your search.

MD Consult

<http://home.mdconsult.com/groups/eccles1146.html>

MD Consult provides access to over 30 renowned medical texts, articles from more than 40 clinical journals, practice guidelines, drug information, 2,500 patient education handouts, CME, and daily medical updates customized to your specialty.

PubMed

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

PubMed provides free access to MEDLINE, a database of more than 11 million bibliographic citations and abstracts in the fields of medicine, nursing, dentistry, veterinary medicine, healthcare systems, and preclinical sciences. PubMed also contains links to the full-text versions of articles at participating publishers' websites.

STAT!REF

<http://EcclesNT.med.utah.edu/statref/tserver.dll>

STAT!REF provides access to 31 electronic medical and pharmaceutical textbooks.

WebPAC

<http://medlib.med.utah.edu/webpac-bin/wgbroker?new+access+top.eccles>

Provides access to the Eccles Library catalog over the Web. WebPAC users can search for materials owned by the Eccles Library or member libraries of the Utah Health Sciences Libraries Consortium by keyword, or alphabetically by title, journal title, author, subject and series. Links are provided to Eccles Library electronic journal subscriptions; access to electronic journals requires a University of Utah IP address.

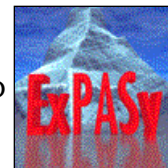
Research Tools for Molecular Biology, Genetics and Biochemistry

The following are creative and informative information resources available via the World Wide Web. Molecular and genetic tools are highlighted. For additional links, please visit the InfoFair 2001 Web Gallery at: <http://medstat.med.utah.edu/infofair/infofair2001/gallery.html>

ExPASy (Expert Protein Analysis System)

<http://expasy.cbr.nrc.ca>

The ExPASy (Expert Protein Analysis System), proteomics server of the Swiss Institute of Bioinformatics (SIB), is dedicated to the analysis of protein sequences and structures as well as 2-D PAGE. This site boasts a well organized collection of 100+ helpful Web links.



Human Genome Project Information

<http://www.ornl.gov/hgmis>



Funded by the U.S. Department of Energy, this site is designed to answer questions concerning the history and the goals of the Human Genome Project. Informative about the research in progress, the funding, a portal for information on medical as well as ethical aspects, educational resources and more.

Mouse Genome Informatics at the Jackson Laboratory

<http://www.informatics.jax.org>

This link is an example of a research institute with an outstanding Web page, where you get an idea of the research in progress and the services provided. Concentrating on mouse research, the Jackson Laboratory not only provides a Mouse Genome Database (MGD, updated daily) and a Gene Expression Database (GXD), but also places the information in a biological context. You can also view homologies between mouse and human at the whole genome level.



National Center for Biotechnology Information (NCBI)

<http://www.ncbi.nlm.nih.gov>

Established in 1988 as a national resource for molecular biology information, NCBI creates public databases, conducts research in computational biology, develops software tools for analyzing genome data, and disseminates biomedical information - all for the better understanding of molecular processes affecting human health and disease. The Site Map page explains all of the NCBI resources.



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InfoFair 2001

Genome Research in Healthcare Cracking the Code

Thursday, March 22, 2001

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Acquisitions	801-587-9247
Administration	801-581-8771
Circulation	801-581-8772
Clinical Library	801-581-4686
Computer & Media	801-581-8052
Gifts to Library	801-581-5266
Duplication	801-581-5258
Education Services	801-585-6744
Hours	801-581-8773
Interlibrary Loans	801-581-5282
Knowledge Weavers	801-585-3031
Reference	801-581-5534
Reserve	801-585-8772
Technical Support	801-581-3691

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Editor: Jeanne Le Ber

Phone: 801-581-5534

Fax: 801-581-3632

Internet: jeannele@lib.med.utah.edu

URL: <http://medstat.med.utah.edu/>