



Thomas Jefferson University
Computers in Healthcare Education Symposium
University of Utah
Knowledge Weavers
Eccles Health Sciences Library
Slice of Life Development Fund
Gold Standard Multimedia

invite you to the

Computers in Healthcare Education Symposium and Slice of Life Workshop on Interactive Multimedia

PRE-WORKSHOP TUTORIALS

Tuesday & Wednesday

JUNE 22 – 23, 1999

PRESENTATIONS AND DEMONSTRATIONS

Thursday, Friday and Saturday

JUNE 24 – 26, 1999

Philadelphia, Pennsylvania

PROGRAM INFORMATION

Suzanne S. Stensaas, Ph.D.
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MEETING REGISTRATION /WEB SITE

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PHILADELPHIA HOST/EQUIPMENT

Rodney B. Murray, Ph.D.
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Academic Infor. Serv. &
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COMPLIMENTARY DRINKS, EMBASSY SUITES HOTEL

Lobby, main floor, Nightly 5:00-7:00 p.m.

HOSPITALITY SUITE, LOGAN ROOM, EMBASSY SUITES HOTEL

Sponsored by Gold Standard Multimedia, 28th floor of the Hotel

Monday 7-9 p.m., Tuesday 7-9 p.m., Wednesday 5-9 p.m. and Friday 7-9 p.m.

The Conference Hospitality Suite is sponsored by Gold Standard Multimedia and will be open Wednesday and Friday evenings from 7:00 pm-9:00 pm. There will be sodas, wine, appetizers and computers featuring GSM products as well as tables and chairs for participants to set up their own laptops for "showing and telling" in the Slice tradition. The Hospitality Suite has always been a place where attendees and families can have a drink and inquire about places to eat. Find a group for dinner, catch a ride with those who have cars or share a taxi. Don't forget your CDs, Zips, Jazz, Palm Pilots or your latest toys. There is no Internet connection in this room. On **Wednesday evening from 5:00-9:00 p.m. you can pick up registration materials in the Logan Room.** If you are coming up before 7 bring your own refreshment with you from the lobby.

PRE - WORKSHOP TUTORIALS

TUESDAY, JUNE 22, 1999

BUSES DEPART EMBASSY SUITES 7:50, 8:00, 8:20, 8:50 A.M. (APPROX), OR WALK

9:00 a.m. – 4:30 p.m. Preparing Video for CD-ROM, WWW & DVD. Room 200B, Scott Memorial Library, 1020 Locust Street. Registrants \$150; non-registrants \$200. **Pre-registration Required.** Limit 20 participants. Lunch included.

Instructors: Paul Burrows, KUED Media Solutions, University of Utah, Salt Lake City, UT and Robert Trelease, PhD, UCLA School of Medicine, Los Angeles, CA and others in the field.

Lecture/Demonstration: A technical workshop for people who have tried or wondered or who just enjoy techie talk.

Who Should Attend: Any health science educator interested in learning how to manipulate video.

Topics include: Preparing and using video for CD-ROMs, the World Wide Web, or DVD as well as a review of the fundamentals of (a) acquiring source video, (b) digitizing, (c) editing, (d) compressing/codecs, (e) deployment methods, and (f) cross platform considerations. We will illustrate and demonstrate these concepts in order to give participants the foundation needed to understand production and digitizing procedures. Adobe Premiere and Terran Interactive's Media Cleaner Pro will be used. The QuickTime architecture and its suite of codecs are featured, although others are discussed. In the afternoon, we will discuss and demonstrate the latest digital video (DV) camcorder technology and the FireWire (IEEE 1394) DV interface standard that allows encoded video and sound to be transferred directly into the computer and other DV systems. In editing, the conventional video digitization step is eliminated because the DV camcorder IS the codec.

Medical College of Pennsylvania-Hahnemann Clinical Skills Lab and an OSCE Exam with Standardized Patients; Designing and Equipping a Clinical Skills Lab. BUS DEPARTS EMBASSY SUITES 8:30 A.M. – return 1:00 p.m.

Registrants (\$150); non-registrants (\$175). **Pre-registration Required.** Transportation and box lunch to eat on the bus are included. Bus returns to Embassy Suites and Thomas Jefferson University between 12:30 and 1:00 p.m. in time for afternoon workshops, if desired.

Instructors: Dennis H. Novack, MD, Professor of Medicine and Associate Dean of Medical Education, Diane G. Cohen, Director, Standardized Patient Program, MCP-Hahnemann School of Medicine, Philadelphia, PA and Leon Moore, PhD, Center for Informatics in Medicine, Uniformed Services University of Health Sciences (USUHS), Bethesda, MD.

Who Should Attend: Those interested in seeing a clinical skills lab and talking with those designing, using and evaluating students in such facilities. Limit 20 people.

Synopsis: At one of the finest clinical skills labs you can observe the teaching of interviewing and examining skills. The examining rooms and multi-session taping/viewing area will be used as participants either interview or evaluate two trained Standardized Patients (SPs) with an ethical dilemma or medical problem. Participants can see how the SPs immediately evaluate the students on the computers in each examining room. SPSS is used in generating reports through a web interface. Instructors review the reports from the 10 OSCE stations. Each student reviews their performance with the instructor using the report for feedback. The Center will also demonstrate the latest version of *Harvey*. The Uniformed Services University is constructing a new National Capital Area Simulation and Readiness Center (SIMCEN) for training military clinicians in the Washington DC area. The SIMCEN features a 12 station clinical simulation area, a simulation operating room area, a virtual reality room, and a NBME Medical School Center for computer-based testing of Step 1 and Step 2 exams. Leon Moore will describe the new lab under construction at USUHS in Bethesda, Maryland. He will include design features, plans, pictures and a list of equipment selected.

9:30 a.m. - 4:30 p.m. Automating the Evaluation Process: Using Information Technology to Evaluate Your Students, Faculty and Curriculum. Computer Lab Room 1311, Edison Bldg., 130 S. Ninth St. Registrants \$150; non-registrants is \$200.

Pre-registration Required. Lunch included. Limit 20 participants.

Instructor: Richard Rathe, MD, Director, Medical Informatics, Professor of Family Medicine, University of Florida College of Medicine, Gainesville, FL

Hands-on: Pentium PCs with Windows.

Who Should Attend: Educators, administrators and developers know that they should be evaluating, but the masses of paper inhibit them. You want to know more about how to evaluate and you want to do it with a computer. This tutorial is intended for a non-technical audience. No programming experience is required. Computer familiarity with Windows and browsers is assumed.

Synopsis: In this session you will 1) learn to analyze and develop requirements for computerized evaluation systems (needs assessment), 2) learn the practical and technical aspects of implementing Internet-based evaluation systems, 3) learn the practical and technical aspects of implementing evaluation systems on hand held (PDA) computers, 4) be able to select and deploy new evaluation technologies at your home institution. During the workshop you will be presented with cases and solutions for peer evaluation, performance-based exams (OSCEs), and online CME programs. You will make your own online evaluations forms.

9:00 a.m.– 4:30 p.m. Writing Good Test Questions, Banking Them Electronically, and Adding Multimedia Resources.

Room 307, Scott Memorial Library, 1020 Walnut Street. Priority will be given to GRIPE members until May 22. Registrants and GRIPEers \$150; non-registrants \$200. Lunch included. **Pre-registration Required.** Space limited. Repeat workshop on Wednesday.

Instructors: Susan M. Case and David B. Swanson, National Board of Medical Examiners, Philadelphia, PA, Susan Roberts and Valeri Craigle, Knowledge Weavers, University of Utah, David McHaffie, Wellington School of Medicine, New Zealand, Tim Fitzharris, Medical School, University of South Carolina, and Larry Fabrey, AMP for LXR•TEST 5.1 Software, Alta Loma, CA

Hands-on: Pentiums PCs with Windows.

Who Should Attend: If you are interested in writing better questions, banking them in a computer program for paper or electronic delivery, collecting question and exam statistics, and adding multimedia elements to your questions, then this is the workshop for you. If you are computer-phobic we can pair you with someone who is not. You do not need to be a Ph.D. or an M.D. to participate.

Synopsis: First the experts will analyze questions: both good and bad. Working in pairs, you will discover it is not so easy when you critique your questions. Next you enter your questions into LXR•TEST and select clip media such as a heart sound, animation, graph, photo or a patient movie. At the end of the day, the group will share insights and frustrations. Applied Measurement Professionals will provide us with the software. On Tuesday, Regina Kreisle from Purdue University will also demonstrate the GRIPE pathology question bank, which uses a FileMaker Pro template she developed.

9:00 a.m.– 12:00 p.m. JavaScript Primer (a.m.) and The Power of JavaScript 1:30 p.m.–4:30 p.m. Rm. 1310, Edison Building, 130 S. Ninth St. Registrants \$150 all day or \$75 half day; non-registrants \$100 half day; \$200 all day. **Pre-registration Required.**

Instructors: Ulrich Woermann, University of Bern, Switzerland and Tyler Anderson, Eccles Health Sciences Library, University of Utah, Salt Lake City, UT. **Hands-on: Pentium PCs with Windows.** Limited to 20 participants.

Who Should Attend: Anyone who wants to add interactivity to a Web site without too much effort. **Pre-requisite** for morning session: a working knowledge of HTML (especially forms) and a basic understanding of programming. **Pre-requisite** for afternoon session: attendance at the morning session or fundamental knowledge of JavaScript.

Overview: JavaScript allows you to control the various elements of HTML, thus creating real interactivity. JavaScript is not as powerful as compiled programming languages such as C++ or Java, but it is much easier to learn and to implement.

Morning Session: After communicating the essential facts on how to integrate JavaScript into HTML pages, examples such as how to change an image (rollover effect), change the content of a frame, open a new window, and simple calculations will be shown. We will cover de-bugging with the Netscape Console and Internet Explorer, MIME type mapping on the WWW-Server.

Afternoon Session: We will compose elaborate scripts using features of JavaScript such as arrays, cookies, browser and platform specific adaptations, and DHTML. Examples will include random generator, browser and OS dependent pages, interactive quiz templates, and differential count of blood cells. Tools such as ScriptBuilder, BBEdit, and HomeSite will also be discussed.

Tuesday, June 22, 7:00-9:00 p.m. Buffet and Cocktail Reception at The College of Physicians of Philadelphia, Mutter Museum and Garden, 19 South 22nd St. \$25 including transportation for attendees and guests. Pre-registration Required. Don't miss the good music, delicious food or medical collection or sitting in the medicinal herb garden. <http://www.collphyphil.org/muttpg1.shtml>.

Enjoy the String Quartet organized by Raphael Rubin, MD, Department of Pathology, TJU

CELEBRATE Bruce Fenderson's Birthday (Bruce is our local TJU GRIPE organizer)

Wine, beer, soft drinks and stuffed tomatoes, asparagus and ham rolls, arametes, dried beef roll, nutballs, Endive with boursin, crudite with house dip, salmon pate maison, assorted cheese tray, fresh fruit, guacamole with tortilla chips, roast turkey, with condiments, bread, rolls, miniature reubens sandwiches
cream puff shells with chicken salad, hot chicken livers wrapped with bacon, spinokapita, shish kabobs
chicken and artichoke skewers, swedish meatballs, and stromboli

Reception included with GRIPE registration. Those **not** registered for the GRIPE meeting check with Leah Smith regarding the availability of last minute tickets. **First bus departs at 6:30 from Embassy Suites.**

First bus returns at 9:00.

BUSES DEPART EMBASSY SUITES 7:50, 8:00, 8:20, 8:50 A.M. (APPROX), OR WALK

9:00 a.m. – 12:00 p.m. The “Virtual Human”. Computer Lab Room 1310, Edison Building, 130 S. Ninth Street. Meeting registrants \$100, non-registrants \$125. **Pre-registration Required.**

Instructors: Jon Seymour, MD, Gold Standard Multimedia, Tampa, FL

Hands-on Pentium PCs with Windows: Limited to 20 participants.

Who Should Attend: Anyone interested in exploring ways that the *Virtual Human* (VH) application can be used to create material for gross anatomy curriculum or wanting to learn to create their own 3-D renderings and animations.

Synopsis: It is possible to manipulate and customize any combination of the more than 1400 anatomical structures identified in the *Visible Human Male* for student use, lectures, presentations, Intranet sites and papers. Learn to use the software and understand its capabilities so you can supplement a gross anatomy lab or describe a surgical approach. *VH* is the first truly 3-D software designed for you to select the organs and structures you want to “animate”. Using the *Virtual Human* can help students see anatomical shapes and relationships in a different way. The software is available to attendees of the pre-workshop for half price; \$100 for the Atlas version (normally \$195) and \$625 for the Studio version (normally \$1250).

9:00 a.m. – 12:00 p.m. Designing and Producing Medical Education Programs for the Next Generation Internet (Broadband): A Theoretic and Practical Framework. Room 307, Jefferson Alumni Hall, 1020 Locust Street.

Registrants \$75; non-registrants \$100. **Pre-registration Required.**

Instructors: Joseph Henderson, MD and Mark Noel, Interactive Media Laboratory, Dartmouth Medical School, Hanover, NH

Lecture/Demonstration: Limited to 40 participants

Who Should Attend: Anyone wanting to focus on the future of education with the Next Generation Internet (NGI). If you are curious about new instructional designs that offer more comprehensive health professional education and illustrate the potential of NGI, then this is the session for you. This is NOT for experts but for educators with imagination.

Synopsis: NGI is likely to dramatically increase the educational tools and designs available to educators, including increased use of motion video and graphics, more immersive interfaces, and more absorbing and complex depictions of the world about which one wishes to learn. New instructional designs are being developed that offer the potential for more comprehensive health professional education, and that illustrate the potential of NGI capabilities. The *Virtual Practicum*, a template for case simulations and educational resources, will be shown along with examples from combat trauma and field training programs developed for DARPA and NSF.

12:15/12:30 BUSES FROM TJU TO EMBASSY SUITES RETURNING TO TJU 12:45, 1:00

1:30 p.m. – 4:30 p.m. Software Design and Use Informed by Results from Cognitive Science Research. Room 1311, Edison Bldg., 130 S. Ninth Street. Registrants \$75; non-registrants \$125. **Pre-registration Required.**

Instructors: Andy C. Reese, Director of Electronic Curriculum Resources, Medical College of Georgia, Augusta, GA and Thomas M. Nosek, Associate Dean for Information Technology, Case Western Reserve University, Cleveland, OH

Hands-on: Pentium PCs with Windows. Limited to 20 participants

Who Should Attend: Interested in a better understanding of how people acquire, process, store, and recall information so you can create more effective presentations? Then this workshop is for you.

Synopsis: Dr. Reese will summarize results from the cognitive/learning sciences that are relevant to maximizing learning in any setting. From his experience as a software author and in overseeing development of the electronic curriculum at CWRU, Dr. Nosek will provide practical examples of how this information can be applied to software design and use, effective presentations, course design, etc. The last portion will be a hands-on opportunity for individuals to put some of these ideas into practice by working on a personal project using the computers provided. Only skills needed are those of Microsoft Office or PowerPoint. Participants are then expected to share ideas.

9:00 a.m. – 4:30 p.m. Writing Good Test Questions, Banking them Electronically, and Adding Multimedia Resources. Room 307, Scott Memorial Library, 1020 Walnut Street. This is a repeat of Tuesday’s workshop. **See p. 3 for description.** Registrants and GRIPEers (\$150), non-registrants (\$200). Lunch included. **Pre-registration Required.**

1:00 p.m. – 5:00 p.m. AAMC Curriculum Management & Information Tool (CurrMIT). Room 1310, Edison Building, 130 S. Ninth Street. **Hands-on: Pentium PCs with Windows.** Registrants \$100; non-registrants \$125. **Pre-registration Required.**

Instructor: Albert A. Salas, American Association of Medical Colleges, Division of Medical Education, Washington, DC

Who Should Attend: Anyone who wants to use the online curriculum database to support management, organization and reform of their curriculum.

Synopsis: CurrMIT is an online database designed to help medical schools manage the curriculum. The database can be of use to associate deans for medical education and curriculum managers, as well as other administrators, faculty, and medical education researchers. It is being made available to all LCME-accredited medical schools. An overview of the background of the project and the data that can be held in CurrMIT will be demonstrated. Then you will learn to add, modify, and delete data as well as manage references and source tables.

9:00 a.m. – 4:30 p.m. Streaming Media & Synchronized Multimedia for the WWW. Room 200 B, Scott Memorial Library, 1020 Walnut Street. Registrants \$150; non-registrants \$200. Lunch included. **Pre-registration Required.**

Instructors: Valeri Craigle and Susan Roberts, Knowledge Weavers, Spencer S. Eccles Health Sciences Library, University of Utah, Richard Rathe, MD, University of Florida, Gainesville, FL, Paul Burrows, KUED Media Solutions, University of Utah, Salt Lake City, UT and others in the field.

Lecture/Demonstration Limited to 20.

Who Should Attend: It will help if you are familiar with terms relating to HTML, video and audio manipulation and compression. There will be technical banter among the demonstrators and participants. This is not a workshop for novices but all are welcome. The principal focus will be on preparation for the Web (as well as CD-ROM).

Synopsis: The session will include the difference between "progressive download" and "streaming media" on the Web. A review of the fundamentals of preparing the media. Streaming media tools, including RealVideo, RealAudio, RealText and RealPix. Real Networks new RealSystemG2, a package of streaming media production tools for higher quality and increased flexibility, will also be included. An introduction to SMIL to deliver/create timed and synchronized streaming multimedia presentations for the Web is also featured. Practical issues related to streaming both media and HTML images over the web at 28.8kbs and their necessary resolution in order to have user acceptance will be stressed. The PresenterPro plug-in for PowerPoint is an easy, time-efficient way to create online presentations of narrated PowerPoint slides into a self-contained RealMedia presentation. We conclude with a look at a new authoring tool, *Electrifier Pro*, to drag and drop video, audio, vector-based graphics, pixel-based graphics and other media into a single QuickTime movie with a suite of effects and hypermedia links, all for Web deployment.

1:00 p.m. – 5:00 p.m. Panel of Experts on the "Big Mystery", COPYRIGHT AND FAIR USE Brent Auditorium, Jefferson Alumni Hall, 1020 Locust Street. Registrants \$75; non-registrants \$100. **Pre-registration Required.**

Who Should Attend: Everyone! With copyright there are always more questions than answers, and everyone needs to know the answers! Panelists will each have 10 minutes to raise issues or review the status of their area, followed by 10 minutes of Q&A from the audience and other panelists. After a refreshment break at 3:00 p.m., there will be an open discussion among panelists and attendees. Questions, answers, and open discussion from everyone is encouraged. We anticipate a lively and informative exchange from all viewpoints.

PANEL Moderator: Alexander Grimwade, Ph.D., Publisher, The Scientist, Philadelphia PA, Formerly of Elsevier Science and Keyboard Publishing. Dana Schilling (Harvard Law School '75) is a writer and lecturer, and author and editor of a white paper for the American Business Press Electronic Media Committee. She is preparing a document for the group.

Bob Braude. Associate Dean for Biomedical Communications and Library Director, Weill Medical College of Cornell University, NY, NY

Lyndon Holmes, President of Aries Systems Corporation, North Andover, MA. publishes electronic databases and journals.

Jon Seymour, MD, is Chairman and President., Gold Standard Multimedia, Tampa, FL. GSM is an electronic medical publisher of health education CDs and Web-based courses such as *Clinical Pharmacology Online*.

Carol Richman is Director of Licensing, and Permissions and Copyrights for Lippincott Williams & Wilkins, Baltimore, MD

Clifford K. Weber, Esq., is Assistant Counsel, Intellectual Property, Office of University Counsel, Thomas Jefferson University.

REGISTRATION MATERIALS for those not attending pre-workshops may be picked up in the Hospitality Suite, Logan Room, top floor Embassy Suites Hotel Wednesday evening from 5-9 pm or outside the Solis Cohen Auditorium in Alumni Hall Thursday or Friday mornings.

BUSES TO EMBASSY SUITES 4:45-5:30 PM

**ALL PRESENTERS ON THURSDAY MORNING SHOULD BRING THEIR SOFTWARE EARLY
WEDNESDAY AFTERNOON TO THE SOLIS COHEN AUDITORIUM, JEFFERSON ALUMNI HALL**

PICKUP REGISTRATION PACKET

On Wednesday evening from 5:00-9:00 p.m. you can pick up registration materials in the Gold Standard Hospitality Suite, the Logan Room on the top floor of the hotel. If you are coming up before 7:00 p.m. bring your own refreshment with you from the lobby. You can pick up registration packets as long as the hospitality suite is open.

Evening Recommendation: Wednesday night is "Museum Night" in Philadelphia. Most Museums are open until 8:45 p.m. Plan to visit one and then have dinner. Our hotel is on "Museum Row". Manny Besa has arranged for a special pizza dinner for a limited number. See the form in your registration packet.

PLATFORM PROGRAM: THURSDAY, JUNE 24, 1999

Solis Cohen Auditorium, Jefferson Alumni Hall, 1020 Locust Street

BUSES DEPART FROM EMBASSY SUITES 7:15 - 8:10 A.M.

7:30-10:30 a.m. REGISTRATION: Outside the auditorium.

8:30 a.m. WELCOME: Rod Murray, Suzanne Stensaas, Paul Burrows, Sharon Dennis, Jon Seymour, Marianne Messer.

8:35 a.m. Opening Remarks from our Host: Edward Tawyea, MSLS, Director of Academic Information Services and Research and University Librarian, Thomas Jefferson University

8:45 a.m. KEYNOTE: Cases, Narratives, and Interactive Multimedia: The Issue of Abortion in America

Robert Cavalier, PhD, Dept Philosophy and Center for the Advancement of Applied Ethics (CAAE), Carnegie Mellon University, Pittsburgh, PA

This presentation will explore the relation between case studies, story telling and multimedia. Using a recently released learning resource (CD-ROM from Routledge), the discussion will connect classical casuistry (case-based moral reasoning), recent studies in cognitive science (on the role of narrative in human understanding), and interactive multimedia as a productive art. Taken together, and implemented in forms of digital media, these ideas allow us to explore ethical problems confronting modern medicine in ways that come close to the perplexing reality of real-world decision-making.

9:30 a.m. Software Design Using Knowledge from the Learning Sciences

Andy C. Reese, PhD, Director of Electronic Curriculum Resources, Medical College of Georgia, Augusta, GA

9:50 a.m. Effective Distance Learning Teams

Anthony J. Frisby, PhD, Thomas Jefferson University, Philadelphia, PA

10:10 better_health @ here.now Valerie Florance, PhD, Association of American Medical Colleges, Washington, DC

10:15 a.m. COFFEE BREAK

10:45 a.m. Enhancing Medical Teaching and Learning Through the Collaboration of Students and Faculty: The McGill Molson Medical Informatics Project

Raisa Lev and Jonathan I. Gates, MD, McGill University Faculty of Medicine, Montreal, Quebec, Canada

11:00 a.m. SMIL and Zooming in the Tufts Health Sciences Database - More Multimedia for Teaching

Susan Albright, Elizabeth Eaton, and Tarik Alkasab, Health Sciences Library, Tufts University, Boston, MA

11:15 a.m. Virtual Reality: A Practical Use of Simulation in Skill Development in Nursing and Allied Health Education
Virginia Barker, State University of New York, Plattsburgh, NY

11:30 a.m. Interactive Pathology Laboratory: A Case-Based Approach to General Pathology

Peter G. Anderson, DVM, PhD, and Kristopher Jones, University of Alabama at Birmingham, AL

11:45 a.m. Computerized Testing to Prepare Medical Students for the National Boards

Jeanne B. Schlesinger, Brenda L. Seago, Chris L. Stephens, Virginia Commonwealth University, Medical College of Virginia Campus, Richmond, VA

12:00 p.m. The Knowledge Weavers Project: Tools, Templates and Outreach

Sharon E. Dennis, Eccles Health Sciences Library, Knowledge Weavers, University of Utah, Salt Lake City, UT

12:20 p.m. Tribute to James Baggott by Sharon Dennis. Presentation of the James Baggott Award to Oleg Medvedev, Dean of Faculty of Basic Medicine, Moscow State University, Moscow, Russia

12:30 p.m. LUNCH (provided to all registrants) You may eat in the patio, cafeteria or take your lunch to the breakout group.

Please SET UP YOUR DEMONSTRATIONS during lunch break or the breakout session - unless you are leading a breakout session. You are requested to be present at your demonstration from 2:00 – 3:30 or 3:30 – 5:00. This will give each demonstrator time to see the other demonstrations. Demonstrators are expected to be in the demonstration area even if not at their assigned location, so people can talk to them.

1:00 p.m. Break-Out Session: Learning in a Digital Age: Web Site Structure and Formats to Enhance Learning - Cafeteria
Bob Joyce, University of Texas Medical Branch, Galveston, TX

1:00 p.m. Break-Out Session: Tools in Distance/Asynchronous Learning - Room 139
Tony Frisby, PhD, Thomas Jefferson University, Philadelphia, PA

1:00 p.m. Break-Out Session: Mandated Computer Purchase: Trials, Tribulations and Successes - Cafeteria
Mark W. Platt and Lee Bairnsfather, Louisiana State Medical School at Shreveport, LA

1:00 p.m. Break-Out Session: User-Centered Design of Medical Learning Software - Room 23
Jens Doerup, MD, Section For Health Informatics and Institute of Anatomy, University of Aarhus, Denmark

1:00 p.m. Break-Out Session: Comparison of Off-the-shelf Web-based Course Management Systems such as WebCT - Eakins Lounge - Jeanne Schlesinger, Chris Stephens, Medical College of Virginia, Richmond; Tom Marino, Temple Univ., Philadelphia; Chris Candler, University of Oklahoma College of Medicine, Oklahoma City, OK

1:00 p.m. Break-Out Session: Multimedia Delivery in a Broadband Environment - Room JAH 311

Mark Noel, Interactive Media Laboratory, Dartmouth Medical School, Hanover, NH

1:00 p.m. Sharing Lessons Learned from a Decade of Developing, Using, and Integrating Computer-based Instruction for Medical Education - Room 145 - Harold C. Lyon, Ed.D, Notre Dame College and Guest Prof. of Medical Education & Informatics, Ludwig Maximilians University, Munich, Germany

POSTERS WILL BE DISPLAYED THURSDAY & FRIDAY

2:00 P.M. - 5:00 P.M., Scott Memorial Library, Second Floor

Using Medical Clip Art

Martha DePecol Sanner, Middlesex College, Middletown, CT

Simplifying Graphic Image Servers

Mark W Platt, Biometry, Louisiana State University, Medical Center, Shreveport, LA

Multimedia Format for the Administration of Extended Matching Questions for Undergraduate Assessments in Clinical Medicine. David McHaffie and John Nacey, Wellington School of Medicine, Wellington Hospital, New Zealand

The Acquisition of Requisite Computer Skills for Incoming Pre-Doctoral Students

Elise S. Eisenberg, DDS, MA, and G. More Frederick, New York University College of Dentistry, NY, NY

Use of a Computerized Simulated Patient to Assess Student Progress in a Problem-based Learning Curriculum

Carol F. Whitfield, PhD, Robert Zelis, MD, Fred Stuppy, CCP, Pennsylvania State University College of Medicine, Hershey, PA and William Schwartz, MD, University of Pennsylvania School of Medicine, Philadelphia, PA

The Great Bypass: Avoiding the Paper Medical Record Paradigm

David R. Bolling, MD, U of Utah/U of Texas Health Science Center San Antonio and Nicolas E. Walsh, MD, Reed Gardner, Ph.D. Donald Currie, MD, Ross Lawler, MD, Gavin Corcoran, MD, Diane Gilbert, MD, U of Texas Health Science Center, San Antonio

Collecting and Indexing Surgery Cases: Development of a Collaborative Resource

Kenneth B. Williamson, PhD, Southern Illinois University, School of Medicine, Department of Surgery, Springfield, IL

A Five-year Experience: Multimedia Resources Applied to a Traditional-format Course of Human Anatomy in a Medical School Humberto Guiradles, Hernán Oddó, Beltran Mena, and Nicolas Velasco, Catholic University School of Medicine, Santiago, Chile

THURSDAY, JUNE 24, SHOW AND TELL/DEMONSTRATIONS

2:00 P.M. - 5:00 P.M., Scott Memorial Library, Second and Third Floors

Web-based Self-directed Learning Modules in Neuropathology and in Hematopathology

Jannie Woo, PhD, Robert Schelper, MD, Robert Hutchison, MD, SUNY Health Science Center at Syracuse, NY

Project CVP: Interactive Cardiovascular Physiology Courseware on the Internet

Chi-Ming Chow, MDCM CCFP FRCPC, Ahsan Alam, Steven A. Prescott BSc., Ohmar Ahmad, Alvin Shrier PhD, Faculty of Medicine, McGill University, Montreal, Quebec, Canada

Neurology and Surgery Interactive: Two Programs, One Shell

Christof Daetwyler, MD, Dept for Education Media of the Institute for Medical Education, University of Bern, Switzerland

A Technical Schema for Web-based Peer Evaluation

Joan Freedman and Harold Lehmann, Johns Hopkins School of Medicine, Baltimore, MD

The Academic Intranet - A Novel Approach to Enhance the Dental School Curriculum

Elise S. Eisenberg, D.D.S., M.A., New York University College of Dentistry, NY

Exploring Histology Using a CD-based Microscope

Jens Doerup and Michael Schacht Hansen, Section for Health Informatics & Institute of Anatomy, University of Aarhus, Denmark

Case-Based Clinical Microbiology Exercises Delivered Over a LAN: Experiences with IMMEX

Hingley, S., Brown, C., Vasko, M., Coughlin, P., Philadelphia College of Osteopathic Medicine, PA

New Tools for the Pathology Curriculum: Case-Based "Virtual Microscopy"

Michael O. Driscoll and Anne Linton, George Washington Univ. Himmelfarb Library

Digital Video: Nuts & Bolts.

Paul E. Burrows, Media Solutions, University of Utah and Robert Trelease, Ph.D., UCLA School of Medicine, Los Angeles, CA

Multimedia Software for Medical Education in Göteborg, Sweden

Torben Kling-Petersen and Ragnar Pascher, Mednet, Göteborg University

Creation of Multimedia Extended Matching Item Multiple Choice Questions for the Preparation of an Undergraduate Assessment in Clinical Medicine David McHaffie, Wellington School of Medicine, Wellington Hospital, New Zealand

"Mock Code" Project. Terri Schwartz, RN, MSN and Pat Jones, MS, Thomas Jefferson University Hospital and the Philadelphia College of Textiles and Sciences

"Neuroscience Images" CD-ROM.

Diane E. Smith, PhD and William I. Campbell, LSU Medical School, New Orleans, LA

Migration of Educational Materials to Relational Databases

John Jackson, MEd, Jack Kelly, B.S., University of Virginia School of Medicine, Charlottesville, VA

Development of a Pathology Education Instructional Resource (PEIR)

Kristopher Jones, and Peter G. Anderson, DVM, PhD, Department of Pathology, University of Alabama at Birmingham. AL

Anatomy Revealed© - Developing An Interactive Dissection

R.E.Schneider, M.H.Hankin, C.A.Bennett-Clarke, and D.E.Morse, Medical College of Ohio, Toledo, OH

Streaming Media: The Latest Generation of RealNetworks Streaming Media Production Tools and Media Types

Susan Roberts and Valeri Craigle, Spencer S. Eccles Health Sciences Library, University of Utah, Salt Lake City, UT

SMIL and Zooming in the Tufts Health Sciences Database - more Multimedia for Teaching

Susan Albright, Elizabeth Eaton, and Tarik Alkasab, Health Sciences Library, Tufts University, Boston, MA

Computerized Testing of Medical Students in Preparation for the National Board Exams

Chris L. Stephens, Brenda L. Seago, Jeanne B. Schlesinger, Carol L. Hampton, Dean X. Parmelee, James M Messmer, Virginia Commonwealth University, Medical College of Virginia Campus, Richmond, VA

The Knowledge Weavers Project: Tools, Templates and Outreach

Sharon E. Dennis, Spencer S. Eccles Health Sciences Library, Knowledge Weavers, University of Utah, Salt Lake City, UT

The Issue of Abortion in America: an Exploration of a Social Controversy on CD-ROM

Elizabeth A. Style, Preston Covey, Robert Cavalier, and Andrew Thompson, Carnegie Mellon University, Pittsburgh, PA

Multimedia Resources Applied to a Course in Human Anatomy

Humberto Guiraldes, Hernán Oddo, Beltran Mena, and Nicolas Velasco, Catholic University School of Medicine, Santiago, Chile

Can a Virtual Cadaver Be Developed From the Visible Human Male?

Don R. Hilbelink, PhD, Univ. South Florida, Tampa, FL

CAMPS- A Patient Simulation for Teaching and Evaluating Problem Solving

William Schwartz MD, University of Pennsylvania School of Medicine, Philadelphia, PA

Using Multimedia and Models to Teach Basic Surgical Skills.

Roger Kneebone, MD and David Apsimon, University of Bath, United Kingdom

**ALL PRESENTERS ON FRIDAY MORNING SHOULD BRING THEIR SOFTWARE EARLY
THURSDAY AFTERNOON TO THE SOLIS COHEN AUDITORIUM, JEFFERSON ALUMNI HALL
BUSES DEPART TJU 5:00-5:45 PM FOR EMBASSY SUITES**

WELCOME BUFFET DINNER, THURSDAY, JUNE 24, 1999

VALLEY GREEN INN, FAIRMOUNT PARK

This wonderful evening is **Sponsored by**

SmithKline Beecham

Berlex Laboratories, Inc.

Novartis Pharmaceuticals Corporation

Medscape: the Online Resource for Better Patient Care

and **YOUR** registration fee.

FOR EACH REGISTERED ATTENDEE the cost is \$10 which you should have paid when you registered. Guest tickets for \$50 should have been purchased in advance. Bus transportation will be provided. The bus driver will give you an option of getting out 3 miles from the Inn and walking along the creek path to the restaurant or riding all the way. If you plan to walk try to ride the early buses. Those less energetic can ride all the way and sit by Wissahickon Creek, feed the ducks or stroll the cool paths. This is a real escape from the city and heat. It could be cool later in the evening so bring a wrap. The Inn is a restored 1683 house and is ours for the evening. We will have additional outdoor seating with a tent just in case (but it won't rain, we have our rubber chickens.)

Menu: Salmon fillet with lemon caper butter, Roast garlic & fresh herb chicken, Honey baked Ham, Lobster ravioli, served with a Creole shrimp sauce, Sauteed green beans with roast peppers, Ratatouille, Braised baby bok choy, Exotic mushroom bread pudding, wild rice, baked potatoes (sour cream, butter, assorted fixings) Tossed mixed greens salad, Caesar salad, Potato and Pasta salad, Assorted breads, Seasonal fruits, Assorted mini-pastries, and Ice cream (vanilla, chocolate, strawberry). We will also have bottled beer in addition to red and white wine and sodas.

First bus departs 6:00 p.m. from the Embassy Suites Hotel. Last bus departs 6:55. Possible final bus 7:10 if needed.

7:00 AM Friday: AD HOC SPECIAL INTEREST GROUP: Creating an Online Case Bank with Database and Multimedia Elements for all to use. We all talk about it, now LET'S DO IT!! We will meet for breakfast at TGI Friday's adjacent to the hotel where the complimentary Breakfast Buffet is served. All are welcome. The time has come! *Carpe diem.* Ken Williamson, Sharon Dennis, Al Salas; and if interested in a question bank join David McHaffie at his table.

7:00 a.m. **AD HOC SPECIAL INTEREST GROUP: Creating an Online Case Bank with Database and Multimedia Elements Open to All.** See box at bottom of previous page.

BUSES DEPART EMBASSY SUITES 7:15, 7:40, 7:50, 8:10 AM

PLATFORM PROGRAM: FRIDAY, JUNE 25, 1999

Solis Cohen Auditorium, Jefferson Alumni Hall, 1020 Locust Street

8:30 a.m. **KEYNOTE: Technology-based Education of the Reflective Healthcare Practitioner: the "Virtual Practicum."**
Joseph V. Henderson, MD, Interactive Media Laboratory, Dartmouth Medical School, Hanover, NH

9:15 a.m. **Integrating Personal Digital Assistants (PDA) Computers into the Medical Curriculum**

John Jackson, MEd, University of Virginia School of Medicine, Charlottesville, VA

9:35 a.m. **Medical PDA Computing.** Jeffrey M. Gilfor, MD, Jefferson Health System, Philadelphia, PA

9:55 a.m. **AN@TOMEDIA: A New Approach To Medical Education: Developments In Anatomy**

Priscilla Barker, B App Sci (Physio), Department of Anatomy and Cell Biology, Univ. Melbourne, Australia

10:15 a.m. **COFFEE BREAK**

10:45 a.m. **On-Demand Distribution of Video for Neurological Physical Exam Instruction: Attempts Using Digital Recordings and Variable Bit Rate Compression.**

John C. Pearson, Gary L. Nieder, Thomas Mathews, and Mark D. Anderson, Wright State University, School of Medicine, Department of Anatomy, Department of Neurology, Interdisciplinary Teaching Labs, Dayton, OH

11:05 a.m. **SMIL(E)! New Authoring Environments for Web Based Multimedia Development**

Sebastian Uijtdehaage, Instructional Design and Technology Unit, School of Medicine, UCLA, Los Angeles, CA

11:25 a.m. **Overview of Distributed Learning with LearningSpace**

Anthony J. Schmidt, JD and J. Lorraine Schmidt, JD, St. George's University Ltd., Bay Shore, NY

11:45 a.m. **Y2K Disaster: Fact or Fiction for Multimedia Software?**

Rodney B. Murray, Ph.D., Office of Academia Computing, Thomas Jefferson University, Philadelphia, PA

12:00 p.m. **HemoSurf - An Interactive Hematology Atlas**

Ulrich Woermann, M.D., Division for Instructional Media, University of Bern, Andreas Tobler, MD, and M. Monatrandon, Haematologisches Zentrallabor Universitaetsspital, Bern, Switzerland

12:15 **Sandoz Student Software Award.** Suzanne S. Stensaas, University of Utah, Salt Lake City, UT

12:30 **LUNCH (for all registered) You may eat in the patio, cafeteria or take your lunch to a breakout session**

Please SET UP YOUR DEMONSTRATIONS during lunch break or the breakout session - unless you are leading a breakout session. You are requested to be present at your demonstration from 2:00 – 3:30 or 3:30 – 5:00. This will give each demonstrator time to see the other demonstrations. Demonstrators are expected to be in the demonstration area even if not at their assigned location, so people can talk to them.

1:00 p.m. **Break-Out Session: Architectures for Online Education: Using IMS and XML - Room M23**

Chris Candler, MD, The University of Oklahoma College of Medicine, Oklahoma City, OK

1:00 p.m. **Break-Out Session: Medical PDA Computing, Jeffrey M. Gilfor, MD, Jefferson Health System - Room 145**

1:00 p.m. **Break-Out Session: Applying Results of Learning Sciences to Software Design and Use - Eakins Lounge**

Andy C. Reese, Thomas M. Nosek, Medical College of Georgia, Case Western Reserve University, Jens Doerup, University of Aarhus, Denmark

1:00 p.m. **Break-Out Session: Establishing a Peer-Review for Teaching Materials on the Internet - Cafeteria**

Emmanuel C. Besa, M.D., MCP Hahnemann University, Philadelphia, PA

1:00 p.m. **Break-Out Session: A "Virtual Practicum" Developers Consortium? - Room M24**

Joseph V. Henderson, Interactive Media Laboratory, Dartmouth Medical School, Hanover, NH

1:00 p.m. **Break-Out Session: Delivering Layered Images over the Web. Room JAH 311** Harold Lehman, Ph.D., Johns

Hopkins Univ. Baltimore, MD, Sharon Dennis, Univ. Utah, Parvati Dev, Stanford Univ., William Lober, U. Wash.

1:00 p.m. **Patient Simulation Software and the Clinical Competency Exam: How to get the Most out of "Diagnostic Reasoning" - Room 139** Hurley Myers, Ph.D., Southern Illinois University, Carbondale, IL and DxR Development

FRIDAY, JUNE 25, SHOW AND TELL/DEMONSTRATIONS

2:00 P.M. – 5:00 P.M., Scott Memorial Library, Second and Third Floors

ProMediWeb: Cooperative Case-based Learning in Medicine Using the WWW

Martin Adler, Martin Fischer, Matthias Holzer, Jorg Lindner, Jana Konschak and Sepp Bruckmoser, Ludwig-Maximilians-University, Munich, Germany and Ulf Weichelt and Thomas Baehring, Dusseldorf University, Germany

Experiences with a Knowledge-based Tutoring System for Student Education in Rheumatology

Stefan Schewe, Medizinische Poliklinik, University Munich and Tina Reinhardt, and Christian Betz, University Würzburg, Germany

Problem-based Learning on Personal Computers (PBL on PC): A Multimedia Application for Problem-based Self-directed

Learning in Medical Education Michio Shiibashi, Ph.D., Yoshihiko Shimizu, M.D., Ryozo Ohno, M.D., Motohide Takahama, M.D., Department of Medical Education, Saitama Medical School, Japan

Interactive CD-ROM on Core Procedures in Removable Prosthodontics-Complete Dentures

Ashok Soni, DDS, New York University College of Dentistry, NY

SMIL(E)! New Authoring Environments for Web Based Multimedia Development

Sebastian Uijtdehaage, Instructional Design and Technology Unit, School of Medicine, UCLA, Los Angeles, CA

Online Quizzes and Readiness Evaluations Using Cold Fusion. Ken M. Williams, University of Arizona, Tucson, AZ

Histology Image Review: A Complete Illustrated Course in Basic Histology on CD-ROM. Frank J. Wilson, A.M Grimwade, J.A. Gibney, S.G. Matta and M.G. Kestenbaum, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, NJ, The Scientist, Philadelphia, Univ. Tennessee, Memphis and Georgetown Univ., Washington, DC

MacOS X Server with NetBoot and Streaming QuickTime: The solution for Easy Administration and Attractive Network Access?

Marc M. Batschkus, Dr.med, Marc Gumpinger, Martin Dugas, Dr.med. Dipl.Inf. IBE University of Munich, Germany

Web-based 3-D: the Potential of Different Techniques for Medical Education, Torben Kling-Petersen and Ragnar Pascher, Mednet, Göteborg University, Göteborg, Sweden

Web-based Tutorial and Self-examination on Radiology: The McGill Molson Medical Informatics Radiological Anatomy Project

Raisa Lev, McGill University Medical School and L. Stein, MD, Royal Victoria Hospital Montreal, Quebec, Canada

Creation of a Web-based Tutorial on Auscultation: The McGill Virtual Stethoscope Project

Jonathan I. Gates, MD, Chi-Ming Chow, MD, and Oles Protsidym, McGill University Fac. of Medicine, Montreal, Quebec, Canada

HistoWeb: An Interactive Digital Lab Guide for Histology

Barry G. Timms, PhD, University of South Dakota, School of Medicine, Vermillion, South Dakota

Website Access to Museum Specimens for Use in Neuroscience Classrooms and Laboratories

John I. Johnson, Radiology and Anatomy Departments and Neuroscience Program, Michigan State University, East Lansing MI

Generating HTML Pages Dynamically from mySQL

Sharon E. Dennis and Susan Roberts, Knowledge Weavers, Eccles Health Sciences Library, University of Utah, Salt Lake City, UT

A CD-ROM on Breast Cancer Education for Health Professionals

Syed S. Haque, PhD, University of Medicine and Dentistry of New Jersey, Newark, NJ

CAPLET: A Web-based Drug Identifier. Alvin B. Marcelo, MD, DPBS, National Library of Medicine, High Performance Computing and Communications and the University of the Philippines, Manila, PI.

Neuropathology Self-Instructional Units for Second-year Medical Students in an Integrated Neuroscience Course

Kathryn Lovell, Mark Hodgins, and Brian Mavis, Michigan State University, East Lansing, MI

Medscape: A Resource for Medical Educators. Jeff Hanissian, MD, Editorial Dept., Medscape, Carla Cantor, Media Relations and Communications Manager, George D. Lundberg, MD, Editor in Chief, Paul Sheils, Pres. & CEO, Medscape, Inc., NY, NY

The "Right to Die" CD-ROM Robert Cavalier, PhD, Carnegie Mellon University, Pittsburgh, PA

Programs for Health Professional Education Designed for the Next Generation Internet

Joe Henderson, MD and Mark Noel, Interactive Media Laboratory, Dartmouth Medical School, Hanover, NH

Student Evaluations of Computerized Cases to Teach Obstetrics and Gynecology

Sonya Erickson, MD and Scott Elliott, BS Office of Research, University of Iowa

Functional Neuroanatomy: An Interactive Atlas

P.A. Stewart, A. Agur, B. Liebgott, D. Mikulis and M.J. Wiley, University of Toronto, Canada

MedApps: An End-User Driven Medical Education System (Including MedFiler, MedLogbook, and MedSurvey)

Daniel Rosenthal, University of South Florida College of Medicine, Tampa, FL

Digital Analytical Histology.

Al Telser, Northwestern Univ. Medical School, Chicago, IL

The Visible Embryo.

Carmen Arbona, San Francisco, CA

Learning Space: Web Delivery of an Organ-System Block.

Don E. Wheeler, MD, Department of Pathology, University of New Mexico School of Medicine, Albuquerque, NM

BUSES DEPART TJU FOR EMBASSY SUITES 5:00-5:30 PM

AD HOC SPECIAL INTEREST GROUP: Creating an Online Bank of Catalogued, Repurposeable Multimedia. Suzanne Stensaas and Sharon Dennis are looking for Eds. and Contributors. Time to participate and take advantage of the Knowledge Weaver's skills. Bring your drink to the Stensaas' Suite, FRIDAY 6-7 p.m., then adjourn to dinner.

PLATFORM PROGRAM: SATURDAY, JUNE 26, 1999

Jefferson Alumni Hall, 1020 Locust Street

BUSES DEPART EMBASSY SUITES 7:40 AND 8:10AM FOR TJU

- 8:30 a.m. KEYNOTE: *Electronic Evaluation of Problem Solving Skills***
Hurley Myers, Southern Illinois Univ. School of Medicine and the DxR Development Group, Inc., Carbondale, IL
- 9:15 a.m. *Student Evaluations of Computerized Cases to Teach Obstetrics and Gynecology***
Sonya Erickson, MD and Scott Elliott, BS Office of Research, University of Iowa
- 9:35 a.m. *Cardio-OP: An Internet-based and Database-driven Multimedia Information System for Physicians, Medical Lecturers, Students and Patients in the Field of Cardiac Surgery***
Reinhard Friedl, MD, Dept. of Cardiac Surgery, Univ. of Ulm, Germany
- 9:55 a.m. *Case-based Clinical Education: Do Computers Teach Better? A Media Comparison Study with the CASUS-System.*** *Martin Maleck and Martin Adler, Medizinische Klinik Innenstadt, Ludwig-Maximilians-Univ. Munich*
- 10:15 a.m. COFFEE BREAK**
- 10:45 a.m. *Computer-based Multimedia Approaches to Facilitating and Testing Higher-level Learning***
Kathryn Lovell, Mark Hodgins, and Brian Mavis, Michigan State University, East Lansing, MI
- 11:05 a.m. *Experiences with a Knowledge-based Tutoring System for Student Education in Rheumatology***
Stefan Schewe, Medizinische Poliklinik, University of Munich and Tina Reinhardt and Christian Betz, University Würzburg, Germany
- 11:25 a.m. *Medscape: An Underutilized Resource for Medical Educators: Ideas for the Curriculum***
Jeff Hanissian, Editorial Dept., Carla Cantor, Media Relations, Paul Sheils, Pres. & CEO, Medscape, Inc., NY, NY
- 11:45 a.m. *"EnviroDx": Web-based Learning Program on Environmentally Related Diseases***
Eddy Bresnitz, MD, MS, University of Medicine and Dentistry of New Jersey (UMDNJ), Newark, NJ
- 12:05 p.m. *Closing Remarks, Acknowledgments, Extravaganza Logistics***
Suzanne S. Stensaas, Ph.D., University of Utah School of Medicine, Salt Lake City, UT

BUSES DEPART 12:25 AND 12:55 PM FOR EMBASSY SUITES

SATURDAY, JUNE 26, 1999

The Traditional Grand Extravaganza: An absolute must and really part of the Workshop.

Join us on Saturday, June 26 for our famous outing including art, nature, food, and music. The event starts at 1:30 p.m. with a box **lunch aboard the bus** to the Brandywine River Museum, housed in a renovated Civil War era grist mill. View the museum's impressive collection of American art including those by Wyeth. Stroll through wild flower gardens on the banks of the River. Our journey next takes us to Longwood Gardens. Marvel at the exotic plants in the conservatory. Roam (or take the included tour) through outdoor gardens filled with exquisite flowers and splashing fountains. Tour the historic Peirce-du Pont House, the Idea Garden, Chimes Tower, Topiary Garden, and Rose Garden, or bask in the late afternoon sun on the patio adjoining the Longwood Gardens Café. At the buffet you may select from soup, salad, pasta, meat, or fish, tantalizing desserts and refreshing beverages, including beer or wine. As the sun sets, we'll relax to the outdoor concert. The theme is Symphonic Swing...& all that Jazz!—a 100th birthday tribute to Duke Ellington and hits by Glenn Miller, performed by the Kennett Symphony of Chester County with the U.S. Army Jazz Ambassadors. Finally, colorful fountain displays will provide a magical end to this memorable day. Cost is **\$75** per person with or without the bus and includes lunch, dinner, admission to the museum and gardens and the concert. The cost is not included in the registration. Book your Return Flight on Sunday! You will not want to miss this. **Pre-registration required.**

BUS DEPARTS FROM EMBASSY SUITES 1:30 PM SHARP!

CHES/Slice of Life Workshop 2000, University of Utah, Salt Lake City, Utah
June 27-July 1, 2000 Marriott University Park Hotel and University Guest House

Plan to bring the family to the Saturday Grand Extravaganza

Don't miss the post-extravaganza July 4 weekend outing which will probably be
a white water rafting trip in Idaho, Wyoming or Utah.