



# CBILSpace Currents

Computer Based Instruction Lab ♦ School of Medicine

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### CBILSpace Currents

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## New CD-ROM Features 14 Programs

by Michelle Combs

The newest compilation of computer based instruction programs for medical students includes 14 programs. This CD-ROM, titled *Selected Computer Based*



*Instructional Programs*, is distributed to M-I and M-II students, but is also available to M-IIIs and M-IVs who want them. All programs were created by School of Medicine (SOM) faculty. The following programs are included on the CD:

- *Clinical Simulation of Fetal Heart Rate Patterns in Labor*
- *Electron-Microscopic Histology of the*

- Nervous System*
- *General Appearance, Skin and Body Measurement, Unit 3*
- *Gross Anatomy Practice Questions*
- *Gross and Sectional Anatomy of the Central Nervous System*
- *Images in Human Genetics*
- *Light-Microscopic Histology of the Nervous System*

- *M-I Gross Anatomy Practice Exam*
- *M-II Endocrine Practice Exam*
- *Pathology: Basic Principles*
- *Review Questions in Gross Anatomy of the Head and Neck*
- *Self-Test on the Nuclei and Connections of the Central Nervous System*
- *The Upper Extremity*
- *Women's Health*

## Computer Exam Program Enhanced

by Brenda Seago, M.L.S., M.A.

On November 4, 1998, the first computer exam for the academic year was administered in CBIL. A Web survey was e-mailed to all M-II students the following day and 65 responses were received.

Outlined below are some clarifications and some changes that will be made based on survey responses. CBIL staff will continue to enhance the computer exam throughout the year.

The following are clarifications based on comments by the students. White boards will be used for the National Boards and that is the reason they were purchased to use during computerized exams in CBIL.

They will be used for the remaining computer exams this year. Students who do not want to use the white board have an additional option (see #1 below).

Some students asked for a "Go to" feature in the examination. This feature was available in the exam in a pulldown menu in the upper left corner of the screen and allowed students to put in a specific question number to return to. This feature will continue to be available.

The ability to strike out answers will continue to be available to assist students in

*continued on page 2*

## Telemedicine Expands Distance Learning Capabilities

by Kelly Jones Fisk

On October 2, Health Administration students at Midwestern State University (MSU) in Wichita Falls, Texas participated in a live distance learning class with Robert Hurley, Ph.D., from VCU's Health Administration program. His lecture, entitled "Managed Health in the 21<sup>st</sup> Century" was sent via compressed video over three ISDN lines (384 KBPS) to a video bridge at Texas A & M University, and then transmitted to approximately 15 students at MSU. Dr. Hurley presented his lecture using PowerPoint, which ran through a scan converter into the telemedicine system. The students in Texas are in a class with Dr. Russ Porter, who is a 1995 graduate of VCU's Health Administration program.

### ***Diabetes Patient Education planned for Farmville Community***

The School of Medicine's Office of Faculty and Instructional Development has been working with the Southside Area Health Care Center (AHEC) planning educational

outreach for patients in the southside community. Efforts are underway to bring diabetes education directly to patients through use of 2-way compressed video at Prince Edward High School and at the Medical College of Virginia Campus telemedicine facility. Faculty involved are John Clore, M.D., Professor of Internal Medicine; Carol Hampton, M.M.S., Associate Dean of Faculty and Instructional Development; Linda Thurby-Hay, R.N., Diabetes Nurse Coordinator; and Kelly Jones Fisk, Telemedicine Technical Manager. Woody B. Haynes, R.N., M.Ed., F.N.P., Executive Director of the Southside AHEC, is coordinating the project for Southside AHEC along with Robbie Hammer, C.R.T.T., R.T.P., Center Manager for Farmville and South Hill Branch of Lyncare, and leader of the Diabetes Support Group in Farmville.

### ***International Connections***

On October 1, 1998, Dennis Cheal from Carlton, Victoria, Australia, visited the MCV Campus telemedicine operation. Mr. Cheal is with TENTAS business

development in Australia, and is researching active telemedicine programs in the United States. His company plans to implement telemedicine between three tertiary care hospitals and their country (what we call community) hospitals in the outlying rural areas in Australia.

Also, on October 5, 1998, attempts to connect via video to the Leiceister Royal Infirmary in Leiceister, England were successful. Carol Hampton and Kelly Jones Fisk met with Roger Hickinbotham to test quality of videoconferencing across the ocean. Potential applications of distance learning and telemedicine planning were discussed.

### ***Medical Director Appointed***

Effective September 1, 1998, Lisa Kaplowitz, M.D., became Interim Medical Director for the MCV Campus telemedicine project. We are pleased to have Dr. Kaplowitz in this leadership position to spearhead development of clinical applications. ♦

### *Computer Exam... continued from page 1*

eliminating possible incorrect answers. This feature will not be available for Type K questions.

The problem of the answer disappearing when scrolling down for additional text in long vignettes has been fixed.

Computer connections and cords will be quickly checked between exam sessions to minimize the possibility of disconnecting cords accidentally.

New features for the next exam based on survey responses:

1. Ability to add notes to each question. A notebook icon will appear in the lower right of the screen and will allow entry of notes or text as in a word processor. The notebook will be highlighted in yellow if it

contains a note. The pulldown menu "Review your answers" will indicate whether the question has been marked for review and will display the first few words of the note, if there is one.

2. A one minute warning will be added to the exam, in addition to the 15 and 30 minute warnings. There will not be an automatic submit feature.

3. Under the "Go to question" feature there will be an additional option labeled "Go to next marked question." This will allow for faster navigation between marked questions.

4. The Quit button under pulldown File menu has been modified - a confirmation asking to quit without saving the answers will be added. The correct way to finish

the exam will still be to use the "Submit" button on the pulldown menu.

5. The program has the ability to give preliminary scores automatically, but the scores will be displayed after the exam is submitted at the discretion of the course director.

6. Students who identify themselves as left-handed before the exam will be assigned to a computer with the mouse on the left side.

7. Any students who have problems which require the monitor to be moved off the CPU should let CBIL staff know when entering the exam room.

Please feel free to direct additional comments to any CBIL staff member. ♦

## Students Receive *Visual Histology* CD-ROM

by Jeanne B. Schlesinger, M.Ed.

The M-I Histology course began January 4, 1999 and will continue through April 23, 1999. Due to restructuring in this course, the laboratories that covered the sections on the cell and basic tissues have been modified. While small group sessions are scheduled as part of the curriculum to give students practical experience, the majority of the laboratory component will utilize a newly developed computer based instructional (CBI) program entitled *Visual Histology*. This program was produced by Anatomy department faculty and CBIL development staff. Not only is this program available on the CBIL network, but all M-I medical students, graduate students in Microscopic Anatomy, and D-I dental students received their own CD-ROM that contains a version of the program in both PC and Macintosh format.

The first portion of M-I Histology, through January 22, will be devoted to the eight cell and basic tissue sections – Cell, Cartilage, Bone I, Bone II, Connective Tissue Proper, Epithelium, Muscle, and Nerve. Students will be able to study this material on CD-ROM or use the program on the CBIL network. The other two sections in the program, Eye and Female Reproduction, will be covered in mid-April and students will be able to use the CBI program as a lab preview, since labs will still be conducted for the organ systems. This computer program will replace the video tapes that had previously been used for lab previews.

*Visual Histology*, an initial version with ten chapters, is the first of two major teaching packages that the Anatomy faculty will be making available to students. By fall of 1999, the program will be enhanced to include all of the organ systems that are covered in the Histology course, bringing the number of sections in it to approximately 22. ♦

## CBIL Staff Visits Anesthesia Simulators

by Mimi Hotchkiss, M.S.N.A., C.R.N.A. and Rachel Ballard

Brenda Seago, M.L.S., M.A., Carol Hampton, M.M.S., Jeanne Schlesinger, M.Ed., Chris Stephens, Cronin Warmack, and Rachel Ballard visited the School of Allied Health Professions' Department of Nurse Anesthesia and the Department of Anesthesiology, both located in West Hospital, on August 20, 1998. The purpose of the visit was to see the human patient simulators. There are only two U.S. manufactured simulators, the Medical Education Technologies, Inc. (METI) and the Eagle. VCU has both represented on its medical campus. CBIL staff and the Office of Faculty and Instructional Development are interested in seeing how the simulators can be integrated as a source of instruction into the School of Medicine (SOM) curriculum.

The Department of Anesthesiology's METI is currently housed a short walk from the operating room and is used to orient and teach interns and residents in airway management, principles and practice of anesthesiology, and critical care medicine. In addition, it is showcased each day on the walking tour of the SOM for medical school applicants.

The Department of Nurse Anesthesia's Center for Research in Human Simulation

facility occupies over 1,200 square feet of space and features a state-of-the-art full body Eagle human-patient simulator, a simulated operating room, intensive care area, computer simulation stations, and high tech audio and video interfaces for remote viewing and recording.

The Department of Nurse Anesthesia plans to focus training and research efforts in the area of crisis resource management. Crisis training involves subjecting multidisciplinary teams of providers to adverse situations in a simulated environment. Provider performance is videotaped and analyzed. A thorough debriefing of the team follows, focusing on strategies to best manage resources in a crisis and focus attention back to the patient.

Jointly, the two departments are exploring cooperative ventures with the local Emergency Medical Services groups and representatives of industry for drug and equipment training. Mimi Hotchkiss and E. Bruce Johnson, M.D., are co-chairs of the newly developed VCU Simulation Center Users Group. The combined Center resources at the university are open to researchers from all related disciplines. ♦

## New Equipment Arrives in CBIL

by Michelle Combs and Rachel Ballard

In early October, CBIL received new equipment. Twenty-five Panasonic monitors that look like televisions, but are industrial standard to meet the needs of medical students, have replaced the older models we had. One significant difference between televisions and these monitors is the number of ports for input devices.

Another addition, two dual deck VCRs, will simplify the dubbing process and free up VCRs for playing tapes. These VCRs rewind the tapes, copy from the first deck to the second, then rewind and eject both tapes. These stations will be

especially helpful to students recording Histology lab tapes.

We have also received 30 new Telex slide projectors. These replace the ringmasters that are used for viewing 35 mm slides for almost every course in the M-I and M-II curricula.

Funds for the equipment came from state Education and General (E & G) Fund dollars that were distributed to the SOM to support medical education. CBIL, as a curriculum resource, supports all instructional needs across SOM departments. ♦

## Staff Update . . .

Cronin Warmack attended the Novell Interconnect conference in Washington, DC on August 17-18, 1998.

Brenda Seago, M.L.S., M.A., attended a conference hosted by the Association of American Medical Colleges in St. Louis, MO from September 12-14, 1998. The conference was entitled, Leaders in Information Resources - Professional Development Conference: Anticipating Institutional Challenges: Building Responsive IT Organizations.

Cronin Warmack attended an Advanced PC Troubleshooting conference hosted by CompuMaster in Richmond on September 28, 1998.

Brenda Seago, M.L.S., M.A., attended the Medical Library Association's Mid-Atlantic and Pittsburgh Regional Chapters Joint Meeting held in Pittsburgh from October 3-7, 1998. Brenda is the immediate past president of its five-state group: DC, MD, NC, VA and WV.

Chris Stephens, medical applications developer and Jeanne Schlesinger, M.Ed., hosted the Richmond Macromedia Multimedia User Group (RMMUG) meetings on October 13, 1998 and December 8, 1998.

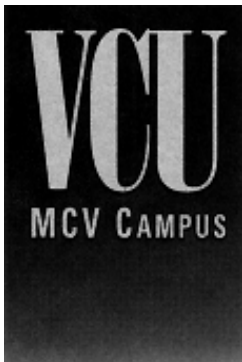
Brenda L. Seago, M.L.S., M.A., Chris L. Stephens, Dean X. Parmelee, M.D., Carol L. Hampton, M.M.S., James M. Messmer, M.D., and Jeanne B. Schlesinger, M.Ed. attended the AAMC meeting in New Orleans, LA from October 30 - November 5, 1998 to present an exhibit for Innovations in Medical Education (IME) titled "Technology for 2000 and Beyond: Computer Testing of Medical Students in Preparation for the National Board Examinations."

Welcome back to Michelle Combs, a recent graduate of VCU's School of Mass Communications who previously worked in CBIL's development suite. She is now a part-time administrative assistant in the lab.

Welcome to Lillian Tran, Marcus Amoako, and Huy Nguyen to the CBIL staff. Lillian, a graphic design student, assists with development projects. Marcus and Huy, both computer science co-op students, work in the lab. All are undergraduate students at VCU.

Welcome to Carrie Williams, who joined our staff in November. Carrie is an editorial assistant who is working with multimedia development. She is a graduate of VCU's School of Humanities and Sciences and is working on a Master's degree in English.

Goodbye to Debbie Stewart, Program Assistant, after six years of service in the Office of Faculty and Instructional Development and the Office of Continuing Medical Education. ♦



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