IV. SkyEye® Camera Prosection Videos

This initiative is directed by Dr. Omid Rahimi as the primary faculty member. The SkyEye® camera is a specially designed camera on a boom arm that can rotate and approach the dissection from unique vantage points. Video captured using the Sky-Eye® can be fed to monitors in labs or classrooms, synchronously, or recorded to digital media for asynchronous use in teaching or continuing education.

Student focus group comments about GATEways initiatives:

- In lab would be great, especially if large view screen available.
- The video shows how to dissect and what to look for.
- Idea is great. It connects pieces.
- Access from home and before and after lab would help.
- The animation gives a better view and idea of how things work and look.
- Awesome!
- This would be really good for learning injections.
- How about creating virtual surgery?
- As long as it’s a supplement – don’t do away with lab and professors – need to touch and feel for profession.

The GATEways Team:

- Mr. David Baker, Medical Illustration Supervisor
  Educational Media Resources • Academic Technology Services
- Dr. Patricia Brown, Assistant Dean for Student Affairs
  School of Allied Health Sciences and Associate Professor,
  Department of Physical Therapy
- Dr. Vidri Byers, Associate Professor/Clinical
  Department of Acute Nursing Care • School of Nursing
- Mr. Sam Newman, 3D Animator
  Educational Media Resources • Academic Technology Services
- Dr. Nancy Grant, Associate Professor and Chair
  Department of Acute Nursing Care • School of Nursing
- Dr. Mary Hayes, Associate Professor
  Department of Acute Nursing Care • School of Nursing
- Dr. Linda Johnson, Professor
  Department of Cellular and Structural Biology
  Graduate School of Biomedical Sciences
- Dr. John Littlefield, Director
  Awards Office for Educational Teaching
- Mr. Chris Motza, Medical Illustrator
  Educational Media Resources • Academic Technology Services
- Dr. Rob Phillips, Senior Lecturer
  Department of Cellular and Structural Biology
  Graduate School of Biomedical Sciences
- Dr. Omid Rahimi, Assistant Professor
  Department of Cellular and Structural Biology
  Graduate School of Biomedical Sciences
- Ms. Janis Rice, Assistant Professor
  Department of Acute Nursing Care
  School of Nursing
- Dr. Debra Stark, Evaluation Specialist
  Academic Informatics Services
- Ms. Will Underwood, Producer
  EHR Video Production • Academic Technology Services
- Dr. Frank Wuker, Associate Professor
  Department of Cellular and Structural Biology
  Graduate School of Biomedical Sciences
- Dr. Vick Williams, Professor
  Department of Cellular and Structural Biology
  Graduate School of Biomedical Sciences

GATEways
Gross Anatomy
Teaching Enhancement

Brochure design by Ms. Luisa Horton, Printing Services, EMR
Introduction:
The GATEways (Gross Anatomy Teaching Enhancement) project began in February 2005 as an interdisciplinary collaboration among faculty and staff of all five schools at the UT Health Science Center at San Antonio. The goal of GATEways is to design, develop, implement and evaluate four technological initiatives to be used in teaching human gross anatomy throughout the Health Science Center. The five schools at the Health Science Center (Medicine, Dentistry, Allied Health, Nursing, and the Graduate School) have over 800 students who are enrolled in or need access to anatomy content each academic year.

The GATEways project was honored to receive the First Place Award in Innovations in Health Science in October, 2006 given by the University of Texas System. Information on the GATEways project can be found at our website:

www.uthscsa.edu/vs/gateways.html

GATEways Initiatives:

I. A series of digitally videotaped human cadaver dissections with still photographs

This initiative is directed by Dr. Vick Williams as the primary faculty member, with assistance from Dr. Omid Rahimi and Patricia Brewer. Video production assistance is from Will Underwood, EMR Video Production Services. At this time twenty-five videos are nearing completion, covering the thorax, abdomen and head and neck regions. The majority of these videos have been recorded in High Definition video, accompanied by a scripted audio narration, and have been edited and labeled in post-production. These videos are available to the faculty and students of the Health Science Center on the university server, linked to courses in Blackboard®, and available as podcasts. Future dissection goals include back and extremities.

II. An instructional module of three dimensional animations of the head, to include the skull and cranial nerves

This project is directed by Dr. Frank Weaker as the primary faculty member, with medical illustration assistance from David Baker, Chris McKee and Sam Newman. This initiative has two parts; twelve cranial nerve modules and an interactive skull module. The cranial nerves are being modeled in 3D Studio Max® and placed into Flash® to add interactivity with the goal to have all twelve modules completed by the end of 2007. These modules are currently being evaluated by students and faculty. These modules are available to Health Science Center faculty and students on the university server, and can be linked to courses in Blackboard®. Future plans include addition of blood vessels to these animations.

The interactive skull module is being developed using the commercially available three dimensional ViewPoint® skull. Available Flash® versions of the modules have been introduced into some courses and evaluated for quality, as early as the beginning of academic year 2006-2007.

III. Implementation of an anatomical testbank, to include illustrations, photographs and radiographs

This initiative is directed by Dr. Patricia Brewer as the primary faculty member, with assistance from Dr. Omid Rahimi, Linda Johnson and Mary Heye. A testbank already in use in the medical gross anatomy course is being adapted to include questions using the original Health Science Center radiograph collection (300+ films). These films have been digitized, labeled using Photoshop® and all patient data removed from the images in order to comply with HIPAA regulations. Illustrations will also be drawn from still photographs from the dissections and the animations. This testbank will be available to faculty and students on the university server, CD/CDI, incorporated into courses on Blackboard®, or in the classroom using the Turning Point Audience Response System®.

The goal of GATEways is to design, develop, implement and evaluate four technological initiatives to be used in teaching anatomy throughout the UT Health Science Center.

www.uthscsa.edu/vs/gateways.html

More Information

If you are interested in:
1) Receiving a DVD copy of the GATEways presentation made at AAMC, or
2) Being a collaborator with us on the development of gross anatomy teaching materials

Please fill out the information below and either drop it in our box at Booth 2004 or fax it to:

Dr. Patricia Brewer
Assistant Chair for Student Affairs
School of Allied Sciences
The University of Texas Health Science Center at San Antonio
7703 Floyd Curl Drive - MSC 6243
San Antonio, Texas 78229-3900
Fax: (210) 567-847
brewerp@uthscsa.edu

Name: _______________________________________
Address: ______________________________________
City/State/Zip: ____________________________
Email: _____________________________________
Phone: _____________________________
Work Phone: _____________________________
Cell/Work Phone: _____________________________
Fax: _____________________________

1) Please send me a DVD.
2) I am interested in collaborating on the development and use of gross anatomy teaching materials.

(512) 232-1071